

# PATENT JOURNAL

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## Part II of II

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# PATENT JOURNAL

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## 2. PATENTS



**PATENTS****APPLICATIONS FOR PATENTS**

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

**THE PARTICULARS APPEAR IN THE FOLLOWING SEQUENCE:**

The numerical references denote the following: **(21)** Number of application. **(22)** Date of application. **(43)** 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 2025/05/24 -

2025/04473 ~ Complete ~54:HOT ROLLED AND STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF ~71:ARCELOMITTAL, 24-26 Boulevard d'Avranches, Luxembourg ~72: Eugen Andrei IANOS;Jeff GAO;Sanjiv SONI;Yaping LU~

2025/04472 ~ Complete ~54:A SAMPLING TOOL FOR SAMPLING REBURNED LIME FROM A LIME KILN, AND AN APPARATUS AND A METHOD FOR DETERMINING AMOUNT OF RESIDUAL CARBONATE IN REBURNED LIME SAMPLED FROM A LIME KILN ~71:Andritz Oy, Tammasaarekatu 1, HELSINKI 00180, FINLAND, Finland ~72: AALTONEN, Ossi;ANTIKAINEN, Airi;MUSSALO, Mika;OKSMAN, Antti;RÄSÄNEN, Jani;VEHVILÄINEN, Tuomo~ 33:FI ~31:20226072 ~32:02/12/2022

2025/04420 ~ Provisional ~54:WEDGE ENGINE ~71:WILLEM JOSEFUS JACOBUS PETRUS HARMSE, 23 Heide avenue, FLORA GARDENS, VANDERBIJLPARK, 1911, South Africa ~72: WILLEM JOSEFUS JACOBUS PETRUS HARMSE~

2025/04431 ~ Complete ~54:METHOD FOR DETERMINING PARKING SPACE AVAILABILITY ~71:OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72: BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130487 ~32:10/10/2024

2025/04462 ~ Complete ~54:ANTIBODIES ~71:KYMAB LIMITED, The Bennet Building (B930), Babraham Research Campus, United Kingdom ~72: BARNES, Matthew, Joseph;BENNETT, Kirstie;BILLAUD, Margot;HUTCHINGS, Catherine, Jane;LECOINTRE, Morgane Marie;MCCOURT, John Matthew;ROWLANDS, Robert;STOTT, Lisa;WAKE, Matthew Stephen~ 33:EP ~31:23154055.0 ~32:30/01/2023

2025/04474 ~ Complete ~54:COMPOSITIONS AND METHODS FOR BIOLOGICAL PRODUCTION AND HARVEST OF LITHIUM ~71:ECOBIOOME HOLDINGS, LLC, 59 E Whistlers Bend CIR, The Woodlands, Texas, 77384-5045, United States of America ~72: MARC RODRIGUEZ~ 33:US ~31:63/420,356 ~32:28/10/2022

2025/04419 ~ Provisional ~54:E-CON PLUMBING FITTING ~71:Hendrik Jakobus van Wyk, 3 Ashford Crescent, Brookside Village, South Africa ~72: Hendrik Jakobus van Wyk~

2025/04425 ~ Complete ~54:MACHINE READABLE MEDIUM FOR TRANSFORMING A STRUCTURED DATA ARRAY CONTAINING INFORMATION OBJECTS OF A DIGITALIZED DOCUMENT ~71:ROGACHEV Igor Petrovich, Pogonniy proezd, d. 3, k. 3, kv. 91, Moscow, 107564, Russian Federation ~72: ROGACHEV Igor Petrovich~ 33:RU ~31:2024118116 ~32:29/06/2024

2025/04429 ~ Complete ~54:SYSTEM FOR DETERMINING PARKING SPACE AVAILABILITY  
~71:OBSHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY  
OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72:  
BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta  
Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130490 ~32:10/10/2024

2025/04432 ~ Complete ~54:COMPUTER DEVICE FOR DETERMINING PARKING SPACE AVAILABILITY  
~71:OBSHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY  
OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72:  
BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta  
Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130488 ~32:10/10/2024

2025/04436 ~ Complete ~54:VEHICLE FOR COLLECTING DATA FOR MACHINE LEARNING COMPRISING  
DEVICE FOR COLLECTING DATA ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow,  
107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130472 ~32:10/10/2024

2025/04439 ~ Complete ~54:MACHINE-READABLE MEDIUM FOR CONTROLLING A VEHICLE ~71:VOLKOV  
Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem  
Maksimovich~ 33:RU ~31:2024130486 ~32:10/10/2024

2025/04446 ~ Complete ~54:PORTABLE INTELLIGENT INFORMATION ALL-IN-ONE MACHINE FOR PUBLIC  
INTEREST LITIGATION SERVICES ~71:Henan University of Urban Construction, Binhu street, Xinhua District,  
Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: WANG Yongjun~

2025/04447 ~ Complete ~54:A LANDFILL LEACHATE TREATMENT DEVICE ~71:Foshan University, No. 18  
Jiangwan 1st Road, Chancheng District, Foshan City, Guangdong Province, People's Republic of China ~72:  
Dong Fangyan;Gao Heng;Liu Dongfang;Liu Wenjing;Yang Fujun;Yao Yiluan;Zhang Sijie;Zhang Yongli;Zhou  
Yanbo~

2025/04451 ~ Complete ~54:IN-SITU AUTOMATIC MONITORING APPARATUS FOR GRASSLAND CARBON  
FLUX, AND MONITORING METHOD ~71:Inner Mongolia Academy of Agricultural And Animal Husbandry  
Sciences, No. 22 Zhaojun Road, Yuquan District, Hohhot City, Inner Mongolia Autonomous Region, 010031,  
People's Republic of China ~72: BAO, Longshan;CHANG, Hong;DI, Caixia;GAO, Liqin;HAO, Jie;HUO, Zihua;JIN,  
Caixia;LI, Liyun;LIU, Sibao;LIU, Xinchao;PAN, Dong;SI, Qin;TIAN, Yanjun;TIAN, Ye;WANG, Feng;WANG,  
Haiming;WANG, Kang;WEN, Chao;XU, Jiayi;YE, Ruhan;YIN, Guomei;ZHANG, Lihua;ZHANG, Pujin;ZHAO,  
Yiwen~

2025/04458 ~ Complete ~54:TERMINAL ASSEMBLY FOR CONDUCTOR ROD HAVING MULTIPLE DEGREES  
OF FREEDOM ~71:CATERPILLAR INC., 100 N.E. Adams Street, Peoria, Illinois, 61629-9510, United States of  
America ~72: IGOR STRASHNY~ 33:US ~31:17/535,235 ~32:24/11/2021

2025/04464 ~ Complete ~54:TRIVALENT TUBERCULOSIS VACCINE ~71:MCMASTER UNIVERSITY, 1280  
Main Street West, Hamilton, Canada ~72: AFKHAMI, Sam;XING, Zhou~ 33:US ~31:63/383,566 ~32:14/11/2022

2025/04466 ~ Complete ~54:MEMBRANE FUSION INHIBITOR FOR INHIBITING AIDS VIRUS AND DRUG-  
RESISTANT STRAIN THEREOF, AND PHARMACEUTICAL USE THEREOF ~71:Institute of Pathogen Biology,  
Chinese Academy of Medical Sciences, 9 DONG DAN SAN TIAO, Dongcheng District, BEIJING 100730, CHINA  
(P.R.C.), People's Republic of China ~72: CHONG, Huihui;GENG, Xiuzhu;HE, Yuxian;ZHU, Yuanmei~ 33:IB  
~31:202211410040.4 ~32:11/11/2022

2025/04479 ~ Provisional ~54:RAKEMATE ~71:RHUDOLF SEEMISE MOATSHE, 1344 STAND SECTION, MOTHOTLUNG, BRITS, MADIBENG, South Africa ~72: RHUDOLF SEEMISE MOATSHE~

2025/04427 ~ Complete ~54:MACHINE-READABLE MEDIUM FOR GENERATING A GRAPHICAL USER INTERFACE FOR A SYSTEM FOR DETERMINING PARKING SPACE AVAILABILITY ~71:OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72: BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130495 ~32:10/10/2024

2025/04461 ~ Complete ~54:IMMOBILISED LIPASE AND METHOD OF PRODUCING BIODIESEL USING THE SAME ~71:VAAL UNIVERSITY OF TECHNOLOGY, VANDERBIJLPARK CAMPUS PRIVATE BAG X021 ANDRIES POTGIETER VANDERBIJLPARK, South Africa ~72: FETO, Naser Aliye;MOLOTO, Makwena Justice;NKHI, Mpho Gladys~ 33:ZA ~31:2022/13010 ~32:30/11/2022

2025/04468 ~ Complete ~54:AMYLIN RECEPTOR AGONISTS ~71:Novo Nordisk A/S, Novo Alle 1, BAGSVÆRD 2880, DENMARK, Denmark ~72: JØRGENSEN, Cecilie Mia;KRUSE, Thomas;LAU, Jesper F.~ 33:EP ~31:22215958.4 ~32:22/12/2022;33:US ~31:18/512,512 ~32:17/11/2023

2025/04478 ~ Complete ~54:MODULAR PROCESSING PLANT ~71:OWENS-BROCKWAY GLASS CONTAINER INC., One Michael Owens Way, Perrysburg, Ohio, 43551, United States of America ~72: PHILIPP ZIPPE~

2025/04421 ~ Provisional ~54:MODULAR PAINT ROLLER SYSTEM WITH SHAFTLESS FRAME, CLIP-ON GUARDS, AND FABRIC SOCK SLEEVES ~71:Sashendren Pillay, 1 KLIPPERS WAY, South Africa ~72: SASHENDREN PILLAY~

2025/04430 ~ Complete ~54:MACHINE-READABLE MEDIUM FOR DETERMINING PARKING SPACE AVAILABILITY ~71:OBSCHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72: BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130491 ~32:10/10/2024

2025/04433 ~ Complete ~54:MOBILE USER DEVICE FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE AND PLAYBACK CORRECTION ~71:LIMITED LIABILITY COMPANY "ADDON", VN.TER.G. MUNITSYPALNIY OKRUG TEKSTILSHCHIKI, PR-KT VOLGOGRADSKIY, D. 45, STR. 1, POMESCH. 1H/3, MOSCOW, 109316, Russian Federation ~72: BUROV Kirill Vitalievich;GIRIN Ivan Andreevich;POPOV Sergey Alekseevich;VETROV Dmitriy Viktorovich~ 33:RU ~31:2024131169 ~32:17/10/2024

2025/04438 ~ Complete ~54:MACHINE-READABLE MEDIUM FOR DETERMINING PERMISSIBLE SPEED OF A VEHICLE ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130482 ~32:10/10/2024

2025/04449 ~ Complete ~54:A MULTI-SOURCE SOLID WASTE-BASED LIGHTWEIGHT GEOPOLYMER CONCRETE, PREPARATION METHOD, AND APPLICATIONS ~71:Fujian Huarong Construction Group Co., Ltd, Huarong Technology Center, 2nd Floor, No. 138-9 Changpu Community, Chaoyang Road, Linjiang Street, Cangshan District, Fuzhou City, Fujian Province, 350001, People's Republic of China;Henan Polytechnic University, No. 2001 Century Avenue, Shanyang District, Jiaozuo City, Henan Province, 454003, People's Republic of China;Huahui Construction Group Co., Ltd, 933, Building C3, Phase II, Taihe Plaza, East Second Ring Road, Jin'an District, Fuzhou City, Fujian Province, 350001, People's Republic of China;Sanming University, No. 25 Jingdong Road, Sanming City, Fujian Province, 365004, People's Republic of China ~72: LIN, Shengyuan;LIU, Jifeng;LU, Jian;YANG, Guangyu;YANG, Miao;ZHANG, Huizhi;ZHU, Jianping~

2025/04452 ~ Complete ~54:GAS-EXTRACTING IN-SITU AUTOMATIC MONITORING APPARATUS FOR GRASSLAND CARBON FLUX, AND MONITORING METHOD ~71:Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences, No. 22 Zhaojun Road, Yuquan District, Hohhot City, Inner Mongolia Autonomous Region, 010031, People's Republic of China ~72: BAO, Longshan;CHANG, Hong;DI, Caixia;GAO, Liqin;HAO, Jie;HUO, Zihua;JIN, Caixia;LI, Liyun;LIU, Sibao;LIU, Xinchao;PAN, Dong;SI, Qin;TIAN, Yanjun;TIAN, Ye;WANG, Feng;WANG, Haiming;WANG, Kang;WEN, Chao;XU, Jiayi;YE, Ruhan;YIN, Guomei;ZHANG, Haiying;ZHANG, Lihua;ZHANG, Pujin;ZHAO, Yiwen~

2025/04455 ~ Complete ~54:CORONARY HEART DISEASE AND ANGINA PECTORIS PASTER AND PREPARATION METHOD THEREOF ~71:THE AFFILIATED HOSPITAL TO CHANGCHUN UNIVERSITY OF CHINESE MEDICINE, No.1478 Gongnong Road, Chaoyang District, Changchun City, Jilin Province, Changchun, People's Republic of China ~72: LV Shan~

2025/04465 ~ Complete ~54:A CORROSION PROTECTIVE WRAPPING ~71:BROWNLOW, George, 340A Spionkop Road, Northriding, South Africa ~72: BROWNLOW, George~ 33:ZA ~31:2022/13443 ~32:13/12/2022

2025/04477 ~ Complete ~54:GLASS CONTAINER FORMING SYSTEM AND METHOD ~71:OWENS-BROCKWAY GLASS CONTAINER INC., One Michael Owens Way, Perrysburg, Ohio, 43551, United States of America ~72: JOHN HOLMES-LIBBIS;PAUL MOHR~ 33:US ~31:63/429,759 ~32:02/12/2022;33:US ~31:18/525,038 ~32:30/11/2023

2025/04480 ~ Provisional ~54:SELF-SUSTAINING POWER GENERATION SYSTEM USING CLOSED-LOOP AIRFLOW AND DUAL HALBACH ARRAYS ~71:Kevin De Lange, 5 Karen Crescent, South Africa ~72: Kevin De Lange~

2025/04434 ~ Complete ~54:SYSTEM FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE AND PLAYBACK CORRECTION ~71:LIMITED LIABILITY COMPANY "ADDON", VN.TER.G. MUNITSYPALNIY OKRUG TEKSTILSHCHIKI, PR-KT VOLGOGRADSKIY, D. 45, STR. 1, POMESCH. 1H/3, MOSCOW, 109316, Russian Federation ~72: BUROV Kirill Vitalievich;GIRIN Ivan Andreevich;POPOV Sergey Alekseevich;VETROV Dmitriy Viktorovich~ 33:RU ~31:2024131170 ~32:17/10/2024

2025/04444 ~ Complete ~54:METHOD FOR COLLECTING DATA FOR MACHINE LEARNING ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130467 ~32:10/10/2024

2025/04470 ~ Complete ~54:PROCESS FOR THE PRODUCTION OF PVC IN AQUEOUS SUSPENSION USING A MIXTURE OF INITIATORS AND AN ACTIVITY CONTROL AGENT ~71:Inovyn Europe Limited, PO Box 9, Bankes Lane Office, Bankes Lane, RUNCORN WA7 4JE, CHESHIRE, UNITED KINGDOM, United Kingdom ~72: HERMANT, Thomas~ 33:EP ~31:22215208.4 ~32:20/12/2022

2025/04423 ~ Provisional ~54:INCLUSIVE PARTICIPATION ARCHITECTURE AND SOFTWARE SYSTEM AND METHOD FOR ESG-ALIGNED ECONOMIC ACCELERATION AND SECTOR-NEUTRAL WHITE-LABEL OR DIRECT DEPLOYMENT ~71:George Smith, 11 Vorster Place, South Africa ~72: George Smith~

2025/04424 ~ Complete ~54:PIPETTE TIP WITH PS-DVB-GMA AT OA-FE3O4 NANO-CONFINED MAGNETIC FILTER ELEMENT ~71:Zhejiang Shuren University, No. 8 Shuren Street, Gongshu District, Hangzhou City, Zhejiang Province, 310015, People's Republic of China ~72: CHEN, Xin;FAN, Libo;HU, Lijia;LOU, Xuefei;LU, Yin;QIAN, Yaojie;WANG, Enjun;ZHAO, Yezhe;ZHOU, Ying~

2025/04428 ~ Complete ~54:COMPUTER DEVICE FOR GENERATING A GRAPHICAL USER INTERFACE FOR A SYSTEM FOR DETERMINING PARKING SPACE AVAILABILITY ~71:OBSHCHESTVO S OGRANICHENNOY

OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72: BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130493 ~32:10/10/2024

2025/04437 ~ Complete ~54:MACHINE-READABLE MEDIUM FOR TRAINING A MACHINE LEARNING MODEL OR COMPIRSING A TRAINED MACHINE LEARNING MODEL ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130478 ~32:10/10/2024

2025/04440 ~ Complete ~54:DEVICE FOR DETERMINING PERMISSIBLE SPEED OF A VEHICLE ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130480 ~32:10/10/2024

2025/04443 ~ Complete ~54:VEHICLE FOR COLLECTING DATA FOR MACHINE LEARNING ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130470 ~32:10/10/2024

2025/04454 ~ Complete ~54:A CARDIOVASCULAR EMERGENCY CLINICAL RADIOGRAPHY INJECTION DEVICE ~71:THE AFFILIATED HOSPITAL TO CHANGCHUN UNIVERSITY OF CHINESE MEDICINE, No.1478 Gongnong Road, Chaoyang District, Changchun City, Jilin Province, Changchun, People's Republic of China ~72: LV Shan~

2025/04457 ~ Complete ~54:CELLULOSE NANOFILTRATION MEMBRANE AND ITS PREPARING METHOD ~71:Suntar Membrane Technology (Xiamen) Co., Ltd, No.66 Jinting North Road, Xinglin, Jimei District, People's Republic of China ~72: CHEN, Huiying;FANG, Fulin;HONG, Yubin;HUANG, Liulian;LAN, Weiguang;LIU, Fei;WANG, Yuzhou;YANG, Sen;ZHENG, Zheng~ 33:CN ~31:202411399435.8 ~32:09/10/2024

2025/04459 ~ Complete ~54:DOUBLE ACTING PUMP ~71:MHWIRTH GMBH, Kölner Straße 71-73 41812, Germany ~72: JAEGER, Norbert;JANSEN, Roman~ 33:NO ~31:20221205 ~32:09/11/2022

2025/04463 ~ Complete ~54:COMPOSITIONS COMPRISING ACETIC ACID, BUTYRIC ACID AND QUERCETIN AND USES THEREOF ~71:COMTEMP - COMPANHIA DOS TEMPEROS, LDA., Zona Industrial, Lote 11 - II Fase, Casal Marcos Ferreira - Apartado 17, Portugal ~72: CALDAS PEREIRA CALDAS, Fernando António~ 33:PT ~31:118285 ~32:26/10/2022;33:EP ~31:22204484.4 ~32:28/10/2022

2025/04503 ~ Complete ~54:A COMPOSITE COMPLIANT VASCULAR GRAFT ~71:ASCENSE MEDICAL GMBH, Modecenterstraße 22/D14, Austria ~72: JARMAN, Jeremy Douglas;MIRCHANDANI, Smurti;MOORE, Michael Matthew;TICAR, Johanna Maria~ 33:ZA ~31:2023/00507 ~32:22/03/2023

2025/04456 ~ Complete ~54:"EXCREMENT-FERTILIZER ORCHARD" PLANTING AND BREEDING CIRCULATION METHOD SUITABLE FOR RED SOIL HILLY REGIONS IN THE SOUTH ~71:JIANGXI AGRICULTURAL UNIVERSITY, NANCHANG ECONOMIC DEVELOPMENT ZONE, People's Republic of China ~72: CAO, Lingdan;HAO, Qi;HE, Xiaolin;LIANG, Feng;LIN, Xiaoxia;LIU, Dao;LIU, Jia;LIU, Kailou;LIU, Ming;LIU, Yitian;XIONG, Peng;ZHOU, Chunhuo~ 33:CN ~31:202510612004.3 ~32:13/05/2025

2025/04460 ~ Complete ~54:HEAD STABILIZING TRAVEL PILLOW ~71:AZUROUS, INC. DBA CABEAU, 5950 Canoga Avenue, Suite 619 Woodland Hills, CA 91367, United States of America ~72: NEU, Thorben;STERNLIGHT, David, B.~ 33:US ~31:63/422,676 ~32:04/11/2022;33:US ~31:18/501,769 ~32:03/11/2023



2025/04469 ~ Complete ~54:METHODS OF TREATING GASTROINTESTINAL STROMAL TUMORS WITH RIPRETINIB ~71:Deciphera Pharmaceuticals, LLC, 200 Smith Street, WALTHAM 02451, MA, USA, United States of America ~72: SHERMAN, Matthew L.;SOTO, Rodrigo Ruiz;SPROTT, Kam M.~ 33:US ~31:63/435,137 ~32:23/12/2022;33:US ~31:63/478,736 ~32:06/01/2023;33:US ~31:63/481,093 ~32:23/01/2023;33:US ~31:63/493,821 ~32:03/04/2023;33:US ~31:63/505,720 ~32:02/06/2023;33:US ~31:63/515,898 ~32:27/07/2023

2025/04475 ~ Complete ~54:NOVEL PHTHALOCYANINE COMPOUNDS AND THE USE THEREOF FOR THE TREATMENT OF DISEASES ~71:RHODES UNIVERSITY, Drosty Road, Makhanda, 6139, South Africa ~72: PINAR SEN;TEBELLO NYOKONG~ 33:ZA ~31:2022/13068 ~32:02/12/2022

2025/04422 ~ Provisional ~54:SYSTEM AND METHOD FOR DECENTRALISED CONTEXTUAL INTEGRATION AND CONSTRAINT VALIDATION OF TASK AND DATA SUBMISSIONS ~71:AGRIILABS Pty Ltd, Ground Floor, Mac Building, Maxwell Office Park, Waterval City, South Africa ~72: Terry Igharoro~

2025/04426 ~ Complete ~54:METHOD FOR GENERATING A GRAPHICAL USER INTERFACE FOR A SYSTEM FOR DETERMINING PARKING SPACE AVAILABILITY ~71:OBSHESTVO S OGRANICHENNOY OTVETSTVENNOSTYU "PARCORP", VN.TER.G. MUNITSYPALNIY OKRUG BASMANNIY, UL 2-YA BAUMANSKAYA, D. 5 STR. 1, MOSCOW, 105005, Russian Federation ~72: BELOPUKHOV Maksim Borisovich;LARIN Aleksandr Andreevich;ROZHKOVA Elizaveta Aleksandrovna;VARNIAGA Maksim Olegovich~ 33:RU ~31:2024130492 ~32:10/10/2024

2025/04435 ~ Complete ~54:MACHINE-READABLE MEDIUM FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE AND PLAYBACK CORRECTION ~71:LIMITED LIABILITY COMPANY "ADDON", VN.TER.G. MUNITSYPALNIY OKRUG TEKSTILSHCHIKI, PR-KT VOLGOGRADSKIY, D. 45, STR. 1, POMESCH. 1H/3, MOSCOW, 109316, Russian Federation ~72: BUROV Kirill Vitalievich;GIRIN Ivan Andreevich;POPOV Sergey Alekseevich;VETROV Dmitriy Viktorovich~ 33:RU ~31:2024131171 ~32:17/10/2024

2025/04441 ~ Complete ~54:DEVICE FOR COLLECTING DATA FOR MACHINE LEARNING ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130468 ~32:10/10/2024

2025/04442 ~ Complete ~54:SYSTEM FOR COLLECTING DATA FOR MACHINE LEARNING ~71:VOLKOV Artem Maksimovich, sh. Otkrytoye, d. 14D, kv. 254, Moscow, 107370, Russian Federation ~72: VOLKOV Artem Maksimovich~ 33:RU ~31:2024130469 ~32:10/10/2024

2025/04445 ~ Complete ~54:SUPPORT STRUCTURE AND METHOD FOR REDUCING LOAD ON ARCH BRIDGE ABUTMENT ~71:China West Normal University, No. 1 Shida Road, Shunqing District, Nanchong City, Sichuan Province, 637009, People's Republic of China;Sichuan Academy of Water Conservancy, No. 7 Mudian Road, Qingyang District, Chengdu, Sichuan Province, 610072, People's Republic of China ~72: CHEN Hongkai;QIN Xin~

2025/04448 ~ Complete ~54:A RAPID-SETTING GEOPOLYMER CONCRETE AND ITS PREPARATION METHOD ~71:Fujian Deyao Construction Co., Ltd, 10th Floor, No. 103, Building A, No. 111, North Ring Road, Hanjiang Town, Shishi City, Quanzhou City, Fujian Province, 362700, People's Republic of China;Fujian Huarong Construction Group Co., Ltd, Huarong Technology Center, 2nd Floor, No. 138-9 Changpu Community, Chaoyang Road, Linjiang Street, Cangshan District, Fuzhou City, Fujian Province, 350001, People's Republic of China;Haixia Construction Group Co., Ltd, 9th Floor, Building A, Yongzheng Building, No. 333 Fuguang Road, Gushan Town, Jin'an District, Fuzhou City, Fujian Province, 350003, People's Republic of China;Huahui Construction Group Co., Ltd, 933, Building C3, Phase II, Taihe Plaza, East Second Ring Road, Jin'an District, Fuzhou City, Fujian Province, 350001, People's Republic of China;Sanming University, No. 25 Jingdong Road,

Sanming City, Fujian Province, 365004, People's Republic of China ~72: LIN, Shengyuan;LIN, Xin;LIU, Jifeng;LU, Jian;QIU, Chunlong;YANG, Miao;ZHANG, Huizhi~

2025/04450 ~ Complete ~54:METHOD FOR ASSESSING LIFESPAN OF ELECTRICAL EQUIPMENT BASED ON CLOUD COMPUTING ~71:Fujian Yueshan Energy Technology Co., Ltd., Room 601, No. 1, Shiluogu North Lane, Suxi, Xicheng, Xinluo District, Longyan City, Fujian Province, 364031, People's Republic of China;HENAN UNIVERSITY OF URBAN CONSTRUCTION, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China ~72: DENG Lifeng;DENG Zihan;LEI Zuozhao;LOU Tong;NIU Zhehui;PANG Binbin;PANG Kaige;ZHONG Zhiguang~

2025/04453 ~ Complete ~54:A CHINESE MEDICINAL COMPOSITION FOR TREATING CORONARY HEART DISEASE AND ANGINA PECTORIS, AND ITS PREPARATION METHOD ~71:THE AFFILIATED HOSPITAL TO CHANGCHUN UNIVERSITY OF CHINESE MEDICINE, No.1478 Gongnong Road, Chaoyang District, Changchun City, Jilin Province, Changchun, People's Republic of China ~72: LV Shan~

2025/04467 ~ Complete ~54:BAKING AT LOW-PH WITH THERMOSTABLE GLUCOAMYLASE VARIANTS ~71:Novozymes A/S, Krogshoejvej 36, BAGSVAERD 2880, DENMARK, Denmark ~72: HARRIS, Katie;LUNDKVIST, Henrik~

2025/04471 ~ Complete ~54:LASER BEAM DEVICE AND METHOD FOR PRODUCING COHERENCE ~71:Rheinmetall Waffe Munition GmbH, Heinrich-Ehrhardt-Straße 2, SÜDHEIDE 29345, GERMANY, Germany ~72: JUNG, Markus;NEUMANN, Benjamin~ 33:DE ~31:10 2022 132 521.0 ~32:07/12/2022

2025/04476 ~ Complete ~54:GLASS CONTAINER FORMING SYSTEM AND METHOD ~71:OWENS-BROCKWAY GLASS CONTAINER INC., One Michael Owens Way, Perrysburg, Ohio, 43551, United States of America ~72: PAUL MOHR~ 33:US ~31:63/429,772 ~32:02/12/2022;33:US ~31:18/524,369 ~32:30/11/2023

- APPLIED ON 2025/05/27 -

2025/04591 ~ Provisional ~54:SYSTEM AND METHOD FOR INTEGRATED RESALE FUNCTIONALITY IN E-COMMERCE PLATFORMS ~71:Rudolf Danté de Villiers, 84 Charles Hoffe, South Africa ~72: Rudolf Danté de Villiers~

2025/04481 ~ Provisional ~54:AI-POWERED SENTIMENT ANALYSIS AND VISUALISATION SYSTEM WITH SECURE TRIAL PREVIEW AND COLLOQUIAL LANGUAGE PROCESSING ~71:Keightly Mabasa, 37 Invicta road, South Africa ~72: Keightly Mabasa~ 33:ZA ~31:N/A ~32:25/05/2025

2025/04488 ~ Provisional ~54:UMQHAGI: AI-ENABLED WEARABLE PANIC DETECTION AND COMMUNITY ALERT SYSTEM ~71:Thozama Jonas, 9 Muirfield Road, South Africa ~72: Thozama Jonas~

2025/04489 ~ Provisional ~54:FINGERLICKING ~71:Muntu Motati Phiri, 15847 ThabaNchu, Kagiso Ext, Krugersdorp, Gauteng, 1754, South Africa ~72: Muntu Motati Phiri~

2025/04493 ~ Complete ~54:LOW-TEMPERATURE FERMENTATION DEVICE FOR STATIC COMPOSTING OF SOLID MANURE ~71:CRRC Env. Sci. & Tech. Co., Ltd., Floor 9, Building 1, Yard 8, Automobile Museum West Road, Fengtai District, Beijing, People's Republic of China ~72: Hongrui CHEN;Luke Wang;Qiuju YU;Su LIU;Tianfu LIU;Yiyi CAO;Zhenhai XU~ 33:CN ~31:202410995720.X ~32:24/07/2024

2025/04506 ~ Complete ~54:CRYSTALLINE MELANOCORTIN SUBTYPE-2 RECEPTOR (MC2R) ANTAGONIST ~71:CRINETICS PHARMACEUTICALS, INC., 6055 Lusk Blvd., United States of America ~72: KELLY, Colin M.;REDDY, Jayachandra P.;ZHAO, Yuxin~ 33:US ~31:63/387,884 ~32:16/12/2022

2025/04512 ~ Complete ~54:FUNGICIDAL COMPOSITIONS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: EDMUNDS, Andrew;GRASSO, Valeria;SCARBOROUGH, Christopher Charles;WOLF, Hanno Christian~ 33:EP ~31:22210538.9 ~32:30/11/2022

2025/04516 ~ Complete ~54:ENZYMATIC SMOOTHING OF BEVERAGES ~71:Voodoo Scientific USA, INC., 1171, W. Paseo Del Mar San Pedro, CALIFORNIA 90731, USA, United States of America ~72: ENRIQUEZ, Martin Duncan;MONTENEGRO, Joana~ 33:US ~31:63/386,431 ~32:07/12/2022

2025/04518 ~ Complete ~54:AGENT FOR PREVENTING OR TREATING DISEASE ASSOCIATED WITH ACCUMULATION OF ABNORMAL PROTEIN AGGREGATES ~71:MITSUBISHI TANABE PHARMA CORPORATION, 3-2-10, Dosho-machi, Chuo-ku, Osaka-shi, Osaka, 5418505, Japan;THE UNIVERSITY OF OSAKA, 1-1, Yamadaoka, Suita-shi, Osaka, 5650871, Japan ~72: MIKITO SHIMIZU;MISAO SUGA;TAKUYA FUJITA;TATSUSADA OKUNO;TOSHIHIDE YAMASHITA~ 33:JP ~31:2022-178369 ~32:07/11/2022;33:JP ~31:2023-119403 ~32:21/07/2023

2025/04495 ~ Complete ~54:MASS ELECTRICITY DEMAND MANAGEMENT SYSTEM AND METHOD ~71:BLUE POT HOLDINGS (PTY) LTD, Studio 3, Wechmarshof Farm, South Africa ~72: BENEKE, John Raymond;LABUSCHAGNE, Jean;LOUBSER, Jacques Bjorn;MARALACK, Lourens Phillip Edward~ 33:ZA ~31:2024/01693 ~32:28/02/2024

2025/04505 ~ Complete ~54:PRODUCTS AND METHODS FOR PATHOGEN CONTROL IN PLANTS ~71:APHEA.BIO NV, Technologiepark-Zwijnaarde 21, Belgium;FUNDACIÓN CENTRO DE EXCELENCIA EN INVESTIGACIÓN DE MEDICAMENTOS INNOVADORES EN ANDALUCÍA, MEDINA, Avenida del Conocimiento 34, Parque Tecnológico de Ciencias de la Salud, Spain ~72: DE MULDER, Thijs;HOUBRAKEN, Michael;LAGAE, Emma;MAINTZ, Jens;SIMON, Thomas;VANDENABEELE, Steven;VERCAUTEREN, Isabel~ 33:EP ~31:22383307.0 ~32:28/12/2022

2025/04508 ~ Complete ~54:ULOTARONT FOR TREATING ANXIETY AND ASSOCIATED CONDITIONS ~71:Sumitomo Pharma America, Inc., 84 Waterford Drive, MARLBOROUGH 01752, MA, USA, United States of America ~72: DEDIC, Nina;HAYES, Robert;KENT, Justine~ 33:US ~31:63/381,327 ~32:28/10/2022

2025/04515 ~ Complete ~54:IMMUNOGENIC COMPOSITIONS AND METHODS FOR ELICITING AN IMMUNE RESPONSE AGAINST CLOSTRIDIODES (CLOSTRIDIUM) DIFFICILE ~71:Pfizer Inc., 66 Hudson Boulevard East, NEW YORK 10001-2192, NY, USA, United States of America ~72: ANDERSON, Annaliesa Sybil;GONZALEZ-GARIS, Marina A.;HU, Lei;KANEVSKY, Isis;LIBERATOR, Paul Arthur;MORAN, Justin Keith;PHELAN, Lynn Marie;PRIDE, Michael William;SHI, Shuai;SURENDRAN, Naveen~ 33:US ~31:63/387,100 ~32:13/12/2022;33:US ~31:63/485,995 ~32:20/02/2023;33:US ~31:63/598,556 ~32:14/11/2023

2025/04485 ~ Provisional ~54:ESTYNOTE (TM) DIGITAL LICENSING SYSTEM FOR AESTHETIC PRACTITIONERS ~71:Gugu Emma Masondo, 11271 Eagle Rd, ext 6a, South Africa ~72: Gugulethu Masondo~

2025/04490 ~ Complete ~54:DEVICE HOUSING WITH LIGHTING ~71:MESO SCALE TECHNOLOGIES, LLC., 1601 Research Boulevard, Rockville, United States of America ~72: VANDERSARL, Jules;ZIMMERMAN, Cecilia~ 33:US ~31:62/956,983 ~32:03/01/2020

2025/04494 ~ Complete ~54:AN INTEGRATED AUDIT MANAGEMENT SYSTEM FOR FINANCIAL AND COMPLIANCE REPORTING ~71:HAOJING COLLEGE OF SHAANXI UNIVERSITY OF SCIENCE & TECHNOLOGY, TONGYI AVENUE, People's Republic of China ~72: LI ANG~



2025/04501 ~ Complete ~54:GUTTERS FOR A TRUCK BED ROLLER LID ~71:AEROKLAS COMPANY LIMITED, 111/1, 111/10 Moo 2, Tambol Makham-Khoo, Thailand ~72: VITOORAPAKORN, Ekawat;VITOORAPAKORN, Supawadee~ 33:TH ~31:2403001590 ~32:30/05/2024

2025/04507 ~ Complete ~54:ROASTED COFFEE ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: DAVIDEK, Tomas;MURPHY, Sean;POISSON, Luigi;TCHAMENI, Elodie~ 33:EP ~31:22205211.0 ~32:03/11/2022

2025/04513 ~ Complete ~54:PULVERIZED SOLID FUEL NOZZLE TIP ASSEMBLY WITH LOW CONTACT FRAME ~71:General Electric Technology GmbH, Brown Boveri Strasse 8, BADEN 5400, SWITZERLAND, Switzerland ~72: DONAIS, Richard Edward;GRZEBIEN, Kevin T.;LEWIS, John Childs~

2025/04519 ~ Complete ~54:FUSED BICYCLIC COMPOUND ~71:CHIA TAI TIANQING PHARMACEUTICAL GROUP CO., LTD., No. 369 Yuzhou South Rd., Lianyungang, Jiangsu, 222062, People's Republic of China ~72: HUI QIN;KE LI;PUZHOU CHEN;XIN LIU;YINSHENG ZHANG~ 33:CN ~31:202211404183.4 ~32:10/11/2022;33:CN ~31:202310799109.5 ~32:30/06/2023;33:CN ~31:202311448787.3 ~32:01/11/2023

2025/04483 ~ Provisional ~54:VIRTUAL SMART TAP ELECTRONIC BUS TICKET ~71:Willy sfiso Sibuyi, 57 Frank Townsend Street, White River, South Africa ~72: Willy sfiso Sibuyi~

2025/04487 ~ Provisional ~54:CLAMP ~71:ULRICH SEATS (PTY) LTD., 14 Axle Drive, Clayville Ext 11, Olifantsfontien, 1666, South Africa ~72: CHARLES EUGENE BRITZ;CHRISTO JOHANNES HOLTZHAUSEN~

2025/04491 ~ Complete ~54:A GEOTECHNICAL DETECTION DEVICE FOR GEOLOGICAL EXPLORATION OF DEBRIS FLOW DISASTERS ~71:Chengdu Vocational & Technical College of Industry, No. 818 Da'an Road, Zhengxing Street, Tianfu New Area, Chengdu City, Sichuan Province, People's Republic of China;Sichuan Provincial Highway Planning, Survey, Design and Research Institute Co., Ltd, No. 535 Tianfu 1st Street, High tech Zone, Chengdu City, Sichuan Province, People's Republic of China;Southwest Jiaotong University, No. 111, North Section 1, Second Ring Road, Chengdu, Sichuan Province, People's Republic of China ~72: Cao Yong;Chen Shuang;Feng Yan;Guan Xu;Huang Rui;Li Bing;Liu Rui;Liu Wei;Liu Xuemin;Lu Xiaoyu;Pan Sheng;Wen Lina;Xiao Dong;Zha Yan;Zhou Chunping~ 33:CN ~31:2025105360139 ~32:27/04/2025

2025/04502 ~ Complete ~54:A NUTRIENT RICH JAMUN MILLET COMPOSITE COOKIES FORMULATION ~71:BARKULE, Santosh R., OFFICER INCHARGE, CENTRAL NURSERY, VNMKV, PARBHANI, MAHARASHTRA, India;GAVIT, Urvashi R., M.SC (HORT) SCHOLAR, DEPARTMENT OF HORTICULTURE, VNMKV, PARBHANI, MAHARASHTRA, India;JAGTAP, Gajendra P., ASSOCIATE PROFESSOR (PL. PATH), COLLEGE OF HORTICULTURE, VNMKV, PARBHANI, MAHARASHTRA, India;JOSHI, Anuprita A., ASSISTANT PROFESSOR, COLLEGE OF FOOD TECHNOLOGY, VNMKV, PARBHANI, MAHARASHTRA, India;KALALBANDI, Baslingappa M., ASSOCIATE PROFESSOR, COLLEGE OF HORTICULTURE, VNMKV, PARBHANI, MAHARASHTRA, India;KHANDARE, Vishwanath S, PROFESSOR & OFFICER INCHARGE, COLLEGE OF HORTICULTURE, VNMKV, PARBHANI, MAHARASHTRA, India;LOHAKARE, Anshul S., ASSISTANT PROFESSOR, COLLEGE OF HORTICULTURE, VNMKV, PARBHANI, MAHARASHTRA, India ~72: BARKULE, Santosh R.;GAVIT, Urvashi R.;JAGTAP, Gajendra P.;JOSHI, Anuprita A.;KALALBANDI, Baslingappa M.;KHANDARE, Vishwanath S;LOHAKARE, Anshul S.~

2025/04517 ~ Complete ~54:WIRELESS DETONATOR CONSOLIDATION ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: MAHOMED, Shaheen Shafi;VAN DER MERWE, Divan;YATES, Marinus~ 33:ZA ~31:2023/00878 ~32:20/01/2023

2025/04522 ~ Complete ~54:METHOD AND APPARATUS FOR FORMING AN OBJECT WITH A NATURAL FIBRE-BASED SUBSTANCE ~71:SACMI COOPERATIVA MECCANICI IMOLA SOCIETÀ COOPERATIVA, Via

Selice Provinciale 17/A, 40026, Imola (Bologna), Italy ~72: DAVIDE ZANOTTI;FABRIZIO PUCCI;FIORENZO PARRINELLO;FRANCESCO PIRAZZOLI;GIOVANNI MAZZOTTI;MARCELLO ZAMA~ 33:IT ~31:102022000026688 ~32:23/12/2022

2025/04524 ~ Complete ~54:SOMATOSTATIN SUBTYPE-2 RECEPTOR (SST2R) TARGETED THERAPEUTICS AND USES THEREOF ~71:CRINETICS PHARMACEUTICALS, INC., 6055 Lusk Blvd., United States of America ~72: CHEN, Mi;ZHAO, Jian;ZHU, Yunfei~ 33:US ~31:63/387,235 ~32:13/12/2022;33:US ~31:63/597,871 ~32:10/11/2023

2025/04498 ~ Complete ~54:DEFLECTOR ~71:VISSER, Christiaan Pieter;, 377 Larsens street, South Africa ~72: VAN DER WALT, Herman;VISSER, Christiaan Pieter~ 33:ZA ~31:2024/04157 ~32:28/05/2024

2025/04510 ~ Complete ~54:SOMATOSTATIN RECEPTOR 2 AGONISTS AND USES THEREOF ~71:Basecamp Bio Inc., c/o International Corporation Service Ltd, PO Box 472, Harbour Place, 2nd Floor, 103 South Church Street, GEORGE TOWN KY1-1106, GRAND CAYMAN, CAYMAN ISLANDS, Cayman Islands ~72: DAI, Dongcheng;LI, Cui;ZHANG, He~ 33:IB ~31:2022/128301 ~32:28/10/2022

2025/04497 ~ Complete ~54:TRAFFIC FLOW PLANNING EARLY WARNING SYSTEM ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: Dayong WANG;Liming ZHANG;Xiaoyong GU;Yuantao WANG;Yuzhe SHEN~

2025/04499 ~ Complete ~54:STEPPED BIORETENTION DEVICE FOR HIGHWAY PAVEMENT RUNOFF ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: Guanghua CHEN;Guoping HU;Junkui PAN;Mingyang REN;Mingyu LI;Sangtian HU;Weili CHEN;Xinke ZHANG;Zimo LIU~

2025/04504 ~ Complete ~54:METHODS FOR TREATING IMMUNE THROMBOCYTOPENIA BY ADMINISTERING (R)-2-[3-[4-AMINO-3-(2-FLUORO-4-PHENOXY-PHENYL)PYRAZOLO[3,4-D]PYRIMIDIN-L-YL]PIPERIDINE-L-CARBONYL]-4-METHYL-4-[4-(OXETAN-3-YL)PIPERAZIN-L-YL]PENT-2-ENENITRILE ~71:PRINCIPIA BIOPHARMA INC., 55 Corporate Drive, Bridgewater, New Jersey, United States of America ~72: DAAK, Ahmed;KHAN, Umer~ 33:US ~31:63/420,864 ~32:31/10/2022;33:US ~31:63/386,094 ~32:05/12/2022

2025/04511 ~ Complete ~54:USE OF TAIL GAS MADE OF THE DISCHARGED GAS OF A REDUCTION PROCESS OF IRON OXIDE-CONTAINING MATERIAL ~71:Primetals Technologies Austria GmbH, Turmstraße 44, LINZ 4031, AUSTRIA, Austria ~72: MILLNER, Robert;REIN, Norbert;WURM, Johann;ZELLINGER, Karl-Heinz~ 33:EP ~31:22214825.6 ~32:20/12/2022;33:EP ~31:23170274.7 ~32:27/04/2023

2025/04521 ~ Complete ~54:A METHOD FOR CALCULATION OF A PRESSURE DROP BETWEEN CROSS-SECTIONS OF AN ARTERY ~71:HEMOLENS DIAGNOSTICS SP. Z.O.O., ul. Legnicka 48G, Wroclaw, 54-202, Poland ~72: KRYSPIN MIROTA~

2025/04484 ~ Provisional ~54:DIGITAL PLATFORM FOR INTEGRATED MEDICAL APPOINTMENTS, DOCUMENTATION, AND INSURANCE CLAIMS ~71:ABSORBENT INTERMEDIARY (PTY) LTD, 3478 ONICA MASHIGO STREET, FAR EAST BANK, ALEXANDRA, SANDTON, 2090, SOUTH AFRICA, South Africa ~72: SOMO, David~

2025/04496 ~ Complete ~54:BIAS ESTIMATION CONTROL METHOD BASED ON IMPROVED MINMAX MECHANISM ~71:Liaoning Petrochemical University, No.1 Dandong Road West Section, Wanhua District, Fushun City, Liaoning Province, 113001, People's Republic of China ~72: CHAO, Weipeng;HUANG, Yueyang;LI, Yushuai;SHI, Yuanbo~

2025/04509 ~ Complete ~54:BISPECIFIC ANTIBODIES AGAINST CANINE CD3 AND CD20 ~71:PetMedix Ltd, The Glenn Berge Building, Building 940, Babraham Research Campus, Babraham, CAMBRIDGE CB22 3FH , CAMBRIDGESHIRE, UNITED KINGDOM, United Kingdom ~72: BANDIERA, Roberto;BRADLEY, Ayesha;LI, Meng Amy;PATERSON, Yasmin Zoe~ 33:GB ~31:2217993.1 ~32:30/11/2022

2025/04523 ~ Complete ~54:NEURAL VIDEO CODING ~71:MICROSOFT TECHNOLOGY LICENSING, LLC, One Microsoft Way, Redmond, Washington, 98052-6399, United States of America ~72: BIN LI;JIAHAO LI;YAN LU~ 33:CN ~31:202310098152.9 ~32:20/01/2023

2025/04482 ~ Provisional ~54:AI-POWERED SENTIMENT ANALYSIS AND VISUALISATION SYSTEM WITH SECURE TRIAL PREVIEW AND COLLOQUIAL LANGUAGE PROCESSING ~71:Keightly Mabasa, 37 Invicta road, South Africa ~72: Keightly Mabasa~ 33:ZA ~31:N/A ~32:25/05/2025

2025/04486 ~ Provisional ~54:SYSTEMS AND METHODS FOR AI-DRIVEN AUTOMOTIVE SAFETY AND THREAT DETECTION ~71:CISSE, Ismail, 110 8th Street, ORANGE GROVE, Johannesburg 2192, Gauteng, SOUTH AFRICA, South Africa ~72: CISSE, Ismail~

2025/04492 ~ Complete ~54:ASSEMBLED CONNECTION STRUCTURE BASED ON BIM ~71:Anhui Water Conservancy Technical College, No. 18 Dongmenhe Road, Hefei City, Anhui Province, 231603, People's Republic of China ~72: CHEN Wei;GUO Mengmeng;HE Fang;LI Jian;PAN Zucong;XIE Ying;YU Wenjing~

2025/04500 ~ Complete ~54:PROCESS FOR COATING AN IMPLANT AND AN IMPLANT HAVING A CERAMIC MULTI-LAYER COATING ~71:AESCLAP AG, Am Aesculap-Platz, Germany;IHI IONBOND AG, Industriestrasse 9, Switzerland ~72: DOHM, Julius;GRUPP, Thomas;RICHTER, Berna;SANTANA, Antonio;SCHMIDT, Susann~ 33:EP ~31:24178830.6 ~32:29/05/2024

2025/04514 ~ Complete ~54:COATING COMPOSITIONS, ARTICLES, AND METHODS OF COATING ~71:SWIMC LLC, 1100 Midland - Legal Department, 101 W. Prospect Avenue, CLEVELAND 44115, OH, USA, United States of America ~72: ANDRIOT, Matthieu;BEAUFRETON, Christine;COLLETTE, Floraine;DEQUIDT, Amandine;DESTAL, Delphine;FONTAINE, Melanie;GIBANEL, Sebastien;GUIDAL, Adeline;MAURIER, Clementine;MICHEL, Philippe;TURGIS, Jean-Dominique~ 33:US ~31:63/386,713 ~32:09/12/2022

2025/04520 ~ Complete ~54:BRM TARGETING COMPOUNDS AND ASSOCIATED METHODS OF USE ~71:PRELUDE THERAPEUTICS INCORPORATED, 175 Innovation Boulevard, Wilmington, Delaware 19805, United States of America ~72: ANDREW PAUL COMBS;ARTEM SHVARTSBART;COREY HOWARD BASCH;LIANG LU;SINA REZAZADEH;SONG MEI~ 33:US ~31:63/383,753 ~32:15/11/2022

- APPLIED ON 2025/05/28 -

2025/04588 ~ Complete ~54:ADENO-ASSOCIATED VIRAL VECTORS FOR PROPER PACKAGING OF REPETITIVE ELEMENTS ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, New York, 10591, United States of America ~72: BRET D REID;GREGORY THOMAS NACHTRAB;RACHEL A ADAMS;RANJAN BATRA;REA LARDELLI MARKMILLER~ 33:US ~31:63/385,759 ~32:01/12/2022

2025/04538 ~ Complete ~54:METHOD AND SYSTEM FOR ANALYZING CORRELATION PROBABILITY OF PAVEMENT STRUCTURAL STRENGTH AND STRUCTURAL DAMAGE ~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;LI, Deying;LI, Yajie;MU, Jingjing;XU, Huafeng~

2025/04541 ~ Complete ~54:MOVABLE NEW MEDIA LIVE BROADCAST DEVICE ~71:XINYU UNIVERSITY, NO. 2666 SUNSHINE AVENUE, HIGH TECH ZONE, XINYU CITY, People's Republic of China ~72: CHEN, Wenling;HU, Hao;LAN, Luxi;TIAN, Jianxin;XIE, Xiaoyong;ZHANG, Luping~

2025/04542 ~ Complete ~54:A BLAST RESISTANT CAGE ~71:ITA SECURITY PRODUCTS AND SERVICES COMPANY (PTY) LTD, 245 3rd Avenue Bredell, Kempton Park, 1619, South Africa ~72: KENNETH LOUIS KOEN~

2025/04553 ~ Complete ~54:METHOD AND APPARATUS FOR THREE-DIMENSIONAL IMAGE RECONSTRUCTION BASED ON SPARSE VIEWS, AND COMPUTER DEVICE ~71:SHENZHEN POLYTECHNIC UNIVERSITY, By the Xili Lake in Xili Lake Town, Nanshan District, People's Republic of China ~72: YANG, Jinfeng;YE, Ziyun;ZHU, Xingzheng~ 33:CN ~31:2025104859883 ~32:17/04/2025

2025/04561 ~ Complete ~54:A METHOD AND SYSTEM FOR DETECTING INJECTION MOLDING DEFECTS ~71:PAN, Yong, No. 23 Guojian Lane, Dongcheng Street, Huangyan District, Taizhou, Zhejiang, 318000, People's Republic of China ~72: PAN, Yong~

2025/04563 ~ Complete ~54:POWERED AIR PURIFYING RESPIRATOR ~71:JSP LIMITED, Worsham Mill, Minster Lovell, United Kingdom ~72: BEARD, Oliver;HARE, Stephen~ 33:GB ~31:2215971.9 ~32:28/10/2022

2025/04527 ~ Provisional ~54:A STRUCTURAL ELEMENT ~71:MELLING, Colin, Unit 4, 292 Bryanston Drive, South Africa ~72: MELLING, Colin~

2025/04528 ~ Provisional ~54:ELECTROLYZER, SYSTEM AND METHOD FOR PRODUCING HYDROGEN GAS ~71:CRONJE, Jacobus, 6 Sandbaai Close, Langebaan 7357, SOUTH AFRICA, South Africa ~72: CRONJE, Jacobus~

2025/04535 ~ Complete ~54:PICK BALL TRAINING DEVICE AND SYSTEM ~71:GUANGZHOU HUAXIA VOCATIONAL COLLEGE, No. 772, East of ChengAo Avenue, Conghua District, Guangzhou, Guangdong, People's Republic of China ~72: Guoqiang Cai;Zhifeng Yu~

2025/04543 ~ Complete ~54:POWER CONVERTER, POWER SYSTEM, AND METHOD FOR CONTROLLING POWER CONVERTER ~71:SUNGROW (SHANGHAI) CO., LTD., Floor 4, No. 78, Lane 887, Zuchongzhi Road, Zhangjiang Hi-Tech Park, People's Republic of China ~72: JIANG, Anying;XU, Jincheng;YU, Yanfei~ 33:CN ~31:2024106840213 ~32:29/05/2024

2025/04557 ~ Complete ~54:SYSTEM AND METHOD FOR HYDROPROCESSING HIGH CHLORIDE FEEDSTOCKS ~71:SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., Carel van Bylandtlaan 30, HR The Hague, Netherlands ~72: AGARWAL, Deepak;ANDERSON, Russell Lee;BANDYOPADHYAY, Subhransu;BUENO DE MESQUITA, Janbart;PERRY, Stephen Randolph;STREET, Mike;VAN BEIJNUM, Johannes;WITTE, Gerard Pieter~ 33:IN ~31:202241077440 ~32:30/12/2022

2025/04566 ~ Complete ~54:LAYER 1 OR 2 MOBILITY IN WIRELESS COMMUNICATION SYSTEMS ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: AWADA, Ahmad;GOYAL, Sanjay;KARIMIDEHKORDI, Ali;KOSKELA, Timo;LADDU, Keeth, Saliya, Jayasinghe;SPAPIS, Panagiotis~ 33:GB ~31:2216564.1 ~32:07/11/2022

2025/04571 ~ Complete ~54:APPARATUS AND METHOD USING DIFFERENT OPTIMUM MAXIMUM POWER REDUCTION VALUES LINEARLY DEPENDENT ON DIFFERENT BANDWIDTH GROUPS ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: KOSKELO, Jaakko

Kalevi;LEHTINEN, Vesa Kalervo;NG, Man Hung;SÄYNÄJÄKANGAS, Tuomo Mikael;VASENKARI, Petri, Juhani~  
33:US ~31:63/422,480 ~32:04/11/2022

2025/04579 ~ Complete ~54:METHOD AND DEVICE FOR OBTAINING HIGH-PURITY HYDROGEN FROM  
METHANOL OR AMMONIA ~71:BASF Catalysts Germany GmbH, Seligmannallee 1, HANNOVER 30173,  
GERMANY, Germany ~72: HENSCHEL, Carsten;MACHHAMMER, Otto~ 33:EP ~31:22215256.3  
~32:21/12/2022

2025/04590 ~ Provisional ~54:BACKPACK GROCERIES BAGS ~71:BARNEY MHLABA NKOMO, P.O BOX 532,,  
South Africa ~72: BARNEY,MHLABA NKOMO~

2025/04592 ~ Provisional ~54:FR33LUMINOVAQ3UNCY ~71:John Jaey, MOSAWAWA, PHAKE, South Africa  
~72: John Jaey~

2025/04536 ~ Complete ~54:KIT FOR SCREENING LACTATION YIELD OF JIANGYUE DONKEY AND  
APPLICATION THEREOF ~71:Xinjiang Agricultural University, No. 311, Nongda East Road, Shayibake District,  
Urumqi City, Xinjiang, 830000, People's Republic of China ~72: CAO, Hang;CHEN, Bin;FANG, Chao;LIU,  
Lingling;LIU, Wujun;MA, Haiyu~

2025/04539 ~ Complete ~54:A COMPOUND PROBIOTIC FERMENTATION COMPOSITION FOR PREVENTING  
AND TREATING EPITHELIAL CELL DAMAGE CAUSED BY MYCOTOXINS AND ITS APPLICATION ~71:Henan  
University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province,  
467041, People's Republic of China ~72: HONG, Jun;HU, Jianye;HUANG, Weiwei;LIU, Chaoqi;WU,  
Xianchao;YAN, Chongye~

2025/04546 ~ Complete ~54:ROUTING DIGITAL MESSAGES VIA AUTHENTICATION NETWORKS  
~71:ENTERSEKT INTERNATIONAL LIMITED, Level 3, Alexander House, 35 Cybercity, Mauritius ~72:  
DOMINGUEZ, Benedicto Hernandez;HEIKKINEN, Jari Sakari~ 33:US ~31:63/652,890 ~32:29/05/2024

2025/04568 ~ Complete ~54:ALKALINE COMPOSITIONS AND METHOD FOR CLEANING ZINC-MAGNESIUM  
SURFACES ~71:CHEMETALL GMBH, TRAKEHNER STRASSE 3, 60487 FRANKFURT, GERMANY, Germany  
~72: LUECKERATH, Thorsten;SCHAUS, Andre;SIX, Marcell~ 33:EP ~31:22205516.2 ~32:04/11/2022

2025/04570 ~ Complete ~54:PARAMETRIC SPATIAL AUDIO ENCODING ~71:NOKIA TECHNOLOGIES OY,  
KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: LAITINEN, Mikko-Ville;VASILACHE, Adriana~ 33:GB  
~31:2217884.2 ~32:29/11/2022

2025/04581 ~ Complete ~54:ANALYZING CARBON ISOTOPES OF METHANE PRODUCED BY  
MICROORGANISMS AFTER EXOGENOUS CARBON ADDITION TO GEOLOGIC FORMATIONS  
~71:Transworld Technologies Inc., 700 Corporate Cir. Suite N, GOLDEN 80401, CO, USA, United States of  
America ~72: DEBRUYN, Roland P.;VANZIN, Gary;ZEMETRA, Joseph Edward~ 33:US ~31:63/426,026  
~32:16/11/2022

2025/04587 ~ Complete ~54:AQUEOUS DISPERSION OF ALKYL KETENE DIMER AND ITS USE ~71:KEMIRA  
OYJ, Energiakatu 4, Helsinki, 00180, Finland ~72: EIJA KORTE;ELISABETH LACKINGER-CSARMANN;JAAKKO  
HILTUNEN;JENNIFER RISER;NINA SNEITZ;RIINA KOIVULUOMA~ 33:US ~31:63/434,172  
~32:21/12/2022;33:FI ~31:20235078 ~32:27/01/2023

2025/04550 ~ Complete ~54:RFID LABEL CONTINUOUS IDENTIFICATION DEVICE BASED ON INTERNET OF  
THINGS ~71:ANHUI VOCATIONAL COLLEGE OF CITY MANAGEMENT, NO. 300, HUAIHAI AVENUE,



XINZHAN DISTRICT, HEFEI CITY, People's Republic of China ~72: CHEN Xin;GUO Shuheng;JIN Jian;LI Lin;LIU Chunxia;LIU Yong;LIU Yun;LUO Linfeng;WANG Zhaolong;WEI Wei;WU Huailu~

2025/04559 ~ Complete ~54:ANTI-TFR1 ANTIBODIES AND USES THEREOF ~71:BIOCYTOGEN PHARMACEUTICALS (BEIJING) CO., LTD., No.12, Baoshen South Street, Daxing Bio-Medicine Industry Park, People's Republic of China ~72: HU, Yiqing;SHEN, Yuelei;YAO, Jiawei;ZHANG, Lijun;ZHAO, Huizhen~ 33:CN ~31:PCT/CN2022/136246 ~32:02/12/2022

2025/04560 ~ Complete ~54:WIRE FOR REFINING MOLTEN METAL ~71:INJECTION ALLOYS LIMITED, The Way, Fowlmere, United Kingdom ~72: BECERRA, Ramiro;STEKLY, Victor~ 33:GB ~31:2219049.0 ~32:16/12/2022

2025/04565 ~ Complete ~54:DETERMINING AUTHENTICATION CREDENTIALS FOR A DEVICE-TO-DEVICE SERVICE ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: MAVUREDDI DHANASEKARAN, Ranganathan;PING, Jing~

2025/04567 ~ Complete ~54:MULTI-SLOT SCHEDULING IN CONTEXT OF SBFD ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: GAO, Jie;NHAN, Nhat-Quang;SUN, Jing Yuan;YUK, Youngsoo~

2025/04577 ~ Complete ~54:FUSION POLYPEPTIDE AND USE THEREOF ~71:ADLAI NORTYE BIOPHARMA CO., LTD., Block 6, 1008 Xiangwang Street, Cangqian Avenue, Yuhang District, People's Republic of China ~72: CHEN, Wanwan;HE, Nanhai;WANG, Youping;ZHU, Kun~ 33:CN ~31:202211507001.6 ~32:29/11/2022;33:CN ~31:202310444884.9 ~32:20/04/2023

2025/04580 ~ Complete ~54:STING AGONISTS ~71:LigaChem Biosciences Inc., 10, Gukjegwahak 10-ro, Yuseong-gu, DAEJEON 34002, REPUBLIC OF KOREA, Republic of Korea ~72: BAE, Hyun Joo;CHANG, Sook Kyung;CHUNG, Chul-Woong;HAN, Nara;JANG, Gun Young;JUNG, Yeong Hun;KIM, Ji Soo;KIM, Sung Min;LEE, Kun Jung;LEE, Young Cheol;LIM, So Yeon;OH, Jihye;PARK, Kyung Eun;PARK, Se Yeon;PARK, Yun-hee;SONG, Ho Young~ 33:KR ~31:10-2022-0147897 ~32:08/11/2022

2025/04582 ~ Complete ~54:STABILIZED VACCINES ~71:Seqirus Inc., 475 Green Oaks Parkway, HOLLY SPRINGS 27540, NC, USA, United States of America ~72: CAI, Yongfei;LEE, Changkeun;SETTEMBRE, Ethan;WEN, Yingxia~ 33:US ~31:63/383,041 ~32:09/11/2022

2025/04584 ~ Complete ~54:ANTI-CMET ANTIBODY, ANTIBODY-DRUG CONJUGATE, AND PREPARATION METHOD THEREFOR AND USE THEREOF ~71:Medilink Therapeutics (Suzhou) Co., Ltd., Unit 101, Block B3, Biotech Industrial Park, 218 Xinghu Street, Suzhou Industrial Park, Suzhou Area of China (Jiangsu) Pilot Free Trade Zone, SUZHOU 215000, JIANGSU, CHINA (P.R.C.), People's Republic of China ~72: CAI, Jiaqiang;XIAO, Liang;XUE, Tongtong~ 33:CN ~31:202211663573.3 ~32:23/12/2022

2025/04531 ~ Complete ~54:METHOD FOR EXTRACTING BUILDING REGION STRUCTURE FEATURES AND PREDICTING EARTHQUAKE DAMAGE BASED ON FUZZY MATHEMATICS ~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;HAN, Zongyuan;HU, Sumin;LI, Deying;LI, Qiuhong;LI, Yajie;ZHANG, Yao~

2025/04534 ~ Complete ~54:SIMULATION DATA GENERATION METHOD AND APPARATUS FOR MONITORING AND EARLY WARNING OF MAJOR COAL MINE HAZARDS ~71:China Coal Technology and Engineering Group Chongqing Research Institute Co. Ltd, No.6, Erlang Kecheng Road, Jiulongpo District, Chongqing City, 400039, People's Republic of China;National Energy Group Wuhai Energy Co., Ltd, Chuangye

Road West, Shenhua Street South, Binhe District, Wuhai City, Inner Mongolia Autonomous Region, 016099, People's Republic of China ~72: CAI Jiang;CHE Yuheng;CHENG Xiaoyang;CUI Junfei;LI Jie;LI Mingjian;LIN Fujin;LIU Hong;NIU Changsong;PU Yang;QIN Muguang;SHI Yinbin;SONG Zhiqiang;TAN Guowen;WANG Zhen;ZHANG Guojun;ZHAO Xusheng;ZHAO Yibing;ZHENG Zijun;ZHONG Yuanhang;ZHOU Yong~

2025/04551 ~ Complete ~54:GREEN BUILDING DESIGN DEVICE BASED ON BIM TECHNOLOGY ~71:ANHUI WATER CONSERVANCY TECHNICAL COLLEGE, NO. 18 HEMA ROAD, HEFEI CITY, People's Republic of China ~72: BAO, Hailing;CHENG, Zihui;LI, Jinbo~

2025/04554 ~ Complete ~54:ENERGY-SAVING GEAR TRANSMISSION MECHANISM ~71:Risi NA, Unit 2, Building 3, Mengjili Community, Qianjin Lane, Saihan District, Huhhot, Inner Mongolia, 010010, People's Republic of China ~72: Risi NA~ 33:CN ~31:202311240038.1 ~32:22/09/2023

2025/04562 ~ Complete ~54:METHOD OF MANUFACTURING STEEL PRESS PARTS WITH LOW ENVIRONMENTAL IMPACT ~71:ARCELOMITTAL, 24-26 Boulevard d'Avranches, Luxembourg ~72: Maxime BROSSARD;Pascale FELTIN;Raisa GRIGORIEVA;Tiago MACHADO AMORIM~

2025/04573 ~ Complete ~54:FALLBACK CONDITIONAL HANDOVER CONFIGURATION WITH SINGLE CONNECTIVITY ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: AWADA, Ahmad;GÜRSU, Halit Murat;KARABULUT, Umur;SPAPIS, Panagiotis~ 33:US ~31:17/980,662 ~32:04/11/2022

2025/04576 ~ Complete ~54:SYSTEMS AND METHODS FOR IDENTIFYING AND LOCATING MISSING OR DAMAGED GROUND-ENGAGING TOOLS ~71:CATERPILLAR INC., 100 NE Adams Street, United States of America ~72: LAY, Norman;MATHEW, Shawn N.;MILKOWSKI, Arthur;SHAIK, Subhani M.~ 33:US ~31:18/060,809 ~32:01/12/2022

2025/04586 ~ Complete ~54:MODULATION OF SYNGAP1 GENE TRANSCRIPTION USING ANTISENSE OLIGONUCLEOTIDES TARGETING REGULATORY RNAs ~71:CAMP4 THERAPEUTICS CORPORATION, One Kendall Square, Building 1400 West, United States of America ~72: ABDULLATIF, Ali Al;BUMCROT, David A.;RAMASWAMI, Gokul;SATHE, Preeti Kashinath;SEHGAL, Alfica;YUVA-AYDEMIR, Yeliz~ 33:US ~31:63/385,695 ~32:01/12/2022

2025/04526 ~ Provisional ~54:LEGACY VAULT ~71:Sizwesisha Mbuso Gamedze, 159 Sagewood Apartments, Swaziland ~72: Sizwesisha Mbuso Gamedze~

2025/04529 ~ Provisional ~54:A COMPUTER IMPLEMENTED SYSTEM FOR OPERATING A RETIREMENT FUND ~71:DISCOVERY LIMITED, 1 Discovery Place, corner of Rivonia Road and Katherine Street, Sandton, 2196, South Africa ~72: CRAIG SHAUN SHER;Cheminais, Mare~

2025/04530 ~ Provisional ~54:MULTI-BARREL RAPID-FIRE GUN ~71:C-FPV APS, H.P. Hanssens Gade 42, DK-6200 Aabenraa, Denmark ~72: JØRGEN LEIF SVANE;RASMUS NORMANN WILKEN ERIKSEN~

2025/04532 ~ Complete ~54:BUILDING THERMAL COMFORT MODEL PREDICTIVE CONTROL METHOD AND SYSTEM ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: CAI, Yujie;HU, Sumin;LI, Deying;LI, Yajie;LIU, Yuxiao;XU, Huafeng~

2025/04533 ~ Complete ~54:METHOD AND DEVICE FOR TRACING CAUSES OF MAJOR COAL MINE DISASTERS ~71:China Coal Technology and Engineering Group Chongqing Research Institute Co. Ltd, No.6, Erlang Kecheng Road, Jiulongpo District, Chongqing City, 400039, People's Republic of China;National Energy

Group Wuhai Energy Co., Ltd, Chuangye Road West, Shenhua Street South, Binhe District, Wuhai City, Inner Mongolia Autonomous Region, 016099, People's Republic of China ~72: CAI Jiang;CHEN Sen;CUI Junfei;DIAO Yong;HU Wen;LI Jie;LI Mingjian;LI Weiwei;LIAO Cheng;LIU Hong;PU Yang;SI Jianjun;SONG Zhiqiang;TAN Guowen;TANG Huaqiang;WANG Xuebing;WANG Zhen;XU Tengfei;YUE Jun;ZHAI Erhou;ZHANG Shiling;ZHANG Yixuan;ZHANG Yongjiang;ZHOU Yong~

2025/04540 ~ Complete ~54:USER INFORMATION SHARING MANAGEMENT METHOD AND SYSTEM BASED ON BIG DATA ~71:Peach Tech Limited, Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, Virgin Islands (British) ~72: Haoxin Zhang~

2025/04544 ~ Complete ~54:DEVICE FOR CONVENIENTLY HARVESTING CAMELLIA OLEIFERA FRUITS AND USING METHOD THEREOF ~71:Experimental Center for Subtropical Forestry, Chinese Academy of Forestry, No. 460, Qianshan West Road, Fenyi county, Xinyu City, Jiangxi Province, 336600, People's Republic of China ~72: CAO Linqing;CAO Xiaoyun;CHEN Shengtian;HU Weirong;HUANG Hui;LIU Ru;TAN Xinjian;WU Huijun;WU Xiaoyu;YAN Chao;YANG Hong;YANG Yue;Yuan Yaqi;ZENG Jianfeng;ZHONG Qiuping~ 33:CN ~31:202411050921.9 ~32:01/08/2024

2025/04545 ~ Complete ~54:A METHOD FOR ENHANCING DURABILITY OF CONCRETE ~71:BABREKAR, Mahesh Kisanrao, ASSISTANT PROFESSOR, INDRARAJ ARTS, COMMERCE AND SCIENCE COLLEGE, SILLOD, CHHATRAPATI SAMBHAJINAGAR, MAHARASHTRA, 431112, India;DESHMUKH, Suchita Venkatrao, ASSISTANT PROFESSOR, INDRARAJ ARTS, COMMERCE AND SCIENCE COLLEGE, SILLOD, CHHATRAPATI SAMBHAJINAGAR, MAHARASHTRA, 431112, India;KAKADE, Deepak N., ASSOCIATE PROFESSOR, P.E.S. COLLEGE OF ENGINEERING, NAGSENVANA, CHHTRAPATI SAMBHAJINAGAR, MAHARASHTRA, 431001, India;KALE, Chandrashekhar Madhavrao, PROFESSOR, INDRARAJ ARTS, COMMERCE AND SCIENCE COLLEGE, SILLOD, CHHATRAPATI SAMBHAJINAGAR, MAHARASHTRA, 431112, India;MUNDE, Surekha V., ASSOCIATE PROFESSOR, P.E.S. COLLEGE OF ENGINEERING, NAGSENVANA, CHHTRAPATI SAMBHAJINAGAR, MAHARASHTRA, 431001, India ~72: BABREKAR, Mahesh Kisanrao;DESHMUKH, Suchita Venkatrao;KAKADE, Deepak N.;KALE, Chandrashekhar Madhavrao;MUNDE, Surekha V.~

2025/04549 ~ Complete ~54:ECOLOGICAL ENVIRONMENT DATA PROCESSING METHOD FOR ECOLOGICAL RESTORATION ~71:LANZHOU UNIVERSITY, NO. 222 TIANSHUI SOUTH ROAD, CHENGGUAN DISTRICT, LANZHOU CITY,, People's Republic of China ~72: AN Yapeng;CHEN Yujin;CHENG Zhuoyun;DUAN Wenhui;JIANG Bin;SHAO Guoyong;WANG Junwu;WANG Weidong;WANG Xia~

2025/04555 ~ Complete ~54:PREPARATION PROCESS FOR LEVEL B1 HIGH FLAME RETARDANT NS TYPE FIREPROOF CABLE ~71:Guangdong Vango Cable Industry Co., Ltd., Yuanguang Building, No.198 Guangqing Avenue, Qingcheng District, Qingyuan, Guangdong Province, 511520, People's Republic of China ~72: Guan LIU;Kaijun CAI;Lili XU;Shijie ZHONG~ 33:CN ~31:2024115909839 ~32:08/11/2024

2025/04556 ~ Complete ~54:SOLUBLE GUANYLATE CYCLASE ACTIVATORS FOR TREATING SYSTEMIC SCLEROSIS ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: FLACK, Mary, Ruth;KAUFMAN, Julia;SETHY-CORACI, Indra~ 33:US ~31:63/422,452 ~32:04/11/2022

2025/04558 ~ Complete ~54:OLANZAPINE COMPOSITIONS AND METHODS OF USE ~71:MEDINCELL S.A., 3 rue des Frères Lumière, France ~72: CARLUER, Mélodie;CHERNIAKOV, Irina;FERRAND, Maria;VALITSKY, Anna Elgart~ 33:US ~31:63/479,267 ~32:10/01/2023;33:US ~31:63/516,283 ~32:28/07/2023

2025/04564 ~ Complete ~54:TOP COVER FOR A BATTERY PACK WITH INTEGRATED REINFORCEMENTS, BATTERY PACK AND METHOD TO ASSEMBLE THE SAME ~71:ARCELORMITTAL, 24-26 Boulevard d'Avranches, Luxembourg ~72: Qaiser KHAN;Tianfu WANG~



2025/04569 ~ Complete ~54:IMPROVED BIOTECHNOLOGICAL PROCESS TO PRODUCE GUANIDINOACETIC ACID (GAA) BY TARGETED INTRODUCTION OR BY INCREASING THE ACTIVITY OF A TRANSMEMBRANE EXPORTER PROTEIN ~71:EVONIK OPERATIONS GMBH, RELLINGHAUSER STRASSE 1-11, 45128 ESSEN, GERMANY, Germany ~72: MARIN, Kay;SCHNEIDER, Frank~ 33:EP ~31:22205232.6 ~32:03/11/2022

2025/04572 ~ Complete ~54:IMPROVED BIOTECHNOLOGICAL PROCESS TO PRODUCE GUANIDINOACETIC ACID (GAA) BY TARGETED INTRODUCTION OR BY INCREASING THE ACTIVITY OF A TRANSMEMBRANE TRANSPORT PROTEIN BELONGING TO THE AMINO ACID-POLYAMINE-ORGANOCATION SUPERFAMILY ~71:EVONIK OPERATIONS GMBH, RELLINGHAUSER STRASSE 1-11, 45128 ESSEN, GERMANY, Germany ~72: MARIN, Kay;SCHNEIDER, Frank~ 33:EP ~31:22205239.1 ~32:03/11/2022

2025/04574 ~ Complete ~54:PARAMETRIC SPATIAL AUDIO ENCODING ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: LAITINEN, Mikko-Ville;VASILACHE, Adriana~ 33:GB ~31:2217905.5 ~32:29/11/2022

2025/04575 ~ Complete ~54:EARLY INDICATION FOR DUAL CONNECTIVITY AND/OR CARRIER AGGREGATION ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: AWADA, Ahmad;DALSGAARD, Lars;GÜRSU, Halit Murat;HENTTONEN, Tero;KAINULAINEN, Jani-Pekka;KARIMIDEHKORDI, Ali;KOLEHMAINEN, Niko~

2025/04578 ~ Complete ~54:SYSTEMS AND METHODS FOR SUPPLYING NUTRITIONAL SUPPLEMENTS THAT ELIMINATE PERVASIVE ODORS ~71:ZINPRO CORPORATION, 7500 Flying Cloud Drive, Suite 800, Eden Prairie, Minnesota, 55344, United States of America ~72: SOCHA, Michael Thomas;STARK, Peter A.~ 33:US ~31:18/059,142 ~32:28/11/2022

2025/04583 ~ Complete ~54:ALKALINE ANION EXCHANGE BLEND MEMBRANE ~71:BASF SE, Carl-Bosch-Strasse 38, LUDWIGSHAFEN AM RHEIN 67056, GERMANY, Germany ~72: GRONWALD, Oliver;MALKO, Daniel;WEBER, Martin~ 33:EP ~31:22212610.4 ~32:09/12/2022

2025/04585 ~ Complete ~54:BENZIMIDAZOLE DERIVATIVES ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: BONVALOT, Damien;DAPIAGGI, Federico;GERMAIN, Nicolas;GROSHEVA, Daria;JEANMART, Stephane André Marie;LE CHAPELAIN, Camille;POULIOT, Martin~ 33:EP ~31:22214194.7 ~32:16/12/2022

2025/04589 ~ Complete ~54:DEEP FOUNDATION PIT SLOPE DEFORMATION MONITORING METHOD, APPARATUS, STORAGE MEDIUM, AND ELECTRONIC DEVICE ~71:ANHUI CHINA RAILWAY ENGINEERING TECHNOLOGY CO., LTD, China Railway Science And Technology Building, Susong South Road, Baohe District, Hefei City, People's Republic of China;ANHUI UNIVERSITY OF SCIENCE & TECHNOLOGY, No. 168 Taifeng Street, Shannan New District, Huainan City, People's Republic of China;CHINA RAILWAY NO. 4 ENGINEERING GROUP CO., LTD, No. 96 Wangjiang East Road, Baohe District, Hefei City, People's Republic of China ~72: CHEN Yonghua;CHENG Jiesheng;LIANG Zuozhen;LING Benchun;LIU Xiaopeng;LIU Yewei;PENG Tao;SHEN Zhiqiang;SUN Zhihao;WU Jingkui;XU Liangji;XU Qinguo;XU Wenqing;YANG Qi;ZENG Qingchun;ZHU Aren~ 33:CN ~31:202510081792.8 ~32:29/12/2024

2025/04525 ~ Provisional ~54:FLOATATION SAFETY SYSTEM FOR MOTOR VEHICLES ~71:Karabo Lekala, 99 Jan Heukelman Avenue, South Africa ~72: Karabo Lekala~

2025/04537 ~ Complete ~54:3D-PRINTED NAVIGATION TEMPLATE SUITABLE FOR CERVICAL VERTEBRAL LAMINAR SCREW PLACEMENT ~71:Quzhou People's Hospital (Quzhou Central Hospital), No. 100, Minjiang Road, Kecheng Dist., Quzhou, Zhejiang, People's Republic of China ~72: Nana Zhang;Yancheng Li~

2025/04547 ~ Complete ~54:CLINICAL RESCUE AUXILIARY DEVICE FOR NEWBORNS ~71:SANMENXIA CENTRAL HOSPITAL (SANMENXIA CHILDREN'S HOSPITAL), MIDDLE SECTION OF XIAOSHAN ROAD, SANMENXIA CITY,, People's Republic of China ~72: FENG, Xiangju;LIU, Xiao;LIU, Yangbo;WAN, Yanwei;WANG, Dan;WANG, Xiaobing;YANG, Fengtao;YOU, Xiaoli;YU, Xiaomin;ZHANG, Dan;ZHU, Xiaojie~

2025/04548 ~ Complete ~54:MULTI-INTERFACE CONTROLLER FOR COMPUTER NETWORK SECURITY ~71:TAN, HeYi, XIAOLONG HONGFA ROAD, GAOPING DISTRICT, NANCHONG CITY, People's Republic of China ~72: TAN, HeYi~

2025/04552 ~ Complete ~54:METHOD FOR PREPARING NUTRIENT FOR PLANTING VEGETABLES WITH FRUIT PEELS ~71:JINGDEZHEN UNIVERSITY, NO. 3 FULIANG AVENUE, JINGDEZHEN CITY, People's Republic of China ~72: FENG Tangkai;SONG Jingping~

- APPLIED ON 2025/05/29 -

2025/04596 ~ Provisional ~54:HYBRID BACKFILL BAG TIMBER CRIB PACK ~71:Timrite (Pty) Ltd, 10 Van der Bijl Street, South Africa ~72: MOFOKENG, Dineo;MUKONDELELI, Sanele~

2025/04597 ~ Provisional ~54:A SYSTEM AND METHOD FOR A MOBILE APPLICATION PLATFORM ENABLING LIVE PERSON CONNECTION AND VIEWING AT STADIUM EVENTS AND REMOTE LOCATIONS WITH AI-DRIVEN MAPPING, PAIRING, AND PERFORMANCE TRACKING FEATURES ~71:Hjalmar Douglas Fuchs, 346B Edward Street, South Africa ~72: Hjalmar Douglas Fuchs~

2025/04604 ~ Complete ~54:MULTIFUNCTIONAL LOW-LACTOSE PREBIOTIC GOAT MILK POWDER AND PREPARATION METHOD THEREOF ~71:SHAANXI UNIVERSITY OF SCIENCE AND TECHNOLOGY, Weiyang University Park, Xi'an City, Shaanxi Province, 710016, People's Republic of China;Xi'an Baiyue Goat Milk Group Co., Ltd., North Section of Xihuan Road, Wutun Street, Yanliang District, Xi'an City, Shaanxi Province, 710089, People's Republic of China ~72: CUI Xiuxiu;DENG Shiru;LEI Huan;SHU Guowei;XIE Zipei;YU Xinru;ZHENG Qiqi~

2025/04608 ~ Complete ~54:TETRAHYDRO-PYRIDO[3,4-B]INDOLE ESTROGEN RECEPTOR MODULATORS AND USES THEREOF ~71:F. Hoffmann-La Roche AG, Grenzacherstrasse 124, BASEL CH-4070, SWITZERLAND, Switzerland ~72: GOODACRE, Simon Charles;LABADIE, Sharada;LAI, Tommy;LIANG, Jun;LIAO, Jiangpeng;LIU, Zhiguo;ORTWINE, Daniel Fred;RAY, Nicholas Charles;WAI, John;WANG, Tao;WANG, Xiaojing;ZBIEG, Jason;ZHANG, Birong~ 33:US ~31:62/093,929 ~32:18/12/2014;33:US ~31:62/110,998 ~32:02/02/2015;33:US ~31:62/142,077 ~32:02/04/2015

2025/04613 ~ Complete ~54:AUTOMATED MANAGEMENT METHOD AND APPARATUS FOR INTERNET OF THINGS CARD, COMPUTER DEVICE, AND STORAGE MEDIUM ~71:E SURFING IOT CO., LTD., No. 366 West Yuejiang Road, Haizhu District, People's Republic of China ~72: CHEN, Furong;LIU, Chang;LU, Ziyao;SUN, Xuexue;WANG, Chang~ 33:CN ~31:202311599964.8 ~32:27/11/2023

2025/04625 ~ Complete ~54:METHOD FOR PREPARING A THERMOSETTING BINDER COMPOSITION BASED ON WATER-SOLUBLE OR WATER-DISPERSIBLE LIGNIN ESTER, FOR BINDING FIBRES ~71:Saint-Gobain Isover, Tour SAINT-GOBAIN, 12, Place de l'Iris, COURBEVOIE 92400, FRANCE, France ~72: SOISSON, Arnaud~ 33:FR ~31:2213857 ~32:19/12/2022

2025/04631 ~ Complete ~54:ANTIVIRAL COMPOSITION COMPRISING NUCLEOSIDE ANALOGUES DERIVED FROM NUCLEIC ACID AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF ~71:CJ CHEILJEDANG CORPORATION, 330, Dongho-ro, Jung-gu, Seoul, 04560, Republic of Korea ~72: AH REUM CHO;HOJIN MOON;SUNG HUN KIM;YOUNG NAM KIM~ 33:KR ~31:10-2022-0189720 ~32:29/12/2022;33:KR ~31:10-2023-0075804 ~32:13/06/2023;33:KR ~31:10-2023-0195074 ~32:28/12/2023

2025/04601 ~ Complete ~54:EXTRACTION METHOD AND APPLICATION OF PEPPER POLYPHENOLS WITH INHIBITORY ACTIVITY AGAINST PSEUDOMONAS FRAGI ~71:Hainan Xingke Tropical Crops Engineering Technology Company Limited, Xinglong Tropical Botanical Garden, Wanning City, Hainan Province, 571533, People's Republic of China;Sanya Research Institute of Chinese Academy of Tropical Agricultural Sciences, Yazhou Bay Science and Technology City, Yazhou District, Sanya City, Hainan Province, 572025, People's Republic of China;Spice and Beverage Research Institute, Chinese Academy of Tropical Agricultural Sciences, Xinglong Tropical Botanical Garden, Wanning City, Hainan Province, 571533, People's Republic of China;Yangzhou University, No. 88, Daxue South Road, Yangzhou City, Jiangsu Province, 225000, People's Republic of China ~72: DING, Yunshuang;DONG, Wenjiang;GU, Fenglin;HE, Shuzhen;HU, Weicheng;WANG, Xu;WU, Guiping;ZHU, Hongying;ZHU, Kexue~ 33:CN ~31:202510154466.5 ~32:12/02/2025

2025/04602 ~ Complete ~54:AN INTELLIGENT RECOGNITION METHOD FOR BRIDGE UNDERWATER IMAGE DEFECTS BASED ON CONVOLUTIONAL NEURAL NETWORKS ~71:SICHUAN ZHENTONG INSPECTION CO. LTD, No. 59, Qinglong Avenue, Fucheng District, Mianyang City, Sichuan Province, 621000, People's Republic of China;Southwest University of Science and Technology, A314, Special Laboratory Building, No. 59, Middle Section of Qinglong Avenue, Fucheng District, Mianyang City, Sichuan Province, 621000, People's Republic of China ~72: Biao Yang;Bihe Zhang;Chuankang Liao;Haoyan Zhang;Haoyang Wang;Liang Zuo;Lin Zhu;Longfan Zhu;Luyao Ma;Shaoping Yang;Shengrui Luo;Tiansi Zhang;Yaodong Luo;Yixiang Du;Yuhao Cheng~

2025/04605 ~ Complete ~54:PROBIOTIC GOAT MILK POWDER CONTAINING ANTIHYPERTENSIVE PEPTIDES AND ANTIOXIDANT PEPTIDES AND PREPARATION METHOD THEREOF ~71:SHAANXI UNIVERSITY OF SCIENCE AND TECHNOLOGY, Weiyang University Park, Xi'an City, Shaanxi Province, 710016, People's Republic of China;Shaanxi Yatai Dairy Co., Ltd., Wangqiao Town, Jingyang County, Xianyang City, Shaanxi Province, 713701, People's Republic of China ~72: DAI Chunji;DONG Xu;KONG Qiannan;NAN Jianhao;SHU Guowei;WAN Hongchang;WANG Qian;ZHANG Meng~

2025/04607 ~ Complete ~54:BIM TECHNIQUE-BASED WALL BUILDING DEVICE ~71:JI'AN COLLEGE, NO. 133 JI'AN SOUTH AVENUE, People's Republic of China ~72: LIU, Qiankun~

2025/04609 ~ Complete ~54:TETRAHYDRO-PYRIDO[3,4-B]INDOLE ESTROGEN RECEPTOR MODULATORS AND USES THEREOF ~71:F. Hoffmann-La Roche AG, Grenzacherstrasse 124, BASEL CH-4070, SWITZERLAND, Switzerland ~72: GOODACRE, Simon Charles;LABADIE, Sharada;LAI, Tommy;LIANG, Jun;LIAO, Jiangpeng;LIU, Zhiguo;ORTWINE, Daniel Fred;RAY, Nicholas Charles;WAI, John;WANG, Tao;WANG, Xiaojing;ZBIEG, Jason;ZHANG, Birong~ 33:US ~31:62/093,929 ~32:18/12/2014;33:US ~31:62/110,998 ~32:02/02/2015;33:US ~31:62/142,077 ~32:02/04/2015

2025/04615 ~ Complete ~54:METHOD AND PROCESS FOR ELECTROCHEMICAL OXIDATION ~71:ECOX GLOBAL PTE LTD, 10 Jalan Besar, #7-01 Sim Lim Tower, Singapore ~72: MONTOYA, Alejandro~ 33:AU ~31:2022903618 ~32:29/11/2022

2025/04619 ~ Complete ~54:VHH ANTIBODIES AND USES THEREOF ~71:KEY2BRAIN AB, NANNA SVARTZ VÄG 4, 171 65 SOLNA, SWEDEN, Sweden ~72: BERGLUND, Magnus;NORDLING, Erik;OHLIN SJÖSTRÖM, Elisabet;ÅSTRAND, Mikael~ 33:SE ~31:2251368-2 ~32:23/11/2022

2025/04629 ~ Complete ~54:SHARED FOUNDATION ADAPTABLE TO TOWER CRANE CONVERSION AND CONSTRUCTION METHOD THEREFOR ~71:CHINA CONSTRUCTION THIRD ENGINEERING BUREAU GROUP (ZHEJIANG) CO., LTD., Room 1020, Building 5, Pinggao Entrepreneurial City, Liangzhu Street, Yuhang District, Hangzhou, Zhejiang 311100, People's Republic of China;CHINA CONSTRUCTION THIRD ENGINEERING BUREAU GROUP CO., LTD., No.552 Guanshan Road, Hongshan District, Wuhan, Hubei, 430074, People's Republic of China;THE THIRD CONSTRUCTION CO., LTD OF CHINA CONSTRUCTION THIRD ENGINEERING BUREAU, No.2, Guannanyuan Road, Hongshan District, Wuhan, Hubei 430074, People's Republic of China ~72: DONGYANG LI;GUOLIANG LAI;JI LIAO;JIANDONG CHEN;JIANHUA YOU;JIE HAN;MINGZHI MAO;SHUAI WANG;YUMING YANG~ 33:CN ~31:202410570500.2 ~32:09/05/2024

2025/04638 ~ Complete ~54:PERFUME BOTTLE AND SPRAYING SYSTEM ~71:SIGNATURE PARFUMES, S.L., Avenida Emilio Lemos 2, Módulo 411, 41020, Sevilla, Spain ~72: ARMANDO MEDINA RIVERO~

2025/04595 ~ Provisional ~54:HYBRID BACKFILL BAG TIMBER ELONGATE PACK ~71:Timrite (Pty) Ltd, 10 Van der Bijl Street, South Africa ~72: MOFOKENG, Dineo;MUKONDELELI, Sanele~

2025/04600 ~ Complete ~54:AN ADJUSTABLE MOUNTING STRUCTURE FOR A FACIAL RECOGNITION DEVICE ~71:Yancheng Teachers University, B16 Xinchuang Software Industry Base, Big Data Industrial Park, Kecheng Street, Yannan High tech Zone, Yancheng City, People's Republic of China ~72: Yang Yuxin;Yu Ping~ 33:CN ~31:2025105751626 ~32:06/05/2025

2025/04620 ~ Complete ~54:ENERGY STORAGE SYSTEM FOR VEHICLE AND ALIGNMENT SYSTEM FOR SAME ~71:JOY GLOBAL UNDERGROUND MINING LLC, 40 Pennwood Place, Suite 100, Warrendale, United States of America ~72: BEANGE, Craig;BLACK, Daniel;KARNS, Ryan~ 33:US ~31:63/424,727 ~32:11/11/2022;33:US ~31:63/426,662 ~32:18/11/2022

2025/04633 ~ Complete ~54:ELECTRIC DISTRIBUTION PLATE AND ELECTROLYSER STACK THEREFOR ~71:JOHN COCKERILL HYDROGEN BELGIUM, Rue Jean Potier 1, 4100, Seraing, Belgium ~72: DAVID D'AMBROSIO;LUC VANHEE~ 33:EP ~31:22217279.3 ~32:30/12/2022

2025/04636 ~ Complete ~54:ANTI-PLASMA KALLIKREIN ANTIBODY DOSING REGIMENS FOR TREATING PLASMA KALLIKREIN ASSOCIATED DISORDERS ~71:ASTRIA THERAPEUTICS, INC., 75 State Street Suite 1400, Boston, Massachusetts, 02109, United States of America ~72: ANDREW JOHN NICHOLS;CHRISTOPHER JOHN MORABITO;JOU-KU CHUNG~ 33:US ~31:63/387,187 ~32:13/12/2022;33:US ~31:63/482,674 ~32:01/02/2023;33:US ~31:63/446,299 ~32:16/02/2023;33:US ~31:63/491,335 ~32:21/03/2023;33:US ~31:63/498,163 ~32:25/04/2023;33:US ~31:63/518,023 ~32:07/08/2023;33:US ~31:63/597,115 ~32:08/11/2023

2025/04603 ~ Complete ~54:EXTRACTION METHOD AND APPLICATION OF PEPPER POLYPHENOLS WITH ANTIOXIDANT ACTIVITIES ~71:Hainan Xingke Tropical Crops Engineering Technology Company Limited, Xinglong Tropical Botanical Garden, Wanning City, Hainan Province, 571533, People's Republic of China;Sanya Research Institute of Chinese Academy of Tropical Agricultural Sciences, Yazhou Bay Science and Technology City, Yazhou District, Sanya City, Hainan Province, 572025, People's Republic of China;Spice and Beverage Research Institute, Chinese Academy of Tropical Agricultural Sciences, Xinglong Tropical Botanical Garden, Wanning City, Hainan Province, 571533, People's Republic of China;Yangzhou University, No. 88, Daxue South Road, Yangzhou City, Jiangsu Province, 225000, People's Republic of China ~72: DING, Yunshuang;DONG, Wenjiang;GU, Fenglin;HE, Shuzhen;HU, Weicheng;WANG, Xu;WU, Guiping;ZHU, Hongying;ZHU, Kexue~ 33:CN ~31:202510154469.9 ~32:12/02/2025

2025/04611 ~ Complete ~54:SLIDABLE CURRENT COLLECTOR AND METHOD FOR CONTACTING CONDUCTOR RAIL ~71:CATERPILLAR GLOBAL MINING EQUIPMENT LLC, 3501 N. FM Hwy 1417, Denison,

Texas, 75020, United States of America ~72: IGOR STRASHNY;ROOPA RAJESH~ 33:US ~31:17/578,072  
~32:18/01/2022

2025/04624 ~ Complete ~54:PREPARATION OF FUSED AZOLE 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: HUGELSHOFER, Cedric L.;LIM, Yeon-  
Hee;ROANE, James P.;SHOCKLEY, Samantha E.~ 33:US ~31:63/429,615 ~32:02/12/2022

2025/04627 ~ Complete ~54:IMPACT BED FOR CONVEYOR BELT ~71:TRU-TRAC ROLLERS (PTY) LTD., 590  
Barolong Street, Icon Industrial Park, Sunderland Ridge, Centurion, 0157, South Africa ~72: HENDRIK  
STEPHANUS PRETORIUS~ 33:AU ~31:2022902562 ~32:05/09/2022

2025/04593 ~ Provisional ~54:LEAK-RESISTANT BEVERAGE CUP LID WITH PRESSURE-ACTIVATED VALVE  
~71:LHL GROUP (PTY) LTD, 64 Curvy Rd, South Africa ~72: Louis Lourens~ 33:ZA ~31:2025/01  
~32:28/05/2025

2025/04621 ~ Complete ~54:A STABLE AGROCHEMICAL COMPOSITION ~71:UPL Limited, Uniphos House,  
CD Marg, 11th Road, Madhu Park, Khar (West), MUMBAI 400052, INDIA, India ~72: JADHAV, Sujata  
Vishwas;PATIL, Samadhan~ 33:IN ~31:202221074001 ~32:20/12/2022

2025/04635 ~ Complete ~54:USE OF 8-HYDROXYQUINOLINE DERIVATIVE ~71:ASIERIS  
PHARMACEUTICALS (SHANGHAI) CO., LTD., 12F, Building 56, No.1000 Jinhai Road, City of Elite, Pudong New  
Area, Shanghai 201203, People's Republic of China;JIANGSU YAHONG MEDITECH CO., LTD., D-1009, New  
Drug Innovation Base, No. 1, Yaocheng Avenue, CMC Taizhou, Jiangsu, 225316, People's Republic of China  
~72: YIJUN DENG~ 33:CN ~31:202211468308.X ~32:22/11/2022

2025/04639 ~ Complete ~54:ENHANCING NITROGEN FIXATION WITH FUN ~71:AARHUS UNIVERSITET,  
Nordre Ringgade 1, 8000, Aarhus, Denmark ~72: DUGALD REID;JENS STOUGAARD JENSEN;JIESHUN  
LIN;KASPER RØJKJÆR ANDERSEN;PETER BJØRK~ 33:US ~31:63/483,248 ~32:03/02/2023;33:US  
~31:63/580,171 ~32:01/09/2023

2025/04594 ~ Provisional ~54:SANDY B ANTI-THEFT AND HIJACK PREVENTION DEVICE SYSTEM  
(SATHDS) ~71:Sandile Bhengu, 208 Evans Road, South Africa ~72: Sandile Bhengu~

2025/04832 ~ Provisional ~54:WEALTH TRADING BOT SYSTEM WITH CONFLUENCE STRATEGY AND  
ADAPTIVE TRADE STACKING ~71:kuphumla, shosholoza street,unit-p, South Africa ~72: kuphumla~ 33:ZA  
~31:N/A ~32:28/05/2025

2025/04599 ~ Complete ~54:COMPOSITE FORCE FIELD MAGNETIC SEPARATION COLUMN FOR DRY  
SEPARATION OF FINE-GRAINED MATERIALS AND ITS APPLICATION ~71:Kunming University of Science and  
Technology, No.68 Wenchang Road, 121 Avenue, Kunming City, Yunnan Province, People's Republic of China  
~72: Changtao WANG;Chuandong ZHAO;Qiang SONG;Xian XIE;Xiong TONG;Yuanlin MA~ 33:CN  
~31:2025103990162 ~32:01/04/2025

2025/04614 ~ Complete ~54:VIDEO TRANSMISSION METHOD AND SYSTEM FOR NETWORK CAMERA  
DEVICE, AND MEDIUM ~71:E SURFING IOT CO., LTD., No. 366 West Yuejiang Road, Haizhu District, People's  
Republic of China ~72: CHEN, Feng;CHEN, Xinyuan;CHEN, Zhou;QIAN, Liping~ 33:CN ~31:202311653512.3  
~32:05/12/2023



2025/04618 ~ Complete ~54:VHH ANTIBODIES AND USES THEREOF ~71:KEY2BRAIN AB, NANNA SVARTZ VÄG 4, 171 65 SOLNA, SWEDEN, Sweden ~72: BERGLUND, Magnus;NORDLING, Erik;OHLIN SJÖSTRÖM, Elisabet;ÅSTRAND, Mikael~ 33:SE ~31:2251367-5 ~32:23/11/2022

2025/04628 ~ Complete ~54:MAXILLARY AIRWAY DEVICE ~71:SELWYN GRUSD, 817 Honeysuckle Crescent, Gallo Manor, Sandton, 2052, South Africa ~72: SELWYN GRUSD~ 33:ZA ~31:2022/08880 ~32:10/08/2022;33:ZA ~31:2022/11277 ~32:14/10/2022

2025/04630 ~ Complete ~54:TRAVELING TOWER CRANE FOUNDATION ON STEP AND METHOD FOR CONSTRUCTING THE SAME ~71:CHINA CONSTRUCTION THIRD ENGINEERING BUREAU GROUP (ZHEJIANG) CO., LTD., Room 1020, Building 5, Pinggao Entrepreneurial City, Liangzhu Street, Yuhang District, Hangzhou, Zhejiang 311100, People's Republic of China;CHINA CONSTRUCTION THIRD ENGINEERING BUREAU GROUP CO., LTD., No.552 Guanshan Road, Hongshan District, Wuhan, Hubei, 430074, People's Republic of China;THE THIRD CONSTRUCTION CO., LTD OF CHINA CONSTRUCTION THIRD ENGINEERING BUREAU, No.2, Guannanyuan Road, Hongshan District, Wuhan, Hubei 430074, People's Republic of China ~72: CONGYUE QI;DONGYANG LI;JI LIAO;JIANDONG CHEN;JIANHUA YOU;QI WEI;WEIXIANG DING;YUMING YANG;ZEXING WU~ 33:CN ~31:202410599597.X ~32:15/05/2024

2025/04598 ~ Provisional ~54:A SYSTEM AND METHOD FOR ACCOUNTING AND RESERVING FOR AN INSURANCE RISK ~71:INSUREAI (PTY) LTD, Floor 2, 30 Melrose Blvd, Melrose Arch, South Africa ~72: PADAYACHY, Kishan;RICHMAN, Ronald;VAN DER WALT, Rowald~

2025/04642 ~ Provisional ~54:REMOVABLE HEAT SHIELD WITH RAISED OUTER MOTIFS AND INTERNAL VENTILATION CHANNELS FOR GRILLS ~71:Alaric Mac Heim, 29 Southey st, South Africa;Gerald Eugene Repinz, 33 Glastonbury rd, South Africa ~72: Alaric Mac Heim~

2025/04606 ~ Complete ~54:UNIT STRUCTURE SUITABLE FOR COMPLEX CURVED SURFACE MODELING SPACE ~71:China Railway No. 10 Engineering Group Co., Ltd., Building 7, Shuntai Plaza, High-tech Industrial Development Zone, Jinan City, Shandong Province, People's Republic of China;China Railway No. 10 Group Urban Construction Engineering Co., Ltd., 22nd Floor, Zhenghai Building, No. 66, Zhujiang Road, Development Zone, Yantai City, Shandong Province, People's Republic of China;University of Jinan, No. 336, Nanxinzhuan West Road, Shizhong District, Jinan City, Shandong Province, People's Republic of China ~72: LI, Xinkang;LIU, Zhaolei;LUO, Mingzu;PENG, Xiaotong;WANG, Hongwei;WANG, Zhongqing;ZHANG, Lujie~ 33:CN ~31:202411357208.9 ~32:27/09/2024

2025/04610 ~ Complete ~54:DISPENSER AND METHOD OF USE THEREOF ~71:S. C. JOHNSON & SON, INC., 1525 Howe Street, Racine, Wisconsin, 53403, United States of America ~72: CAITLIN Y O'GARA;CALISTOR NYAMBO;CURTIS CONKLIN;JIA WANG;TODD ULRICH~ 33:US ~31:16/431,598 ~32:04/06/2019

2025/04616 ~ Complete ~54:DATA PROCESSING AND VISUALIZATION METHOD, APPARATUS, MEDIUM AND DEVICE ~71:NDIVAL TECHNOLOGY (ZHUHAI) CO., LTD, Room 208B, 2nd Floor, No. 82, Shuangzhu Street, Ningxi Road, Xiang Zhou District, People's Republic of China ~72: FU, Guiduo;HE, Qi;HE, Yichen;XIE, Zhengheng;ZHAO, Zhiyi~ 33:CN ~31:202211597220.8 ~32:12/12/2022

2025/04622 ~ Complete ~54:AEROSOL PROVISION SYSTEM ~71:Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: FALLON, Gary;GIBSON, Paul~ 33:GB ~31:2218992.2 ~32:15/12/2022

2025/04626 ~ Complete ~54:SUSPENDED ANCHOR RING ~71:BERICAP HOLDING GMBH, Kirchstasse 5, Germany ~72: KRAUTKRÄMER, Alexander~ 33:DE ~31:10 2022 132 992.5 ~32:12/12/2022;33:DE ~31:10 2023 129 954.9 ~32:30/10/2023

2025/04632 ~ Complete ~54:RAISING MACHINE FOR HIGH DENSITY CASHMERE FABRIC PROCESSING ~71:ZHEJIANG TONGHUI TEXTILE CO., LTD, Zhicun Street, Chongfu Town, Tongxiang City, Jiaxing, Zhejiang, 314511, People's Republic of China ~72: DICHENG XI;DONGYU SHEN;FENJUAN CHEN;FENLI TU;HAIGUO TANG;YIBO CHEN;YIXIAO SHEN~ 33:CN ~31:202421181686.4 ~32:28/05/2024

2025/04640 ~ Complete ~54:COMBINATION THERAPY INVOLVING BISPECIFIC BINDING AGENTS BINDING TO CLDN18.2 AND CD3 AND IMMUNE CHECKPOINT INHIBITORS ~71:ASTELLAS PHARMA EUROPE BV, Sylviusweg 62, Netherlands ~72: BERNETT, Matthew;KIKUCHI, Aya;MOORE, Gregory;NAKAZAWA, Taisuke;NISTHAL, Alex~ 33:US ~31:63/387,403 ~32:14/12/2022;33:EP ~31:PCT/EP2023/061047 ~32:26/04/2023

2025/04612 ~ Complete ~54:DEVICE-CARD SEPARATION DIAGNOSIS METHOD AND SYSTEM BASED ON NETWORK ELEMENT MESSAGE, DEVICE AND MEDIUM ~71:E SURFING IOT CO., LTD., No. 366 West Yuejiang Road, Haizhu District, People's Republic of China ~72: CHEN, Feng;QIAN, Liping;SUN, Jintao;WANG, Yalei;ZHANG, Chunyan~ 33:CN ~31:202311775491.2 ~32:21/12/2023

2025/04617 ~ Complete ~54:ENERGY STORAGE SYSTEM FOR VEHICLE AND MOUNTING SYSTEM FOR SAME ~71:JOY GLOBAL UNDERGROUND MINING LLC, 40 Pennwood Place, Suite 100, Warrendale, United States of America ~72: BEANGE, Craig;BLACK, Daniel~ 33:US ~31:63/424,727 ~32:11/11/2022;33:US ~31:63/426,662 ~32:18/11/2022

2025/04623 ~ Complete ~54:IRAK4 DEGRADERS AND USES THEREOF ~71:Kymera Therapeutics, Inc., 500 North Beacon Street, 4th Floor, WATERTOWN 02472, MA, USA, United States of America ~72: DAVIS, Jeffrey;GOLLOB, Jared;MCDONALD, Alice;RONG, Haojing~ 33:US ~31:63/387,245 ~32:13/12/2022

2025/04634 ~ Complete ~54:METHOD FOR DETECTING CRACKS IN A TUBULAR PIPE ~71:ELECTRICITE DE FRANCE, 22-30 avenue de Wagram, 75008, Paris, France ~72: FLORENT COPIN;JONATHAN PEIXOTO;OLIVIER WATTIAU~ 33:FR ~31:FR2212839 ~32:06/12/2022

2025/04637 ~ Complete ~54:NLRP3 INFLAMMASOME INHIBITOR AND USE THEREOF ~71:TRANSTHERA SCIENCES (NANJING), INC., Flr 3, Bld 9, Accelerator Phase 2, Biotech And Pharmaceutical Valley, Jiangbei New Area, Nanjing, Jiangsu, 210032, People's Republic of China ~72: FRANK WU;LIN LI~ 33:CN ~31:202211378563.5 ~32:04/11/2022;33:CN ~31:202310292375.9 ~32:23/03/2023;33:CN ~31:202310646466.8 ~32:02/06/2023;33:CN ~31:202310817782.7 ~32:05/07/2023

2025/04641 ~ Provisional ~54:WASTE TO ENERGY ~71:NDIDZULAFHI MICHAEL MUTI, 612 LETLAPE STREET, EXT 7, South Africa ~72: NDIDZULAFHI MICHAEL MUTI~

- APPLIED ON 2025/05/30 -

2025/04667 ~ Complete ~54:SYNCHRONIZATION OF VIDEO CAMERAS ~71:GENIUS SPORTS SS, LLC, 312 E. 1ST STREET, 5TH FLOOR, LOS ANGELES, CALIFORNIA 90012, USA, United States of America ~72: MALDONADO LÓPEZ, Edisson O.;QUIROGA SEPULVEDA, Julian, Armando~ 33:US ~31:63/420,858 ~32:31/10/2022

2025/04683 ~ Complete ~54:BLADE, IMPELLER AND WIND POWER GENERATION DEVICE ~71:Sinoma Wind Power Blade Co., Ltd., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park North Street, Haidian District,

BEIJING 100083, CHINA (P.R.C.), People's Republic of China ~72: LI, Chengliang;LU, Xiaofeng;SU, Chenggong;ZHANG, Denggang;ZHANG, Yanming~ 33:CN ~31:202211530876.8 ~32:01/12/2022

2025/04646 ~ Provisional ~54:A SYSTEM FOR, AND METHOD OF, DETECTING A STATE OF APORIA ~71:ADRIAAN DIRK FREDERICH VAN DER WART, 426 Queen St E, Apartment #404, Toronto, M5A 1T4, Canada ~72: ADRIAAN DIRK FREDERICH VAN DER WART~

2025/04648 ~ Provisional ~54:A SHUNT SYSTEM, SHUNT AND METHOD FOR TREATING AN OCULAR DISORDER ~71:LIQID MEDICAL CORP., 1221 Brickell Center, Miami 33131, Florida, USA, United States of America ~72: CAMRAS, Lucinda Jean;FISCHER, Joshua David;MCCLUNAN, Daemon Bruce;SWANEPOEL, Liam~

2025/04671 ~ Complete ~54:METHODS FOR MODULATING COMPLEMENT FACTOR B EXPRESSION ~71:Ionis Pharmaceuticals, Inc., 2855 Gazelle Ct., CARLSBAD 92010, CA, USA, United States of America ~72: HUGHES, Steven G.;MCCALEB, Michael L.;NORRIS, Daniel A.~ 33:US ~31:63/382,057 ~32:02/11/2022

2025/04677 ~ Complete ~54:NITROXOLINE FOR USE IN THE TREATMENT OR PREVENTION OF A MALIGNANT PERIPHERAL NERVE SHEATH TUMOUR ~71:HEALX LIMITED, Charter House, 66-68 Hills Road, United Kingdom ~72: BROWN, David~ 33:GB ~31:2218460.0 ~32:08/12/2022

2025/04771 ~ Provisional ~54:CREDIT CONTROL REMOTE MANAGEMENT POWER DISCONNECTION/RECONNECTION OF DEFAULTING CUSTOMERS ~71:Lindani Ndodenjani Dlamini, 15 Plover East Driefontein, South Africa ~72: Lindani Dlamini~ 33:ZA ~31:1 ~32:01/05/2025

2025/04647 ~ Provisional ~54:PNEUMATIC GENERATOR, AND DEVICE INCLUDING SAME ~71:PETRUS HENDRIK ROODT, Plot 67, Michael Road, Oaktree, Krugersdorp, Gauteng, 1739, South Africa ~72: PETRUS HENDRIK ROODT~

2025/04649 ~ Provisional ~54:A SHUNT SYSTEM, SHUNT AND METHOD FOR TREATING AN OCULAR DISORDER ~71:LIQID MEDICAL CORP., 1221 Brickell Center, Miami 33131, Florida, USA, United States of America ~72: CAMRAS, Lucinda Jean;FISCHER, Joshua David;MCCLUNAN, Daemon Bruce;SWANEPOEL, Liam~

2025/04653 ~ Complete ~54:TRANSACTION DATA PROCESSING SYSTEMS AND METHODS ~71:XERO LIMITED, 19-23 Taranaki Street, New Zealand ~72: CHEAH, Soon-Ee;DRIDAN, Rebecca;JEUNE, Hayden;PECHAN, Niklas Patrick;QIN, Fubiao;RUSU, Delia;THURIER, Quentin-Gabriel~ 33:AU ~31:2020904805 ~32:23/12/2020

2025/04656 ~ Complete ~54:LIPID NANOPARTICLES FOR DELIVERY OF NUCLEIC ACIDS, AND RELATED METHODS OF USE ~71:AKAGERA MEDICINES, INC., 5 Essex Street, Boxford, Massachusetts, 01921, United States of America ~72: ALEXANDER KOSHKARYEV;DARYL C DRUMMOND;DMITRI B KIRPOTIN;MARK E HAYES;ROSS B FULTON~ 33:US ~31:63/118,534 ~32:25/11/2020

2025/04662 ~ Complete ~54:RACK SLAT ~71:SUPERCART SOUTH AFRICA (PTY) LTD, 32 Prospector Road, PROSPECTON, Durban 4115, Kwazulu-Natal, SOUTH AFRICA, South Africa ~72: WOLFE, Michael Castledine~ 33:ZA ~31:2024/04197 ~32:30/05/2024

2025/04665 ~ Complete ~54:CYCLIC PYRIDINE DERIVATIVES AS CGAS INHIBITORS ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: GNAMM, Christian;GODBOUT, Cédricx;HANDSCHUH, Sandra Ruth;HEIMANN, Annekatrin Charlotte;HOENKE, Christoph;KLEY, Joerg



Thomas;KUTTRUFF, Christian Andreas;LI, Jun;REINERT, Dirk;STUBER, Raphael;THEIS, Theodor~ 33:US  
~31:63/382,946 ~32:09/11/2022;33:EP ~31:22212488.5 ~32:09/12/2022

2025/04672 ~ Complete ~54:STORAGE CONTAINER ~71:Lifestyle Dreams Ltd., 8/F., Tungtex Building, 203 Wai Yip Street, Kwun Tong, KOWLOON HONG KONG, CHINA (P.R.C.), People's Republic of China ~72: VAN LANCKER, Pieter Jules J.;WONG, Waihang~ 33:US ~31:63/435546 ~32:27/12/2022

2025/04681 ~ Complete ~54:PULTRUSION APPARATUS, PROFILE PRODUCTION METHOD, TWISTED PLATE AND WIND TURBINE BLADE ~71:SINOMA WIND POWER BLADE CO., LTD., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park, North Street, Haidian District, Beijing, 100083, People's Republic of China ~72: JIAQI ZHAI;LEI XIAO;XIAOFENG LU;YURONG YANG;ZHANYING LI~ 33:CN ~31:202211467045.0 ~32:22/11/2022

2025/04643 ~ Provisional ~54:RADIONICS DEVICE WITH ROTATIONAL ALIGNED DIRECTIONAL AMPLIFIED PARTICLE FIELD ACCELERATOR ~71:DE WET, Riccardo, Arthur, 33 SUIKERBOSSIE DRIVE, GORDON'S BAY, MOUNTAINSIDE, 7140, SOUTH AFRICA, South Africa ~72: DE WET, Riccardo, Arthur~

2025/04660 ~ Complete ~54:SYSTEMS AND METHODS FOR MANAGING ACCESS CREDENTIAL REQUESTS ~71:XERO LIMITED, 19-23 Taranaki Street, New Zealand ~72: THIRKELL, Justin~

2025/04663 ~ Complete ~54:VIRTUAL DEBUGGING AND SIMULATION METHOD FOR INDUSTRIAL ROBOT BASED ON DIGITAL TWIN ~71:BEIJING RESEARCH INSTITUTE OF AUTOMATION FOR MACHINERY INDUSTRY CO., LTD., 1 Jiaochangkou Deshengmenwai, Xicheng District, People's Republic of China ~72: CHEN, Weicai;DUAN, Minghao;LIU, Lixun;WANG, Dequan;XIE, Zhenyu;ZHANG, Nan;ZHANG, Shun;ZHAO, Nan~ 33:CN ~31:202510323915.4 ~32:19/03/2025

2025/04673 ~ Complete ~54:FRACTIONATION OF CRUDE TALL OIL ~71:Stora Enso Oyj, P.O. Box 309, HELSINKI 00101, FINLAND, Finland ~72: KAVAKKA, Jari;TORSSELL, Staffan~ 33:SE ~31:2230437-2 ~32:21/12/2022

2025/04680 ~ Complete ~54:WIND TURBINE BLADE AIRFOIL FAMILY ~71:SINOMA WIND POWER BLADE CO., LTD., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park, North Street, Haidian District, Beijing, 100083, People's Republic of China ~72: CHENGLIANG LI;WANG REN;XIAOE MAO;XIAOFENG LU;XINGXING LI;ZHE XIE~ 33:CN ~31:202311733041.7 ~32:15/12/2023

2025/04654 ~ Complete ~54:RELOCATABLE BASE FOR ELEVATED POWER RAILS AND METHOD OF DEPLOYMENT ~71:CATERPILLAR GLOBAL MINING EQUIPMENT LLC, 3501 S. FM Hwy 1417, Denison, Texas, 75020, United States of America ~72: BRIAN ROBERT WELLER;IGOR STRASHNY~ 33:US ~31:17/563,317 ~32:28/12/2021

2025/04676 ~ Complete ~54:METHODS FOR TREATING NEURODEGENERATIVE DISORDERS WITH TRAMIPROSATE ~71:Alzheon, Inc., 111 Speen Street, Suite 306, FARMINGHAM 01701, MA, USA, United States of America ~72: ABUSHAKRA, Susan;HEY, John;TOLAR, Martin~ 33:US ~31:63/429,637 ~32:02/12/2022

2025/04684 ~ Complete ~54:BLADE AND WIND TURBINE ~71:Sinoma Wind Power Blade Co., Ltd., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park North Street, Haidian District, BEIJING 100083, CHINA (P.R.C.), People's Republic of China ~72: LU, Xiaofeng;SU, Chenggong;WANG, Xiangdong;ZHANG, Yanming~ 33:CN ~31:202211454022.6 ~32:21/11/2022

2025/04685 ~ Complete ~54:WIND TURBINE GENERATOR, WIND TURBINE BLADE, AND STALL MONITORING METHOD FOR SECTION AIRFOIL OF WIND TURBINE BLADE ~71:Sinoma Wind Power Blade Co., Ltd., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park North Street, Haidian District, BEIJING 100083, CHINA (P.R.C.), People's Republic of China ~72: LI, Chengliang;LI, Xingxing;LU, Xiaofeng;MAO, Xiaoe;REN, Wang;ZHANG, Denggang~ 33:CN ~31:202211467524.2 ~32:22/11/2022

2025/04645 ~ Provisional ~54:ADJUSTABLE CLEANING UTENSIL ~71:Saadick Choonara, 5 ruben crescent, South Africa ~72: Saadick Choonara~ 33:ZA ~31:1 ~32:01/05/2025

2025/04652 ~ Complete ~54:HIGH-EFFICIENCY BENEFICIATION METHOD FOR COMPLEX AND REFRACTORY TITANIUM PLACER ~71:GUANGDONG UBRIDGE NEW MATERIAL TECHNOLOGY CO., LTD., C-03 HENAN TWO DISTRICT, People's Republic of China;KUNMING UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO.727 JINGMING SOUTH ROAD, People's Republic of China ~72: CHANG, Sheng;GUO, Ziqi;HUANG, Xiang;TAN, Jianfeng;WANG, Xiangding;WANG, Zhenxing;ZHENG, Yongxing~

2025/04658 ~ Complete ~54:SYSTEMS AND METHODS FOR GENERATING DOCUMENT NUMERICAL REPRESENTATIONS ~71:XERO LIMITED, 19-23 Taranaki Street, New Zealand ~72: CHEAH, Soon-Ee;FAKHOURI, Salim;GLEYZES, Jerome;KHODEIR, Mohamed;WU, Yu~ 33:AU ~31:2021900419 ~32:18/02/2021

2025/04678 ~ Complete ~54:ELECTRICALLY-CONTROLLED HYDRAULIC ACTUATING SYSTEM OF AIRCRAFT ~71:AVIC HARBIN AIRCRAFT INDUSTRY GROUP CO., LTD, No.1 5, Youxie Road, Pingfang District, People's Republic of China ~72: CUI, Yuwei;GU, Feng;LIN, Yuzhu;LIU, Binbin;SONG, Yannan;WANG, Hongzhi;ZHANG, Zhuoran;ZHU, Bo~ 33:CN ~31:202211496555.0 ~32:27/11/2022

2025/04669 ~ Complete ~54:INHIBITORS OF KIF18A AND USES THEREOF ~71:Insilico Medicine IP Limited, 26th Floor, Three Exchange Square, 8 Connaught Place, CENTRAL HONG KONG, CHINA (P.R.C.), People's Republic of China ~72: DING, Xiao;DING, Xiaoyu;GAO, Feng;REN, Feng;ZHENG, Min;ZHU, Wei~ 33:IB ~31:2023/073384 ~32:20/01/2023;33:IB ~31:2023/096044 ~32:24/05/2023;33:IB ~31:2023/119748 ~32:19/09/2023;33:IB ~31:2023/140730 ~32:21/12/2023

2025/04679 ~ Complete ~54:BLADE ROOT FOR WIND POWER BLADE AND PREPARATION METHOD THEREOF ~71:SINOMA WIND POWER BLADE CO., LTD., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park, North Street, Haidian District, Beijing, 100083, People's Republic of China ~72: CHENGLIANG LI;CHONGBI ZHANG;GUOYONG LI;XIAOFENG LU;YANMING ZHANG;ZHANYING LI~ 33:CN ~31:202410077967.3 ~32:18/01/2024

2025/04651 ~ Complete ~54:BIG DATA-BASED INTELLIGENT WATER GAUGE RECOGNITION SYSTEM ~71:RIZHAO OCEAN SHIPPING TALLY CO., LTD, South End of Haibin 5th Road, Rizhao City, People's Republic of China ~72: Bing, ZHAO;Chuanfeng, XU;Fan, BU;Liqiang, CHI;Ning, GAO;Peichao, AN;Peng, ZHAO;Riwen, FEI;Wenlong, SUN;Xudong, FAN;Yilin, WANG;Yuanhang, CHEN~ 33:CN ~31:2024118131966 ~32:11/12/2024

2025/04675 ~ Complete ~54:COMPOSTIONS FOR USE IN THE PROPHYLACTIC TREATMENT OF HYPOCALCEMIA IN A RUMINANT ANIMAL ~71:Vilofoss A/S, Ballesvej 2, Snoghøj, FREDERICIA 7000, DENMARK, Denmark ~72: THEILGAARD, Per~

2025/04655 ~ Complete ~54:RELOCATABLE BASE FOR ELEVATED POWER RAILS AND METHOD OF DEPLOYMENT ~71:CATERPILLAR GLOBAL MINING EQUIPMENT LLC, 3501 S. FM Hwy 1417, Denison, Texas, 75020, United States of America ~72: BRIAN ROBERT WELLER;IGOR STRASHNY~ 33:US ~31:17/563,317 ~32:28/12/2021

2025/04657 ~ Complete ~54:DRILL STEEL COUPLING, ROD AND DRILL STEEL INCLUDING SAME ~71:PETRUS HENDRIK ROODT, Plot 67, Michael Road, Oaktree, Krugersdorp, Gauteng, 1739, South Africa;ROBERT CHARLES GRADIDGE, 12 Kleim Street, Carletonville, 2499, South Africa ~72: PETRUS HENDRIK ROODT~

2025/04670 ~ Complete ~54:BEVERAGE PREPARATION MACHINE ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: KOLLEP, Alexandre;VUAGNIAUX, Didier~ 33:EP ~31:22205828.1 ~32:07/11/2022

2025/04674 ~ Complete ~54:BISPECIFIC ANTIBODIES TARGETING PD1 AND VEGF ~71:LaNova Medicines Limited, Cailun Road, Building 1, Floor 5, Pudong New Area, SHANGHAI 201203, CHINA (P.R.C.), People's Republic of China ~72: CAO, Wei;GU, Haijuan;HUANG, Wentao;LI, Runsheng;ZANG, Ying Qin~ 33:IB ~31:2022/138363 ~32:12/12/2022

2025/04644 ~ Provisional ~54:LASER GROW SYSTEM ~71:DE WET, Riccardo, Arthur, 33 SUIKERBOSSIE DRIVE, GORDON'S BAY, MOUNTAINSIDE, 7140, SOUTH AFRICA, South Africa ~72: DE WET, Riccardo, Arthur~

2025/04659 ~ Complete ~54:SYSTEMS AND METHODS FOR GENERATING DOCUMENT NUMERICAL REPRESENTATIONS ~71:XERO LIMITED, 19-23 Taranaki Street, New Zealand ~72: CHEAH, Soon-Ee;FAKHOURI, Salim;GLEYZES, Jerome;KHODEIR, Mohamed;WU, Yu~ 33:AU ~31:2021900419 ~32:18/02/2021

2025/04661 ~ Complete ~54:METHODS AND SYSTEMS FOR PERFORMING DATABASE OPERATIONS ~71:XERO LIMITED, 19-23 Taranaki Street, New Zealand ~72: MCFAULL, Cassandra;THORNBURROW, Geoff~ 33:AU ~31:2022900112 ~32:21/01/2022

2025/04664 ~ Complete ~54:VIRTUAL SIMULATION AND MONITORING METHOD FOR FIVE-AXIS COMPUTER NUMERICAL CONTROL MACHINE TOOL, AND READABLE STORAGE MEDIUM ~71:BEIJING RESEARCH INSTITUTE OF AUTOMATION FOR MACHINERY INDUSTRY CO., LTD., 1 Jiaochangkou Deshengmenwai, Xicheng District, People's Republic of China ~72: CHEN, Weicai;DUAN, Minghao;LIU, Lixun;WANG, Dequan;XIE, Zhenyu;ZHANG, Nan;ZHANG, Shun;ZHAO, Nan~ 33:CN ~31:202510324572.3 ~32:19/03/2025

2025/04666 ~ Complete ~54:CYCLIC BENZIMIDAZOLE DERIVATIVES AS CGAS INHIBITORS ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: DREYER, Alexander;GNAMM, Christian;GODBOUT, Cédrickx;GRUNDL, Marc Alexander;HANDSCHUH, Sandra Ruth;HEIMANN, Annkatrin Charlotte;HOENKE, Christoph;KLEY, Joerg Thomas;KUTTRUFF, Christian Andreas;LI, Jun;REINERT, Dirk;STUBER, Raphael~ 33:US ~31:63/382,948 ~32:09/11/2022;33:EP ~31:22212494.3 ~32:22/12/2022

2025/04650 ~ Provisional ~54:A DISEASE MANAGEMENT PLATFORM ~71:ALTRON TMT (PTY) LTD, Altron Campus Block D, Woodlands Office Park, South Africa ~72: MOODLEY, Leslie;MUDALY, Nicolette~

2025/04668 ~ Complete ~54:CROSS-SPECIFIC ANTIGEN BINDING PROTEINS (ABP) TARGETING LEUKOCYTE IMMUNOGLOBULIN-LIKE RECEPTOR SUBFAMILY B1 (LILRB1) AND LILRB2, COMBINATIONS AND USES THEREOF ~71:iOmx Therapeutics AG, Fraunhoferstraße 22, MARTINSRIED 82152, GERMANY, Germany ~72: AIGNER, Maximilian;FRIEDRICH, Simone;HARTL, Christina;MILDE, Ronny;SCHILZ, Jonas;SUDAN, Kritika;ZANTOW, Jonas~ 33:EP ~31:22216595.3 ~32:23/12/2022;33:EP ~31:23185667.5 ~32:14/07/2023

2025/04682 ~ Complete ~54:METHOD OF FORMING WIND TURBINE BLADE AND WIND TURBINE BLADE  
~71:SINOMA WIND POWER BLADE CO., LTD., C-9th Floor, Building B-6, No. 66, Xixiaokou Road, Haidian  
District, 100192 Beijing, People's Republic of China ~72: CHENGLIANG LI;DEXIN ZHANG;GANG  
WANG;JINGBO WEN;KAI CHEN;LEILEI CHU;XIAOFENG LU~ 33:CN ~31:202310001980.6 ~32:03/01/2023

2025/04686 ~ Complete ~54:AERODYNAMIC DATA ACQUISITION METHOD AND APPARATUS, AND DEVICE  
AND MEDIUM ~71:Sinoma Wind Power Blade Co., Ltd., Floor 9-10, Building 7, No. 6, Dongsheng Technology  
Park North Street, Haidian District, BEIJING 100083, CHINA (P.R.C.), People's Republic of China ~72: LI,  
Chengliang;LI, Xingxing;LU, Xiaofeng;MAO, Xiaoe~ 33:CN ~31:202310626283.X ~32:30/05/2023

2025/04687 ~ Provisional ~54:JIGSIMUR ~71:ABDUL NASSER OMAR, 28-6th AVE RONDEBOSH EAST, South  
Africa ~72: ABDUL NASSER OMAR~

- APPLIED ON 2025/06/02 -

2025/04694 ~ Complete ~54:WORK MACHINE CHARGING THERMAL DERATE ~71:CATERPILLAR INC., 100  
NE Adams Street, South Africa ~72: BENEDICT, Adam K.;CHIN, Kea Voa;DELGADO, Julianna;KARNATI,  
Sindhu;MACHA, Gayatri;SELVEY, Dustin Craig~ 33:US ~31:63/657,758 ~32:07/06/2024;33:US  
~31:19/222,129 ~32:29/05/2025

2025/04696 ~ Complete ~54:A MODI SCRIPT IDENTIFICATION SYSTEM USING PDF SCANNING AND  
ANDROID APPLICATION ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD,  
UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BORADE,  
Monali;GOVINDWAR, Gauri Sagar;HABIB, Purushottam Santosh;INGLE, Yashwant;MAHALLE, Parikshit  
N.;PATIL, Ratna;SHAIKH, Sadiq Aqil;SHARMA, Nakul S.;VACHKAL, Shreyash Somnath;YADAV, Gitanjali B.~

2025/04699 ~ Complete ~54:A REAL-TIME DEEP LEARNING FRAMEWORK FOR AUTOMATED MALWARE  
DETECTION AND ANALYSIS WITH DYNAMIC ACTION THRESHOLDING FOR CYBERSECURITY  
PROFESSIONALS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER  
INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: ATTARDE, Khushboo  
Prashant;BANDEWAR, Krishnapriya Balaji;BOBHATE, Grishma Yadav;DHUMAL, Sanika Sameer;KULKARNI,  
Omkaresh Sakharam;MALI, Chinmayee Vijaykumar;MIRAJIKAR, Riddhi;PATIL, Rutuja Rajendra;SABLE, Nilesh  
P.;SHINDE, Gitanjali Rahul~

2025/04706 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING A DATABASE  
QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY,  
VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97,  
MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem  
Aleksandrovich~ 33:RU ~31:2025110704 ~32:24/04/2025

2025/04717 ~ Complete ~54:CONTROL SYSTEM FOR A FORCED CIRCULATION STEAM GENERATOR  
~71:MACKWELL & CO. LIMITED, Unit 3 54 Greywacke Road Harewood, New Zealand ~72: MACKWELL,  
Samuel James~ 33:NZ ~31:789534 ~32:20/12/2022

2025/04722 ~ Complete ~54:RECOMBINANT RSV VACCINE: METHODS OF MAKING AND USING THE SAME  
~71:BLUE LAKE BIOTECHNOLOGY, INC., 111 RIVERBAND ROAD, ATHENS, GEORGIA 30602, USA, United  
States of America ~72: GINGERICH, Maria, Cristina;HE, Biao;JIN, Hong~ 33:US ~31:63/382,453  
~32:04/11/2022

2025/04724 ~ Complete ~54:COMBINED USE OF ENILURACIL AND CAPECITABINE FOR TREATING  
CANCER ~71:ELION ONCOLOGY, INC., 4800 Hampden Lane, Suite 200, Bethesda, Maryland, 20814, United

States of America ~72: KHALID ISLAM;LORENZO LEONI~ 33:US ~31:63/386,271 ~32:06/12/2022;33:US ~31:63/513,525 ~32:13/07/2023

2025/04691 ~ Provisional ~54:LASH & DASH - "AN ELEVATED LASH & BEAUTY EXPERIENCE" ~71:Simphiwe Zandile Motha, 71 Homestead Avenue, BRYANSTON GATE OFFICE PARK< BLOCK 4E, BRYANSTON, South Africa ~72: Simphiwe Zandile Motha~

2025/04695 ~ Complete ~54:A SMART AI-POWERED PERSONAL FINANCE ASSISTANT WITH INTEGRATED BEHAVIORAL ANALYTICS AND PREDICTIVE FINANCIAL MANAGEMENT SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BOBHATE, Girishma Yadav;DESHPANDE, Yogesh Dattatray;KULKARNI, Omkaresh Sakharam;PATIL, Rutuja Rajendra;SHINDE, Gitanjali Rahul;SINGH, Tanishk~

2025/04698 ~ Complete ~54:A SOLAR ERUPTION ACTIVITY PREDICTION AND ANALYSIS SYSTEM BASED ON MACHINE LEARNING ~71:NANJING NORMAL UNIVERSITY, 1 Wenyuan Road., Qixia District, Nanjing, People's Republic of China ~72: YANG, Yun~ 33:CN ~31:2024109956438 ~32:24/07/2024

2025/04709 ~ Complete ~54:COORDINATING DYNAMIC HDR CAMERA CAPTURING ~71:Koninklijke Philips N.V., High Tech Campus 52, EINDHOVEN 5656 AG, THE NETHERLANDS, Netherlands ~72: MERTENS, Mark Jozef Willem~ 33:EP ~31:22205268.0 ~32:03/11/2022

2025/04725 ~ Complete ~54:SECURITY DOCUMENT AND METHOD FOR ITS MANUFACTURE ~71:DE LA RUE INTERNATIONAL LIMITED, De La Rue House Jays Close Viabes, Basingstoke, Hampshire, RG22 4BS, United Kingdom ~72: ALICE MESNAGE;REBECCA LOCKE~ 33:GB ~31:2300529.1 ~32:13/01/2023

2025/04708 ~ Complete ~54:RYLENE-BASED UV CURABLE SECURITY INK COMPOSITIONS ~71:SICPA HOLDING SA, Avenue de Florissant 41, PRILLY 1008, SWITZERLAND, Switzerland ~72: BAILLEUL, Mickael;CARTESIO, Salvatore;ELIGERT, Laurent;KAENEL, Cindy;PASQUIER, Cécile;VIENET, Arnaud~ 33:EP ~31:22205394.4 ~32:03/11/2022

2025/04712 ~ Complete ~54:SMALL DATA TRANSMISSION CONTROL ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: KOSKINEN, Jussi-Pekka;TURTINEN, Samuli, Heikki;WU, Chunli~

2025/04720 ~ Complete ~54:GAS COOLER ASSEMBLY FOR TRANSCRITICAL REFRIGERATION SYSTEM ~71:FLOW ENVIRONMENTAL SYSTEMS, INC., 6543 46TH Ave NE, Seattle, United States of America ~72: JARVIE, Sean~ 33:US ~31:18/074,979 ~32:05/12/2022

2025/04726 ~ Complete ~54:WASHABLE FAUCET LEVER WITH CRANK ACTIVATED DETERGENT DISPENSER ~71:WILKS, Freeman, 2231 NW 79th Ave., United States of America ~72: WILKS, Freeman~ 33:US ~31:63/475,718 ~32:03/12/2022

2025/04702 ~ Complete ~54:A SYSTEM SUGGESTING CORROSION PROTECTION METHOD OF VARIOUS METALS IN DIFFERENT PH ENVIRONMENT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BOBHATE, Grishma Yadav;CHAVHAN, Vaibhav Vinod;KAMBLE, Khushi Rahul;KULKARNI, Aparna;KULKARNI, Omkaresh Sakharam;MAHALLE, Parikshit Narendra;MOTGHARE, Sanchit Rustam;PATIL, Rutuja Rajendra;SHINDE, Gitanjali Rahul;UNDALE, Chaitanya Kishor~

2025/04705 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY,



VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110703 ~32:24/04/2025

2025/04718 ~ Complete ~54:DATA CAPTURE DEVICE, SYSTEM & METHOD ~71:GLOBALTECH CORPORATION PTY LTD, 83 Abernethy Road Forrestfield, Australia ~72: HEJLEH, Khaled~ 33:AU ~31:2022903923 ~32:20/12/2022

2025/04721 ~ Complete ~54:TRANSCRITICAL REFRIGERATION SYSTEM WITH GAS COOLER ASSEMBLY ~71:FLOW ENVIRONMENTAL SYSTEMS, INC., 6543 46TH Ave NE, Seattle, United States of America ~72: JARVIE, Sean~ 33:US ~31:18/074,987 ~32:05/12/2022

2025/04700 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS USING GRAPHICAL USER INTERFACE ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110708 ~32:24/04/2025

2025/04703 ~ Complete ~54:METHOD FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110700 ~32:24/04/2025

2025/04711 ~ Complete ~54:RESPIRATORY SYNCYTIAL VIRUS RNA VACCINATION ~71:SANOPI PASTEUR INC., 1 Discovery Drive, Swiftwater, United States of America ~72: CORONEL MARTINEZ, Diana Leticia;DANVE-CHERY, Emilie;SCOTT GALLICHAN, William;TEMITOPE IDOKO, Olubukola;ZHANG, Linong~ 33:US ~31:63/422,621 ~32:04/11/2022;33:US ~31:63/523,543 ~32:27/06/2023

2025/04719 ~ Complete ~54:CABLE AND TROLLEY SYSTEM FOR USE WITHIN AN IRRIGATION SPAN ASSEMBLY ~71:VALMONT INDUSTRIES, INC., 15000 Valmont Plaza,, United States of America ~72: DILLON, Cory J.~ 33:US ~31:63/489,008 ~32:08/03/2023

2025/04688 ~ Provisional ~54:PLANT-DERIVED MUCILAGE-BASED FLOCCULANT AND WATER PURIFICATION SYSTEM ~71:Conrad Jeffry van Staden, 250 Glover Avenue, South Africa ~72: Conrad Jeffry van Staden~ 33:ZA ~31:1/50 ~32:30/05/2025;33:ZA ~31:101/30 ~32:30/05/2025;33:ZA ~31:29/01 ~32:30/05/2025;33:ZA ~31:35/30 ~32:30/05/2025;33:ZA ~31:9/20 ~32:30/05/2025

2025/04689 ~ Provisional ~54:A METHOD OF ESCALATING SOCIAL MEDIA CONNECTIONS THROUGH AN ONLINE MAP GAME APPLICATION ~71:Hjalmar Douglas Fuchs, 346B Edward Street, South Africa ~72: Hjalmar Douglas Fuchs~

2025/04690 ~ Provisional ~54:INFRASTRUCTURE MONITORING SYSTEM AND METHOD ~71:ENGINERO SOLUTIONS (PTY) LIMITED, 84 HIGHVELD VIEW ESTATE, South Africa ~72: MODISHANA, Jase Simon~

2025/04692 ~ Provisional ~54:FERMENTED MUSHROOM WOUND CARE AND HEALING GEL FROM FERMENTED SCHIZOPHYLLUM COMMUNE AND PRODUCTION METHODS THEREOF. ~71:Busisiwe Moloi, 1/152 London Lane, South Africa;Neo Moloi, 1/152 London Lane, South Africa ~72: Busisiwe Moloi;Neo Moloi~

2025/04693 ~ Provisional ~54:RESEALABLE BEVERAGE CAN V6 ~71:Martin Hempel, Endeavour Farm, South Africa ~72: Martin Hempel~

2025/04697 ~ Complete ~54:A MULTILINGUAL SENTIMENTS ANALYSIS IN REAL-TIME CHAT SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DEDGAONKAR, Suruchi;FUTANE, Pravin;KODMELWAR, Manohar;MISAL, Vijay Ajinath;PATGAVKAR, Shubham Parsharam;SULAY, Kanhaiya Pramod;TADE, Siddhant Santosh~

2025/04710 ~ Complete ~54:ORAL FORMULATION OF N-PYRIDINYL ACETAMIDE DERIVATIVE FOR TREATING INTERSTITIAL LUNG DISEASE ~71:AstraZeneca AB, SÖDERTÄLJE SE-151 85, SWEDEN, Sweden ~72: CHUKHARKINA, Alexandra Pavlovna;FERRARI, Nicola;FRANSSON, Rebecca;OWEN, Caroline Ann;PROTHON, Susanne;SJÖSTRAND, Veronika;WIKSTRÖM, Håkan;WILLIAMS, Michael Lee~ 33:US ~31:63/382,311 ~32:04/11/2022

2025/04714 ~ Complete ~54:APPARATUS FOR STOPPING A CUTTING DISC ~71:KANDO INNOVATION LIMITED, 82 Kerwyn Avenue, East Tamaki, New Zealand ~72: George Davey MADDEVER;Keith BLENKINSOPP~ 33:NZ ~31:796439 ~32:18/01/2023

2025/04715 ~ Complete ~54:FABRICS INCLUDING A NON-FLUORINATED BARRIER COATING ~71:BERRY GLOBAL, INC., 101 Oakley Street Evansville, United States of America ~72: BISHOP, Nyle;WANG, Lei~ 33:US ~31:63/427,600 ~32:23/11/2022

2025/04723 ~ Complete ~54:ASSEMBLY AND METHOD FOR PACKAGING FRUIT AND VEGETABLE PRODUCTS ~71:UNITEC S.P.A., Via Provinciale Cotignola, 20/9, 48022, Lugo, Italy ~72: LUCA BENEDETTI~ 33:IT ~31:102022000026016 ~32:20/12/2022

2025/04727 ~ Complete ~54:FORMULATION OF A PAN-JAK INHIBITOR ~71:KINASET THERAPEUTICS, INC., 10 Knollwood Road, Medfield, United States of America ~72: GREENAN, Rebecca Annabel Louise;MORGAN, Frazer Giles;O'BRIEN, Christopher D.;OLIVER, Martin James~ 33:US ~31:63/385,847 ~32:02/12/2022;33:US ~31:63/501,086 ~32:09/05/2023;33:US ~31:63/597,934 ~32:10/11/2023

2025/04701 ~ Complete ~54:A FRIENDLY CHATBOT FOR MENTAL HEALTH SUPPORT AND CRISIS INTERVENTION ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DONGARE, Mahesh Sambhaji;KULKARNI, Omkaresh Sakharam;NADHE, Vedant Manoj;PATIL, Rutuja Rajendra;SALUNKE, Yugal Nagaraj;SHINDE, Gitanjali Rahul;WAGH, Aditya Anand~

2025/04704 ~ Complete ~54:METHOD FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110699 ~32:24/04/2025

2025/04707 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110705 ~32:24/04/2025

2025/04713 ~ Complete ~54:ZONED SPINNERET AND NONWOVEN FABRICS ~71:BERRY GLOBAL, INC., 101 Oakley Street Evansville, United States of America ~72: JOIJODE, Abhay;MOODY, III, Ralph A.;SINANGIL, Mehmet Selcuk~ 33:US ~31:63/427,584 ~32:23/11/2022

2025/04716 ~ Complete ~54:PHARMACEUTICAL COMPOSITION OF NON-ENVELOPED VIRUS ~71:JOINT STOCK COMPANY "BIOCAD", vn. ter. g. poselok Strelna, ul. Svyazi, d. 38, str. 1, pomeshch. 89, Russian Federation ~72: FEDORENKO, Lina Igorevna;LOMKOVA, Ekaterina Aleksandrovna;MOROZOV, Dmitry Valentinovich;NAGIBINA, Galina Sergeevna;SOZONOVA, Aleksandra Aleksandrovna;TOLSTYKH, Dmitrii Aleksandrovich~ 33:RU ~31:2022130458 ~32:24/11/2022

- APPLIED ON 2025/06/03 -

2025/04731 ~ Provisional ~54:A LOAD CELL ~71:BADGER EQUIPMENT (PTY) LTD, 77 Wattle Road, Benoni, South Africa ~72: GRIX, Etienne Douglas Lennox~

2025/04733 ~ Provisional ~54:SYSTEM AND METHOD FOR GENERATING PERSONALISED FINANCIAL MARKET ANALYSIS REPORTS AND STRATEGY RECOMMENDATIONS ~71:Oarabile Seboka, 14 Juta Street, Braamfontein, Johannesburg, South Africa, South Africa ~72: Oarabile Seboka~

2025/04736 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING CONTROL SIGNAL ~71:LIMITED LIABILITY COMPANY INSESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110928 ~32:26/04/2025

2025/04743 ~ Complete ~54:SERVER FOR A SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110940 ~32:26/04/2025

2025/04747 ~ Complete ~54:SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING WITH SERVER ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110937 ~32:26/04/2025

2025/04754 ~ Complete ~54:CABIN ENTRY DEVICE AND METHOD FOR SUSPENDED FLOATING RAFT ~71:No. 719 Research Institute of China State Shipbuilding Corporation Limited, No. 19, Yangqiaohu Avenue, Canglong Island Development Zone, Jiangxia District, Wuhan City, Hubei Province 430205, People's Republic of China ~72: CHEN Yahui;CHENG Yongchao;FANG Chang;JIANG Shiliang;LEI Jiayuan;LIU Wei;SUN Xinzhan;TAN Haitao;TIAN Mengnan;WANG Shuai;ZHAO Bo~ 33:CN ~31:202410749705.7 ~32:12/06/2024

2025/04737 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING NOTIFICATION TO BE DISPLAYED BY OUTPUT DEVICE ~71:LIMITED LIABILITY COMPANY INSESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110929 ~32:26/04/2025

2025/04748 ~ Complete ~54:METHOD FOR GENERATING CONTROL SIGNAL ~71:LIMITED LIABILITY COMPANY INSESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110925 ~32:26/04/2025

2025/04753 ~ Complete ~54:A SUSPENSION SYSTEM FOR A MINING DUMP TRUCK ~71:Henan Yuexin Intelligent Machinery Co., Ltd, No. 301-308, Office Building of Henan Pingkai Electric Power Equipment Co., Ltd., North Yuying Road, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: Gao Tienan;Ye Yongwang;Zhao Qianyang~



2025/04758 ~ Complete ~54:FEW-SHOT OBJECT DETECTION METHOD BASED ON IMPLICIT FEATURE CONTRASTIVE LEARNING ~71:Chongqing Normal University, No. 37, University Town Middle Road, Shapingba District,, Chongqing, 401331, People's Republic of China;Chongqing University of Technology, No. 69, Hongguang Avenue, Banan District,, Chongqing, 400054, People's Republic of China ~72: DENG Jianglin;FAN Xinyu;LI Gang;LV Pengfei;RUAN Zihan;TAN Wei;WANG Ru;XU Chuanyun;ZHOU Chunyu;ZHOU Zheng~ 33:CN ~31:2025101142135 ~32:24/01/2025

2025/04766 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING AAK1 INHIBITOR ~71:XIZANG HAISCO PHARMACEUTICAL CO., LTD., Xingfu Jiayuan Economic Development Zone, Jieba Town, Naidong District, Lhoka, Tibet, 856099, People's Republic of China ~72: HANG SONG;HUA MAO;SHIHAO DENG;XUANMIAO ZHANG;YANG ZHOU;YING DOU~ 33:CN ~31:202211406281.1 ~32:10/11/2022

2025/04769 ~ Complete ~54:N-PHENYL-PYRAZOLO[1,5-A]PYRIDINE-3-CARBOXAMIDE DERIVATIVES AS WILD TYPE C-KIT KINASE INHIBITORS FOR THE TREATMENT OF URTICARIA ~71:BLUEPRINT MEDICINES CORPORATION, 45 Sidney Street, Cambridge, Massachusetts, 02139, United States of America ~72: ANDREW MARC HAIDLE;CHENG FANG;DOUGLAS WILSON;EMANUELE PEROLA;GUANGYAN DU;JASON D BRUBAKER;JOSEPH L KIM;THIWANKA SAMARAKOON;THOMAS A DINEEN;YINGHUI DAI~ 33:US ~31:63/428,804 ~32:30/11/2022;33:US ~31:63/445,787 ~32:15/02/2023

2025/04750 ~ Complete ~54:DESERT SAND FIXATION AND SAND PREVENTION RAPID TREE PLANTING DEVICE ~71:XINJIANG INSTITUTE OF ECOLOGY AND GEOGRAPHY CHINESE ACADEMY OF SCIENCES, 818 South Beijing Road, Urumqi, Xinjiang, People's Republic of China ~72: FAN Jinglong;JIANG Youwei;WANG Haifeng;ZHANG Heng;ZHANG Ping~

2025/04752 ~ Complete ~54:HYDROGEOLOGICAL SURVEY METHOD FOR UNDERGROUND COAL MINE ~71:PASTORAL WATER CONSERVANCY SCIENCE RESEARCH INSTITUTE OF THE MINISTRY OF WATER RESOURCES, NO. 128, UNIVERSITY EAST ROAD, People's Republic of China ~72: BAI, Yawen;FENG, Yaru;HAN, Zhenhua;JI, Gang;JIAO, Rui;LI, Kaixuan;LI, Zijing;LIU, Hualin;LIU, Tiejun;PENG, Kai;WANG, Jin;ZHANG, Yanfei~

2025/04761 ~ Complete ~54:METHOD OF INSERTING REINFORCEMENT INTO A CEMENT MIXTURE WHEN CREATING OBJECTS USING 3D PRINTING AND A DEVICE FOR PERFORMING THE METHOD ~71:TECHNICKA UNIVERZITA V LIBERCI, Studentska 1402/2, Czech Republic ~72: Petr ZELENY~

2025/04765 ~ Complete ~54:COMPOSITIONS AND METHODS FOR NITROGEN FIXATION CLUSTER REGULATION ~71:BIOCONSORTIA, INC., 279 Cousteau Place, Suite 100, Davis, United States of America ~72: ALFORD, Betsy;CURTIS, Damian;MALIN, John;TIPTON, Kyle;WILLIAMS, Thomas~ 33:US ~31:63/477,306 ~32:27/12/2022

2025/04767 ~ Complete ~54:AN AIR-COOLED MOTOR AND A PISTON-TYPE AIR COMPRESSOR ~71:BENGBU GREATALL CHENG'EN COMPRESSOR MANUFACTURING CO., LTD., No.238 Tebu Road, Huaishang District, Bengbu, Anhui, 233000, People's Republic of China;GREATALL DYNAMIC CO., LTD., No.2 Xingfu Yi Road, Wushu Village, Miaoshan, Jiangxia District, Wuhan, Hubei, 430223, People's Republic of China ~72: CHUN WANG;JING LI;MING ZHANG~ 33:CN ~31:202410788197.3 ~32:19/06/2024

2025/04770 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TARGETED DELIVERY OF TGF $\beta$  ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, New York, 10591-6707, United States of America ~72: ANDREW J MURPHY;ARISTIDES ECONOMIDES;CHRISTOPHER SCHOENHERR;SENE AYKUL;SILVIA SMALDONE;VINCENT IDONE~ 33:US ~31:63/479,679 ~32:12/01/2023;33:US ~31:63/526,021 ~32:11/07/2023

2025/04730 ~ Provisional ~54:A.D.A.M-Q: AUTONOMOUS DIGITAL ADVANCED MACHINE WITH QUANTUM CYBER KINETIC INTELLIGENCE AND MULTILAYER SURVEILLANCE FRAMEWORK ~71:LESEGO JEROME KEVIN LEKGANYANE, 11 VAN REIBEECK ROAD, South Africa ~72: Lesego Jerome Kevin Lekganyane~

2025/04734 ~ Complete ~54:METHOD FOR DISTRIBUTING DOSAGE FORMS ~71:LIMITED LIABILITY COMPANY INESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110926 ~32:26/04/2025

2025/04738 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING CONTROL SIGNAL ~71:LIMITED LIABILITY COMPANY INESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110930 ~32:26/04/2025

2025/04741 ~ Complete ~54:SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110936 ~32:26/04/2025

2025/04745 ~ Complete ~54:METHOD OF DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110934 ~32:26/04/2025

2025/04746 ~ Complete ~54:SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110935 ~32:26/04/2025

2025/04751 ~ Complete ~54:A BUMPER CONNECTION DEVICE FOR MINING DUMP TRUCKS ~71:Henan Yuexin Intelligent Machinery Co., Ltd, No. 301-308, Office Building of Henan Pingkai Electric Power Equipment Co., Ltd., North Yuying Road, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: Gao Tienan;Ye Yongwang;Zhao Qianyang~

2025/04759 ~ Complete ~54:ANTI-TNFR2 ANTIGEN-BINDING PROTEINS AND USES THEREOF ~71:ODYSSEY THERAPEUTICS, INC., 51 Sleeper Street, Suite 800, United States of America ~72: FRANCHI, Luigi;HUBER, Ferdinand;KNOPF, Julia;KÖNIG, Paul-Albert;OPIPARI, Anthony W.;PREISS, Laura;PRÓCHNICKI, Tomasz;SEIFRIED, Annegrit;SWEE, Lee Kim~ 33:US ~31:63/437,877 ~32:09/01/2023;33:US ~31:63/472,175 ~32:09/06/2023

2025/04762 ~ Complete ~54:ACETAMINOPHEN AND NAPROXEN FOR TREATING PAIN ~71:Kenvue Brands LLC, 1 Kenvue Way, SUMMIT 07901, NJ, USA, United States of America ~72: COSKEY, Julia;SACAVAGE, Steven;ULRICH, Stephen A.~ 33:US ~31:63/422,547 ~32:04/11/2022;33:US ~31:63/504,237 ~32:25/05/2023

2025/04798 ~ Provisional ~54:FABRICATION OF BRICKS & PAVERS USING COMPOUND ADDITIVE AND 100% CONSTRUCTION & DEMOLITION WASTE ~71:NOTHANA HOLDINGS, 1224 Embankment Avenue, South Africa;Thabiso Nothana, Unit 52, Von Willigh Street, South Africa ~72: Thabiso Nothana~

2025/04732 ~ Provisional ~54:A GAS-LIQUID MIXING APPARATUS ~71:MORRIS, David John, 11 Royal Palms, 20M Ferguson Road, Bedfordview, South Africa;MOTHERWELL, Craig Stuart, Unit 1, Pine Tree Business Park, Lekkerwater Road, Sunnydale, South Africa;MOTHERWELL, Kerry Atherstone, Unit 1, Pine Tree Business Park,

Lekkerwater Road, Sunnysdale, South Africa ~72: MORRIS, David John;MOTHERWELL, Craig Stuart;MOTHERWELL, Kerry Atherstone~

2025/04740 ~ Complete ~54:METHOD OF STORING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110933 ~32:26/04/2025

2025/04742 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR DISTRIBUTING DOSAGE FORMS ~71:LIMITED LIABILITY COMPANY INESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110931 ~32:26/04/2025

2025/04749 ~ Complete ~54:DEVICE FOR STORING AND DISTRIBUTING DOSAGE FORMS ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110932 ~32:26/04/2025

2025/04756 ~ Complete ~54:CONICAL-BOTTOMED FLUIDIZED BED REACTOR FOR IRON METALLIZATION USING HOT HYDROGEN ~71:RIO TINTO IRON & TITANIUM CANADA INC., 400-1190 avenue des Canadiens-de-Montréal, Montréal, Canada ~72: DIGHE, Shyam Vasant;HUDON, Guillaume;KARRI, Surya B. Reddy;KIM, Hyoung;KNOWLTON, Teddy Merrill;LAURIN, Pierre;LITALIEN, Marko;PINTO, Roberto Pires~ 33:US ~31:63/476,467 ~32:21/12/2022

2025/04757 ~ Complete ~54:PYRIMIDINE-CONTAINING POLYCYCLIC DERIVATIVE INHIBITOR, AND PREPARATION METHOD THEREFOR AND USE THEREOF ~71:JIANGSU HANSOH PHARMACEUTICAL GROUP CO., LTD., Economic And Technological Development Zone, People's Republic of China;SHANGHAI HANSOH BIOMEDICAL CO., LTD., Building 11, NO.3728 Jinke Road, People's Republic of China ~72: CEN, Cheng;LEE, Chih-Hung;LIU, Shiqiang;YU, Mingcheng;YU, Wensheng;YUAN, Yida~ 33:CN ~31:202211616536.7 ~32:15/12/2022;33:CN ~31:202310077472.6 ~32:16/01/2023;33:CN ~31:202310870328.8 ~32:14/07/2023;33:CN ~31:202311168469.1 ~32:11/09/2023;33:CN ~31:202311205445.9 ~32:18/09/2023;33:CN ~31:202311451767.1 ~32:02/11/2023;33:CN ~31:202311598512.8 ~32:27/11/2023

2025/04763 ~ Complete ~54:SYSTEMS, METHODS, MEDIUMS, AND APPARATUSES FOR CAPTURING MEDICATIONS AND MEDICATION USAGE ~71:Kenvue Brands LLC, 1 Kenvue Way, SUMMIT 07901, NJ, USA, United States of America ~72: IDE, Joshua;MA, Liyun~ 33:US ~31:63/422,824 ~32:04/11/2022

2025/04923 ~ Provisional ~54:INDIGO EQUI-AIR ~71:Shane Bernard Cass, 9 Penhoek Street, Country View, South Africa ~72: Shane Bernard Cass;Shane Cass~

2025/04735 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING INSTRUCTION TO GENERATE CONTROL SIGNAL ~71:LIMITED LIABILITY COMPANY INESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110927 ~32:26/04/2025

2025/04739 ~ Complete ~54:SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING WITH SERVER ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110938 ~32:26/04/2025

2025/04744 ~ Complete ~54:METHOD FOR GENERATING INSTRUCTION TO GENERATE CONTROL SIGNAL ~71:LIMITED LIABILITY COMPANY INSESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110922 ~32:26/04/2025

2025/04755 ~ Complete ~54:MOBILE DUST CONTROL SYSTEM AND DEVICE ~71:DEKKER, Jacobus, Johan, 580 AIREDALE STREET, GASRFONTEIN EXT 10, PRETORIA, South Africa ~72: DEKKER, Jacobus, Johan~

2025/04760 ~ Complete ~54:TRAJECTORY TRACKING DEVICE CAPABLE OF POSITIONING TIP OF INTERVENTIONAL GUIDE WIRE ~71:CENTRAL SOUTH UNIVERSITY, No.932 South Lushan Road, Yuelu District,, People's Republic of China ~72: PENG, Yanjin;XIONG, Li~ 33:CN ~31:202211385384.4 ~32:07/11/2022

2025/04764 ~ Complete ~54:RNAI CONSTRUCTS FOR INHIBITING TTR EXPRESSION AND METHODS OF USE THEREOF ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: LONG, Jason C.;MEADE, Bryan;MURRAY, Justin K.;RULIFSON, Ingrid~ 33:US ~31:63/433,263 ~32:16/12/2022

2025/04768 ~ Complete ~54:PHENYL-PYRAZOLO[3,4-B]PYRIDINE-4-CARBOXYLIC ACID DERIVATES FOR USE AS 5-ALPHA REDUCTASE ANTAGONISTS IN METHODS OF TREATMENT ~71:UNIVERSITY OF CAPE TOWN, Bremner Building, Lovers Walk, Rondebosch, Cape Town, 7700, South Africa ~72: AFOLAKE AROWOLO;NONHLANHLA PATIENCE KHUMALO;OGHENECHUKO UTIEYIN OPUTU;SINCENGILE NOKUBONGA NTSHINGILA;STEPHEN FIENBERG~ 33:GB ~31:2218325.5 ~32:06/12/2022

- APPLIED ON 2025/06/04 -

2025/04778 ~ Complete ~54:POLYMER UTILITY VAULT AND METHOD OF MANUFACTURING BY WELDING ~71:Channell Commercial Corporation, 1700 Justin Road, ROCKWALL 75087, TX, USA, United States of America ~72: BURKE, Edward J.~ 33:US ~31:18/734,852 ~32:05/06/2024

2025/04799 ~ Provisional ~54:STEERING WHEEL-MOUNTED STABILIZED HOLDER FOR ELECTRONIC DEVICES ~71:Jake Rawlinson, 13 Bertram Road, Sea Point, South Africa ~72: Jake Rawlinson~

2025/04781 ~ Complete ~54:COMPOUNDS FOR MODULATING HUR (ELAVL1) ~71:SHANGHAI DEGRON BIOMEDICAL TECHNOLOGY CO., LTD., No. 1 Jinchuang Building, 5th Floor, JLABS, 4560, Jinke Road, China (Shanghai), People's Republic of China ~72: DOU, Hao;GENG, Chenlu;SU, Hexiu;SUN, Zhuming;YANG, Zheng;ZOU, Lihui~ 33:CN ~31:PCT/CN2022/134645 ~32:28/11/2022

2025/04783 ~ Complete ~54:BEAM INFORMATION TRIGGERING FOR CELL ACTIVATION ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: DALSGAARD, Lars;DU, Lei;KAINULAINEN, Jani-Pekka;RANTA-AHO, Karri, Markus~

2025/04790 ~ Complete ~54:COMPOSITIONS COMPRISING STABLE FREE AVAILABLE CHLORINE SPECIES AND PEROXIDES, METHODS OF MAKING AND USES THEREOF ~71:COLLIDION, INC., 1770 CORPORATE CIRCLE, PETALUMA, CALIFORNIA 94954, USA, United States of America ~72: ALIM, Hojabr;ESMAEILI, Mohammad~ 33:US ~31:63/383,062 ~32:09/11/2022

2025/04796 ~ Complete ~54:A CARRIER DEVICE, FOOD PROTECTION ARTICLE, FOOD PRODUCTS COMPRISING THE SAME AND METHODS ~71:LIVA BIO PROTECTION TECHNOLOGIES LTD, 6/3 Frug Street, 7630250 Rehovot, Israel ~72: IFAT HAMMER~ 33:US ~31:63/423,363 ~32:07/11/2022

2025/04772 ~ Provisional ~54:BIAXIALLY COMPLIANT VASCULAR GRAFT ~71:Ascense Medical GmbH, Modecenterstraße 22/D14, Austria ~72: LEIVA, Daniel Navarro;MIRCHANDANI, Smurti;MOORE, Michael;SCHOUP, Jo Carlos~

2025/04794 ~ Complete ~54:AURISTATIN LINKER-PAYLOADS, PHARMACEUTICAL COMPOSITIONS, AND USES THEREOF ~71:Merck Sharp & Dohme LLC, 126 East Lincoln Avenue, RAHWAY 07065, NJ, USA, United States of America ~72: CHARATI, Manoj B.;FLYGARE, John A.;JOHNSON, Rebecca Elizabeth;LANG, Simon B.;SEGANISH, W. Michael~ 33:US ~31:63/432,470 ~32:14/12/2022;33:US ~31:63/497,887 ~32:24/04/2023

2025/04773 ~ Provisional ~54:URINE CONTROL DEVICE ~71:Martha du Plessis, 276 Kuruman Ave, South Africa ~72: Erasmus van Niekerk~

2025/04777 ~ Complete ~54:MONITORING, EARLY WARNING, AND SAFETY PREVENTION EQUIPMENT FOR THE FORESTRY AND GRASSLAND INDUSTRY SITUATION ~71:Lishui Rongsen Forestry Development Co., Ltd, No. 2, Building 4, Zone 2, Gangtuo Community, Bailongshan Street, Yunhe County, Lishui City, Zhejiang Province, 323699, People's Republic of China ~72: Fang Jianfei;Jin Pan;Wu Xinhui;Zhang Jianxing;Zhang Turong~

2025/04800 ~ Provisional ~54:HOLSTER-BASED FIREARM AND EQUIPMENT TRACKING SYSTEM ~71:Shane Thomson, 42 Mountain View Ave, South Africa ~72: Shane Thomson~

2025/04812 ~ Complete ~54:A SYSTEM AND METHOD FOR TEACHING A STUDENT SELF-DISCIPLINE, DEDICATION, DRIVE, AND APPRECIATION OF FINANCES ~71:TEMBA, NKOSINATHI EMMANUEL LUVUYO, 631 Molete Street, Zone 1, Ga-Rankuwa, South Africa;WENTWORTH, NICHOLAS JAYDE, 07 Carnoustie, Jackal Creek Golf Estate, North-Riding, South Africa ~72: TEMBA, NKOSINATHI EMMANUEL LUVUYO;WENTWORTH, NICHOLAS JAYDE~ 33:ZA ~31:2022/12102 ~32:07/11/2022

2025/04787 ~ Complete ~54:OBTAINING OF SECURITY INFORMATION FOR RELAY DISCOVERY ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: NASSAR, Mohamed, Amin;PING, Jing;YU, Ling~

2025/04780 ~ Complete ~54:TUNNEL FAULT PREDICTION METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM ~71:CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, 17 Changyungong, Xisanhuan North Road Haidian District,, People's Republic of China ~72: CHENG, Wei;HE, Naiwu;WU, Peng;YAN, Dongxiao;YU, Yonghua~ 33:CN ~31:2025100729950 ~32:17/01/2025

2025/04785 ~ Complete ~54:POWER HEADROOM FOR SECONDARY CELL ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: HENTTONEN, Tero;RANTA-AHO, Karri, Markus;TURTINEN, Samuli, Heikki;WU, Chunli~

2025/04789 ~ Complete ~54:PUNCTURING ASSUMPTION FOR CONTROL CHANNEL IN NARROWBAND NEW RADIO OPERATION ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: HAKOLA, Sami-Jukka;HOOLI, Kari, Juhani;HUGL, Klaus;KAIKKONEN, Jorma, Johannes;KINNUNEN, Pasi, Eino, Tapio;LUNTTILA, Timo, Erkki;TIIROLA, Esa, Tapani~ 33:US ~31:63/425,207 ~32:14/11/2022

2025/04784 ~ Complete ~54:ALKOXYLATED POLYALKYLENEIMINES, PREPARATION AND USE ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany;THE UNIVERSITY OF NOTTINGHAM, UNIVERSITY PARK, NOTTINGHAM NG7 2RD, UNITED KINGDOM, United Kingdom ~72: GARCIA CASTRO, Ivette;HUEFFER, Stephan;MERKEL, Tobias, Maximilian;SNAPE, Colin, Edward;STEVENS, Lee, Anthony~ 33:EP ~31:22207176.3 ~32:14/11/2022



2025/04782 ~ Complete ~54:METHANOL SYNTHESIS CONVERTER AND PROCESS ~71:CASALE SA, Via Giulio Pocobelli 6, Switzerland ~72: MOREO, Pietro;MUSCIONICO, Isabella;POLETTI, Riccardo~ 33:EP ~31:22214315.8 ~32:16/12/2022

2025/04786 ~ Complete ~54:METHOD AND APPARATUS FOR INDICATING POSITIONING AVAILABILITY BASED ON NETWORK CONGESTION ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: BARACCA, Paolo;MICHALOPOULOS, Diomidis;SAHIN, Taylan;SEHIER, Philippe;SÄILY, Mikko~ 33:GB ~31:2216596.3 ~32:08/11/2022

2025/04788 ~ Complete ~54:CONSISTENT LISTEN BEFORE TALK FAILURE RECOVERY PROCEDURE FOR SIDELINK OPERATION IN UNLICENSED BANDS ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: ABREU, Renato, Barbosa;BUTHLER, Jakob Lindbjerg;KIILERICH PRATAS, Nuno, Manuel;LIU, Jianguo;SANCHEZ, Laura Luque;WILDSCHEK, Torsten~

2025/04776 ~ Complete ~54:PREPARATION AND APPLICATION OF ENVIRONMENT-FRIENDLY FLOWER AND NURSERY STOCK CULTIVATION SUBSTRATE ~71:Zhejiang Academy of Agricultural Sciences, Room 429, Environmental Soil Institute, Zhejiang Academy of Agricultural Sciences, No. 298 Desheng Middle Road, Shangcheng District, Hangzhou City, Zhejiang, 310021, People's Republic of China ~72: GUO, Rui;HONG, Chunlai;HONG, Leidong;LU, Xin;WANG, Weiping;YAO, Yanlai;ZHANG, Tao;ZHU, Fengxiang;ZHU, Weijing~ 33:CN ~31:202411361669.3 ~32:27/09/2024

2025/04793 ~ Complete ~54:RUTHENIUM OXIDE DECORATED WITH PLATINUM OXIDE AND ELECTRODES FOR THE OXYGEN EVOLUTION REACTION ~71:BASF SE, Carl-Bosch-Strasse 38, LUDWIGSHAFEN AM RHEIN 67056, GERMANY, Germany ~72: KOTREL, Stefan;MALKO, Daniel;MAYERHOEFER, Britta~ 33:EP ~31:22214222.6 ~32:16/12/2022

2025/04797 ~ Complete ~54:POLYHALITE GRANULES CONTAINING NITROGEN ~71:ANGLO AMERICAN WOODSMITH LIMITED, 17 Charterhouse Street, London, EC1N 6RA, United Kingdom ~72: RAFAELLA DA FONSECA RODRIGUES;TIMOTHY DAVID LEWIS~ 33:GB ~31:2218397.4 ~32:07/12/2022

2025/04774 ~ Provisional ~54:ACTIVE BARRIER WITH INTEGRATED AUTOMATIC SUBSTANCE DISPERSION MODULES ~71:Uthesshan Naidu, 45 BARNARD ROAD, South Africa ~72: Uthesshan Naidu~

2025/04779 ~ Complete ~54:TESTING SYSTEM AND METHOD FOR PROTECTIVE ENGINEERING FAILURE UNDER STRONG IMPACT ~71:Anhui University of Science and Technology, No. 168, Taifeng Street, Huainan City, Anhui Province, 232001, People's Republic of China ~72: MU Chaomin;WANG Jiong~

2025/04792 ~ Complete ~54:MULTIPLE SFLT-1 MEASUREMENTS FOR PROGNOSIS OF EARLY ONSET PREECLAMPSIA ~71:B.R.A.H.M.S GmbH, Neuendorfstraße 25, HENNIGSDORF 16761, GERMANY, Germany;Université Laval, 2325, rue de l'Université, Québec, QUÉBEC G1V 0A6, CANADA, Canada ~72: BUJOLD, Emmanuel~ 33:EP ~31:22212265.7 ~32:08/12/2022

2025/04795 ~ Complete ~54:A WATER-SOLUBLE CARRIER DEVICE, FOOD PROTECTION ARTICLE, FOOD PRODUCTS COMPRISING THE SAME AND METHODS ~71:LIVA BIO PROTECTION TECHNOLOGIES LTD, 6/3 Frug Street, 7630250 Rehovot, Israel ~72: IFAT HAMMER~ 33:US ~31:63/423,365 ~32:07/11/2022

2025/04791 ~ Complete ~54:SOLID FORMS OF NAPHTHYRIDINE COMPOUNDS ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: LI, Weikun;PARK, Hyunsoo;REID, Darren Leonard;SMITH, Adam Nicholas;WU, Tian~ 33:US ~31:63/430,246 ~32:05/12/2022

2025/04775 ~ Complete ~54:ALGINATE WITH ANTI-PHOTOAGING ACTIVITY AND PREPARATION METHOD AND USE THEREOF ~71:SOUTH CHINA UNIVERSITY OF TECHNOLOGY, NO. 381 WUSHAN ROAD, People's Republic of China ~72: HUO, Junhui;YOU, Lijun~

- APPLIED ON 2025/06/05 -

2025/04801 ~ Provisional ~54:MAGEN DRIVE: RESONANCE-BASED MAGNETIC TORQUE DRIVE WITH MODULAR TRIANGULAR ROTOR ARCHITECTURE ~71:Mikateko elia mlambo, 160 firelily street countryview, South Africa ~72: Mikateko elia mlambo;Mikateko elia mlambo~

2025/04805 ~ Complete ~54:A METHOD FOR EFFICIENTLY REDUCING THE MERCURY CONTENT IN THE PREGNANT SOLUTION OF THE GOLD SMELTING WATER SYSTEM ~71:Metallurgical laboratory branch of Shandong gold mining technology Co., Ltd., No.888, Longbu Village, Jincheng Town, Laizhou City, Shandong, People's Republic of China ~72: Bai Ruihua;Cai Mingming;Gao Tengyue;Li Guangsheng;Lu Zhongbo;Qin Xiangwei;Wang Kaimei;Xu chao;Zhang Jiajuan;Zhang Juntong;Zhu Xingfu~ 33:CN ~31:2025101675784 ~32:17/02/2025

2025/04810 ~ Complete ~54:A LABORATORY SYSTEM FOR QUANTITATIVE COMPARISON OF TUINA PARAMETERS ~71:THE SECOND AFFILIATED HOSPITAL OF ANHUI UNIVERSITY OF TRADITIONAL CHINESE MEDICINE (ACUPUNCTURE AND MOXIBUSTION HOSPITAL OF ANHUI PROVINCE), No. 300 Shouchun Road, Hefei City, People's Republic of China ~72: CAO, Yi;CHEN, Fei;GUO, Qingjun;HE, Yuxia;JIANG, Tao;NI, Lu;PAN, Yaping;TAO, Long;WANG, Cong;WANG, Kun;WU, Zhidong;ZHOU, Mengyu~ 33:CN ~31:202411115865.2 ~32:14/08/2024

2025/04813 ~ Complete ~54:CYTOTOXIC COMPOUNDS ~71:PHEON THERAPEUTICS LTD, Rothamsted Research, West Common, United Kingdom ~72: ANDRIOLLO, Paolo;JACKSON, Paul;PROCOPIOU, George~ 33:US ~31:63/387,426 ~32:14/12/2022

2025/04815 ~ Complete ~54:ANTI-CLDN18.2 ANTIBODY-DRUG CONJUGATE, AND PHARMACEUTICAL COMPOSITION THEREOF AND USE THEREOF ~71:CHIA TAI TIANQING PHARMACEUTICAL GROUP CO., LTD., No.369 Yuzhou South Rd., Lianyungang, People's Republic of China;SHANGHAI CHIA TAI TIANQING PHARMACEUTICAL TECHNOLOGY DEVELOPMENT CO., LTD., Room 804H, No. 8, Lane 66, Panyang Road, Minhang District, People's Republic of China ~72: CHEN, Tianxi;WEI, Shanshan;XU, Tongjie;YING, Shusong;ZHANG, Zhengping~ 33:CN ~31:202211521035.0 ~32:30/11/2022

2025/04819 ~ Complete ~54:PREFUSION-STABILIZED HUMAN PARAINFLUENZA VIRUS 3 F PROTEINS ~71:BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, 210 West 7th Street, United States of America ~72: BLADE, Elizabeth;BYRNE, Patrick;HSIEH, Ching-Lin;MCLELLAN, Jason~ 33:US ~31:63/479,127 ~32:09/01/2023

2025/04826 ~ Complete ~54:SINGLE-ARM ELECTRIC DISTANCE TRACKING CLEANING BRUSH ~71:CGN SOLAR ENERGY DELINGHA CO., LTD., North Of National Highway 315, West Exit, Delingha City, Haixi Prefecture Haixi, Qinghai 817000, People's Republic of China;CGN SOLAR ENERGY DEVELOPMENT CO., LTD., Building 5, Area 2, Hanwei International Plaza, No.186 South Fourth Ring West Road Fengtai District, Beijing 100078, People's Republic of China ~72: CHEN CHEN;HANG YIN;NAI BING LU;QIANG WANG;XIAO LONG DU~ 33:CN ~31:202211380742.2 ~32:05/11/2022

2025/04814 ~ Complete ~54:ANTIBODIES TO CUB DOMAIN-CONTAINING PROTEIN 1 (CDCP1) AND USES THEREOF ~71:PHEON THERAPEUTICS LTD, Rothamsted Research, West Common, United Kingdom ~72: HUANG, Chi-Ting;ZAWEL, Leigh~ 33:US ~31:63/387,819 ~32:16/12/2022

2025/04820 ~ Complete ~54:LIPID NANOPARTICLE COMPOSITIONS AND USES THEREOF ~71:ReCode Therapeutics, Inc., 1140 O'Brien Drive, MENLO PARK 94025, CA, USA, United States of America ~72: ALFAIFI, Ali Ahmed;BAEK, Julia Jung-Un;CEFALU, Joseph S.;HENNIG, Mirko;ISHIMARU, Daniella;KHARITONOV, Vladimir Grigor'evich;LI, Shuang;LOCKHART, David J.;MOHAPATRA, Sakya Sing;WANG, Yufeng;WUSTMAN, Brandon A.~ 33:US ~31:63/431,166 ~32:08/12/2022;33:US ~31:63/485,863 ~32:17/02/2023

2025/04824 ~ Complete ~54:PROCESS OF CONTROLLING HEAVIES IN A RECYCLE CATALYST STREAM ~71:DOW TECHNOLOGY INVESTMENTS LLC, 2211 H.H. Dow Way, Midland, United States of America ~72: BASER, Deven Swapneshu;LIU, Yujun;MILLER, Glenn A.~ 33:US ~31:63/386,276 ~32:06/12/2022

2025/04808 ~ Complete ~54:A METHOD AND SYSTEM FOR GENERATING A HUMAN INFORMATION GREEN CARD ~71:Zhanwei Zhang, Dongzheng Group, Changle Town, Pinglu County, Yuncheng, Shanxi, People's Republic of China ~72: Zhanwei Zhang~

2025/04807 ~ Complete ~54:PURLIN, PURLIN ASSEMBLY AND PHOTOVOLTAIC BRACKET ~71:CHANGZHOU ARCTECH SOLAR NEW ENERGY TECHNOLOGY CO., LTD, No.19 Xingye Avenue, Industrial Zone, People's Republic of China ~72: CHEN, Meng;SHEN, Guangsheng;YU, Zhengming~ 33:CN ~31:2025207954762 ~32:24/04/2025

2025/04818 ~ Complete ~54:COMBINING THE EXPRESSION LEVELS OF KRT19 AND COL1A2 TO PRODUCE A SCORE FOR SCREENING AND DIAGNOSING CANCER ~71:ONCOMATRYX BIOPHARMA, S.L., 801-B Parque Tecnológico De Bizkaia, Spain ~72: CONCHA LÓPEZ, Ángel;DOMÍNGUEZ HORMAETXE, Saioa;ESTÉVEZ PÉREZ, Lara Sofía;OTERO ALÉN, Begoña;OTERO ALÉN, Maria;SIMÓN BUELA, Laureano~ 33:EP ~31:22383195.9 ~32:07/12/2022

2025/04822 ~ Complete ~54:MB2CAS12A VARIANTS WITH FLEXIBLE PAM SPECTRUM ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: BAZYK, Claire Marie;ENGLISH, James J.;LI, Jiang;MORRIS, Brett Konstantin;UDRANSZKY, Ingrid;WANG, Yanli;WHALEN, Robert Gerald;XIONG, Feng;XU, Jianping~ 33:IB ~31:2023/073487 ~32:27/01/2023

2025/04828 ~ Complete ~54:PROCESS FOR REMOVING CARBON DIOXIDE FROM A GAS STREAM ~71:COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, Clunies Ross St, Acton, Australian Capital Territory, 2601, Australia ~72: ALI KIANI;GRAEME PUXTY;PAUL FERON;ROBERT BENNETT~ 33:AU ~31:2022903484 ~32:18/11/2022

2025/04831 ~ Complete ~54:MULTI-STAGE ACTIVE TELESCOPIC BELT CONVEYOR ~71:CCTEG TAIYUAN RESEARCH INSTITUTE CO., LTD., No.1 Kehui Road, Technology Innovation City, Demonstration Area, Shanxi, People's Republic of China;SHANXI TIANDI COAL MINING MACHINERY CO., LTD, No. 1 Dianzi Street, Demonstration Area, Shanxi, People's Republic of China ~72: GUO, Wenxiao;HAO, Chenglin;JIANG, Lingyan;JIAO, Hongzhang;LI, Gang;LIU, Lei;LIU, Yubo;WANG, Teng;XIE, Xuebin;ZHANG, Shaopeng;ZHANG, Yinxing;ZHAO, Haiwei;ZHENG, Yuepeng;ZHOU, Kai;Zhao, Xin~ 33:CN ~31:2022115900271 ~32:12/12/2022

2025/04803 ~ Provisional ~54:DILIGENCE, ACCOUNTABILITY, AND PUNCTUALITY SYSTEM FOR VERIFIED PRODUCT ENGAGEMENT AND REPUTATION TRACKING (WITH AI ENHANCEMENT) ~71:MR JUDAH B JOYCE, 4 Cilliers Street, La Hoff, Klerksdorp, 2571, South Africa ~72: MR JUDAH B JOYCE~

2025/04821 ~ Complete ~54:DOSAGE FORMS OF AN ESTROGEN RECEPTOR ANTAGONIST ~71:Olema Pharmaceuticals, Inc., 780 Brannan Street, SAN FRANCISCO 94103, CA, USA, United States of America ~72: BABAR, Digvijay;EMORY, Stephanie Marie Noe;GULLAPALLI, Rampurna Prasad;LI, Yongqiang;MYLES, David C.;ZHANG, Jing Jim~ 33:US ~31:63/431,515 ~32:09/12/2022

2025/04825 ~ Complete ~54:MELATONIN LIQUID FORMULATIONS ~71:ITF RESEARCH PHARMA, S.L.U., San Rafael 3 E-28108 Alcobendas, Madrid, Spain ~72: KATIA URSO;PATRICIA GARCÍA RODRÍGUEZ;PEDRO ENRIQUE ESQUINAS GONZÁLEZ~ 33:EP ~31:22383234.6 ~32:16/12/2022

2025/04823 ~ Complete ~54:SYSTEMS AND METHODS FOR OPERATING AN OVERHEAD ELECTRICAL LINE ~71:CTC Global Corporation, 2026 McGaw Avenue, IRVINE 92614, CA, USA, United States of America ~72: BOSZE, Eric;CORBALIS, Kevin;GOEKJIAN, David~ 33:US ~31:63/426,254 ~32:17/11/2022

2025/04830 ~ Complete ~54:TOPICAL COMPOSITIONS FOR TREATING AND PREVENTING HAIR LOSS AND HAIR GRAYING ~71:CUTANEON - SKIN & HAIR INNOVATIONS GMBH, Flughafenstraße 52A, Germany;HAIRDAO PAYMENTS LLC, 108 West 13th Street, c/o Otonomos LLC, United States of America ~72: PAUS, Ralf~ 33:US ~31:63/431,126 ~32:08/12/2022;33:US ~31:63/530,854 ~32:04/08/2023

2025/04806 ~ Complete ~54:GENOMIC PREDICTION METHOD AND APPARATUS BASED ON GENOTYPE-ENVIRONMENT INTERACTION HETEROGENEOUS GRAPH ~71:Information Technology Research Center, Beijing Academy of Agriculture and Forestry Sciences, 1107, Building A, Nongke Bldg, No.11 Shuguang Huayuan Middle Road, Haidian District, Beijing, 100097, People's Republic of China ~72: HAN, Yanyun;LI, Jinlong;LIU, Zhongqiang;PAN, Shouhui;WANG, Kaiyi;YANG, Feng;ZHANG, Dongfeng~ 33:CN ~31:202410925622.9 ~32:11/07/2024

2025/04809 ~ Complete ~54:BIOREACTOR AND ANAEROBIC REACTION TEST DEVICE ~71:Zhejiang University of Science and Technology, No. 318 Liuhe Road, Xihu District, Hangzhou City, Zhejiang Province, 310023, People's Republic of China ~72: MA, Tengshuang;SHAN, Shengdao;WANG, Jingyuan;WANG, Lanting;YUAN, Kaichong~ 33:CN ~31:202510549409.7 ~32:28/04/2025

2025/04811 ~ Complete ~54:A METHOD FOR METAGENOMIC ANALYSIS OF FUNGAL REPERTOIRE IN FERMENTED ZUSEM ~71:Lydia Yeptho, Nagaland University, Hqrs. Lumami Zunheboto, Nagaland, 798627, India;Tali Jungla, Nagaland University, Hqrs. Lumami Zunheboto, Nagaland, 798627, India;Wati Temjen, Nagaland University, Hqrs. Lumami Zunheboto, Nagaland, 798627, India ~72: Lydia Yeptho;Tali Jungla;Wati Temjen~

2025/04816 ~ Complete ~54:REAR STRUCTURE FOR AN AUTOMOTIVE VEHICLE ~71:ARCELORMITTAL, 24-26 Boulevard d'Avranches, Luxembourg ~72: Gilson DONYA~ 33:IB ~31:PCT/IB2023/050673 ~32:26/01/2023

2025/04827 ~ Complete ~54:ADAPTIVE RIBBON SPEED CONTROL SYSTEMS AND METHODS ~71:PRINTRONIX, LLC, 7700 Irvine Center Drive, Suite 700, Irvine, California, 92618, United States of America ~72: LEE FANG CHONG;MING MING YIN;ROBERT OVCHARENKO;YU-MIN GRANT CHANG~ 33:US ~31:18/175,076 ~32:27/02/2023

2025/04802 ~ Provisional ~54:MAGEN DRIVE ADVANCED MX1: RESONANCE-BASED MAGNETIC TORQUE DRIVE WITH MODULAR TRIANGULAR ROTOR ARCHITECTURE ~71:Mikateko elia mlambo, 160 firelily street countryview, South Africa;Mikateko elia mlambo, 160 firelily street countryview, South Africa ~72: Mikateko elia mlambo~

2025/04804 ~ Complete ~54:APPLICATION OF CALCIUM BETA-HYDROXY-BETA-METHYLBUTYRATE IN IMPROVING PRODUCTION PERFORMANCE OF HORSES ~71:Xinjiang Agricultural University, No. 311, Nongda East Road, Shayibake District, Urumqi City, Xinjiang, 830052, People's Republic of China ~72: CHEN, Kaixu;LI, Fengming;LI, Yonggang;LIU, Jiancheng;XIE, Xinjie;YANG, Kailun~ 33:CN ~31:202510074385.4 ~32:16/01/2025

2025/04817 ~ Complete ~54:METHOD FOR SYNTHESIZING BRANCHED POLYETHYLENE WAX BY MEANS OF NICKEL CATALYSIS BY USING MIXED SPATIAL STRATEGY ~71:HuangShan University, No. 39, Xihai Road, Tunxi District, Huangshan City, Anhui Province, 245041, People's Republic of China ~72: CHANG, Guanru;CHEN, Long;CHENG, Ziyang;DAI, Shengyu;GUO, Min;LI Changjiang;WU, Bin~ 33:CN ~31:2024105624344 ~32:08/05/2024

2025/04829 ~ Complete ~54:TREATMENT OF MST1 RELATED DISEASES AND DISORDERS ~71:EMPIRICO INC., 4660 La Jolla Village Drive, Suite 100, United States of America ~72: BRUSE, Shannon;BUSKE, Paul;CAJES, Brian;GOTTESMAN, Omri;JAKUBOSKY, David;KLEINSTEIN, Sarah;LEWIS, David;ROZEMA, David;VEKICH, John~ 33:US ~31:63/432,918 ~32:15/12/2022;33:US ~31:63/582,783 ~32:14/09/2023;33:US ~31:63/584,461 ~32:21/09/2023

- APPLIED ON 2025/06/06 -

2025/04848 ~ Complete ~54:INFRASTRUCTURE FOR HYDROGEN REFUELLING OF A FUEL CELL VEHICLE WITH LOW-PRESSURE HYDROGEN STORAGE AND METHOD OF OPERATING THE SAME ~71:UNIVERSITY OF THE WESTERN CAPE, Robert Sobukwe Road, Bellville, Cape Town, Western Cape, 7535, South Africa ~72: DANA SWANEPOEL;MOEGAMAT WAFEEQ DAVIDS;MYKHAYLO VOLODYMYROVICH LOTOTSKYY;SIVAKUMAR PASUPATHI;VLADIMIR MIKHAILOVICH LINKOV~ 33:GB ~31:2408075.6 ~32:06/06/2024

2025/04850 ~ Complete ~54:REMOTE MONITORING AND INTELLIGENT FAULT DIAGNOSIS SYSTEM FOR WIND FARM ~71:INNER MONGOLIA LONGYUAN MENG Dong NEW ENERGY CO., LTD, NO. 13 XING'AN STREET, SONGSHAN DISTRICT, CHIFENG CITY, People's Republic of China ~72: BAI, Wenhao;LI, Congmao;LI, Penghuan;OU, Xiaofei;YU, Chongyang~

2025/04852 ~ Complete ~54:BUILDING OUTER WALL CONSTRUCTION QUALITY DETECTION DEVICE ~71:HENAN UNIVERSITY OF URBAN CONSTRUCTION, DAXIANGSHAN ROAD, XINCHENG DISTRICT, PINGDINGSHAN CITY, People's Republic of China ~72: DONG, Kunpeng;JIA, Senchun;LU, Weijie;ZHU, Songling~

2025/04855 ~ Complete ~54:SYSTEM AND METHOD FOR VALIDATING ENERGY CONSUMPTION DATA ~71:PARKIN, Norman Frederick, 12 Sycamore Street, South Africa ~72: PARKIN, Norman Frederick~ 33:ZA ~31:2022/12319 ~32:11/11/2022

2025/04863 ~ Complete ~54:ENCODER COMPRISING AN INTER-CHANNEL PHASE DIFFERENCE CALCULATOR DEVICE AND METHOD FOR OPERATING SUCH ENCODER ~71:Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., Hansastraße 27c, MÜNCHEN 80686, GERMANY, Germany ~72: DÖHLA, Stefan;FOTOPOULOU, Eleni;KIENE, Jan Frederik;MULTRUS, Markus;REUTELHUBER, Franz;SAGNOWSKI, Kacper~ 33:EP ~31:22212047.9 ~32:07/12/2022

2025/04868 ~ Complete ~54:VACCINE FOR TREATING ALLERGIES ~71:WORG PHARMACEUTICALS (ZHEJIANG) CO., LTD., Room 215, Building 2,198# Bandaozhonglu Road, Dipu Street, Anji County Huzhou, Zhejiang 313399, People's Republic of China ~72: ALEXANDER KARAULOV;ANTONINA KARSONOVA;DARIA TRIFONOVA;KSENJA RIABOVA;MARIANNE VAN HAGE;MIRELA CURIN;PETR V GLYBOCHKO;RUDOLF VALENTA~

2025/04849 ~ Complete ~54:PROBABILITY DEMONSTRATION DEVICE ~71:NANCHANG INSTITUTE OF TECHNOLOGY, NO. 289 TIANXIANG AVENUE, HIGH TECH ZONE, NANCHANG CITY, People's Republic of China ~72: KANG, Shuiping~



2025/04857 ~ Complete ~54:METHOD AND SYSTEM FOR ACTIVATION ANALYSIS ~71:CHRY SOS CORPORATION LIMITED, Waite Road, Australia ~72: TICKNER, James~ 33:AU ~31:2022903345 ~32:09/11/2022

2025/04862 ~ Complete ~54:TOLL-LIKE RECEPTOR 7 AGONISTS AS IMMUNE-STIMULATORS TO ELICIT THE INNATE ANTITUMOR IMMUNITY ~71:Merck Patent GmbH, Frankfurter Strasse 250, DARMSTADT 64293 , GERMANY, Germany ~72: GOUTOPOULOS, Andreas;SHAN, Min;WAKIM, Jean~ 33:EP ~31:22206447.9 ~32:09/11/2022

2025/04833 ~ Provisional ~54:ADVANCED FIRE DOOR TECHNIQUE. ~71:R S Crick, 26 Bodley Road, Laezonia AH, Centurion, 0026, South Africa ~72: R S Crick~

2025/04846 ~ Complete ~54:METHOD AND APPARATUS FOR LINING FLANGED PIPES WITH INTEGRAL SEALING RINGS ~71:JANSEN VAN NIEUWENHUIZEN, Dirk Johannes, 12 Exner Street, South Africa ~72: VAN NIEUWENHUIZEN, Dirk Johannes~ 33:BW ~31:BW/P/2024/00001 ~32:06/03/2024

2025/04860 ~ Complete ~54:METHOD FOR PRODUCING EPIGALLOCATECHIN GALLATE MONOGLUCOSIDE ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214, SWITZERLAND, Switzerland ~72: AURIOL, Daniel;BOIRA, Cloe;DON SIMONI, Eglantine~ 33:GB ~31:2216603.7 ~32:08/11/2022

2025/04866 ~ Complete ~54:ANTIBODY AGAINST HEMATOLOGICAL CANCER ~71:THE UNIVERSITY OF OSAKA, 1-1, Yamadaoka, Suita-shi, Osaka, 5650871, Japan ~72: NAOKI HOSEN~ 33:JP ~31:2022-188561 ~32:25/11/2022

2025/04865 ~ Complete ~54:TOPPINGS, CREAMS, AND CULINARY COMPOSITIONS COMPRISING MICELLAR CASEIN ~71:Rich Products Corporation, One Robert Rich Way, BUFFALO 14213, NY, USA, United States of America ~72: BISSONNETTE, Simon;CAMPBELL, Shawn;NAIR, Pulari Krishnankutty~ 33:US ~31:63/423,477 ~32:07/11/2022

2025/04838 ~ Complete ~54:MACHINE LEARNING-BASED COAL MINE WATER HAZARD RISK PREDICTION METHOD AND SYSTEM ~71:Suzhou University, No. 1769 Xuefu Avenue, Suzhou City, Anhui Province (Education Park Campus), People's Republic of China ~72: DAI Hongbao;DAI Shanshan;XU Jiying;YU Kai;ZHANG Haitao~

2025/04839 ~ Complete ~54:OFFSHORE FLOATING WIND POWER GENERATION EQUIPMENT ~71:Shaanxi Kerlimar Engineers Co., Ltd., Room 2707, Building C, Daduhui, Keji Road, Yanta District, Xi'an City, Shaanxi Province, 710000, People's Republic of China ~72: SUN, Ming~

2025/04840 ~ Complete ~54:MULTI-EFFECT STRESS-RESISTANT AGENT FOR ORNAMENTAL GRASSES AND PREPARATION PROCESS THEREOF ~71:Beijing Academy of Agriculture and Forestry Sciences, No.11, Shuguang Garden Middle Road, Haidian, Beijing, 100097, People's Republic of China;Institute of Highland Forest Science, Chinese Academy of Forestry, No. 666 Longyuan Road, Bailongsi, Panlong District, Kunming, Yunnan Province, 650233, People's Republic of China;Southwest Forestry University, No. 300 Bailongsi, Panlong District, Kunming, Yunnan Province, 650224, People's Republic of China;Yunnan Agricultural University, No. 452 Fengyuan Road, Panlong District, Kunming, Yunnan Province, 650201, People's Republic of China ~72: MA, Hong;SUN, Zhenghai;TENG, Ke;YU, Liangjun;YUE, Yuesen;ZHANG, Jingli~

2025/04844 ~ Complete ~54:A PORTABLE ANGLE-ADJUSTABLE TELESCOPIC SURVEYING SUPPORT ~71:Jinggangshan University, No. 28, Xueyuan Road, Qingyuan District, Ji'an City, Jiangxi Province, 343000, People's Republic of China ~72: Qing Fu~

2025/04845 ~ Complete ~54:A COMPOSITE SAFETY NET FOR MITIGATING THE EFFECTS OF BLAST CONCUSSION WAVE ~71:NICAUD COMPANIES 22 (PTY) LTD, Platinum Industrial Park, 88 van Belkum Street, South Africa ~72: FLANAGAN, Fredrick William~ 33:ZA ~31:2024/05282 ~32:08/07/2024

2025/04834 ~ Provisional ~54:LOW POWER IMPULSE RADAR FOR PROJECTILE DETECTION ~71:Lochtron Pty Ltd, 115 Farnham Road, Lynnwood Manor, Pretoria, Gauteng, 0081, South Africa ~72: Gerhard van Lochem~

2025/04842 ~ Complete ~54:A HEPATOCYTE SAMPLE COLLECTION DEVICE ~71:HEXI UNIVERSITY, No. 846, North Ring Road, Zhangye City, Gansu Province, People's Republic of China ~72: Qiong AN;Zhenxiang WANG~ 33:CN ~31:2025105463987 ~32:28/04/2025

2025/04843 ~ Complete ~54:A MULTI-MODAL FACE RECOGNITION SYSTEM AND METHOD BASED ON FEATURE FUSION NETWORK ~71:Xinyu University, No. 2666, Yangguang Road, High-tech Zone, Xinyu, Jiangxi, People's Republic of China ~72: Zhiping Zhang~

2025/04835 ~ Provisional ~54:GUNPORT AIMING DEVICE ~71:BALLISTIC ARMOUR TECHNOLOGIES (PTY) LTD., Corner Viking Way & Dakota Crescent, Airport Park Ext. 4, GERMISTON 1401, Gauteng, SOUTH AFRICA, South Africa;SBV SERVICES (PROPRIETARY) LIMITED, SBV House, Corner of 11th Avenue and 8th Street, Houghton, JOHANNESBURG 2198, Gauteng, SOUTH AFRICA, South Africa ~72: BRADFIELD, John Lewis~

2025/04841 ~ Complete ~54:AN AUXILIARY MOUNTING BRACKET FOR FLIGHT CONTROL OF A QUADROTOR UAV ~71:Jinggangshan University, No. 28, Xueyuan Road, Qingyuan District, Ji'an City, Jiangxi Province, 343000, People's Republic of China ~72: Qing Fu~

2025/04851 ~ Complete ~54:ELECTRONIC INFORMATION COMMUNICATION BASE STATION ~71:XINYU UNIVERSITY, NO. 2666 SUNSHINE AVENUE, HIGH TECH ZONE, XINYU CITY, People's Republic of China ~72: DU, Qiulai;JIANG, Chunlin;LIU, Hesheng;WU, Shilan~

2025/04856 ~ Complete ~54:GREEN ENERGY AND GRID NETWORK MANAGEMENT ~71:UNIVERSITY OF SOUTH AFRICA, PRELLER STREET, NEW MUCKLENEUK, PRETORIA, 0003, REPUBLIC OF SOUTH AFRICA, South Africa ~72: SNYMAN, Lukas, Willem~ 33:ZA ~31:2022/12726 ~32:23/11/2022

2025/04859 ~ Complete ~54:BEVERAGE OR FOODSTUFF PREPARATION SYSTEM ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: NOTH, André~ 33:GB ~31:2216917.1 ~32:13/11/2022;33:EP ~31:22208384.2 ~32:18/11/2022

2025/04869 ~ Complete ~54:TESTING METHOD FOR OBTAINING MATERIAL FRACTURE PROPERTY BASED ON 0.5T-CT SPECIMEN RECONSTRUCTION TECHNOLOGY ~71:LING AO NUCLEAR POWER CO., LTD., B105, Building 01, Daya Bay Nuclear Power Base, Pengcheng Community, Dapeng Street, Dapeng New District, Shenzhen, Guangdong, 518120, People's Republic of China;SUZHOU NUCLEAR POWER RESEARCH INSTITUTE CO., LTD., No.1688, Xihuan Road Suzhou, Jiangsu 215004, People's Republic of China ~72: CHUNHUI WANG;GUANNAN JIANG;KEXIN CAI;KUIYUAN FANG;MINYU FAN;PING HUANG;SHUANG QI;WANGJIE QIAN;YANWEI ZHANG;YINGHUI AN~ 33:CN ~31:202311632916.4 ~32:01/12/2023

2025/04854 ~ Complete ~54:NOVEL OPHTHALMIC COMPOSITION ~71:CIPLA LIMITED, Cipla House, Peninsula Business Park, Ganpatrao Kadam, Marg, Lower Parel, India ~72: CHITRE, Trupti;KALIAPERUMAL, Arunprasath;MARATHE, Vinayak;NARKHEDE, Rahul;RAUT, Preeti Prashant~ 33:IN ~31:202221065056 ~32:14/11/2022

2025/04858 ~ Complete ~54:PACKAGING ARTICLE WITH SURFACE COATING ~71:Colgate-Palmolive Company, 300 Park Avenue, NEW YORK 10022, NY, USA, United States of America ~72: HAO, Zhigang;PAN, Long;XU, Shiyu~ 33:US ~31:18/066,509 ~32:15/12/2022

2025/04864 ~ Complete ~54:PARTICULATE SEPARATION SYSTEM FOR LAUNDRY DRYER ~71:Alliance Laundry Systems LLC, Shepard Street, P.O. Box 990, RIPON 54971, WI, USA, United States of America ~72: DOLLEVOET, Aaron Benjamin;EILER, Debra A.;HARRIS, Andrew Mason;HARRIS, Stephen Lester;KEGLER, Andrew;SCHWENGEL, Karl Fredrick;VANI, Divya Ramesh;ZAMBROWICZ, Michael J.;ZELLMER, Todd Jonathan~ 33:US ~31:63/386,370 ~32:07/12/2022;33:US ~31:18/490,300 ~32:19/10/2023

2025/04871 ~ Provisional ~54:OUTFITT P.A ~71:Mari Magdaleen Fraser, Skurwebank LQ731, South Africa ~72: Mari Magdaleen Fraser~ 33:ZA ~31:n.a ~32:05/06/2025

2025/04836 ~ Complete ~54:VIDEO CODING USING A CODED PICTURE BUFFER ~71:FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., HANSASTRASSE 27C, 80686 MÜNCHEN, GERMANY, Germany ~72: BROSS, Benjamin;HELLGE, Cornelius;SCHIERL, Thomas;SKUPIN, Robert;SÁNCHEZ DE LA FUENTE, Yago;WIEGAND, Thomas~ 33:US ~31:17/965,591 ~32:13/10/2022

2025/04847 ~ Complete ~54:BIM-BASED ENGINEERING COST AND SITE CONSTRUCTION AUXILIARY DEVICE ~71:JI'AN COLLEGE, NO. 133 JI'AN SOUTH AVENUE, People's Republic of China ~72: LIU, Lan;LIU, Qiankun;QIN, Yulan;ZHOU, Min~

2025/04853 ~ Complete ~54:A DEVICE OF DEVELOPMENT OF CONCENTRATION COMPRISING THREE MODES AND A COMPUTER-IMPLEMENTED METHOD USED IN THE SAME ~71:GRABOVIO, Grigorii Petrovich, Ulica Kneza Mihaila 21A, lok.113, Belgrad, 11102 / RS, Russia Serbia ~72: GRABOVIO, Grigorii Petrovich~ 33:GR ~31:20240100429 ~32:10/06/2024

2025/04870 ~ Complete ~54:A NOVEL DOSAGE REGIMEN USING LOW DOSES OF DONEPEZIL OR DERIVATIVE THEREOF FOR PREVENTING OR TREATING A COMPULSIVE DISORDER ~71:CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), 3, rue Michel-Ange, France;ECOLE NORMALE SUPERIEURE, 45, rue d'Ulm, France;SORBONNE UNIVERSITE, 21, rue de l'Ecole de Médecine, France;UNIVERSITE DE MCGILL, 845, rue Sherbrooke Ouest Montréal, Canada ~72: DURIEZ, Philibert;EL MESTIKAWY, Salah;PIETRANCOSTA, Nicolas;PINHAS, Leora~ 33:IB ~31:PCT/IB2022/000653 ~32:17/11/2022

2025/04837 ~ Complete ~54:VIDEO CODING USING A CODED PICTURE BUFFER ~71:FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., HANSASTRASSE 27C, 80686 MÜNCHEN, GERMANY, Germany ~72: BROSS, Benjamin;HELLGE, Cornelius;SCHIERL, Thomas;SKUPIN, Robert;SÁNCHEZ DE LA FUENTE, Yago;WIEGAND, Thomas~ 33:US ~31:17/965,591 ~32:13/10/2022

2025/04861 ~ Complete ~54:NUTRITIONAL COMPOSITION FOR IMPROVING SOCIAL-EMOTIONAL DEVELOPMENT ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: DEONI, Sean;SCHNEIDER, Nora~ 33:EP ~31:22207373.6 ~32:15/11/2022

2025/04867 ~ Complete ~54:METHOD AND SYSTEM FOR TESTING ROTATION PERFORMANCE OF HEAT COLLECTOR ~71:CGN SOLAR ENERGY DELINGHA CO., LTD., North of National Highway 315, West Exit, Delingha City, Haixi, Qinghai, 817000, People's Republic of China;CGN SOLAR ENERGY DEVELOPMENT CO., LTD., Building 5, Area 2, Hanwei International Plaza, No.186 South Fourth Ring West Road Fengtai District, Beijing 100078, People's Republic of China ~72: CHEN CHEN;NAIBING LU;QIANG WANG;TAO YANG;XIANYOU TANG~ 33:CN ~31:202211384181.3 ~32:07/11/2022

- APPLIED ON 2025/06/09 -

2025/04917 ~ Complete ~54:BENZALDEHYDE COMPOUNDS WITH DIRECT POLYMER DESTABILIZING EFFECTS TO TREAT SICKLE CELL DISEASE ~71:CHILDREN'S HOSPITAL OF PHILADELPHIA (CHOP), 3401 Civic Centre Blvd, PA, United States of America;ILLEXCOR HOLDINGS, LLC., 3300 Pemberton Creek Court,, United States of America;KING ABDULAZIZ UNIVERSITY, P O Box 80230, Saudi Arabia;VIRGINIA COMMONWEALTH UNIVERSITY, 800 East Leigh Street, Suite 3000,, United States of America ~72: ABDULMALIK, Osheiza;EL-ARABY, Moustafa;FLEISCHMAN, Andrew;LIGHT, David;OMAR, Abdelsattar;SAFO, Martin;ZHANG, Yan~ 33:US ~31:63/423,167 ~32:07/11/2022;33:US ~31:63/442,824 ~32:02/02/2023

2025/04920 ~ Complete ~54:COMPOSTABLE AERATOR URINE COLLECTOR ~71:WSA INVENTIONS, LLC, 1309 Coffeen Avenue, Suite 1200, Sheridan, Wyoming, 82801, United States of America ~72: PETER NEWELL~ 33:US ~31:63/386,461 ~32:07/12/2022

2025/04906 ~ Complete ~54:RAILWAY WHEEL ~71:BAOWU GROUP MASTEEL RAIL TRANSIT MATERIALS TECHNOLOGY CO., LTD., No.700 Yinhuang East Road, Ma'anshan Economic And Technological Development Zone, Maanshan, Anhui, 243000, People's Republic of China ~72: LIU, Zhi;WANG, Yongyang;YANG, Xiaodong~ 33:CN ~31:202510422947.X ~32:03/04/2025

2025/04910 ~ Complete ~54:RECOMBINANT ANTIBODY, PHARMACEUTICAL COMPOSITION COMPRISING THE SAME, AND USES THEREOF IN TREATING CANCERS ~71:BIOGATE PRECISION MEDICINE CORP., 10F., No. 70, Sec. 3, Nanjing E. Rd., Zhongshan Dist., Taiwan (R.O.C) ~72: HO, Chia-Wen;HUANG, Chong-Jen Frank;LIU, Fong Leroy~ 33:US ~31:63/430,075 ~32:05/12/2022

2025/04916 ~ Complete ~54:PERFORMING CRYPTOGRAPHIC OPERATIONS FOR DIGITAL ACTIVITY SECURITY ~71:ENTERSEKT INTERNATIONAL LIMITED, Level 3, Alexander House, 35 Cybercity, Mauritius ~72: OOSTHUIZEN, Gerhard Gysbert~ 33:ZA ~31:2023/01759 ~32:14/02/2023

2025/04874 ~ Provisional ~54:BUS MOBILE APP TO TOP UP INTEGRATED SMART CARD ~71:Lebohang Gilbert Khonkhe, 258 Mafikeng village, South Africa ~72: Lebohang Gilbert Khonkhe~

2025/04890 ~ Complete ~54:SYSTEM FOR ANALYTE SPECTRAL COLLECTION AND SYSTEM FOR TESTING ANALYTE ~71:SENSURA PTE. LTD, 2 VENTURE DRIVE, #14-02, VISION EXCHANGE, 608526, Singapore ~72: Hongzhi ZHENG~ 33:CN ~31:2024109514663 ~32:16/07/2024

2025/04892 ~ Complete ~54:COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS ~71:Aurigene Oncology Limited, 39-40, KIADB Industrial Area, Electronic City Phase II, Hosur Road, BANGALORE 560100, INDIA, India ~72: BALASUBRAMANIAN, Wesley Roy;DAGINAKATTE, Girish;GUMMADI, Venkateshwar Rao;NELLORE, Kavitha;SAMAJDAR, Susanta~ 33:IN ~31:201741011785 ~32:31/03/2017

2025/04893 ~ Complete ~54:COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS ~71:Aurigene Oncology Limited, 39-40, KIADB Industrial Area, Electronic City Phase II, Hosur Road, BANGALORE 560100, INDIA, India ~72: BALASUBRAMANIAN, Wesley Roy;DAGINAKATTE, Girish;GUMMADI, Venkateshwar Rao;NELLORE, Kavitha;SAMAJDAR, Susanta~ 33:IN ~31:201741011785 ~32:31/03/2017

2025/04895 ~ Complete ~54:COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS ~71:Aurigene Oncology Limited, 39-40, KIADB Industrial Area, Electronic City Phase II, Hosur Road, BANGALORE 560100, INDIA, India ~72: BALASUBRAMANIAN, Wesley Roy;DAGINAKATTE, Girish;GUMMADI, Venkateshwar Rao;NELLORE, Kavitha;SAMAJDAR, Susanta~ 33:IN ~31:201741011785 ~32:31/03/2017

2025/04908 ~ Complete ~54:SAFETY SYSTEM FOR AN AUTOMATIC STORAGE SYSTEM AND AN AUTOMATIC STORAGE SYSTEM ~71:KARDEX PRODUKTION DEUTSCHLAND GMBH, Megamat-Platz 1, Germany ~72: Norbert BOUCHÉ;Wolfgang KOLLMANN~ 33:DE ~31:10 2023 109 423.8 ~32:14/04/2023

2025/04875 ~ Complete ~54:THE DISINFECTION DEVICE FOR TUBERCULOSIS ~71:QuZhou People's Hospital (The Central Hospital Of Qu Zhou), No. 100, Minjiang Avenue, Kecheng District, Quzhou City, Zhejiang Province, People's Republic of China ~72: Lu Weili;Yang Hong~

2025/04879 ~ Complete ~54:METHOD FOR GENERATING NOTIFICATION TO BE DISPLAYED BY OUTPUT DEVICE ~71:LIMITED LIABILITY COMPANY INSESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110924 ~32:26/04/2025

2025/04877 ~ Complete ~54:METHOD FOR GENERATING CONTROL SIGNAL ~71:LIMITED LIABILITY COMPANY INSESCAN, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110923 ~32:26/04/2025

2025/04881 ~ Complete ~54:METHOD FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110701 ~32:24/04/2025

2025/04887 ~ Complete ~54:METHOD FOR OBSERVING SOIL MICROPLASTICS BASED ON DENSITY SEPARATION METHOD ~71:Hubei Provincial Academy of Eco-Environmental Sciences (Hubei Eco-Environmental Engineering Assessment Center), No.338 Bayi Road, Wuhan, Hubei Province, 430070, People's Republic of China ~72: Feng WANG;Song HOU~

2025/04902 ~ Complete ~54:MULTIFUNCTIONAL STERILIZATION DEVICE FOR BURN UNIT MEDICAL INSTRUMENT ~71:Senior Department of Burns and Plastic Surgery, the Fourth Medical Center of PLA General Hospital, No. 51 Fucheng Road, Haidian District, Beijing City, 100080, People's Republic of China ~72: Chen Yiqi;Feng Baigong;Jiang Min;Li Dawei;Li Meizhuo;Liu Liwei;Liu Xinzhu;Shen Chuanan;Wei Qian;Zhao Yusheng~

2025/04884 ~ Complete ~54:INTEGRATED BIOMECHANICAL PROSTHETIC ARM WITH EMBEDDED MACHINE LEARNING AND MULTIFUNCTIONAL USER INTERFACE ~71:4TH AI HOLDINGS (PTY) LTD, 240 HARRY GWALA ROAD WIGGINS, South Africa ~72: BUCU, Mlungiseleli Birthwell~ 33:ZA ~31:2024/02570 ~32:03/04/2024

2025/04888 ~ Complete ~54:SYSTEM FOR ILLUMINATING ANALYTE AND SYSTEM FOR TESTING ANALYTE ~71:SENSURA PTE. LTD, 2 VENTURE DRIVE, #14-02, VISION EXCHANGE, 608526, Singapore ~72: Hongzhi ZHENG~ 33:CN ~31:2024109514644 ~32:16/07/2024

2025/04903 ~ Complete ~54:EMERGENCY WATER DIVERSION CONSTRUCTION METHOD FOR WASTEWATER TREATMENT PLANT ~71:CHINA RAILWAY FIRST GROUP BRIDGE ENGINEERING CO., LTD, 63 Xitong Road, Linwei District, Weinan City, People's Republic of China;CHINA RAILWAY FIRST GROUP CO., LTD, No. 1, Yanta North Road, Beilin District, Xi 'an, People's Republic of China;CHINA RAILWAY FIRST GROUP EIGHTH ENGINEERING CO., LTD, 21-1, 21-2, No. 36 Zhouji Road, Xiantao Street, Yubei District, People's Republic of China ~72: CHEN, Ben;HAN, Baowei;HU, Yonggang;JIANG, Zongzheng;LIU, Linke;MA, Huanhong;WANG, Xianjin;WU, Yuanbo;XUAN, Xinpeng;ZHANG, Qiuqiu;ZHOU, Donglin~



2025/04872 ~ Provisional ~54:INSECTICIDE APPLICATION SYSTEM ~71:PETRUS JOHANNES ANDRIAS NOETH VAN NIEKERK, Tugela 78, Doringkloof, Centurion, Gauteng, South Africa ~72: PETRUS JOHANNES ANDRIAS NOETH VAN NIEKERK~

2025/04882 ~ Complete ~54:USER DEVICE OF SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110941 ~32:26/04/2025

2025/04885 ~ Complete ~54:FIRE STARTER KIT ~71:GAP Inventions (Pty) Ltd, 26 Sandhoogte Street, South Africa ~72: KENNETH ROBERT MALONEY;THEUNIS JACOBUS NEL~

2025/04898 ~ Complete ~54:METHODS AND COMPOSITIONS FOR ALTERING SECONDARY METABOLITES IN PLANTS ~71:Impello Biosciences, Inc., 2601 S. Lemay Ave, STE 7 #402, FORT COLLINS 80525, CO, USA, United States of America ~72: ADLER, Lindsey R.;DILEGGE, Michael J.;KEY, Michael C.~ 33:US ~31:63/057,549 ~32:28/07/2020

2025/04904 ~ Complete ~54:PRECISION TUBE-DRAWING DEVICE FOR MANUFACTURING GLASS PASTEUR PIPETTE ~71:THE FIRST AFFILIATED HOSPITAL OF JINAN UNIVERSITY (GUANGZHOU OVERSEAS CHINESE HOSPITAL), 613 Huangpu Avenue West, Guangzhou, People's Republic of China ~72: LI, Ruiman;WANG, Jun~

2025/04912 ~ Complete ~54:ZEOLITIC ADSORBENT FOR THE HIGHLY PRODUCTIVE SEPARATION OF XYLENES ~71:Arkema France, 51 Esplanade du Général de Gaulle, La Défense, 92800, PUTEAUX, FRANCE, France;IFP Energies nouvelles, 1 & 4 Avenue du Bois Préau, 92500, RUEIL-MALMAISON, FRANCE, France ~72: BOUVIER, Ludivine;MANKO, Maria;PEREZ-PELLITERO, Javier~ 33:FR ~31:2213922 ~32:20/12/2022

2025/04922 ~ Provisional ~54:PHOTOVOLTAIC CELL ~71:Hermanus Christoffel Petrus Human, 10a Clifford Road Chanclyff, South Africa ~72: Hermanus Christoffel Petrus Human;Jan Petrus Human~

2025/04901 ~ Complete ~54:MODULATOR OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR, PHARMACEUTICAL COMPOSITIONS, METHODS OF TREATMENT, AND PROCESS FOR MAKING THE MODULATOR ~71:VERTEX PHARMACEUTICALS INCORPORATED, 50 Northern Avenue, Boston, Massachusetts, 02210, United States of America ~72: ALEXANDER RUSSELL ABELA;ALI KESHAVARZ-SHOKRI;ANDREAS P TERMIN;ANTON GULEVICH;CLARA KUANG-JU HSIA;COREY ANDERSON;DAVID ANDREW SIESEL;FABRICE JEAN DENIS PIERRE;FREDRICK F VAN GOOR;HARIPADA KHATUYA;JASON MCCARTNEY;JEREMY J CLEMENS;JINGLAN ZHOU;JOHNNY UY;KATHY STAVROPOULOS;LORI ANN FERRIS;MARK THOMAS MILLER;MINSON BAEK;MUNA SHRESTHA;PAUL JOHN KRENITSKY;PAUL TIMOTHY ANGELL;PETER DIEDERIK JAN GROOTENHUIS;PING KANG;PRAMOD VIRUPAX JOSHI;PRASUNA PARASELLI;RAYMOND STANLEY GROSS;ROBERT M HUGHES;SARA SABINA HADIDA RUAH;THOMAS CLEVELAND;TIMOTHY ALCACIO;TOMOTHY JOHN YOUNG;YI SHI~ 33:US ~31:62/432,537 ~32:09/12/2016

2025/04911 ~ Complete ~54:HER3-BINDING ANTIBODY-DRUG CONJUGATE ~71:Hummingbird Bioscience Pte. Ltd., #04-01/11 The Aries, Singapore Science Park II, SINGAPORE 117586, SINGAPORE, Singapore ~72: AYERS, Benjamin;BANSAL, Akshaya;BOYD-KIRKUP, Jerome;CHIN, Wen Jie;HANSON, Brendon;INGRAM, Piers;NG, Cheng Theng;PALIWAL, Shalini;RASHEED, Suhail Ahmed Kabeer;THAKKAR, Dipti~ 33:US ~31:63/436,730 ~32:03/01/2023;33:US ~31:63/459,061 ~32:13/04/2023

2025/04878 ~ Complete ~54:SERVER OF SYSTEM FOR DISTRIBUTING DOSAGE FORMS IN ORIGINAL PACKAGING ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG

AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110939 ~32:26/04/2025

2025/04883 ~ Complete ~54:LOW-COST OFFSHORE AUTOMATIC YAW FLOATING FOUNDATION WITH MULTI-HEAD WIND TURBINE ~71:SINOMA OVERSEAS DEVELOPMENT CO., LTD., Room 1201, Ganjiakou Building, No. 17 Sanlihe Road, Haidian District, Beijing City, 100037, People's Republic of China ~72: Hongsheng CHEN;Lei YANG;Liming REN;Lin ZHANG;Miao YU;Nianping LV;Sijia WEN;Yang WANG;Yue LI~ 33:CN ~31:2025209365673 ~32:13/05/2025

2025/04889 ~ Complete ~54:METHOD AND SYSTEM FOR TESTING ANALYTE, MEDIUM, AND DEVICE ~71:SENSURA PTE. LTD, 2 VENTURE DRIVE, #14-02, VISION EXCHANGE, 608526, Singapore ~72: Hongzhi ZHENG~ 33:CN ~31:2024109514409 ~32:16/07/2024

2025/04894 ~ Complete ~54:COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS ~71:Aurigene Oncology Limited, 39-40, KIADB Industrial Area, Electronic City Phase II, Hosur Road, BANGALORE 560100, INDIA, India ~72: BALASUBRAMANIAN, Wesley Roy;DAGINAKATTE, Girish;GUMMADI, Venkateshwar Rao;NELLORE, Kavitha;SAMAJDAR, Susanta~ 33:IN ~31:201741011785 ~32:31/03/2017

2025/04897 ~ Complete ~54:COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS ~71:Aurigene Oncology Limited, 39-40, KIADB Industrial Area, Electronic City Phase II, Hosur Road, BANGALORE 560100, INDIA, India ~72: BALASUBRAMANIAN, Wesley Roy;DAGINAKATTE, Girish;GUMMADI, Venkateshwar Rao;NELLORE, Kavitha;SAMAJDAR, Susanta~ 33:IN ~31:201741011785 ~32:31/03/2017

2025/04913 ~ Complete ~54:AGROCHEMICAL FORMULATION ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: CHEESBROUGH, Jennifer;DONALDSON, Clifford Charles;DORSMAN, Isabella;MARIOTTE, Edouard~ 33:GB ~31:2300567.1 ~32:13/01/2023

2025/04914 ~ Complete ~54:METHOD FOR PROMOTING COMBUSTION OF COMBUSTIBLE MATERIAL, IMPROVING POWER OUTPUT OF COMBUSTION DEVICE AND PROLONGING SERVICE LIFE OF COMBUSTION DEVICE ~71:QINGDAO HENGNEGDA ENERGY TECHNOLOGIES CO., LTD., Room 2501, Unit 1, Building 4, No. 18 Yinchuan East Road, Laoshan District, Qingdao, Shandong, 266000, People's Republic of China ~72: ZHANG, Yongheng~ 33:CN ~31:202311528556.3 ~32:16/11/2023

2025/04915 ~ Complete ~54:COMPOSITE AIDS VACCINE GENERATING ANTI-HIV SPECIFIC NEUTRALIZING ANTIBODIES AND/OR ANTI-HIV CYTOTOXIC T CELLS ~71:DYS-IMMUNE THERAPEUTICS, 28 rue Thiers, France ~72: ZAGURY, Daniel (deceased)~ 33:US ~31:63/431,364 ~32:09/12/2022;33:US ~31:63/489,614 ~32:10/03/2023;33:US ~31:63/498,348 ~32:26/04/2023;33:US ~31:63/514,867 ~32:21/07/2023

2025/04918 ~ Complete ~54:DIAGNOSIS OF BARTONELLA USING RECOMBINANT PROTEINS ~71:ID-FISH TECHNOLOGY, INC., 556 Gibraltar Drive Milpitas, California 95035, United States of America ~72: HARI-HARA POTULA;IRIS CRUZ;JYOTSNA S SHAH;PRERNA BHARGAVA;SONG LIU~ 33:US ~31:63/386,990 ~32:12/12/2022

2025/04900 ~ Complete ~54:PORTABLE GROUNDING WIRE STORAGE BOX ~71:STATE GRID KEZHOU ELECTRIC POWER SUPPLY COMPANY, No. 10, Laodong Road, Xincheng Street, Atushi City, Kizilsu Kirghiz Autonomous Prefecture, People's Republic of China ~72: ABUDOUAINIJANG, Ayinuer;CHAI, Ronghui;CONG, Honghao;DONG, Yaoze;GAO, Jiusheng;MILAWUXI, Ababaikere;REJIFU, Maidina;REN, Xiuxiang;SHI, Junzhu;WANG, Ling;WANG, Xueyi;XIE, De;YUSUFU, Maimaitishabier~ 33:CN ~31:202410960980.3 ~32:17/07/2024

2025/04905 ~ Complete ~54:TRAIN WHEELSET AND OVERHANG DESIGN AND CALCULATION METHOD THEREOF, AND TRAIN ~71:BAOWU GROUP MASTEEL RAIL TRANSIT MATERIALS TECHNOLOGY CO., LTD., No.700 Yinhuang East Road, Ma'anshan Economic And Technological Development Zone, Maanshan, Anhui, 243000, People's Republic of China ~72: LIU, Zhi;WANG, Yongyang;YANG, Xiaodong~ 33:CN ~31:202510422943.1 ~32:03/04/2025

2025/04919 ~ Complete ~54:COMPOUNDS, COMPOSITIONS, AND METHODS OF TREATING DISORDERS ASSOCIATED WITH PROTEIN MISFOLDING ~71:WAVEBREAK THERAPEUTICS, LLC, c/o Morgan Lewis & Bockius LLP, 1 Federal Street, Boston, Massachusetts 02110, United States of America ~72: ALLEYN THOMAS PLOWRIGHT;ANDREW KENNETH TAKLE;ANDREW PETER CRIDLAND;JANETA POPOVICI-MULLER;KERRY JENKINS;TAMAKI HOSHIKAWA~ 33:US ~31:63/432,317 ~32:13/12/2022

2025/04951 ~ Provisional ~54:SYSTEM AND METHOD FOR GENERATING STAINING AND GLAZING RECIPES FOR DENTAL RESTORATIONS FROM SHADE SCAN DATA ~71:Noxolo Philoshia Sigudhla, 31B Adrienne street, South Africa ~72: Noxolo Philoshia Sigudhla~

2025/04873 ~ Provisional ~54:EUTECTIC COMPOSITIONS ~71:SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY, Molotlegi Street, Ga-Rankuwa, Gauteng, 0204, South Africa ~72: BWALYA ANGEL WITIKA;JEAN BAPTISTE NGILIRABANGA~

2025/04876 ~ Complete ~54:METHOD FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110702 ~32:24/04/2025

2025/04880 ~ Complete ~54:ACTIVATION METHOD FOR WASTE CONCRETE MICROPOWDER ~71:Chengdu University, No.2025 Chengluo Avenue, Longquanyi District, Chengdu, Sichuan Province, 610106, People's Republic of China;Hainan University, No. 58 Renmin Avenue, Haikou, Hainan Province, 570228, People's Republic of China ~72: Bo CHEN;Hongzhi QIU;Hua ZHANG;Huajin LI;Junhu SHAO;Peng XIE;Ran TANG;Zhanfeng FAN;Zhijia WANG~

2025/04886 ~ Complete ~54:STIRRING AND SEALING METHOD FOR BAGGED SILAGE ~71:Yunnan Animal Science and Veterinary Institute, Jindian Qinglong Mountain, Panlong District, Kunming City, Yunnan Province, People's Republic of China ~72: Baiji Danzeng;Guobo Quan;Hongyuan Yang;Xiaojun Ni;Xiaoqi Zhao;Yinjiang Li~

2025/04891 ~ Complete ~54:A RISER PIPE FOR AN IRRIGATION INSTALLATION ~71:Fluidra Waterlinx (Pty) Ltd, 5 Kruger Street, Denver, Johannesburg 2094, Gauteng, SOUTH AFRICA, South Africa ~72: VAN DER LINDE, Aldo;VAN DER VYVER, Donovan;WILLEMSE, Christiaan~ 33:ZA ~31:2024/07782 ~32:15/10/2024

2025/04899 ~ Complete ~54:SYSTEM AND APPARATUS FOR TESTING ANALYTE ~71:SENSURA PTE. LTD, 2 VENTURE DRIVE, #14-02, VISION EXCHANGE, 608526, Singapore ~72: Hongzhi ZHENG~ 33:CN ~31:2024109515613 ~32:16/07/2024

2025/04907 ~ Complete ~54:RETRACTABLE HYDROFOIL SYSTEM FOR MULTI-HULL VESSEL ~71:HANGZHOU SINO EAGLE YACHT CO., LTD., 68 Yongtong Road, Dongzhou Industrial Park, People's Republic of China ~72: FAN, ShuKa;HE, Lianggang;PEART, Christopher;XIONG, Ying;ZULE, Jure~ 33:US ~31:18/179585 ~32:07/03/2023

2025/04909 ~ Complete ~54:DEIMMUNIZED PSEUDOMONAS EXOTOXIN A ~71:FORSCHUNGSZENTRUM JÜLICH GMBH, 52425, Jülich, Germany;UNIVERSITY OF CAPE TOWN, Ronderbusch, 7700, Cape Town, South

Africa ~72: AKINRINMADE, Olusiji Alex;BARTH, Stefan;CARLONI, Paolo;CHETTY, Shivan;DARAMOLA, Adebukola Kemi;GOSSEN, Jonas;HENRY, Marc Eric;KRUPA, Naran;ROSSETTI, Giulia~ 33:EP  
~31:PCT/EP2022/082273 ~32:17/11/2022

2025/04921 ~ Complete ~54:TOWER BEAM TEMPORARY CONSOLIDATION DEVICE FOR DEMOLITION OF CABLE-STAYED BRIDGES ~71:CHINA RAILWAY NORTHEAST INVESTMENT AND DEVELOPMENT CO., LTD, Rui Bao Dong Fang Building, Hunnan District, People's Republic of China;DALIAN UNIVERSITY OF TECHNOLOGY, No. 2 Linggong Road, Dalian, People's Republic of China;THE SECOND ENGINEERING CO., LTD OF CHINA RAILWAY SEVENTH GROUP, No.409-5, Shengli South Street, Heping District, Shenyang, People's Republic of China ~72: Chunyi, ZHOU;Huili, WANG;Jianjun, XIONG;Jianzhong, LI;Tao, XING;Weinian, GAO;Xinmin, GUAN;Xuebing, LIANG;Yonghuan, DONG;Yongtao, BI;Youjie, GAO;Yuanjie, ZHU;Zhennam, TIAN~

2025/04896 ~ Complete ~54:COMPOUNDS AND COMPOSITIONS FOR TREATING HEMATOLOGICAL DISORDERS ~71:Aurigene Oncology Limited, 39-40, KIADB Industrial Area, Electronic City Phase II, Hosur Road, BANGALORE 560100, INDIA, India ~72: BALASUBRAMANIAN, Wesley Roy;DAGINAKATTE, Girish;GUMMADI, Venkateshwar Rao;NELLORE, Kavitha;SAMAJDAR, Susanta~ 33:IN ~31:201741011785  
~32:31/03/2017

- APPLIED ON 2025/06/10 -

2025/04935 ~ Complete ~54:METHOD AND SYSTEM OF THE LEACH ROUTING PROTOCOL BASED ON THE GOLD RUSH OPTIMIZER ALGORITHM ~71:Zhejiang University of Science and Technology, No. 318 Liuhe Road, Xihu District, Hangzhou City, Zhejiang Province, 310023, People's Republic of China ~72: Chuitao Sun;Chunxiang Yu;Jian Zhou;Shihui Ni;Yijie Wang;Zhenyu Zhang;Zibo Jin~ 33:CN ~31:202510020429.5  
~32:07/01/2025

2025/04949 ~ Complete ~54:ADJUSTABLE AUTOMATED APPARATUS FOR LOADING MOTORCYCLES AND LOADS ~71:DE COSTA, Luiz Henrique, Avenida das Constelações, 877, casa 03, 88060183, Brazil ~72: DE COSTA, Luiz Henrique~

2025/04938 ~ Complete ~54:METHOD FOR RECOVERING ENHANCED FINE-GRAINED TITANIUM ORE TECHNICAL FIELD ~71:KUNMING UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO. 727 JINGMING SOUTH ROAD, People's Republic of China ~72: CHANG, Sheng;LIU, Guokai;LV, Jinfang;PENG, Jieli;WANG, Zhenxing;ZHENG, Yongxing~

2025/04933 ~ Complete ~54:PIPELINE VIBRATION ABSORPTION DEVICE ~71:No. 719 Research Institute of China State Shipbuilding Corporation Limited, No. 19, Yangqiaohu Avenue, Canglong Island Development Zone, Jiangxia District, Wuhan City, Hubei Province 430205, People's Republic of China ~72: LEI Chengyou;LI Senchen;MA Xunjun;NIE Xiuyi;WANG Li;ZHANG Miao;ZHOU Liubin~ 33:CN ~31:202510597025.2  
~32:09/05/2025

2025/04932 ~ Complete ~54:BINDING MACHINE FOR ACCOUNTING VOUCHERS ~71:GUANGDONG OCEAN UNIVERSITY, No.1 Luoqin Road, Jiangcheng District, Yangjiang City, Guangdong Province, 529568, People's Republic of China ~72: LI Zixian~

2025/04934 ~ Complete ~54:THREE-DIMENSIONAL RETICULATED IRON-MANGANESE MICROSPHERE MATERIAL, PREPARATION METHOD AND APPLICATION ~71:China University of Geosciences, Beijing, No. 29 Xueyuan Road, Haidian District, Beijing, People's Republic of China ~72: DENG Kefang;LIU Bang;MA Bo;MIN Ning;SUN Haoxiang;YAO Jun;ZHANG Lei;ZHANG Liyang~ 33:CN ~31:2025106050500 ~32:12/05/2025

2025/04936 ~ Complete ~54:PYROLYSIS DEVICE FOR AUTOMATIC PLASMA EFFECT GENERATOR  
~71:Shanxi Xinxu Biology Science and Technology Co., Ltd, 14th Floor, Unit A, Building 4, International Metropolis Central Plaza, No.200 South Central Street, Xiaodian district, Taiyuan City, Shanxi Province, 030000, People's Republic of China ~72: Mingxi Gu;Xukui Yang~ 33:CN ~31:2025102515528 ~32:05/03/2025

2025/04948 ~ Complete ~54:ROTATABLE CUTTING TOOL WITH CUTTING INSERT AND BOLSTER  
~71:Kennametal Inc., 1600 Technology Way, LATROBE 15650-0231, PA, USA, United States of America ~72: BLOOM, Robbie D.;GEYER, James R.;KENNO, Brandon J.~ 33:US ~31:18/231,845 ~32:09/08/2023

2025/04950 ~ Complete ~54:PREPARATION OF FOOD ~71:FOXIMVO, INC, 3500 South Dupont Highway, Dover, DE, 19901, USA, United States of America ~72: VOS, Rudolf Roelf~ 33:US ~31:63/476,933 ~32:22/12/2022

2025/04941 ~ Complete ~54:COMPOSITION OF BIODEGRADABLE PECTIN-BASED ACTIVE PACKAGING FILM FUNCTIONALIZED WITH ANOGEISSUS DHOFARICA EXTRACT ~71:Ahmed Al-Harrasi, Professor, (Nationality: Omani) Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;Amity University Haryana, India, Panchgaon, Manesar, Gurgaon (Manesar), Haryana – 122413, India;Najeeb Ur Rehman, Associate Professor, (Nationality Pakistani) Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Postal Code 616, Nizwa, Oman;Pankaj B. Pathare, Associate Professor, (Nationality Indian) Department of Soils, Water & Agricultural Engineering, College of Agricultural & Marine Sciences, Sultan Qaboos University, Oman;Pritam Babu Sharma, Vice Chancellor, (Nationality: Indian) Amity University Haryana, Pachgaon, Manesar, Gurugram,122413, India;Saurabh Bhatia, Associate Professor, (Nationality: Indian) Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman. University of Petroleum and Energy Studies, Dehradun, Uttarakhand, India;Shyam Sundar, Associate Professor, (Nationality: Indian) School of Pharmacy, College of Health Sciences, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;Sultan Qaboos University, Oman, P.O. Box 17, Al-Khoud 123, Muscat, Sultanate of Oman, Oman;Talha Shireen Khan, Research Associate, (Nationality: Pakistani) Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;Yasir Abbas Shah, Research Associate, (Nationality: Pakistani) Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman ~72: Ahmed Al-Harrasi;Najeeb Ur Rehman;Pankaj B. Pathare;Pritam Babu Sharma;Saurabh Bhatia;Shyam Sundar;Talha Shireen Khan;Yasir Abbas Shah~

2025/04943 ~ Complete ~54:BIOLOGICAL TISSUE AND METHOD OF MANUFACTURING ~71:BIO CREATIONS MEDICAL, LLC, 12000 Network Blvd, Suite 300, Texas, United States of America ~72: AGASHCHUK, Andrey;BURCKHARDT, Oliver;CASTILLO, Laura Bordallo;PINTO, Daniel~ 33:US ~31:63/383,574 ~32:14/11/2022;33:US ~31:63/383,578 ~32:14/11/2022

2025/04947 ~ Complete ~54:TIRE TREAD DEPTH INDICATOR AND METHOD OF MAKING AND USING ~71:Omni United (S) Pte Ltd., 2 Central Boulevard, #08-04A West Tower, IOI Central Boulevard, SINGAPORE 018916, SINGAPORE, Singapore ~72: SAREEN, Gajendra Singh~ 33:US ~31:63/539,763 ~32:21/09/2023

2025/04924 ~ Provisional ~54:TIME-DELAY-BASED SEQUENCING METHOD ~71:KOEKEMOER, ANDRÉ LOUIS, 20 CASTOR ROAD, SUNWARD PARK, South Africa ~72: KOEKEMOER, ANDRÉ LOUIS~

2025/04925 ~ Provisional ~54:HYDRO-GRAVITY ELECTRICAL ENERGY GENERATING SYSTEM ~71:CHETTIAR, Rubendra Jugnatha, 6 Kiepersol Drive, Carlswald Estate, 140 Walton Road, CARLSWALD 1685, Gauteng, SOUTH AFRICA, South Africa ~72: CHETTIAR, Rubendra Jugnatha~

2025/04926 ~ Complete ~54:CONSTRUCTION METHOD FOR COMPOSITE FOUNDATION AND PILE FOUNDATION THROUGH PNEUMATIC DOWN-THE-HOLE HAMMER VIBRATION JET GROUTING PILE WITH



INSERTED STEEL PIPES ~71:CABR FOUNDATION ENGINEERING CO., LTD, No. 30, East Road of North 3rd Ring Road, Chaoyang District, Beijing, 100013, People's Republic of China;CNBM Geological Engineering Exploration Academy Co., Ltd., 5th Floor, Tower A, Juanshi Tiandi Plaza, A50-1 Wangjing West Road, Chaoyang District, Beijing, 100102, People's Republic of China;China Building Materials and Geological Engineering Beijing Co., Ltd., 4th Floor, Tower A, Juanshi Tiandi Plaza, A50-1 Wangjing West Road, Chaoyang District, Beijing, 100102, People's Republic of China ~72: CHEN Hui;CHEN Peng;GAO Wensheng;HE Shiming;HONG Wei;HUANG Xinfeng;JIA Cheng;LIANG Chenghua;LIANG Dezhou;LIN Li;MENG Jiahui;QIU Rendong;REN Xinjian;SI Chengqing;WANG Haining;YU Hekun;YUE Zhongjie;ZHU Zhaojing~ 33:CN ~31:2025106224038 ~32:14/05/2025

2025/04928 ~ Complete ~54:CRISP RED PLUM-FLAVORED RICE WINE AND PREPARATION METHOD THEREOF ~71:Sichuan Tourism University, No. 459, Hongling Road, Longquanyi District, Chengdu City, Sichuan Province, People's Republic of China ~72: DUAN Lili;JI Derong;LI Yang;LIAO Sihan;LUO Jingjing;NIE Xin~

2025/04930 ~ Complete ~54:HEAVY METAL REMEDIATION AGENT FOR PLATEAU TAILINGS AND PREPARATION METHOD AND APPLICATION THEREOF ~71:Tibet University, No. 10, Zangda East Road, Chengguan District, Lhasa, Xizang, 850015, People's Republic of China ~72: LI, Wei;LONG, Qin;LV, Xuebin;XI, Huijun;XIONG, Jian~

2025/04931 ~ Complete ~54:SYSTEM AND METHOD FOR EFFICIENTLY PURIFYING GRAPHENE OXIDE ~71:HENAN UNIVERSITY OF URBAN CONSTRUCTION, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China ~72: NIU Zhehui;WANG Shuai;ZHAO Xingtao~

2025/04945 ~ Complete ~54:FACILITATING EARLY MEDICAL INTERVENTIONS ~71:Kenvue Brands LLC, 1 Kenvue Way, SUMMIT 07901, NJ, USA, United States of America ~72: ALUNKAL, Linda;GOULD, Russell A.;MCMONIGLE, Suzanne;WALTERS, Russel M.~ 33:US ~31:63/424,719 ~32:11/11/2022

2025/04927 ~ Complete ~54:PREPARATION METHOD OF TARTARY BUCKWHEAT CHIPS ~71:Sichuan Tourism University, No. 459, Hongling Road, Longquanyi District, Chengdu City, Sichuan Province, People's Republic of China ~72: DENG Wenjun;DUAN Lili;GE Zhiyue;JI Derong;LI Shuang;LI Yang;LIANG Pengjuan;LUO Jingjing;TU Mengjie~

2025/04929 ~ Complete ~54:TRENCH CLOSING ASSEMBLY ~71:PRECISION PLANTING LLC, 23207 Townline Road, Tremont, United States of America ~72: HERRMANN, Tristan;RADTKE, Ian;SCHLIPF, Ben;STOLLER, Jason~ 33:US ~31:62/637,372 ~32:01/03/2018;33:US ~31:62/644,201 ~32:16/03/2018;33:US ~31:62/731,813 ~32:14/09/2018;33:US ~31:62/791,203 ~32:11/01/2019

2025/04937 ~ Complete ~54:INSTANT DRYING DEVICE FOR COLD PRESSING OF METAL POWDER SLURRY FROM RECYCLABLE WASTE LIQUID ~71:Hefei Jiuzhou Times Metal Materials Technology Co., Ltd., Building No. 2, Baihua Industrial Community, Wushan Town, Changfeng County, Hefei City, Anhui Province, 231145, People's Republic of China ~72: Zheng Mei~ 33:CN ~31:202411604976X ~32:12/11/2024

2025/04939 ~ Complete ~54:FEATURES FOR ANGIOGRAPHY SYRINGE ~71:Bayer HealthCare LLC, 100 Bayer Boulevard, WHIPPANY 07981, NJ, USA, United States of America ~72: CALLAN, Gerald;CAMPBELL, Patrick;COWAN, Kevin;SPOHN, Michael~ 33:US ~31:62/706,340 ~32:11/08/2020;33:US ~31:63/073,519 ~32:02/09/2020

2025/04940 ~ Complete ~54:MINE FILLING MATERIAL BASED ON HIGH BRINE MINE WATER AND PREPARATION METHOD THEREOF ~71:BACKFILL ENGINEERING LABORATORY, SHANDONG GOLD MINING TECHNOLOGY CO., LTD, Jiaojia Village, Jincheng Town, Laizhou City, Yantai City, Shandong Province, 261441, People's Republic of China;SHANDONG GOLD MINING TECHNOLOGY CO., LTD., No.2503, Jingshi

Road, Licheng District, Jinan City, Shandong Province, 250002, People's Republic of China ~72: Baoshan Zhan;Gengjie Zhu;Jie Liu;Laifa Sang;Liu Yang;Pengtao Wang;Qin Liu;Tao Jia;Wenhai Liang;Xiaodong Jing;Yunpeng Kou;Zaihai Wu;Zengjia Wang;Zepu Song;Zhuang Zhang~ 33:CN ~31:202510287136.3 ~32:12/03/2025

2025/04942 ~ Complete ~54:PHARMACEUTICAL COMPOSITIONS CONTAINING A PIPERIDINYL-METHYL-PURINE AMINE AND THEIR USE IN TREATING DISEASES AND CONDITIONS ~71:K36 THERAPEUTICS, INC., 1 Main St., Cambridge, United States of America ~72: CONNOLLY, Terrence Joseph;LEWIS, Chad Arthur;MENON, Anil Bhaskar~ 33:US ~31:63/431,771 ~32:12/12/2022

2025/04944 ~ Complete ~54:SPECTRAL IMAGING FOR MATERIAL CHARACTERIZATION AND CONTROL OF SYSTEMS AND METHODS FOR PROCESSING EARTHEN MATERIALS ~71:MOTION METRICS INTERNATIONAL CORP., 101-2389 Health Sciences Mall, Canada ~72: ALHUMSI, Obada;CHUDY, Thomas C.;HSIEH, Shang Yu Peter;KARIMIFARD, Saeed;PICHE, Sophia Alexandra Helen;SAMETI, Mohammad~ 33:US ~31:63/427,085 ~32:21/11/2022

2025/04946 ~ Complete ~54:AEROSOL PROVISION SYSTEM ~71:Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: FALLON, Gary;GIBSON, Paul~ 33:GB ~31:2218991.4 ~32:15/12/2022

- APPLIED ON 2025/06/11 -

2025/04953 ~ Provisional ~54:A COUPLING DEVICE ~71:HEUNIS, Anton, 16 MARAIS STREET, BAILEY'S MUCKLENEUK, PRETORIA, 0181, SOUTH AFRICA, South Africa ~72: HEUNIS, Anton~

2025/04962 ~ Complete ~54:ELONGATED CEILING GRID MEMBER AND CEILING GRID ASSEMBLY INCLUDING A PLURALITY OF THE ELONGATED CEILING GRID MEMBER ~71:TATE ACCESS FLOORS, INC., 7510 Montevideo Road, P.O. Box 278, Jessup, Maryland, 20794, United States of America ~72: CHRISTOPHER BUSS;JAMES DENIS MAHER;MAKSYM BIELKOV~ 33:US ~31:18/802,781 ~32:13/08/2024

2025/04968 ~ Complete ~54:POST-RINSE PRETREATMENT WITH AQUEOUS COMPOSITIONS CONTAINING ALKALINE EARTH METAL IONS ~71:BASF COATINGS GMBH, GLASURITSTRASSE 1, 48165 MÜNSTER, GERMANY, Germany;CHEMETALL GMBH, TRAKEHNER STRASSE 3, 60487 FRANKFURT, GERMANY, Germany ~72: CASTLE, Laurence;GELBRICH, Thorsten;KAULING, Lukas;KOLBERG, Thomas;LUECKERATH, Thorsten~ 33:EP ~31:22207587.1 ~32:15/11/2022

2025/04972 ~ Complete ~54:WIND TURBINE BLADE ~71:SINOMA WIND POWER BLADE CO., LTD., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park North Street, People's Republic of China ~72: LI, Chengliang;LI, Zhanying;WANG, Xiangdong;WU, Weiwei;ZHAO, Liyan~ 33:CN ~31:202411505274.6 ~32:25/10/2024

2025/04977 ~ Complete ~54:MINE SITE ELECTRIFICATION PLANNING BY COMPUTER SIMULATION ~71:CATERPILLAR INC., 100 NE Adams Street, United States of America ~72: ORGAN, Daniel J.;WULF, Stefan J.~ 33:US ~31:18/080,782 ~32:14/12/2022

2025/04963 ~ Complete ~54:ELONGATED CEILING GRID MEMBER AND CEILING GRID ASSEMBLY INCLUDING A PLURALITY OF THE ELONGATED CEILING GRID MEMBER ~71:TATE ACCESS FLOORS, INC., 7510 Montevideo Road, P.O. Box 278, Jessup, Maryland, 20794, United States of America ~72: CHRISTOPHER BUSS;LUCAS MICHAEL FOX;MAKSYM BIELKOV~ 33:US ~31:18/799,228 ~32:09/08/2024

2025/04965 ~ Complete ~54:MEASUREMENT METHOD AND SYSTEM ROF FOREST CARBON STORAGE FROM SINGLE TREE TO REGIONAL FOREST BASED ON HYPERSPECTRAL IMAGING ~71:Chengdu University of Technology, No. 1, East Third Road, Erxianqiao, Chenghua District, Chengdu City, Sichuan Province, 610059, People's Republic of China;HUANENG TIBET YARLUNG TSANGPO RIVER HYDROPOWER DEVELOPMENT AND INVESTMENT CO., LTD, No. 12, Beijing West Road, Chengguan District, Lhasa, Tibet Autonomous Region, 850000, People's Republic of China;Sichuan Forestry and Grassland Survey and Planning Institute, No. 4, Section 1, Renmin North Road, Jinniu District, Chengdu City, Sichuan Province, 610081, People's Republic of China;Tianfu Yongxing Laboratory, Building 12, Tianfu Hai Chuang Park, No. 619 Jicui Street, Tianfu New District, Chengdu City, Sichuan Province, 610213, People's Republic of China ~72: CHEN Guo;LAI Changhong;LEI Junjie;LI Jingji;LI Shan;LIU Qian;LIU Sheng;OUYANG Haijun;PEI Xiangjun;QIAO Chengjun;SONG Fang;TANG Xiaolu;WANG Shuai;XIE Lei;XU Dinghui;YANG Kang~

2025/04974 ~ Complete ~54:INTER-FRAME PREDICTION METHOD, DECODING METHOD, ELECTRONIC DEVICE, AND STORAGE MEDIUM ~71:ZTE Corporation, ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan, SHENZHEN 518057, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: BAI, Yaxian;HUANG, Cheng;ZHANG, Xiaoqu~ 33:CN ~31:202211449177.0 ~32:18/11/2022

2025/04976 ~ Complete ~54:ANTIBODIES THAT BIND INTERLEUKIN 4 RECEPTOR ALPHA AND METHODS OF USE ~71:Apogee Therapeutics, Inc., 221 Crescent Street, Building 17, Suite 102b, WALTHAM 02453, MA, USA, United States of America ~72: HARWIN, Peter Evan;KISELAK, Tomas;OH, Jason Z.;RUSSELL, Shawn Michael;SHAHEEN, Hussam Hisham;THOMPSON, Kenneth Evan;ZHU, Eric Franklin~ 33:US ~31:63/446,763 ~32:17/02/2023;33:US ~31:63/462,864 ~32:28/04/2023;33:US ~31:63/596,501 ~32:06/11/2023;33:US ~31:63/596,504 ~32:06/11/2023

2025/04952 ~ Provisional ~54:SHEPHERDTRACK ~71:Justin Rohloff, 1st Floor St Andrews Building Somerset Links Office Park De Beers Avenue Somerset West, South Africa ~72: Justin Rohloff~

2025/04956 ~ Complete ~54:COMPOUND FERTILIZER FOR INCREASING YIELDS OF MORCHELLA ESCULENTA (L.) PERS. AND GANODERMA LUCIDUM (CURTIS) P. KARST. IN ROTATIONAL CULTIVATION ~71:Agricultural Science Research Institute of the 13th Division, Xinjiang Production and Construction Corps, 25 West Qianjin Road, Hami City, Xinjiang Uygur Autonomous Region, People's Republic of China;Gongliu County Zhitianxia Mushroom Industry Farmer Professional Cooperative, 02-1, Lane 2, Jingye Road , 8th Company, 73rd Regiment, Gongliu County, Ili Kazak Autonomous Prefecture, Xinjiang Uygur Autonomous Region, People's Republic of China;Shihezi University, 221 Beisi Road, Shihezi City, Xinjiang Uygur Autonomous Region, People's Republic of China;Xinjiang Academy of Agricultural and Reclamation Sciences, 221 Wuyi Road, Shihezi City, Xinjiang Uygur Autonomous Region, People's Republic of China ~72: GAO Neng;GUO Xinyong;JIA Bingxin;LIN Zhiguo;LIU Fuyuan;QIAN Wenjie;WU Dongmei;XIA Yongtao;ZHANG Li;ZHANG Lu~

2025/04961 ~ Complete ~54:ELONGATED CEILING GRID MEMBER AND CEILING GRID ASSEMBLY INCLUDING A PLURALITY OF THE ELONGATED CEILING GRID MEMBER ~71:TATE ACCESS FLOORS, INC., 7510 Montevideo Road, P.O. Box 278, Jessup, Maryland, 20794, United States of America ~72: CHRISTOPHER BUSS;JAMES DENIS MAHER;LUCAS MICHAEL FOX;MAKSYM BIELKOV~ 33:US ~31:18/799,201 ~32:09/08/2024

2025/04967 ~ Complete ~54:INDICATION OF CAPABILITY OF PROCESSING A RADIO RESOURCE CONTROL CONFIGURATION FOR HANDOVER ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: DALSGAARD, Lars;KAINULAINEN, Jani-Pekka;ZHANG, Xin~ 33:FI ~31:20226022 ~32:14/11/2022

2025/04970 ~ Complete ~54:METHOD FOR FORMING THERMOPLASTIC COMPOSITE MAIN BEAM AND WIND TURBINE BLADE MAIN BEAM ~71:SINOMA WIND POWER BLADE CO., LTD., 9th Floor, Block C, Building B6, Dongsheng Technology Park, No. 66 Xixiaokou Road, People's Republic of China ~72: LI, Chengliang;LIU, Yan;LU, Xiaofeng;MOU, Shuxiang;WU, Baoyang~ 33:CN ~31:202311450720.3 ~32:02/11/2023

2025/04975 ~ Complete ~54:APPARATUS FOR TORQUE TUBES ~71:Gripple Limited, The Old West Gun Works, Savile Street East, SHEFFIELD S4 7UQ, SOUTH YORKSHIRE, UNITED KINGDOM, United Kingdom ~72: REYNOLDS, Thomas~ 33:GB ~31:2218717.3 ~32:13/12/2022;33:GB ~31:2318548.1 ~32:05/12/2023

2025/04960 ~ Complete ~54:LIGNOSULFONATES PROCESS ~71:SAPPI SOUTHERN AFRICA LTD, 108 Oxford Road, Houghton Estate, Johannesburg, 2198, South Africa ~72: ALEXANDER JOHN GREENWAY;ARTHUR BACHELOR LOFTE GROBLER;ATISH SINGH;BENJAMIN JONATHAN OLIVIER;JANDRI DE LA REY;PHILA XALABILE;ROBIN FISCHER~

2025/04966 ~ Complete ~54:APPARATUS, METHOD AND COMPUTER PROGRAM ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: BIAN, Jian, Jun;FAN, Xuan, Zhi;LIEBHART, Rainer;LIU, Shiwen;SONG, Shu, Qun;WANG, Tian, Da;XUE, Cheng, Yuan;YAN, Li, Mei;YANG, Yong, Andy;ZHOU, Tongqing~

2025/04978 ~ Complete ~54:METHOD AND DEVICE FOR NODE USED FOR WIRELESS COMMUNICATION ~71:APOGEE NETWORKS, LLC, 1999 Bryan Street, Suite 900, Dallas, Texas, 75201, United States of America ~72: LU WU;XIAOBO ZHANG~ 33:CN ~31:202211416048.1 ~32:12/11/2022

2025/04981 ~ Complete ~54:SURFACE INTEGRATION OF HYDROGEN GENERATION ,STORAGE,AND INTEGRATION AND UTILIZATION OF WASTE HEAT FROM ENHANCED GEOLOGIC HYDROGEN PRODUCTION AND DECARBONATION REACTIONS ~71:KOLOMA,INC., 1900 Grant Street, Suite 1250,Denver,Colorado CO 80203, United States of America ~72: DARRAH, Thomas;JOHNSON, Peter~ 33:US ~31:63/349,883 ~32:07/06/2022;33:US ~31:63/349,897 ~32:07/06/2022;33:US ~31:63/349,901 ~32:07/06/2022

2025/04980 ~ Complete ~54:SURFACE INTEGRATION OF HYDROGEN GENERATION,STORAGE,AND INTEGRATION AND UTILIZATION OF WASTE HEAT FROM ENHANCED GEOLOGIC HYDROGEN PRODUCTION AND DECARBONATION REACTIONS ~71:KOLOMA,INC., 1900 Grant Street, Suite 1250,Denver,Colorado,CO 80203, United States of America ~72: DARRAH, Thomas;JOHNSON, Peter~ 33:US ~31:63/349,883 ~32:07/06/2022;33:US ~31:63/349,897 ~32:07/06/2022;33:US ~31:63/349,901 ~32:07/06/2022

2025/04954 ~ Provisional ~54:LIGHTING DEVICE ~71:BADENHORST, Jacobus Cornelius Wilhelm, 22 Suikerbosrand, South Africa;VAN ASWEGEN, Albertus Gerhardus, Vogelvlei No. 8, South Africa ~72: BADENHORST, Jacobus Cornelius Wilhelm;VAN ASWEGEN, Albertus Gerhardus~

2025/04957 ~ Complete ~54:BUILDING DEFORMATION MONITORING APPARATUS BASED ON COMPUTER VISION ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: LI, Xiaolan;LIU, Changsheng;WANG, Xiaohui;ZHOU, Yiming~

2025/04958 ~ Complete ~54:RARE EARTH LIGHT-CONVERSION FILM AND AGRICULTURAL USE THEREOF ~71:Guangxi Jianghe Agricultural Technology Co., Ltd., No. 1 Production Workshop of Yongtong Ductile Iron Pipe Precision Processing Project, Southwest Corner of the Intersection of Xisan Road and XiF Road, Huaqiao Investment Zone, Laibin City, Guangxi, People's Republic of China ~72: Heqing Yu~

2025/04959 ~ Complete ~54:DEVICE AND METHOD FOR REMOVING E2 INTERFACE-RELATED INFORMATION IN RADIO ACCESS NETWORK ~71:SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea ~72: JIWOONG JEONG;YOUNGSUNG KHO~ 33:KR ~31:10-2021-0102248 ~32:03/08/2021

2025/04973 ~ Complete ~54:SPOT WEED DETECTION AND TREATMENT WITHIN A FIELD OF VIEW IN ACCORDANCE WITH MACHINE LEARNING TRAINING ~71:Spraying Systems Co., North Avenue and Schmale Road, PO Box 7900, WHEATON 60187-7901, IL, USA, United States of America ~72: ANTHONIS, Jan;PHILIPSEN, Mark;VAN DEN BULCKE, Hendrik~ 33:US ~31:63/433,101 ~32:16/12/2022

2025/04979 ~ Complete ~54:RECIRCULATING INERTIAL HYDRODYNAMIC PUMP AND WAVE ENGINE ~71:LONE GULL HOLDINGS, LTD., 5331 S Macadam Ave. Suite 258, PMB 332 Portland, Oregon, 97239, United States of America ~72: BRIAN LEE MOFFAT;GARTH ALEXANDER SHELDON-COULSON~ 33:US ~31:63/439,564 ~32:17/01/2023;33:US ~31:63/452,676 ~32:16/03/2023;33:US ~31:18/412,198 ~32:12/01/2024

2025/04955 ~ Complete ~54:INTELLIGENT COLLECTION AND STORAGE SYSTEM FOR SNAIL STEM CELLS ~71:Shilian Bioengineering Wuxi Co., Ltd., Room 923, Phase I Building, Beichuang Technology Park, 401 Xingyuan North Road, Liangxi District, Wuxi City, Jiangsu Province, 214000, People's Republic of China ~72: CHEN, Heping;CHEN, Min;YANG, Chenqing;ZHOU, Mei~

2025/04964 ~ Complete ~54:A VEGETATION BIOMASS MONITORING METHOD BASED ON HYPERSPECTRAL SHRUB GRASS SEGMENTATION ~71:Chengdu University of Technology, No. 1, East Third Road, Erxianqiao, Chenghua District, Chengdu City, Sichuan Province, 610059, People's Republic of China;Huaneng Tibet Yarlung Tsangpo River Hydropower Development and Investment Co., Ltd, No. 12, Beijing West Road, Chengguan District, Lhasa, Tibet Autonomous Region, 850000, People's Republic of China ~72: CAO Huan;CHEN Guo;FU Songyu;HONG Jie;LI Jingji;LIU Feng;TANG Xiaolu;YAN Dong;ZHANG Yuan;ZHOU Zhengquan~

2025/04969 ~ Complete ~54:SHORTENING OF SERVICE INTERRUPTION TIME FOR LLM IN RAN4 ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: DALSGAARD, Lars;KAINULAINEN, Jani-Pekka;ZHANG, Xin~ 33:FI ~31:20226025 ~32:14/11/2022

2025/04971 ~ Complete ~54:NOVEL OXO-PYRIDINE COMPOUND, PREPARATION METHOD THEREFOR, AND USE THEREOF ~71:CHENGDU SHIBEIKANG BIOMEDICAL TECHNOLOGY CO., LTD., No. 1, 1st Floor, Unit 1, Building 26, No.2 Tianyu Road, High-tech Zone, People's Republic of China ~72: FU, Haixia;HUANG, Long;ZENG, Yanqun;ZHOU, Guanglin;ZHU, Xucheng~ 33:CN ~31:202211647390.2 ~32:21/12/2022

- APPLIED ON 2025/06/12 -

2025/04982 ~ Provisional ~54:SURGICAL ROD DISPLACEMENT ASSEMBLY ~71:BECKER, Gert Stephanus, 1378b Breyer Avenue, Waverley, South Africa ~72: BECKER, Gert Stephanus~

2025/04984 ~ Provisional ~54:A SHUNT AND COMPRESSIVE COLLAR FOR TREATING AN OCULAR DISORDER ~71:LIQID MEDICAL CORP., 1221 Brickell Center, Miami 33131, Florida, USA, United States of America ~72: CAMRAS, Lucinda Jean;FISCHER, Joshua David;MCCLUNAN, Daemon Bruce;SWANEPOEL, Liam~

2025/04987 ~ Provisional ~54:SMARTCHEF STATION ~71:Yumnah Daniels, 4 School End Street, Riverton, Cape Town, Western Cape, 7490, South Africa ~72: Yumnah Daniels~



2025/05011 ~ Complete ~54:A COLLAR FOR A RECESSED FIXTURE ~71:SMITH, Danny, 82 Eastbourne Road, United Kingdom ~72: SMITH, Danny~ 33:GB ~31:2216983.3 ~32:14/11/2022

2025/05023 ~ Complete ~54:GP130 ANTIGEN-BINDING MOLECULES ~71:VVB BIO PTE. LTD., 11 Collyer Quay, #17-00 The Arcade, Singapore ~72: COOK, Stuart Alexander;SCHAEFER, Sebastian~ 33:GB ~31:2218388.3 ~32:07/12/2022

2025/04989 ~ Complete ~54:ASSEMBLED TOWER STRUCTURE, WIND TURBINE GENERATOR SET, AND INSTALLATION METHOD ~71:CHINA HUADIAN ENGINEERING CO., LTD., Building 1, No.6 East Automobile Museum Road, Fengtai District, Beijing, 100160, People's Republic of China;HUADIAN ZHONGGUANG NEW ENERGY TECHNOLOGY CO., LTD, Room 807, 8th Floor, Building A, No.6 East Automobile Museum Road, West Fourth Ring Road South, Fengtai District, Beijing, 100070, People's Republic of China ~72: HU, Xiaochun;HUANG, Ligen;LI, Jiafan;LI, Zhuoxin;LIU, Xuewu;SHI, Jun;SONG, Guanghui;SUN, Yankun;ZHANG, Pengyuan;ZHENG, Liming~ 33:CN ~31:202411883081.4 ~32:19/12/2024

2025/04995 ~ Complete ~54:PREPARATION METHOD OF FLAVORED DOUCHI ~71:Sichuan Tourism University, No. 459, Hongling Road, Longquanyi District, Chengdu City, Sichuan Province, People's Republic of China ~72: DENG Wenjun;DUAN Lili;GE Zhiyue;JI Derong;JIANG Shijia;LI Cheng;LI Shuang;LI Yang;LUO Jingjing~

2025/05005 ~ Complete ~54:AN AI-ASSISTED DISEASE DIAGNOSIS SYSTEM VIA MEDICAL IMAGING FOR DENTAL HEALTH ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: KOKATE, Naina Sanjay;KULKARNI, Aryan Prashant;KULKARNI, Mihir Ashish;KULKARNI, Parth Datta;KULKARNI, Samarth Vishwanath;KULKARNI, Shlok Santosh;KULWAL, Sharvani Nagesh;ZAWARE, Geeta Balkrushna~

2025/05009 ~ Complete ~54:INTELLIGENT RECOGNITION AND ALERT METHODS AND SYSTEMS ~71:AI CONCEPTS, LLC, 121 Greenway Boulevard, Carrollton, Georgia, United States of America ~72: SAMPLES, Johnathan~ 33:US ~31:17/988,021 ~32:16/11/2022

2025/05013 ~ Complete ~54:MICROBIAL COMPOSITIONS AND METHODS ~71:OATH, INC., 25 CORTE MADERA AVE., MILL VALLEY, CALIFORNIA 94941, USA, United States of America ~72: EDLUND, Anna Elisabet;MCGLASHAN, JR., William;MCKENNA, Francis (Deceased);SAAVEDRA, Glenn Peter~ 33:US ~31:63/426,025 ~32:16/11/2022;33:US ~31:63/547,326 ~32:03/11/2023

2025/05020 ~ Complete ~54:COMPOSITIONS COMPRISING OCTADECANEUROPEPTIDES (ODN) AND SYNTHETIC DERIVATIVES THEREOF AND METHODS OF USE FOR MODULATION OF FOOD INTAKE, OBESITY, BODY WEIGHT, NAUSEA, AND EMESIS ~71:SYRACUSE UNIVERSITY, 950 Irving Avenue, 301 Dineen Hall Syracuse, New York, 13244, United States of America;THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, 3600 Civic Center Boulevard, 9th Floor, Philadelphia, Pennsylvania, 19104, United States of America ~72: BENJAMIN C REINER;CAROLINE GEISLER;KYLIE S CHICHURA;MATTHEW R HAYES;RICHARD C CRIST;ROBERT P DOYLE~ 33:US ~31:63/384,306 ~32:18/11/2022

2025/04999 ~ Complete ~54:INTELLIGENT SEEDING DEVICE FOR ADAP ~71:HUAINAN NORMAL UNIVERSITY, TIANJIA'AN DISTRICT, HUAINAN CITY, People's Republic of China ~72: LI, Yan;LIANG, Lei;LIU, Qi;ZHANG, Haiyan;ZHU, Zhennv~

2025/05006 ~ Complete ~54:AN EEG SIGNALS BASED BRAIN-COMPUTER INTERFACE SYSTEM FOR CONTROLLING ROBOTIC MOTIONS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: KULKARNI,

Mukund;SOOD, Shruti;SULTANPURE, Kavita Arjun;TAMBE, Shubham Rajendra;THENGE, Aniket Dnyaneshwar;WAGASKAR, Akanksha Maruti;WASEKAR, Tejas Rajkumar~

2025/05010 ~ Complete ~54:POSTOPERATIVE PROTECTIVE DEVICE FOR THYROID SURGERY ~71:SHENZHEN PEOPLE'S HOSPITAL, No. 1017, Dongmen North Road, Luohu District, Shenzhen, Guangdong, People's Republic of China ~72: Nan XU;Xinjie LIU;Xunpeng LUO;Ziyu LI~

2025/05014 ~ Complete ~54:MESHING PLAN FOR CONTROLLING MESH INSTALLATION ~71:Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72: FRANCKE, Totte;HAAVISTO, Ari;HELKALA, Jarno;NURMIKOLU, Heidi~ 33:EP ~31:23152076.8 ~32:17/01/2023

2025/05017 ~ Complete ~54:THERAPEUTIC COMBINATIONS OF CAPIVASERTIB AND VENETOCLAX ~71:AstraZeneca AB, SÖDERTÄLJE SE-151 85, SWEDEN, Sweden ~72: BARRY, Simon Thomas;DRY, Hannah;METTETAL, Jerome;WILLIS, Brandon~

2025/04986 ~ Provisional ~54:ENDOPHYTES HAVING PROBIOTIC AND PLANT GROWTH PROMOTING PROPERTIES AND USES THEREOF ~71:NORTH-WEST UNIVERSITY, 1 Hoffman Street Joon van Rooy Building, Potchefstroom, 2520, South Africa ~72: RASHEED ADEGBOLA ADELEKE~

2025/04993 ~ Complete ~54:FLEXIBLE SEMI-TRANSPARENT PHOTOVOLTAIC CELL STRUCTURE HAVING INFRARED LIGHT REFLECTION FUNCTION, PREPARATION METHOD THEREFOR, AND USE THEREOF ~71:CHINA HUADIAN ENGINEERING CO., LTD., Building 1, No.6 East Automobile Museum Road, Fengtai District, Beijing, 100160, People's Republic of China;HUADIAN ZHONGGUANG NEW ENERGY TECHNOLOGY CO., LTD, Room 807, 8th Floor, Building A, No.6 East Automobile Museum Road, West Fourth Ring Road South, Fengtai District, Beijing, 100070, People's Republic of China ~72: HOU, Yu;KAN, Tongli;LI, Jiafan;LI, Zhuoxin;LIU, Xuewu;SONG, Xin;WANG, Hongyu;ZHOU, Yunshan~ 33:CN ~31:202411630446.2 ~32:15/11/2024

2025/04992 ~ Complete ~54:CLAMPING STRIP BELOW FRONT WINDSHIELD ~71:Qinhuangdao Danfeng Technology Co.,Ltd., NO.17 Building Shugutengyuan, NO.5 Shugu Road, Qinhuangdao Economic & Technological Development Zone, Hebei, People's Republic of China ~72: Dongxue Wang;Mengmeng Bi;Xinyue Du;Zhiqiang Li~ 33:CN ~31:2024115487466 ~32:01/11/2024

2025/04997 ~ Complete ~54:A COMPREHENSIVE PLANT CARE SYSTEM WITH AR DESIGN, DISEASE SCANNING AND AI GUIDANCE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, - 411037, India ~72: BHOR, Pranita;KARNIK, Madhuri Prashant;MANIKJADE, Akshay Ashok;MISHRA, Janhvi;MISHRA, Vaishali;THALE, Radhika;VALVI, Pradnya;WANKHEDE, Disha Sushant~

2025/05000 ~ Complete ~54:BUILDING SURVEYING AND MAPPING DEVICE BASED ON BIM TECHNOLOGY ~71:GUIZHOU UNIVERSITY OF ENGINEERING SCIENCE, NO.1 XUEYUAN ROAD, QIXINGGUAN DISTRICT, BIJIE CITY, People's Republic of China ~72: LIU, LI;LIU, ZHONGGANG~ 33:CN ~31:2025106251092 ~32:14/05/2025

2025/05003 ~ Complete ~54:METHOD, DEVICE, EQUIPMENT, AND MEDIUM FOR EXTRACTING IMAGE FEATURES FROM ULTRASOUND IMAGES ~71:XINJIANG INSTITUTE OF ENGINEERING, NO. 1350 AIDINGHU ROAD, TOUTUNHE DISTRICT, URUMQI ECONOMIC AND TECHNOLOGICAL DEVELOPMENT ZONE, People's Republic of China;YANSHAN UNIVERSITY, NO. 438, WEST SECTION OF HEBEI STREET, QINHUANGDAO CITY, People's Republic of China ~72: FU, Guoqing;FU, Hao;GU, Guanghua;LIU, Wen~ 33:CN ~31:2024113706863 ~32:02/09/2024

2025/05016 ~ Complete ~54:SUBSTITUTED TETRAHYDROPYRROLO-PYRIDINONE COMPOUNDS AND THEIR USE IN TREATING MEDICAL CONDITIONS ~71:Karuna Therapeutics, Inc., Route 206 and Providence Line Road, PRINCETON 08543, NJ, USA, United States of America ~72: AHMAD, Nadia M.;AUDIA, James Edmund;EVANS, David G.;GANCIA, Emanuela;GARDINIER, Kevin Matthew;MONN, James;MYERS, Jason;ROUSSEL, Fabien Jean Ghislain;SKIDMORE, Elizabeth Anne;WAGSTAFF, Niall~ 33:US ~31:63/433,156 ~32:16/12/2022

2025/05024 ~ Provisional ~54:SPLIT PIPELINE COUPLING WITH ADAPTABLE BARREL AND SEALING MECHANISM ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe ~

2025/05008 ~ Complete ~54:CEACAM5 ANTIBODY-DRUG CONJUGATES AND METHODS OF USE THEREOF ~71:SANOVI, 46 avenue de la Grande Armée, France;SEAGEN INC., 21823 30th Drive SE, Bothell, United States of America ~72: BAUDAT, Yves;BRUN, Marie-Priscille;DÉCARY, Stéphanie;JEFFREY, Scott;LYSKI, Ryan;NICOLAZZI, Céline~ 33:US ~31:63/384,214 ~32:17/11/2022;33:EP ~31:22306780.2 ~32:02/12/2022;33:US ~31:63/596,943 ~32:07/11/2023

2025/05019 ~ Complete ~54:COMPOSITIONS AND METHODS FOR CONTROLLING FOOD INTAKE, ENERGY EXPENDITURE, AND BODY WEIGHT FOR THE TREATMENT OF OBESITY AND METABOLIC DISEASES ~71:SYRACUSE UNIVERSITY, 950 Irving Avenue, 301 Dineen Hall Syracuse, New York, 13244, United States of America;THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, 3600 Civic Center Boulevard, 9th Floor, Philadelphia, Pennsylvania, 19104, United States of America ~72: CAROLINE GEISLER;KYLIE S CHICHURA;MATTHEW R HAYES;ROBERT P DOYLE~ 33:US ~31:63/384,272 ~32:18/11/2022

2025/04990 ~ Complete ~54:FLOATING COMB-TYPE BREAKWATER AND OSCILLATING BUOY WAVE ENERGY INTEGRATED MULTI-FIELD COUPLING EXPERIMENTAL DEVICE AND METHOD ~71:Tianjin University, No.92 Weijin Road, Nankai District, Tianjin, 300072, People's Republic of China;Transport planning and Research Institute Ministry of Transport, No.6 Shuguangxili Jia, Chaoyang District, Beijing, 100028, People's Republic of China ~72: FANG Zhuo;ZANG Zhipeng~

2025/05001 ~ Complete ~54:METHOD FOR DETERMINING THE PROTEIN CONTENT IN CORN KERNELS ~71:HUNAN AGRICULTURAL UNIVERSITY, NO. 1 NONGDA ROAD, FURONG DISTRICT, CHANGSHA CITY,, People's Republic of China ~72: DENG, Min;LI, Ruilian;LUO, Hongbing;LYU, Dan;TANG, Jun;ZHANG, Aoni~ 33:CN ~31:202411430114X ~32:14/10/2024

2025/05002 ~ Complete ~54:DISTRIBUTED STORAGE BLOCKCHAIN DATA SECURITY PROTECTION CABINET ~71:HUAINAN NORMAL UNIVERSITY, DONGSHAN WEST ROAD, TIANJIA'AN DISTRICT, HUAINAN CITY, People's Republic of China ~72: GONG, Wenli;HUANG, Guangshun~

2025/05021 ~ Complete ~54:ANTI-CMET ANTIBODY DRUG CONJUGATES AND THERAPEUTIC USES THEREOF ~71:MYTHIC THERAPEUTICS, INC., 100 Beaver Street, Suite 303 Waltham, Massachusetts 02453, United States of America ~72: AMIT DESHPANDE;BRIAN FISKE;NIMISH GERA;WILLIAM COMB~ 33:US ~31:63/386,914 ~32:11/12/2022;33:US ~31:63/585,596 ~32:26/09/2023

2025/04985 ~ Provisional ~54:BUOY AND BUOY ASSEMBLY ~71:COCHRANE USA INC, 3551 Lee Hill Dr, Fredericksburg, United States of America ~72: COCHRANE, Alexander Richard~

2025/04991 ~ Complete ~54:RIVER TREATMENT DEVICE FOR BLACK AND ODOROUS WATER BODIES ~71:CHINA POWER DABIESHAN (HUBEI) ELECTRIC POWER DEVELOPMENT CO., LTD., Datangsi Village, Tiemengang Township, Macheng City, Hubei Province, 438311, People's Republic of China;HENAN CHENGJIANG LOW-ALTITUDE INTEGRATED SERVICES CO., LTD., Longxiang Road, Xincheng District,

Pingdingshan City, Henan Province, 467000, People's Republic of China; HENAN TOOYA ENVIRONMENTAL TECHNOLOGY CO., LTD., Hongfu Home, Weidu District, Xuchang City, Henan Province, 461099, People's Republic of China; HENAN UNIVERSITY OF URBAN CONSTRUCTION, Longxiang Road, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China ~72: DONG Wenchao; GUO Liping; HEI Qiaoli; HEI Xiaohan; LI Yanlei; LIU Kai~

2025/04994 ~ Complete ~54: PHOTOVOLTAIC CELL, PREPARATION METHOD THEREFOR AND USE THEREOF ~71: CHINA HUADIAN ENGINEERING CO., LTD., Building 1, No.6 East Automobile Museum Road, Fengtai District, Beijing, 100160, People's Republic of China; HUADIAN ZHONGGUANG NEW ENERGY TECHNOLOGY CO., LTD, Room 807, 8th Floor, Building A, No.6 East Automobile Museum Road, West Fourth Ring Road South, Fengtai District, Beijing, 100070, People's Republic of China ~72: CONG, Jianou; HU, Xiaochun; KAN, Tongli; LI, Zhuoxin; LIU, Xuewu; ZHAO, Jian; ZHENG, Liming; ZHOU, Yunshan ~ 33: CN ~31: 202411573904.3 ~32: 06/11/2024

2025/04983 ~ Provisional ~54: GLOBAL FAN TOKENS WITH ENHANCED SECURITY FEATURES AND FUNCTIONALITY ~71: CHURCHILL SOKHUPE, 1503 MOLEFI STREET, South Africa; DENNIS CHIUME, 64 MAUDE STREET, South Africa ~72: DENNIS CHIUME~

2025/04988 ~ Complete ~54: PHOTOVOLTAIC PHOTOTHERMAL COUPLING SYSTEM, PREPARATION METHOD THEREFOR, AND USE THEREOF ~71: CHINA HUADIAN ENGINEERING CO., LTD., Building 1, No.6 East Automobile Museum Road, Fengtai District, Beijing, 100160, People's Republic of China; HUADIAN ZHONGGUANG NEW ENERGY TECHNOLOGY CO., LTD, Room 807, 8th Floor, Building A, No.6 East Automobile Museum Road, West Fourth Ring Road South, Fengtai District, Beijing, 100070, People's Republic of China ~72: CONG, Jianou; HOU, Yu; LI, Zhuoxin; LIU, Xuewu; WANG, Hongyu; WANG, Peiming; ZHENG, Liming ~ 33: CN ~31: 202411635444.2 ~32: 15/11/2024

2025/04996 ~ Complete ~54: SOIL COLUMN DEVICE FOR SIMULATING INFLUENCE OF MANURE ON SALINE-ALKALI SOIL LEACHING, GREENHOUSE GAS EMISSION AND AMMONIA VOLATILIZATION AND USING METHOD THEREOF ~71: Center of Technology Innovation for Comprehensive Utilization of Saline-Alkali Land, No. 8 Zhihui Road, Agricultural High tech Industrial Demonstration Zone, Yellow River Delta, Shandong Province, 257300, People's Republic of China; Shandong Academy of Agricultural Sciences, No. 23788 Gongye North Road, Licheng District, Jinan City, Shandong Province, 250100, People's Republic of China ~72: LI Ran; LI Yan; MA Meng; SUN Tao; WANG Yanqin; YAO Li; ZHAO Zichao ~ 33: CN ~31: 2025106455244 ~32: 20/05/2025

2025/05004 ~ Complete ~54: A BEVERAGE COASTER WITH INTEGRATED SENSORS FOR REAL-TIME TEMPERATURE MONITORING AND REGULATION ~71: VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: MAHALLE, Parikshit N.; POWAR, Payal Ranjeet; SIDANALE, Rijul Vidyasagar; SOOD, Shruti; SULTANPURE, Kavita Arjun; TAMBE, Shubham Rajendra; WASEKAR, Tejas Rajkumar~

2025/05015 ~ Complete ~54: CONTROLLING REPLACEMENT OF A MINING TOOL OF A MINING VEHICLE ~71: Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72: AHOLA, Panu; MAKKONEN, Eero; PESOLA, Mikko; PÄRSSINEN, Ville ~ 33: EP ~31: 23153494.2 ~32: 26/01/2023

2025/05018 ~ Complete ~54: DOSAGE REGIME OF ORFORGLIPRON FOR TREATING A SUBJECT WITH TYPE 2 DIABETES (T2D), OBESITY, OR OVERWEIGHT WITH AT LEAST ONE WEIGHT RELATED COMORBIDITY ~71: Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: BETHEL, Mary Angelyn; COX, David Andrew; KEDING, Stacy Jo; KONIG, Manige; LIU, Rong; MA, Xiaosu; PRATT, Edward John; ROBINS, Deborah Ann ~ 33: US ~31: 63/432,197 ~32: 13/12/2022; 33: US ~31: 63/499,328 ~32: 01/05/2023

2025/05022 ~ Complete ~54:THERMAL RUNAWAY MITIGATION IN ELECTRIC MINING MACHINES ~71:JOY GLOBAL UNDERGROUND MINING LLC, 40 Pennwood Place, Suite 100, Warrendale, United States of America ~72: BHAMBRI, Nehul~ 33:US ~31:63/434,364 ~32:21/12/2022

2025/04998 ~ Complete ~54:A PYTHON BASED SYSTEM FOR VISUALIZATION OF CALL STACK DYNAMICS IN C PROGRAMS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, - 411037, India ~72: GHULE, Gauri  
Vaijukumar;KENDURKAR, Aditya;KULKARNI, Sai;MALPATHAK, Samarth;RATNAPARKHI, Archana;SUTAR, Omkar;THAKUR, Gaurish~

2025/05007 ~ Complete ~54:SUPPORTING DEVICE ADAPTABLE TO RADIAL DEFORMATION OF STEEL PLATE SEALING LAYER ~71:CHINA RAILWAY FIRST GROUP CO., LTD, No. 1, Yanta North Road, Beilin District, Xi 'an, People's Republic of China;CHINA RAILWAY FIRST GROUP FOURTH ENGINEERING CO., LTD, 8 Yuquan West Road, Qindu District, Xianyang City, People's Republic of China ~72: AN, Shan;BAI, Pengcheng;CUI, Wentao;GUO, Zhiqiang;HU, Jingyu;HUO, Zhigang;JIANG, Changli;LI, Neng;LIU, Huan;LIU, Songlin;LIU, Xunning;MA, Xinmin;QI, Xinghe;SHEN, Yanfeng;TONG, Yanliang;WANG, Jian;YAN, Yumin;ZHANG, Kuiqiang;ZHANG, Yonghui~

2025/05012 ~ Complete ~54:CRYSTALLINE FORMS, AND PROCESSES FOR THEIR PRODUCTION ~71:QBIOTICS PTY LTD, SUITE 3A, LEVEL 1, 165 MOGGILL ROAD, TARINGA, QUEENSLAND 4068, AUSTRALIA, Australia ~72: FUMAGALLI, Lorena;GAMBINI, Andrea;GIAFFREDA, Stefano, LUCA;IANNI, Cristina;MODENA, Enrico;RANALLI, Nicola;SARDONE, Nicola~ 33:AU ~31:2022903939 ~32:21/12/2022

- APPLIED ON 2025/06/13 -

2025/05028 ~ Complete ~54:APPLICATION OF ZINC-ENRICHED BIOCHAR PREPARED FROM MANURE OF NURSERY PIGS IN IMPROVEMENT OF ZINC CONTENT OF WHEAT ~71:Zhejiang University of Science and Technology, No. 318 Liuhe Road, Xihu District, Hangzhou City, Zhejiang Province, 310023, People's Republic of China ~72: CUI, Zhonghua;MENG, Jun;PAN, Yu;WU, Ye;XU, Qianxue;YAO, Chaowen~

2025/05029 ~ Complete ~54:ECONOMIC-FINANCIAL TREND CURVE SIMULATION DEVICE ~71:GUANGDONG OCEAN UNIVERSITY, No.1 Haida Road, Mazhang District, Zhanjiang City, Guangdong Province, People's Republic of China ~72: SU Linting~

2025/05041 ~ Complete ~54:FORCE DETECTING COLLAR ~71:CROWN PACKAGING TECHNOLOGY, INC., 18410 Crossing Drive, Suite A, United States of America ~72: DAVIES, Mark;HARTE, Christopher~ 33:GB ~31:2219337.9 ~32:21/12/2022

2025/05043 ~ Complete ~54:MULTILAYER METALLIZED PAPER-BASED PACKAGING MATERIAL ~71:Société des Produits Nestlé S.A., Av. Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: DARRA, Matteo  
Riccardo;GALAFFU, Nicola;MORA, Federico~ 33:EP ~31:22209065.6 ~32:23/11/2022

2025/05045 ~ Complete ~54:IRAK DEGRADERS AND USES THEREOF ~71:Kymera Therapeutics, Inc., 500 North Beacon Street, 4th Floor, WATERTOWN 02472, MA, USA, United States of America ~72: MAINOLFI, Nello;WEISS, Matthew M.;ZHENG, Xiaozhang~ 33:US ~31:63/510,011 ~32:23/06/2023;33:US ~31:63/579,477 ~32:29/08/2023;33:US ~31:63/593,445 ~32:26/10/2023;33:US ~31:63/604,610 ~32:30/11/2023;33:US ~31:63/625,710 ~32:26/01/2024;33:US ~31:63/570,564 ~32:27/03/2024

2025/05049 ~ Complete ~54:MULTILAYER METALLIZED PAPER-BASED PACKAGING MATERIAL ~71:Société des Produits Nestlé S.A., Av. Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: DARRA, Matteo  
Riccardo;MORA, Federico~ 33:EP ~31:22209086.2 ~32:23/11/2022



2025/05051 ~ Complete ~54:WIND TURBINE GENERATOR SYSTEM, BLADE, AND PNEUMATIC ACCESSORY AND MANUFACTURING METHOD THEREFOR ~71:Sinoma Wind Power Blade Co., Ltd., 9th Floor, Block C, Building B6, Dongsheng Technology Park, No. 66 Xixiaokou Road, Haidian District, BEIJING 100192, CHINA (P.R.C.), People's Republic of China ~72: LIU, Yan;MOU, Shuxiang;XIE, Zhe;XU, Youmu;ZHAO, Liyan~ 33:CN ~31:202311377551.5 ~32:23/10/2023

2025/05054 ~ Complete ~54:KNOWLEDGE DISTILLATION METHOD BASED ON REVERSE FEATURE FUSION AND CLASSIFIER REUSE ~71:Chongqing Linglue Technology Co., Ltd., No. 20-3, No. 4 Yuzhou Road, Shiqiaopu, Jiulongpo District, Chongqing, 400039, People's Republic of China;Chongqing Normal University, No. 37, University Town Middle Road, Shapingba District, Chongqing, 401331, People's Republic of China;Chongqing University of Technology, No. 69, Hongguang Avenue, Banan District, Chongqing, 400054, People's Republic of China ~72: DENG Jianglin;FAN Xinyu;JIANG Jianzhong;LI Gang;LV Pengfei;RUAN Zihan;TAN Wei;WANG Ru;XU Chuanyun;ZHOU Chunyu;ZHOU Zheng~ 33:CN ~31:202510082092.0 ~32:20/01/2025

2025/05058 ~ Complete ~54:FAECALIBACTERIUM PRAUSNITZII STRAIN CNCM I-4573 FOR THE TREATMENT AND PREVENTION OF CLOSTRIDIODES DIFFICILE INFECTION ~71:ASSISTANCE PUBLIQUE - HÔPITAUX DE PARIS, 55 boulevard Diderot, 75012, Paris, France;EXELIOM BIOSCIENCES, 7 passage du Chemin Vert, 75011, Paris, France;INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT (INRAE), 147 rue de l'Université, 75007, Paris, France;INSTITUT NATIONAL DES SCIENCES ET INDUSTRIES DU VIVANT ET DE L'ENVIRONNEMENT, 22 Place de l'Agronomie, 91120, Palaiseau, France;SORBONNE UNIVERSITE, 21, rue de l'Ecole de Médecine, 75006, Paris, France;UNIVERSITE PARIS SACLAY, 3 rue Joliot Curie – Bâtiment Breguet, 91190, Gif-sur-Yvette, France ~72: BENJAMIN HADIDA;CAMILLE CAMPIDELLI;CLAIRE JANOIR;HARRY SOKOL;JEAN-MARC CHATEL;PAULINE RUFFIE;PHILIPPE LANGELLA;SÉVERINE PECHINE~ 33:EP ~31:22306952.7 ~32:20/12/2022

2025/05061 ~ Complete ~54:METHODS OF PREPARING GLUFOSINATE ~71:NINGXIA YONGNONG BIOSCIENCES CO., LTD., South Side of Guangfu Rd and North Side of Taizhongyin Railway Rd, Ningdong Base Chemical New Material Park, YinChuan City, People's Republic of China;YONGNONG BIOSCIENCES CO., LTD., No.3 East Weiqi Rd, Hangzhou Gulf Economy and Technology Development Zone, Shangyu District, Shaoxing City, People's Republic of China ~72: LI, Nan;MAO, Chunhui;TANG, Wenjie;TANG, Xianzhong;WU, Chengjun;XU, Jianjie~ 33:CN ~31:202211440553.X ~32:17/11/2022;33:CN ~31:202310033931.0 ~32:10/01/2023

2025/05120 ~ Complete ~54:METHOD, APPARATUS, AND SYSTEM FOR TRANSFERRING DATA ~71:MYCASHLESS SAPI DE CV, Puebla No. 75 Int. 3, Roma Norte, Cuauhtémoc, Ciudad de México, 06700, Mexico ~72: BECERRA MORALES, Enrico~ 33:MX ~31:MX/a/2022/016282 ~32:15/12/2022

2025/05027 ~ Complete ~54:AN ELECTROMECHANICAL INTEGRATED INTERLOCKING AUTOMATIC CONTROL DEVICE ~71:Guang Dong Technology College, Qifu Avenue, Gaoyao District, Zhaoqing City, Guangdong Province, People's Republic of China ~72: Chen Xinxin~ 33:CN ~31:2024114826307 ~32:23/10/2024

2025/05032 ~ Complete ~54:COUPLING SIMULATION DEVICE OF UNDERGROUND WATER-COMPRESSED AIR ENERGY STORAGE TUNNEL ~71:China University of Mining and Technology, No.1 Daxue Road, Tongshan District, Xuzhou City, Jiangsu Province, 221116, People's Republic of China;Yunlong Lake Laboratory of Deep Underground Science and Engineering, 10th Floor, Xuzhou Industrial Technology Research Institute (Building B, College Student Pioneer Park, Xuzhou National High-tech Zone), Xuzhou City, Jiangsu Province, 221116, People's Republic of China ~72: HU Chengguo;HU Lihua;LI Xiaozhao;MENG Bo;SU Haijian;WU Yun;YIN Qian;ZHAO Peng~

2025/05052 ~ Complete ~54:SALTS AND SOLID FORMS OF A COMPOUND HAVING GLP-1 AGONIST ACTIVITY ~71:Gasherbrum Bio, Inc., 601 Gateway Blvd., Suite 900, SOUTH SAN FRANCISCO 94080, CA, USA, United States of America ~72: CHEN, Libo;GU, Xiaodong;JIANG, Xinglong~ 33:IB ~31:2022/139277 ~32:15/12/2022

2025/05055 ~ Complete ~54:A METHOD TO PRODUCE PRESS HARDENED PARTS AT HIGH PRODUCTIVITY ~71:ARCELORMITTAL, 24-26 Boulevard d'Avranches, Luxembourg ~72: Antoine JOUMEL;Laurent CRETTEUR~ 33:IB ~31:PCT/IB2023/050781 ~32:30/01/2023

2025/05040 ~ Complete ~54:FLOCCULATION AAV PURIFICATION ~71:GENZYME CORPORATION, 450 Water Street, Cambridge, Massachusetts, United States of America ~72: FIGUEROA, Bruno;HADIDI, Mahsa;LI, Qingxuan;MA, Junfen;SONG, Yuanli~ 33:US ~31:63/425,998 ~32:16/11/2022

2025/05050 ~ Complete ~54:HERBICIDE COMPOSITION ~71:UPL Limited, Uniphos House, CD Marg, 11th Road, Madhu Park, Khar (West), MUMBAI 400052, INDIA, India ~72: PATIL, Samadhan;VISHWAS JADHAV, Sujata~ 33:IN ~31:202221065427 ~32:15/11/2022

2025/05026 ~ Complete ~54:EXPRESSION CASSETTE OF ANTIGENIC EPITOPES OF INFECTIOUS LARYNGOTRACHEITIS VIRUS (ILTV) GLYCOPROTEIN D (GD), RECOMBINANT VIRUS, AND USES THEREOF ~71:SOUTH CHINA AGRICULTURAL UNIVERSITY, No. 483, Wushan Road, Tianhe District, Guangzhou City, People's Republic of China ~72: FENG, Keyu;GONG, Shiyang;SHAO, Guanming;XIE, Qingmei~

2025/05030 ~ Complete ~54:TOMATO WATER-FERTILIZER INTEGRATED DEVICE ~71:Kunming University of Science and Technology, No. 727, Jingming South Road, Chenggong District, Kunming City, Yunnan Province, People's Republic of China ~72: CHEN Zeping;LI Yulin;LIU Yanwei;LU Shumiao;PU Yonghui;WANG Song;XIAO Mingcheng;YANG Qiliang;ZHANG Chu;ZHANG Lei~

2025/05034 ~ Complete ~54:MAGNETICALLY COUPLED ADJUSTABLE-SPEED PROPELLER AND ITS CONTROL METHOD ~71:Changchun University of Science and Technology, No.7089, Weixing Road, Changchun City, Jilin Province, 130022, People's Republic of China;Ocean University of China, No. 238, Songling Road, Laoshan District, Qingdao City, Shandong Province, 266100, People's Republic of China ~72: FU, Qiang;HU, Shuntao;LI, Junyang;LI, Yingchao;LIU Shilong;SHI, Haodong;WANG, Lihong;WEN,Qi;ZHANG, Hao~ 33:CN ~31:CN202411918065.4 ~32:25/12/2024

2025/05038 ~ Complete ~54:INTELLIGENT ROUTING SYSTEM AND METHOD FOR DYNAMIC SELECTION OF PAYMENT CHANNELS ~71:MUSTANG FINANCIAL (PTY) LTD., 17 Winnipeg Street, Spartan, KEMPTON PARK, Johannesburg 1619, Gauteng, SOUTH AFRICA, South Africa ~72: CHEN, Xiaofeng;CHEN, Xilu~

2025/05044 ~ Complete ~54:LAUNDRY COMPOSITION ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214, SWITZERLAND, Switzerland ~72: ZONGO, Mathieu~ 33:SG ~31:10202260101U ~32:15/11/2022

2025/05047 ~ Complete ~54:METHODS OF SWITCHING NEUROPSYCHIATRIC MEDICATIONS USING ULOTARONT ~71:Sumitomo Pharma America, Inc., 84 Waterford Drive, MARLBOROUGH 01752, MA, USA, United States of America ~72: CRANDALL, David;DWORAK, Heather;TOCCO, Michael;ZENI, Courtney~ 33:US ~31:63/383,774 ~32:15/11/2022

2025/05063 ~ Provisional ~54:DRAWING APPARATUS ~71:DOUGLAS, André James Thomas, 260 Via Colinas, Westlake Village, United States of America ~72: DOUGLAS, André James Thomas~

2025/05037 ~ Complete ~54:DURESS PASSWORD SYSTEM AND METHOD FOR A BANKING APPLICATION  
~71:MTSHALI, Samuel Robert, Unit 1 Elmwood, 1 Juniper Drive, DOWERGLEN EXT. 4, Johannesburg 1609,  
Gauteng, SOUTH AFRICA, South Africa ~72: MTSHALI, Samuel Robert~ 33:ZA ~31:2025/02112  
~32:10/03/2025

2025/05042 ~ Complete ~54:WIND TURBINE BLADE AND METHOD OF DESIGNING WIND TURBINE BLADE  
~71:SINOMA WIND POWER BLADE CO., LTD., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park North  
Street, People's Republic of China ~72: CHEN, Delong;LI, Chengliang;LI, Xingxing;REN, Wang;WU, Weiwei~  
33:CN ~31:202410895331.X ~32:04/07/2024

2025/05062 ~ Complete ~54:SUBMERGED SCRAPER CONVEYOR ~71:CBZ SOLUTIONS (PTY) LTD, 11  
INDUSTRIAL ROAD, KYA SANDS, RANDBURG, 2169 JOHANNESBURG, SOUTH AFRICA, South Africa;NINE  
DOT SOLUTIONS (PTY) LTD, BOARDWALK PHASE 5, BUILDING 4A, 113 BOARDWALK BOULEVARD,  
FAERIE GLEN, PRETORIA 0081, GAUTENG, South Africa ~72: KIRSCH, Jeremy, Philip;VAN ZYL, Pieter~

2025/05033 ~ Complete ~54:FOLDABLE TABLE ~71:KEVO PROJECT MANAGEMENT (PTY) LTD, 61 Klein  
Constantia Road, Constantia, South Africa ~72: ELSE, Sean Richard~

2025/05046 ~ Complete ~54:COMPOSITIONS ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214,  
SWITZERLAND, Switzerland ~72: GRIFFIN, Laura;MA, Ling;NARANJO MODAD, Sandra~ 33:US  
~31:63/384,009 ~32:16/11/2022

2025/05031 ~ Complete ~54:RESPIRATORY SYNCYTIAL VIRUS MRNA VACCINE, AND PREPARATION  
METHOD THEREFOR AND USE THEREOF ~71:HANGZHOU TIANLONG PHARMACEUTICAL CO., LTD., No.  
430, Jianding Road, Shangcheng District, Hangzhou City, People's Republic of China ~72: CHAI, Xin;DONG,  
Kai;LANG, Xiaowei;LI, Jing;LIANG, Limin;PAN, Chen;SONG, Gengshen;WANG, Huanyu;WANG, Wang;ZHANG,  
Jinyu;ZHOU, Yuting~ 33:CN ~31:2024109115697 ~32:09/07/2024

2025/05025 ~ Provisional ~54:A GOVERNANCE SYSTEM ~71:KARVOUNIARIS, Nicolaos, Constandinos, 9  
ANTIPOLIS LANE, MACASSAR, CROYDON OLIVE ESTATE, SOMERSET WEST, 7130, WESTERN CAPE,  
SOUTH AFRICA, South Africa ~72: KARVOUNIARIS, Nicolaos, Constandinos~

2025/05039 ~ Complete ~54:MERCHANT FEE CONFIGURATION SYSTEM AND METHOD ~71:MUSTANG  
FINANCIAL (PTY) LTD., 17 Winnipeg Street, Spartan, KEMPTON PARK, Johannesburg 1619, Gauteng, SOUTH  
AFRICA, South Africa ~72: CHEN, Xiaofeng;CHEN, Xilu~

2025/05057 ~ Complete ~54:IMAGE DECODING METHOD, IMAGE ENCODING METHOD, AND METHOD FOR  
TRANSMITTING BITSTREAM ~71:LG ELECTRONICS INC., 128, Yeoui-daero, Yeongdeungpo-gu, Seoul,  
07336, Republic of Korea ~72: HENDRY TAN~ 33:US ~31:63/525,147 ~32:05/07/2023

2025/05059 ~ Complete ~54:SYSTEMS AND METHODS FOR PEST PRESSURE HEAT MAPS THAT CONVEY  
INFORMATION RELATING TO GENETIC MARKERS OF RESISTANCE TO PEST CONTROL PRODUCTS  
~71:FMC CORPORATION, 2929 Walnut Street, Philadelphia, Pennsylvania, 19104, United States of America  
~72: EDUARDO DA CRUZ MADURO PICELLI;FABIO M DE ANDRADE SILVA;LUIS ALFREDO RAUER  
DEMANT;SAMUEL NEVES RODRIGUES ALVES~ 33:US ~31:63/433,554 ~32:19/12/2022

2025/05056 ~ Complete ~54:IMAGE ENCODING/DECODING METHOD FOR PROCESSING REPETITION OF  
NNPFC SEI MESSAGE, METHOD FOR TRANSMITTING BITSTREAM, AND RECORDING MEDIUM HAVING  
BITSTREAM STORED THEREIN ~71:LG ELECTRONICS INC., 128, Yeoui-daero, Yeongdeungpo-gu, Seoul,  
07336, Republic of Korea ~72: HENDRY TAN~ 33:US ~31:63/426,721 ~32:19/11/2022

2025/05035 ~ Complete ~54:A BEARING ELEMENT FOR A ROCK ANCHOR ~71:DE BRUIN, Donovan John, 11 Withaak Street, Elspark, GERMISTON 1428, Gauteng Province, SOUTH AFRICA, South Africa;LEVITAN, Ian, 27 Silvermonte Village, Sandringham, JOHANNESBURG 2192, Gauteng Province, SOUTH AFRICA, South Africa ~72: DE BRUIN, Donovan John;LEVITAN, Ian~ 33:ZA ~31:2024/01087 ~32:02/04/2024

2025/05048 ~ Complete ~54:PROGRAM, METHOD, INFORMATION PROCESSING DEVICE, AND SYSTEM ~71:WOTA Corp., 1-13-13 Nihonbashi-bakurocho, Chuo-ku, TOKYO 1030002, JAPAN, Japan ~72: MORISHIMA, Ryuji;OHKI, Shingo~ 33:JP ~31:2022-183103 ~32:16/11/2022

2025/05060 ~ Complete ~54:METHODS OF TREATING MYELODYSPLASTIC SYNDROME AND MONITORING THE TREATMENT ~71:GERON CORPORATION, 919 E. Hillsdale Blvd. Suite 250, Foster City, California, 94404, United States of America ~72: FAYE FELLER;FEI HUANG~ 33:US ~31:63/436,831 ~32:03/01/2023;33:US ~31:63/444,789 ~32:10/02/2023;33:US ~31:63/448,638 ~32:27/02/2023;33:US ~31:63/503,896 ~32:23/05/2023;33:US ~31:63/505,918 ~32:02/06/2023;33:US ~31:63/520,538 ~32:18/08/2023;33:US ~31:63/606,256 ~32:05/12/2023

2025/05114 ~ Provisional ~54:BAAIJUS: A USER-CONTROLLED, AI-POWERED DIGITAL CONTENT FILTERING AND MODERATION ECOSYSTEM ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~

2025/05036 ~ Complete ~54:A BEARING ELEMENT FOR A ROCK ANCHOR ~71:DE BRUIN, Donovan John, 11 Withaak Street, Elspark, GERMISTON 1428, Gauteng Province, SOUTH AFRICA, South Africa;LEVITAN, Ian, 27 Silvermonte Village, Sandringham, JOHANNESBURG 2192, Gauteng Province, SOUTH AFRICA, South Africa ~72: DE BRUIN, Donovan John;LEVITAN, Ian~ 33:ZA ~31:2024/01087 ~32:02/04/2024

2025/05053 ~ Complete ~54:METHODS OF TREATMENT OF BREAST CANCER WITH SELECTIVE ESTROGEN RECEPTOR DEGRADERS (SERDS) ~71:AstraZeneca AB, SÖDERTÄLJE SE-151 85, SWEDEN, Sweden ~72: GALBRAITH, Susan Mary;KLINOWSKA, Teresa Caroline Maria;LINDEMANN, Justin Pieter Oliver;MORROW, Christopher Jon~ 33:US ~31:63/384,170 ~32:17/11/2022

- APPLIED ON 2025/06/17 -

2025/05072 ~ Complete ~54:MULTIVALENT MULTI-TARGET OHA-GX1 ANTI-TUMOR COMPOSITION ~71:THE AFFILIATED HOSPITAL OF SOUTHWEST MEDICAL UNIVERSITY, No. 25 Taiping Street, Jiangyang District, Luzhou City, Sichuan Province, 646000, People's Republic of China ~72: Deyan Xie;Guojun Wang;Nuoya Wen;Pei Jing;Ruoyan Li;Xiaojuan Qiu~

2025/05078 ~ Complete ~54:NEW METHOD FOR REMEDIATING COPPER CONTAMINATED SOIL BY COMBINING BIOCHAR AND OSCILLIBACTER SP. BS ~71:China University of Geosciences, Beijing, 29 Xueyuan Road, Haidian District, Beijing, 100083, People's Republic of China ~72: CHAI Wenping;MA Yuqing;MIN Ning;YAO Jun;ZHAO Jinsui;ZHAO Yan~

2025/05090 ~ Complete ~54:ALOESWOOD FORMATION METHOD FOR AQUILARIA SINENSIS TREES THROUGH DISEASE-INJURYAND FUNGAL INFECTION ~71:Huaxin Zhuo, No. 17, First Lane, Tianyimen, Xiangzhou Dist., Zhuhai, Guangdong, People's Republic of China ~72: Huaxin Zhuo~ 33:CN ~31:2024119486049 ~32:27/12/2024

2025/05091 ~ Complete ~54:IRON GRADIENT IN POLYCRYSTALLINE DIAMOND COMPACTS; BLANKS, CUTTERS AND CUTTING TOOLS INCLUDING SAME; AND METHODS OF MANUFACTURE ~71:Diamond Innovations, Inc., 6325 Huntley Road, WORTHINGTON 43085, OH, USA, United States of America ~72: ADEPALLI, Kiran~ 33:US ~31:62/946,623 ~32:11/12/2019

2025/05095 ~ Complete ~54:FLAME AND LASER RESISTANT COMPOSITES ~71:NANHAI NANXIN NON-WOVEN CO. LTD., East Side of Nanjin Village, Shatou Avenue, People's Republic of China ~72: DONG WU;MINGLAN FANG;YONGJI JIN~

2025/05096 ~ Complete ~54:STEEL SHEET FOR TOP COVER OF BATTERY PACK AND ITS MANUFACTURING METHOD ~71:ARCELORMITTAL, 24-26 Boulevard d'Avranches, Luxembourg ~72: Pascale SANZEY;Tarek KRIM~ 33:IB ~31:PCT/IB2023/050784 ~32:30/01/2023

2025/05070 ~ Complete ~54:SMA-BASED INTELLIGENT PET COLLAR ~71:Changchun University of Science and Technology, No.7089, Weixing Road, Changchun City, Jilin Province, 130022, People's Republic of China;Ocean University of China, No.238, Songling Road, Laoshan District, Qingdao City, Shandong Province, 266100, People's Republic of China ~72: FU, Qiang;LI, Jihao;LI, Junyang;LI, Yingchao;SHI, Haodong;WANG, Lihong;WEN, Qi;ZHANG, Hao;ZHAO, Qingyuan~ 33:CN ~31:CN202411537900.X ~32:31/10/2024

2025/05088 ~ Complete ~54:MULTI-MODAL DATA FUSION BUILDING MATERIAL HARDNESS INTELLIGENT DETECTION DEVICE ~71:Wenzhou Polytechnic, University Town, Chashan and Jiangjiaqiao 81, Wenzhou, Zhejiang, People's Republic of China ~72: Fang Liwei~

2025/05089 ~ Complete ~54:CONCRETE STIRRING DEVICE FOR SLOPE PROTECTION CONSTRUCTION FOR HYDRAULIC ENGINEERING ~71:Wenzhou Polytechnic, University Town, Chashan and Jiangjiaqiao 81, Wenzhou, Zhejiang, People's Republic of China ~72: Wu Qingling~

2025/05121 ~ Provisional ~54:DATA FOCAST ~71:SAKHILE HOPWELL NTULI, 1351 Ext 05 Empumelelweni, South Africa ~72: SAKHILE HOPEWELL NTULI~

2025/05064 ~ Provisional ~54:UNIVERSAL DRIVETRAIN TECHNOLOGY (UDT) ~71:Davonte Lawrence, N/A, N/A, South Africa ~72: Davonte Lawrence~

2025/05081 ~ Complete ~54:A CONCRETE TEMPERATURE CORRECTION METHOD, DEVICE, MEDIUM, AND PRODUCT FOR MIXER OUTLET COUPLED WITH ENVIRONMENTAL VARIABLES ~71:China Institute of Water Resources and Hydropower Research, No. 20, Chegongzhuang West Road, Haidian District, Beijing, 100038, People's Republic of China;China Three Gorges Construction Engineering Corporation, Room 206-20, 2nd Floor, Building 1, Courtyard 1, Gongyuan Street, Tongzhou District, Beijing, 650500, People's Republic of China ~72: DENG, Wenyang;GUO, Jinyang;HUANG, Jicun;JING, Maogui;LI, Ruyao;LIU, Wei;LIU, Xing;LIU, Yi;LONG, Ang;SUN, Changmao;XIN, Jianda;YAN, Zhongluan;YANG, Ge;YAO, Liang;ZHANG, Guoxin;ZHANG, Lei;ZHANG, Xinlu;ZHENG, Lei;ZHU, Zhenyang~

2025/05097 ~ Complete ~54:FUCOIDAN DEGRADED BY DIELECTRIC BARRIER DISCHARGE PLASMA, PREPARATION METHOD THEREFOR AND USE THEREOF ~71:SOUTH CHINA UNIVERSITY OF TECHNOLOGY, NO. 381 WUSHAN ROAD, People's Republic of China ~72: YOU, Lijun;YU, Yongyi~ 33:CN ~31:202310056495.9 ~32:16/01/2023

2025/05109 ~ Complete ~54:CABLE CLAMPING APPARATUS AND CABLE GLAND ~71:CMF PRODUCTS LIMITED, 11 Glasshouse Street, St Peters, Newcastle upon Tyne, Tyne and Wear, NE6 1BS, United Kingdom ~72: DAVID ROBINSON;LEE FRIZZELL;MARTIN SWAN~ 33:EP ~31:23153297.9 ~32:25/01/2023

2025/05116 ~ Provisional ~54:INTEGRATED PLATFORM FOR FLEET, VEHICLE, STAFF, CARGO, AND TRANSPORT OPERATIONS MANAGEMENT WITH MULTI-TENANT, MULTI-DEPARTMENT, AND CROSS-INDUSTRY AUTOMATION ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~



2025/05117 ~ Provisional ~54:MODULAR MULTI-TENANT SOFTWARE-AS-A-SERVICE (SAAS) PLATFORM ENABLINGINTEGRATED BUSINESS, GOVERNMENT, AND CITIZEN FUNCTIONS WITH UNIVERSALUSER AND DATA INTEROPERABILITY ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~

2025/05115 ~ Provisional ~54:UNIVERSAL, MODULAR PLATFORM FOR USER-CONTROLLED DATA SHARING AND DIGITAL IDENTITYACROSS ALL PERSONAL, COMMERCIAL, GOVERNMENTAL, AND MEDICAL INTERACTIONS ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~

2025/05118 ~ Provisional ~54:COMPREHENSIVE DIGITAL GOVERNMENT OPERATIONS, UTILITIES, AND CITIZENENGAGEMENT PLATFORM WITH MODULAR MULTI-DEPARTMENT INTEGRATION ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~

2025/05075 ~ Complete ~54:ANESTHESIA AUXILIARY SUPPORT WITH FOLDING AND TELESCOPIC STRUCTURE ~71:THE AFFILIATED HOSPITAL OF HEBEI UNIVERSITY, No. 212 Yuhua East Road, Baoding City, Hebei Province, 071000, People's Republic of China ~72: GAN Lu;LI Qianyu;WANG Huiyue~

2025/05082 ~ Complete ~54:JELLYFISH ROBOT WITH FOLDABLE BELL-SHAPED FIN STRUCTURE ~71:Changchun University of Science and Technology, No.7089, Weixing Road, Changchun City, Jilin Province, 130022, People's Republic of China;Ocean University of China, No.238, Songling Road, Laoshan District, Qingdao City, Shandong Province, 266100, People's Republic of China ~72: LI, Junyang;LI, Yingchao;SHI, Haodong;SUN, Hongyu;WANG, Shijie;WEN, Qi;XU, Shuang;ZHANG, Hao~ 33:CN ~31:CN202410796014.2 ~32:20/06/2024

2025/05087 ~ Complete ~54:INTELLIGENT BUILDING ENGINEERING QUANTITY SURVEYING AND MAPPING PRICING DEVICE ~71:Wenzhou Polytechnic, University Town, Chashan and Jiangjiaqiao 81, Wenzhou, Zhejiang, People's Republic of China ~72: Fang Liwei~

2025/05093 ~ Complete ~54:A PAVEMENT STRUCTURE DEPTH DETECTION DEVICE AND ITS DETECTION METHOD ~71:CHINA CONSTRUCTION SEVENTHENGINEERING DIVISION CORP.,LTD, No.267,15th Street, Economic Development Zone, Zhengzhou, Henan, 450016, People's Republic of China;HENAN NO.7 CONSTRUCTION ENGINEERING GROUP CO., LTD, 17th Floor, Building C, No.127 Zidong Road, Guanchenghui District, Zhengzhou, Henan, 450000, People's Republic of China ~72: FENG Dakuo;HAO Yukun;LI Chengbei;LI Zhongzhi;LU Hailu;LI Erbao;MENG Qingxin;QIN, Wei;SHEN Shihao;WANG Qingshan;XIA Junjie;YE Yushan;ZHANG Hui;ZHANG, Jin;ZHU, Yawei~ 33:CN ~31:202410495487 .9 ~32:24/04/2024

2025/05100 ~ Complete ~54:CONTROLLING A STATE OF AT LEAST ONE OPERATION ZONE ~71:Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72: CUMINI, Lauso;HEIKKILÄ, Janne;VAARA, Juho~ 33:EP ~31:22212576.7 ~32:09/12/2022

2025/05102 ~ Complete ~54:PYRIDINE DERIVATIVES AS PROTEIN KINASE INHIBITORS ~71:B.C.I. PHARMA, Avenue de l'Hôpital 11, 4000, Liège, Belgium ~72: CLAIRE AMIABLE;CÉLINE LASCHET;DOMINIQUE SURLERAUX;RÉMI GUILLON~ 33:EP ~31:22209497.1 ~32:24/11/2022

2025/05108 ~ Complete ~54:SOAP COMPOSITE PARTICLES, METHOD FOR PRODUCING SAME, AND COSMETIC ~71:TOMOEGAWA CORPORATION, 2-1-3, Kyobashi, Chuo-ku, Tokyo 1048335, Japan ~72: HIROTOSHI IKEYA;RIKA MIYAKE~ 33:JP ~31:2022-204425 ~32:21/12/2022

2025/05067 ~ Provisional ~54:SYSTEM AND METHOD FOR STRUCTURAL ANTI-CORRUPTION, CORPORATE FRAUD DETECTION, AND NATIONAL RECOVERY ENABLEMENT THROUGH PUBLIC-PRIVATE ARCHITECTURE AND INCENTIVISED WHISTLEBLOWER PARTICIPATION ~71:George Smith, 11 Vorster Place, South Africa ~72: George Smith~

2025/05069 ~ Complete ~54:DEVICE FOR STORING AND DISTRIBUTING DOSAGE FORMS WITH TRANSCIVER ~71:LIMITED LIABILITY COMPANY SIMPLETABS, VN.TER.G. MUNITSYPALNIY OKRUG AKADEMICHESKIY, UL DMITRIYA ULIANOVA, D. 30, K. 2, MOSCOW, 117292, Russian Federation ~72: KRAVCHENKO Alexander Aleksandrovich~ 33:RU ~31:2025110939 ~32:26/04/2025

2025/05071 ~ Complete ~54:CTD SENSOR AND MANUFACTURING METHOD THEREOF ~71:Changchun University of Science and Technology, No.7089, Weixing Road, Changchun City, Jilin Province, 130022, People's Republic of China;Ocean University of China, No.238, Songling Road, Laoshan District, Qingdao City, Shandong Province, 266100, People's Republic of China ~72: LI, Guanlin;LI, Jiefei;LI, Jihao;LI, Junyang;LI, Yingchao;LIU, Qindan;SHI, Haodong;WANG, Lihong;WEN, Qi;ZHANG, Hao~ 33:CN ~31:CN202411177945.0 ~32:27/08/2024

2025/05077 ~ Complete ~54:DOPED TITANIUM DIOXIDE AND PREPARATION METHOD AND APPLICATION THEREOF ~71:Zhejiang Academy of Agricultural Sciences, No. 198, Shiqiao Road, Shangcheng District, Hangzhou City, Zhejiang Province, 310021, People's Republic of China ~72: DING, Lin;DING, Linhao;WANG, Wen;WU, Yue;XIAO, Hua;XIE, Chuanqi;XU, Xing;ZHAO, Jiahao;ZHOU, Weidong~ 33:CN ~31:202410805060.4 ~32:21/06/2024

2025/05094 ~ Complete ~54:SYNTHESIS OF 2-PHENYL-2-AMINO-CYCLOHEXAN-1-ONE DERIVATIVES ~71:GILGAMESH PHARMACEUTICALS, INC., 113 University Place, Suite 1019, United States of America ~72: GAJULA, Praveen, Kumar;GANGU, Satya, Aravind;LEONG, William;NAINI, Santosh, Reddy;QU, Bo;SAMANKUMARA, Lalith, Palitha;SENANAYAKE, Chris, Hugh;SIRASANI, Gopal~ 33:US ~31:63/435,800 ~32:28/12/2022;33:US ~31:63/471,091 ~32:05/06/2023

2025/05106 ~ Complete ~54:A NOVEL SMALL MOLECULE KRAS INHIBITOR: DRUGGING UNDRUGGABLE TARGETS FOR CANCER THERAPEUTICS ~71:PILLAI UNIVERSAL LLC, 963 Topsy Lane 306-351, Carson City, Nevada, 92590, United States of America ~72: BASKARAN PILLAI;DINESH M.G.~ 33:IN ~31:202241072448 ~32:15/12/2022

2025/05110 ~ Complete ~54:APPARATUS AND SYSTEM FOR MEASURING SOIL RESPIRATION ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, Stellenbosch, South Africa ~72: KLOPPER, Kyle Brent;WOLFAARDT, Gideon~ 33:GB ~31:2219626.5 ~32:23/12/2022

2025/05187 ~ Provisional ~54:SYSTEM AND METHOD FOR FACILITATING CASHLESS DIGITAL TIPPING VIA QR CODE AND VIRTUAL WALLET INTEGRATION FOR INFORMAL ECONOMY PARTICIPANTS ~71:Hendrik Rudolph Willemse, 33 Joan Road, South Africa ~72: Hendrik Rudolph Willemse~

2025/05066 ~ Provisional ~54:SYSTEMS AND METHODS FOR WEALTH CREATION AND EQUITY PARTICIPATION BY STOKVELS, ROTATING SAVINGS ASSOCIATIONS (ROSCAS), AND COMMUNITY-BASED INVESTMENT SCHEMES IN FINANCIAL INSTITUTIONS AND INVESTMENT PLATFORMS ~71:George Smith, 11 Vorster Place, South Africa ~72: George Smith~

2025/05074 ~ Complete ~54:PH-TRIGGERED GREEN-RED DUAL-COLOR CONVERSION FLUORESCENT PROBE, PREPARATION METHOD AND APPLICATION THEREOF ~71:HAINAN NORMAL UNIVERSITY, No.99 Longkun South Road, Haikou City, Hainan Province, 571158, People's Republic of China ~72: DAI Wenqin;YE Miantai~

2025/05080 ~ Complete ~54:PICKING ROLLER AND HARVESTING MACHINE FOR PEPPER HARVESTING ~71:Bayinguoleng Vocational and Technical College, Korla Economic Development Zone, Korla City, Xinjiang, People's Republic of China ~72: JIN Ruocheng;LV Huijie;YUAN Xiaowei;ZHAO Liwei~

2025/05085 ~ Complete ~54:CONSTRUCTION METHOD OF INDUCIBLE MURINE CYSTIC KIDNEY DISEASE MODEL ~71:Sir Run Run Hospital Nanjing Medical University, 109 Longmian Road, Jiangning District, Nanjing City, Jiangsu Province, People's Republic of China ~72: Bin Xue;Kai Wang;Xianlin Xu~

2025/05086 ~ Complete ~54:A REAL-TIME MONITORING DEVICE FOR AN ELECTROMECHANICAL DEVICE BASED ON THE INTERNET OF THINGS ~71:Zhejiang Industry and Trade Vocational College, No. 717 Fudong Road, Wenzhou City, Zhejiang Province, People's Republic of China ~72: Jiang Jiaming;Pan Zihao;Shao Kangmin;Wang Wei~

2025/05099 ~ Complete ~54:INCREASED NITROGEN FIXATION USING BACTERIA WITH IMPROVED AMMONIA SECRETION ~71:Bayer CropScience LP, 800 North Lindbergh Boulevard, ST. LOUIS 63167, MO, USA, United States of America;Ginkgo Bioworks, Inc., 27 Drydock Avenue, 8th Floor, BOSTON 02210, MA, USA, United States of America ~72: TAN, Sue Zanne~ 33:US ~31:63/384,373 ~32:18/11/2022

2025/05103 ~ Complete ~54:AZOLE COMPOUNDS FOR CONTROLLING AND COMBATING INVERTEBRATE PESTS ~71:FMC CORPORATION, 2929 Walnut Street, Philadelphia, Pennsylvania, 19104, United States of America ~72: MING XU~ 33:US ~31:63/433,847 ~32:20/12/2022

2025/05105 ~ Complete ~54:ORTHOPEDIC IMPLANT WITH NON-HELICAL FASTENER HOLE ~71:SKELETAL DYNAMICS, INC., 7300 N. Kendall Drive, Suite 400, Miami, Florida, 33156, United States of America ~72: JORGE ORBAY;JUERGEN KORTENBACH;ROBERT SIXTO~ 33:US ~31:63/476,507 ~32:21/12/2022

2025/05112 ~ Complete ~54:DISINFECTION AND STERILIZATION MACHINE ~71:DONGGUAN EMERY PLASTIC HARDWARE CO., LTD., Room 202, Building 3, No. 56, Yongfa Road, Dongshan, Yongfa Industrial Zone, Dongshan Village, Qishi Town, Dongguan, People's Republic of China ~72: LIANG, Qiang;YU, Shaofeng~

2025/05119 ~ Provisional ~54:SYSTEM AND METHOD FOR REAL-TIME,USER-SPECIFIC AI PROMPT PERSONALIZATION ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~

2025/05065 ~ Provisional ~54:QUANTUM-RESILIENT SATELLITE CONSTELLATION WITH STEALTH OPERATION, MODULAR SCALABILITY, AND INTEGRATED MESH NETWORK ~71:Qrevolution Orbit Pty Ltd, 44 Maynard Road, South Africa ~72: Modise Rex Seemela~

2025/05068 ~ Provisional ~54:AI-DRIVEN PERSONALIZED CABIN AMBIENCE CONTROL SYSTEM WITH REINFORCEMENT LEARNING, FUZZY LOGIC, AND MULTI-MODAL SENSOR FUSION FOR AIRCRAFT ~71:Kabelo Diale, 7 Comet Street, South Africa ~72: Kabelo Diale~

2025/05073 ~ Complete ~54:A SOIL IMPROVEMENT METHOD TO ENHANCE SOIL FERTILITY ~71:Jinchang Agricultural Research Institute, No. 101 Tianjin Road, Jinchuan District, Jinchang, Gansu, People's Republic of China ~72: Chengda Niu;Dengxiang Shang;Lin Zeng;Run Gan;Weijie Wang;Xiaofeng Yang;Xili Cheng~

2025/05079 ~ Complete ~54:A B2L-BASED ECTHYMA CONTAGIOSUM VIRUS TAQMAN FLUORESCENCE QUANTITATIVE PCR ASSAY KIT AND HOW TO USE IT ~71:ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY, No. 9 Donghua Road, Fengyang County, Chuzhou City, Anhui Province, People's Republic of China ~72: CHEN Weizhen;FENG Xing;HE Shaojun;LIU Deyi;WANG Aiyang;WANG Bo;ZHANG Liujun~

2025/05084 ~ Complete ~54:VACUUM MULTI-LAYER INSULATION SYSTEM FOR REFRIGERANT RESERVOIRS ~71:Anhui Vocational and Technical College, No. 2600, Wenzhong Road, Xinzhan District, Hefei, Anhui, 230011, People's Republic of China ~72: Aiping CAO;Dengchao LI;Jun ZHONG;Li LIANG;Wei CUI;Yanhua LIU~ 33:CN ~31:2025107368864 ~32:04/06/2025

2025/05098 ~ Complete ~54:WIND TURBINE BLADE, AND MANUFACTURING APPARATUS AND FORMING METHOD THEREFOR ~71:SINOMA WIND POWER BLADE CO., LTD., 9th Floor, Block C, Building B6, Dongsheng Technology Park, No. 66 Xixiaokou Road, People's Republic of China ~72: LIU, Yan;WANG, Yongquan;XIANG, Taocheng;XU, Youmu;ZHAO, Liyan~ 33:CN ~31:202311387797.0 ~32:24/10/2023

2025/05107 ~ Complete ~54:LIPID NANOPARTICLES FOR THE PREVENTION OF TUBERCULOSIS OR OTHER MYCOBACTERIAL INFECTIONS ~71:AKAGERA MEDICINES, INC., 5 Essex Street, Boxford, Massachusetts, 01921, United States of America ~72: CHRISTIAN COBAUGH;DARYL C DRUMMOND;MARK E HAYES;ROBIN FRIEDMAN;ROSS FULTON~ 33:US ~31:63/476,916 ~32:22/12/2022

2025/05111 ~ Complete ~54:LOW RESISTANCE CAPACITIVE CABLE ~71:ENERTECHNOS LIMITED, 19 Kingsmill Business Park, Capel Mill Road, United Kingdom ~72: HAJILOO, Ashkan Daria;SALEHI-MOGHADAM, Mansour~ 33:EP ~31:22209216.5 ~32:23/11/2022;33:EP ~31:23175297.3 ~32:25/05/2023

2025/05076 ~ Complete ~54:EXPERIMENTAL METHOD FOR EXAMINING THE EFFECTS OF ADDING BIOCHAR AND ORGANIC FERTILIZER ON SOIL NUTRIENTS AND KEY ENZYME ACTIVITIES ~71:Jinchang Agricultural Research Institute, No. 101 Tianjin Road, Jinchuan District, Jinchang, Gansu, People's Republic of China ~72: Chengda Niu;Dengxiang Shang;Lin Zeng;Run Gan;Weijie Wang;Xiaofeng Yang;Xili Cheng~

2025/05092 ~ Complete ~54:A SLUDGE GRANULATION APPARATUS AND METHOD EMPLOYING IRON-CARBON-COUPLED MESH INTERCEPTION WITH DRY-RETURN RECIRCULATION ~71:ZHEJIANG UNIVERSITY OF TECHNOLOGY, 18 Chaowang Road, Chaohui 6th District, Gongshu District, Hangzhou, Zhejiang 310014, People's Republic of China ~72: CHENG, Xiaoyu;FENG, Hongbo;JIN, Linyi;LI, Jun~ 33:CN ~31:202410356848.1 ~32:27/03/2024

2025/05113 ~ Complete ~54:CROCUS SATIVUS-DERIVED CSCCD2 MUTANT, GENE AND USE, AND RECOMBINANT MODEL ORGANISM PRODUCING CROCETIN ~71:SHENZHEN UNIVERSITY, No. 3688, Nanhai Road, Nanshan District, Shenzhen, People's Republic of China ~72: HUANG, Danqiong;LI, Hui;LOU, Sulin;ZHOU, Junjie~ 33:CN ~31:202410352118.4 ~32:26/03/2024

2025/05083 ~ Complete ~54:SULFUR DIOXIDE PROBE AND SYNTHESIS METHOD THEREOF ~71:HAINAN NORMAL UNIVERSITY, No.99 Longkun South Road, Haikou City, Hainan Province, 571158, People's Republic of China ~72: YE Miantai;ZHANG Jingyao~

2025/05101 ~ Complete ~54:METHOD FOR MANUFACTURING MAIN BEAM, MAIN BEAM, BLADE AND WIND TURBINE GENERATOR SYSTEM ~71:Sinoma Wind Power Blade Co., Ltd., 9th Floor, Block C, Building B6, Dongsheng Technology Park, No. 66 Xixiaokou Road, Haidian District, BEIJING 100192, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Yadong;LIU, Yan;WU, Zhengming;XU, Youmu;ZHAO, Liyan~ 33:CN ~31:202311389544.7 ~32:24/10/2023

2025/05104 ~ Complete ~54:AVERMECTIN DERIVATIVE ~71:MEIJI SEIKA PHARMA CO., LTD., 4-16, Kyobashi 2-chome Chuo-ku, Tokyo, 1048002, Japan;THE KITASATO INSTITUTE, 5-9-1, Shirokane, Minato-ku, Tokyo, 1088641, Japan ~72: HIDEAKI HANAKI;HIDEHITO MATSUI;KAZUHIKO KATAYAMA;KEI HAGA;KEISUKE NISHIDA;NOBUYOSHI BABA;TAKARA KAWANO;TOMOYASU HIROSE;TOSHIKI SUNAZUKA;YUICHIRO MATSUMOTO~ 33:JP ~31:2022-207198 ~32:23/12/2022

- APPLIED ON 2025/06/18 -

2025/05122 ~ Provisional ~54:MEGA-GRIP FRICTION EXPANSION SHELL SYSTEMS ~71:Theodore Daniel Swemmer, PO Box 75746, South Africa ~72: Theodore Daniel Swemmer~

2025/05125 ~ Complete ~54:METHOD FOR CONSTRUCTING AN EXPERIMENTAL MURINE MODEL OF HEART FAILURE WITH PRESERVED EJECTION FRACTION ~71:TONGJI HOSPITAL, TONGJI MEDICAL COLLEGE, HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 1095 Jiefang Avenue, Qiaokou District, Wuhan, People's Republic of China ~72: Lei, DAI;Yuyue, ZUO~ 33:CN ~31:2024110255000 ~32:29/07/2024

2025/05128 ~ Complete ~54:PREPARATION METHOD OF COMPOSITE METAL OXIDE CATALYST AND APPLICATION OF COMPOSITE METAL OXIDE CATALYST IN GLYCEROL CARBONATE SYNTHESIS ~71:Liaoning Petrochemical University, No.1 West Section of Dandong Road, Wanghua District, Fushun City, Liaoning Province, 113001, People's Republic of China ~72: BAI, Yingzhi;GUO, Yunlong;KANG, Lei;SUN, Na;WANG, Haiyan;WANG, Yujia;ZHANG, Jingwen~

2025/05130 ~ Complete ~54:WALKER FOR JOINT MOTION MEDICAL REHABILITATION ~71:Xinxiang Medical University, Xinyan Road, Hongqi District, Xinxiang, Henan, 453000, People's Republic of China ~72: Guanghua XU;Haoyan WANG;Jiayao WANG;Lin TAO;Shuwei ZHAO;Yali FAN~ 33:CN ~31:2025107170586 ~32:30/05/2025

2025/05133 ~ Complete ~54:OXAZOLIDINONE LIPOSOME COMPOSITIONS ~71:AKAGERA MEDICINES, INC., 5 Essex Street, Boxford, Massachusetts, 01921, United States of America ~72: ALEXANDER KOSHKARYEV;CHARLES O NOBLE;DARYL C DRUMMOND;DMITRI B KIRPOTIN~ 33:US ~31:63/292,899 ~32:22/12/2021

2025/05135 ~ Complete ~54:A REAL-TIME PERFORMANCE MONITORING AND ANALYSIS SYSTEM FOR CLOUD APPLICATIONS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: AMBHORE, Vishal B.;CHAVHAN, Pranali G.;DEOKAR, Ashish F.;DONGRE, Yashwant V.;KHARATE, Namrata G.;KOLEKAR, Vikas K.;SAKHARE, Sachin R.~

2025/05137 ~ Complete ~54:A HYBRID DECISION TREE SYSTEM FOR ENHANCING ACCURACY IN VIRTUAL HEALTHCARE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BABDE, Om;MALI, Manisha;MANE, Anirudh;MARAL, Vikas Balasaheb;PAGAR, Sai;PANDEY, Vaibhav;RATHI, Snehal;WANJALE, Kirti~

2025/05138 ~ Complete ~54:A BLOCKCHAIN BASED INTELLIGENT VEHICLE INSURANCE SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAVHAN, Pranali;MALI, Aadit Pravin;MALI, Manisha;WANKHEDE, Disha~

2025/05151 ~ Complete ~54:A SOCIAL MEDIA DETOX SYSTEM FOR INTEGRATING SOCIAL MEDIA USAGE WITH PHYSICAL TASK ASSIGNMENT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHARATI, Manasi Sachin;BOGIRI, Nagaraju;BORSE, Harshada Prakash;GAIKWAD, Vidya Shrimant;KARNIK, Madhuri Prashant;KARWA, Bhakti Dilip;MANE, Akshada Datta;MARAL, Vikas Balasaheb;MISHRA, Vaishali;WANKHEDE, Disha Sushant~



2025/05152 ~ Complete ~54:AN AI ASSISTED REAL TIME ADAPTIVE ROAD SURFACE SYSTEM TO CHANGE ROAD CHARACTERISTICS ACCORDING TO ENVIRONMENT AND TRAFFIC CONDITIONS  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHORGE, Ayush Sunil;DONGRE, Yashwant;GUDADHE, Shivshankar Bharat;KAMTHE, Yash Rajendra;KHARATE, Namrata;KOLEKAR, Vikas;MARAL, Vikas Balasaheb;SAKAHRE, Nitin~

2025/05156 ~ Complete ~54:WEARABLE COUGH MONITORING METHOD AND SYSTEM ~71:THE FIRST AFFILIATED HOSPITAL OF GUANGZHOU MEDICAL UNIVERSITY (GUANGZHOU CENTER FOR RESPIRATORY), No. 151, Yanjiang West Road, Yuexiu District, Guangzhou, Guangdong, 510000, People's Republic of China ~72: Dehua WANG;Lijuan LIU;Weijuan LIU;Xiaobing WU~ 33:CN ~31:202411183462.1 ~32:27/08/2024

2025/05157 ~ Complete ~54:ANTI-PD-1 $\times$ 4-1BB BINDING PROTEINS ~71:GENZYME CORPORATION, 450 Water Street, Cambridge, Massachusetts, United States of America ~72: AMARAL, Marta;BEIL, Christian;BERTHOU-SOULIÉ, Laurence;BIRKENFELD, Joerg;CAMERON, Béatrice;CUCCHETTI, Margot;DABDOUBI, Tarik;DESRUMEAUX, Klervi;DU, Fangyong;FURTMANN, Norbert;HOELPER, Soraya;LI, Yan;LIU, Guizhong;LUO, Peter Peizhi;RAO, Ercole;SASSOON, Ingrid;SCHNEIDER, Marion;SOUBRIER, Fabienne;VIGNE, Emmanuelle~ 33:US ~31:63/476,584 ~32:21/12/2022

2025/05159 ~ Complete ~54:NOVEL TRIPLE ACTIVATOR HAVING ACTIVITY ON ALL OF GLP-1, GIP, AND GLUCAGON RECEPTORS, AND PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING OBESITY COMPRISING SAME ~71:HANMI PHARM. CO., LTD., 214, MUHA-RO, PALTAN-MYEON, HWASEONG-SI, GYEONGGI-DO 18536, REPUBLIC OF KOREA, Republic of Korea ~72: IM, Hyeon Joo;KIM, Jung Kuk;KIM, Yo Han;SHIN, Min Kyung~ 33:KR ~31:10-2022-0182980 ~32:23/12/2022

2025/05161 ~ Complete ~54:ANTIBODY BINDING SPECIFICALLY TO ASM PROTEIN ~71:ISU ABXIS CO., LTD., C-5F, 22, DAEWANGPANGYO -RO 712BEON-GIL, BUNDANG-GU SEONGNAM-SI GYEONGGI-DO 13488, REP OF KOREA, Republic of Korea ~72: CHO, Jeongin;CHO, Kyueun~ 33:KR ~31:10-2022-0160443 ~32:25/11/2022

2025/05163 ~ Complete ~54:DOWNHOLE SEPARATION SYSTEM AND METHOD ~71:WORKOVER SOLUTIONS, INC., 156 S Campus Drive, United States of America ~72: KOENIG, Russell Wayne;REEVES, Mark Allen;RUDY, Kevin J.;VON GYNZ-REKOWSKI, Gunther HH~ 33:US ~31:18/150,499 ~32:05/01/2023

2025/05167 ~ Complete ~54:ADJUSTING CARBON CONTENT IN DIRECT REDUCED IRON ~71:Primetals Technologies Austria GmbH, Turmstraße 44, LINZ 4031, AUSTRIA, Austria ~72: HIEBL, Bernhard;REIN, Norbert;WURM, Johann;ZELLINGER, Karl-Heinz~ 33:EP ~31:22214537.7 ~32:19/12/2022;33:EP ~31:23168511.6 ~32:18/04/2023

2025/05170 ~ Complete ~54:CANCER TREATMENTS USING MTA-COOPERATIVE PRMT5 INHIBITORS ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: BELMONTES, Brian;HUGHES, Paul E.;SLEMMONS, Katherine~ 33:US ~31:63/434,268 ~32:21/12/2022;33:US ~31:63/459,315 ~32:14/04/2023;33:US ~31:63/543,613 ~32:11/10/2023

2025/05172 ~ Complete ~54:CRYSTALLINE FORMS OF A PIPERIDINE INHIBITOR OF SLC6A19 FUNCTION ~71:Jnana Therapeutics Inc., One Design Center Place, Suite 19-400, BOSTON 02210, MA, USA, United States of America ~72: ANTALEK, Mitchell T.;PURI, Aniket S.;WALTERS, Daniel T.;YOUNG, Maria~ 33:US ~31:63/428,867 ~32:30/11/2022

2025/05173 ~ Complete ~54:HERBICIDAL COMPOSITIONS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: FELLMANN, Julia;WATKINS, Melanie Jayne~ 33:EP ~31:22215115.1 ~32:20/12/2022

2025/05177 ~ Complete ~54:METHOD FOR ENHANCING INTERFACIAL PERFORMANCE BETWEEN METAL BOLT SLEEVE AND RESIN, AND BLADE ROOT COMPONENT ~71:SINOMA WIND POWER BLADE CO., LTD., Floor 9-10, Building 7, No. 6, Dongsheng Technology Park, North Street, Haidian District, Beijing, 100083, People's Republic of China ~72: BAOLONG WANG;CHENGLIANG LI;JIE ZHANG;JIJUN WANG;QIUXIANG SONG;SHUXIANG MOU;WEIWEI WU;YANMING ZHANG~ 33:CN ~31:202411379272.7 ~32:29/09/2024

2025/05180 ~ Complete ~54:FAST-DISINTEGRATING FLAVORING COMPOSITION FOR INSTANT FOODS ~71:V. MANE FILS, 620, route de Grasse, 06620 Le Bar-sur-Loup, France ~72: ANNAÏG FALC'HUN;JEAN-MICHEL HANNETEL~ 33:EP ~31:22307070.7 ~32:30/12/2022

2025/05183 ~ Provisional ~54:HEATING ELEMENT ~71:Hermanus Christoffel Petrus Human, 10a Clifford road Chanclyff, South Africa ~72: Hermanus Christoffel Petrus Human;Jan Petrus Human~

2025/05124 ~ Provisional ~54:METHOD OF MANUFACTURING A FRAME ~71:HERMANUS STEPHANUS PRETORIUS, 127 LINVELT ROAD ONDERSTEEPOORT, South Africa ~72: HERMANUS STEPHANUS PRETORIUS~

2025/05136 ~ Complete ~54:AN IOT BASED BIOGAS MONITORING SYSTEM WITH AI-DRIVEN PREDICTIVE DEPLETION ALERTS AND ECO SAVINGS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BOGIRI, Nagaraju;JAGDALE, Manoj;MALI, Manisha;MARAL, Vikas Balasaheb;PRAJAPATI, Jigar;ROUNIYAR, Rabi;SAKHARE, Sachin;SHINDE, Vaishnavi;WALKARE, Vansh;WANJALE, Kirti~

2025/05142 ~ Complete ~54:A REAL-TIME 3D OBJECT RECONSTRUCTION SYSTEM FOR MIXED/EXTENDED REALITY ENVIRONMENTS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DEDGAONKAR, Suruchi;MORE, Priyanka;SAKHARE, Sachin;SHUKLA, Devang;WAWGE, Tanushri Jayant~

2025/05144 ~ Complete ~54:A REAL-TIME BEHAVIORAL-BASED FINANCIAL RISK ASSESSMENT AND PERSONALIZATION SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAUDHARI, Puja Madan;GAIKWAD, Vidya Shrimant;KARAD, Rajat Sudhakar;MALI, Manisha;MARAL, Vikas Balasaheb;MISHRA, Vaishali;RATHI, Snehal;WANKHEDE, Disha Sushant~

2025/05149 ~ Complete ~54:A SMART HOME AUTOMATION SYSTEM WITH REAL-TIME PRESENCE DETECTION ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DHURVE, Janhavi;KARNIK, Madhuri Prashant;MANIKJADE, Akshay Ashok;MISHRA, Vaishali;PARDESHI, Sudiksha;SAKHARE, Nitin;WANKHEDE, Disha Sushant;ZAGADE, Vrushali~

2025/05155 ~ Complete ~54:BIS-ESTER AND AMIDE CATIONIC LIPIDS ~71:SANOFI, 46 Avenue de la Grande, France ~72: DASARI, Ramesh;DENG, Hongfeng;KARMAKAR, Saswata;LI, Lingyao;WANGWEERAWONG, Apiwat~ 33:EP ~31:22307007.9 ~32:22/12/2022

2025/05162 ~ Complete ~54:ALPP-SPECIFIC VARIANT ANTIGEN BINDING MOLECULES ~71:ALMAC DISCOVERY LIMITED, Almac House, 20 Seagoe Industrial Estate, United Kingdom ~72: COTTON, Graham

John;CRANSTON, Aaron;MCLEAN, Estelle;TRUMPER, Paul Richard;WAPPETT, Mark~ 33:GB ~31:2219467.4  
~32:21/12/2022;33:GB ~31:2305455.4 ~32:13/04/2023

2025/05164 ~ Complete ~54:THERAPEUTIC COMPOSITIONS AND METHODS ~71:SISAF LTD, 8 Frederick  
Sanger Road, United Kingdom ~72: AHMED, Mukhtar;SAFFIE-SIEBERT, Roghieh Suzanne;SUTERA, Flavia~  
33:GB ~31:2300912.9 ~32:20/01/2023

2025/05166 ~ Complete ~54:METHOD FOR PRODUCING HIGH-PURITY QUARTZ FROM IRON ORE WASTE  
OR TAILINGS, HIGH-PURITY QUARTZ AND USE THEREOF ~71:Serviço Nacional de Aprendizagem Industrial  
Departamento Regional da Bahia - Senai/dr/ba, Rua Edístio Pondé, nº 342, SALVADOR 41770-395, STIEP,  
BRAZIL, Brazil;Vale S.A., Torre Oscar Niemeyer, Praia de Botafogo nº 186, salas 1101, 1701 e 1801, Botafogo,  
RIO DE JANEIRO, RJ 22250-145, BRAZIL, Brazil ~72: DE PAULA, Joyce Silva;LIMA, Neymayer Pereira;LOPES,  
Henrique Júnio Oliveira;MODESTO, Paulo Henrique Marques;PEREIRA, Laís Resende;RIBEIRO, Caroline Melo~  
33:BR ~31:1020220235929 ~32:21/11/2022

2025/05174 ~ Complete ~54:RECOMBINANT FC DOMAIN - IL2 VARIANT POLYPEPTIDES AND  
COMBINATION THERAPY WITH MEMBRANE-ANCHORED ANTIGEN BINDING POLYPEPTIDES ~71:F.  
Hoffmann-La Roche AG, Grenzacherstrasse 124, BASEL 4070, SWITZERLAND, Switzerland ~72: DAROWSKI,  
Diana;GASSER, Stephan;KLEIN, Christian;LANG, Simone;VENETZ, Dario~ 33:EP ~31:23152578.3  
~32:20/01/2023

2025/05176 ~ Complete ~54:BLADE ROOT PRE-EMBEDDED PART, BLADE ROOT ASSEMBLY WITH PRE-  
EMBEDDED CONNECTION STRUCTURE, AND BLADE ~71:SINOMA WIND POWER BLADE CO., LTD., Floor  
9-10, Building 7, No. 6, Dongsheng Technology Park, North Street, Haidian District, Beijing, 100083, People's  
Republic of China ~72: CHENGLIANG LI;CHONGBI ZHANG;LIGUI CHEN;YANMING ZHANG;ZHANYING  
LI;ZHEN ZHANG~ 33:CN ~31:202411077611.6 ~32:07/08/2024

2025/05178 ~ Complete ~54:OIL-CONTINUOUS COSMETIC COMPOSITION ~71:UNILEVER GLOBAL IP  
LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: HASIBA BEKTO;LEI HUANG~  
33:EP ~31:22215512.9 ~32:21/12/2022

2025/05185 ~ Provisional ~54:SYSTEM AND METHOD FOR MULTI-LAYERED, CONTEXTUAL AI GUARDRAIL  
ENFORCEMENT AND MODERATION IN DIGITAL PLATFORMS ~71:The Best Trust Registration No:  
IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der  
Merwe ~

2025/05126 ~ Complete ~54:AN AI-POWERED AGRICULTURAL MONITORING AND TESTING SYSTEM FOR  
PRECISION FARMING APPLICATIONS AND A METHOD THEREOF ~71:Ilangovan Ramasamy, 205 D. B.  
Road, R. S. Puram, Coimbatore, Tamil Nadu, 641002, India;T. Vigneshwaran, 89/99 NGN Street, New  
Sidhapudhur, Coimbatore, Tamil Nadu, 641044, India ~72: Ilangovan Ramasamy;T. Vigneshwaran~ 33:IN  
~31:202541049193 ~32:21/05/2025

2025/05140 ~ Complete ~54:AN IOT BASED EMERGENCY TRAFFIC MANAGEMENT SYSTEM FOR  
AMBULANCE PRIORITY AT 4-WAY SIGNAL INTERSECTIONS ~71:VISHWAKARMA INSTITUTE OF  
TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA,  
411037, India ~72: BOGIRI, Nagaraju;CHAVHAN, Pranali G.;KARADKAR, Om Santosh;KATDARE, Ameya  
Mandar;LOHAGAONKAR, Sanket;MARAL, Vikas Balasaheb;WAGHMARE, Shubham;WANKHEDE, Disha  
Sushant~

2025/05145 ~ Complete ~54:AN AI BASED WASTE MANAGEMENT AND ENERGY PRODUCTION SYSTEM  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,

BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BORLE, Vedant;CHAVHAN, Pranali;KALE, Purva;KHARATE, Namrata;MARAL, Vikas Balasaheb;MORE, Priyanka;SAKHARE, Sachin R.;VIBHUTE, Akshata~

2025/05147 ~ Complete ~54: PRESERVATION SYSTEM WITH INDICATOR LABELS AND ITS APPLICATIONS ~71: Anhui Vocational and Technical College, No. 2600, Wenzhong Road, Xinzhan High tech Zone, Hefei City, Anhui Province, 230011, People's Republic of China; Yangzhou University, No. 88, Daxue South Road, Yangzhou City, Jiangsu Province, 225127, People's Republic of China ~72: CAO Chuan; HUANG Pingping; LI Deming; LI Songnan; LI Zi; SUN Yanhua; XU Rui ~ 33: CN ~31: 2025105256741 ~32: 25/04/2025

2025/05150 ~ Complete ~54: A MACHINE LEARNING BASED INTELLIGENT SYSTEM FOR IMPROVING ENGLISH LANGUAGE PROFICIENCY ~71: VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: KARNIK, Madhuri Prashant; KOLEKAR, Vikas; MARAL, Vikas Balasaheb; PHATAKE, Prathmesh Subhash; PINGALE, Dhanraj Dinesh; RAHATE, Sneha Manoj; SHARMA, Yogesh K.; SHINDE, Abhijeet Sudhir~

2025/05168 ~ Complete ~54: C5/VEGF BISPECIFIC BINDING MOLECULES ~71: Shenzhen Oculgen Biomedical Technology Co., Ltd, Nanshanyun Technology Building of Wanke, Yuncheng, 3rd Liuxin Street, Xili Community, Xili Stubbdistrict, Nanshan District, SHENZHEN 518055, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Chiungkuang~ 33: IB ~31: 2022/134813 ~32: 28/11/2022

2025/05175 ~ Complete ~54: PROGESTERONE FORMULATION ~71: Besins Healthcare Distribution FZ-LLC, Dubai Science Park, 907N, Floor 9 Building HQ Complex, DUBAI, UNITED ARAB EMIRATES, United Arab Emirates ~72: AGNUS, Benoît~ 33: EP ~31: 22214575.7 ~32: 19/12/2022

2025/05182 ~ Provisional ~54: WSP-LINK360 LINKING WSP, BUDGETING, AND LEARNING IN ONE SECURE PLATFORM ~71: Sheriff Nkomo, 7 Brampton Place Gansiebos Street, South Africa ~72: Sheriff Nkomo~

2025/05129 ~ Complete ~54: HIGH LIGHT-TRANSMITTING ANTI-PEEPING LAYER FOR ANTI-PEEPING FILM AND PREPARATION METHOD THEREFOR ~71: Cixi Shanglin Electronic Technology Co., Ltd., No. 10, Industrial Road, Wuxingdian Village, Zhangqi Town, Cixi City, Zhejiang Province, People's Republic of China ~72: Mao Jiaming; Mao Longquan~ 33: CN ~31: 2025107610779 ~32: 09/06/2025

2025/05132 ~ Complete ~54: OXAZOLIDINONE LIPOSOME COMPOSITIONS ~71: AKAGERA MEDICINES, INC., 5 Essex Street, Boxford, Massachusetts, 01921, United States of America ~72: ALEXANDER KOSHKARYEV; CHARLES O NOBLE; DARYL C DRUMMOND; DMITRI B KIRPOTIN~ 33: US ~31: 63/292,899 ~32: 22/12/2021

2025/05134 ~ Complete ~54: AN IOT BASED CYBER SECURITY SYSTEM FOR SMART CITIES TO BOOST OPENNESS AND SAFETY ~71: VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BUTLE, Sanika Naresh; DOSHI, Sawani Tarkeshwar; INAMDAR, Shrutee Chandrakant; MARAL, Vikas Balasaheb; MORE, Priyanka; NAIK, Pratiksha Prashant; SAKHARE, Sachin R.; SHINDE, Sakshi Dasharath; VARADE, Isha Santosh~

2025/05141 ~ Complete ~54: AN AI POWERED TRAVEL AND TOURISM SYSTEM WITH PERSONALIZED TRIP RECOMMENDATIONS AND UNEXPLORED AREAS EXPLORATION ~71: VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BUCHADE, Amar; MARAL, Vikas Balasaheb; PANTOJI, Sarvesh Mangesh; POL, Rahul S.; SHINDE, Jay Rahul; SHINDE, Sanika Kiran; SHINDE, Swapnil K.; WALUNJ, Deepak Subhash~

2025/05146 ~ Complete ~54:A REAL-TIME DEMAND AND SUPPLY ANALYTICS BASED DIGITAL MARKETPLACE SYSTEM FOR PRICE OPTIMIZATION OF AGRICULTURAL PRODUCTS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHOPRA, Garv Vinodkumar;DESHMUKH, Gopal B.;GAVALI, Piyush;MARAL, Vikas Balasaheb;RAJMANE, Samarth Prashant;SHINDE, Sairaj Anil;SHINDE, Uddhav Jaywant;TAKALE, Dattatray~

2025/05154 ~ Complete ~54:A COMPREHENSIVE SYSTEM WITH IMPROVED OPERATIONAL EFFICIENCY AND RESOURCE ACCESSIBILITY IN AGRICULTURAL AND VETERINARY SERVICE SECTORS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAVAN, Rohini;DAHIPHALE, Vishwajeet;NAGRE, Yash;TIWASKAR, Shweta;VYAVHARE, Pranav~

2025/05158 ~ Complete ~54:APPARATUS AND METHOD FOR TREATING PROCESS GAS ~71:DURR SYSTEMS AG, Carl-Benz-Str. 34, Bietigheim-Bissingen, 74321, Germany ~72: KEIL, Andreas;RODRIGUEZ CORREA, Catalina;SCHAEFER, Andreas~ 33:DE ~31:10 2022 132 528.8 ~32:07/12/2022

2025/05160 ~ Complete ~54:CONVEYING DEVICE ~71:INNOVA PATENT GMBH, KONRAD-DOPPELMAYR-STRASSE 1, 6922 WOLFURT, AUSTRIA, Austria ~72: BERCHTOLD, Thomas;FRÜHSTÜCK, Hermann~ 33:AT ~31:A50887/2022 ~32:23/11/2022

2025/05179 ~ Complete ~54:CXCL8 INHIBITORS FOR USE IN THE TREATMENT OF OCULAR MUCOUS MEMBRANE PEMPHIGOID AND/OR ORAL MUCOUS MEMBRANE PEMPHIGOID ~71:DOMPE' FARMACEUTICI S.P.A., Via Santa Lucia 6, 20121, Milano, Italy ~72: ANDREA ARAMINI;ENNO SCHMIDT;GIANLUCA BIANCHINI;LAURA BRANDOLINI;NICOLA DETTA;PASQUALE COCCHIARO;RALF LUDWIG;SABRINA PATZELT~ 33:EP ~31:23150423.4 ~32:05/01/2023

2025/05181 ~ Provisional ~54:AKZAR ~71:Mr Vuyo Matobako, 29295 Khaelicha Bloemfontein, South Africa ~72: Mr Vuyo Matobako~

2025/05184 ~ Provisional ~54:SYSTEM AND METHOD FOR AUTOMATED DIGITAL COMPLIANCE ENFORCEMENT, MONITORING, AND AUDIT ACROSSAND MODULAR PLATFORMS ~71:The Best Trust Registration No: IT001800/2017(C), 418 Theuns van Niekerk Street. Wierda Park, Centurion, South Africa ~72: Jacques van der Merwe~

2025/05123 ~ Provisional ~54:REFRIGERATED CONTAINER ~71:BIG BOX CONTAINERS (PTY) LTD., 92 Astron Road, DENVER, Johannesburg 2094, Gauteng, SOUTH AFRICA, South Africa ~72: WARD, Willem Jacobus;WILLIAMS, Douglas Gordon~

2025/05127 ~ Complete ~54:METHOD FOR PREPARING A SPHERICAL ALPHA-AL<sub>2</sub>O<sub>3</sub> POWDER MATERIAL AND USE THEREOF IN EPOXY RESIN MOLDING COMPOUND ~71:BengBu University, No. 1866, Caoshan Road, Bengbu City, Anhui Province, People's Republic of China;Bengbu Zhongheng New Material Technology Co., Ltd., East side of Longjin Road, Bengbu City, Anhui Province (inside Kaisheng Glass New Material Technology Industrial Park), 233000, People's Republic of China ~72: Bowen Huang;Chengxiu Ruan;Chenlin Yin;Gai Wu;Jinlong Ge;Xiaoqi Jin;Xingyu Liang;Yu Cao;Yuhong Jiao~

2025/05131 ~ Complete ~54:HARNESS WIRE ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: OLWAGE, Phillip;SMITH, Ruan~ 33:ZA ~31:2024/04861 ~32:21/06/2024



2025/05139 ~ Complete ~54:BIOPOLYMER FILM COMPOSITION CONTAINING SODIUM ALGINATE LOADED WITH ACRIDOCARPUS ORIENTALIS STEM EXTRACT ~71:Ahmed Al-Harrasi, Professor, Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;Hamed Nasser Harharah, Professor, Department of Chemical Engineering, College of Engineering, King Khalid University, Abha 62223, Saudi Arabia;Najeeb Ur Rehman, Associate Professor, Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Postal Code 616, Nizwa, Oman;Ramzi Hamed Harharah, Researcher, Department of Chemical and Process Engineering, Faculty of Engineering & Built Environment, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia;Salam Kadhim Al Dawery, Professor, Chemical Engineering Department, College of Engineering, University of Nizwa, PC 616, POB 33, Nizwa-Sultanate of Oman, Oman;Saurabh Bhatia, Associate Professor, Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman. University of Petroleum and Energy Studies, Dehradun, Uttarakhand, India;Shyam Sundar, Associate Professor, School of Pharmacy, College of Health Sciences, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;Talha Shireen Khan, Research Associate, Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman;Yasir Abbas Shah, Research Associate, Natural and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al Mauz, Nizwa 616, Oman ~72: Ahmed Al-Harrasi;Hamed Nasser Harharah;Najeeb Ur Rehman;Ramzi Hamed Harharah;Salam Kadhim Al Dawery;Saurabh Bhatia;Shyam Sundar;Talha Shireen Khan;Yasir Abbas Shah~

2025/05143 ~ Complete ~54:AN INTERNET OF BEHAVIOUR (IOB) BASED RETAIL SYSTEM FOR PERSONALIZED CUSTOMER EXPERIENCE AND DYNAMIC STORE LAYOUT OPTIMIZATION ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAVHAN, Pranali;GAJBHIYE, Archit Sanatan;GHUGE, Yash Rajeshrao;GOGULWAR, Gautam Girish;INGOLE, Ishika Ramkumar;MARAL, Vikas Balasaheb;SAKHARE, Sachin R.;WADHE, Atharva Amol~

2025/05148 ~ Complete ~54:AN AI POWERED CULTURAL EXPLORATION AND LANGUAGE TRANSLATION SYSTEM FOR IMMERSIVE TRAVEL EXPERIENCE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BATRA, Rakshika Narendra;DESHPANDE, Leena A.;GHONGE, Vilas;PATIL, Harshali Pramod;POTEKAR, Chaitany Kishor;THAWARE, Shailesh J.~

2025/05153 ~ Complete ~54:A COMPREHENSIVE SYSTEM WITH PREDICTIVE ANALYTICS FOR EMPOWERING FARMERS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BORADE, Shreyash;KARALE, Atharva;KATIKAR, Shilpa M.;KHUNTE, Piyush;MAHAJAN, Pratik;MARAL, Vikas Balasaheb;REGE, Pallavi R.;SHARMA, Yogesh K.~

2025/05165 ~ Complete ~54:METHOD AND DEVICE FOR PURIFYING WATER ~71:WATER IQ INTERNATIONAL B.V., Hooge Zijde 15, Netherlands ~72: Freddy DEKKERS~ 33:NL ~31:2033788 ~32:21/12/2022

2025/05169 ~ Complete ~54:ELECTRONIC EQUIPMENT WITH AN ELECTROMAGNETIC SHIELD SYSTEM ~71:Thales Nederland B.V., Zuidelijke Havenweg 40, HENGELO NL-7554 RR, THE NETHERLANDS, Netherlands ~72: GEERDINK, Benno Gerhardus Johannes;HAGE, Jacob Corstiaan;WITS, Wessel Willems~ 33:NL ~31:2033842 ~32:27/12/2022

2025/05171 ~ Complete ~54:THIADIAZOLE DERIVATIVES AS INHIBITORS OF CYCLIC GMP-AMP SYNTHASE AND USES THEREOF ~71:Ventus Therapeutics U.S., Inc., 100 Beaver Street, Suite 201, WALTHAM 02453, MA,

USA, United States of America ~72: BEVERIDGE, Ramsay;BURCH, Jason;CIBLAT, Stephane;CYR, Patrick~  
33:US ~31:63/433,987 ~32:20/12/2022;33:US ~31:63/501,320 ~32:10/05/2023

2025/05186 ~ Complete ~54:METHOD FOR PREPARING LEATHER COMPRISING THE USE OF SILYLATED COMPOUND AND LEATHER OBTAINED BY THIS METHOD ~71:CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, 3 rue Michel Ange, France;CTC, Parc Scientifique Tony Garnier, 4 rue Hermann Frenkel, France;ENSCM - ECOLE NATIONALE SUPERIEURE DE CHIMIE, 240 avenue du Professeur Emile Jeanbrau, France;UNIVERSITÉ DE MONTPELLIER, 163 rue Auguste Broussonnet, France ~72: CASSENTI, Thomas;MEHDI, Ahmad;MONTHEIL, Titouan;PONCET, Thierry;SUBRA, Gilles~ 33:FR ~31:FR2212156 ~32:22/11/2022

- APPLIED ON 2025/06/19 -

2025/05198 ~ Complete ~54:PREFABRICATED ENERGY-SAVING AND THERMALLY-INSULATING WALL FOR BUILDING, AND PREFABRICATING METHOD THEREOF ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: HUANG, Peng;LOU, Yafei;OUYANG, Kai;SHANG, Feng;WU, Wenlong~ 33:CN ~31:202510174255.8 ~32:18/02/2025

2025/05202 ~ Complete ~54:SEWAGE TREATMENT AGENT AND PREPARATION METHOD THEREOF ~71:HENAN CHENGJIANG LOW-ALTITUDE INTEGRATED SERVICES CO., LTD., Longxiang Road, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China;HENAN TUOYA ENVIRONMENTAL TECHNOLOGY CO., LTD., Hongfu Home, Weidu District, Xuchang City, Henan Province, 461099, People's Republic of China;HENAN UNIVERSITY OF URBAN CONSTRUCTION, Longxiang Road, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China ~72: DONG Wenchao;GUO Liping;HEI Qiaoli;HEI Xiaohan;LIU Kai~

2025/05207 ~ Complete ~54:METHOD FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS USING GRAPHICAL USER INTERFACE ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97, MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110707 ~32:24/04/2025

2025/05211 ~ Complete ~54:A COOLING METHOD FOR VERTICAL ELECTRIC SPINDLE ~71:Sichuan MK Servo Technology Co., Ltd., No. 2, Tengfei 10th Road, Southwest Aviation Harbour Economic Development Zone, Shuangliu District, Chengdu City, Sichuan Province, 610207, People's Republic of China ~72: Li Yuqin;Tu Jianmin;Yan Tao;Zeng Bingsheng~ 33:CN ~31:2024117012067 ~32:26/11/2024

2025/05215 ~ Complete ~54:A METHOD FOR EVALUATING THE EFFECT OF TROPICAL FOREST ECOLOGICAL PROTECTION AND RESTORATION ON CARBON SEQUESTRATION ~71:Hainan Academy of Forestry (Hainan Academy of Mangrove), No. 409, Xindazhou Avenue, Qiongzhan District, Binjiang Center A building, Haikou City, Hainan Province, 571100, People's Republic of China ~72: CHEN Xiaohua;CHEN Yiqing;CHEN Zongzhu;LI Yuanling;PAN Xiaoyan;WU Tingtian~

2025/05217 ~ Complete ~54:A QR CODE TECHNOLOGY BASED EFFICIENT INVENTORY MANAGEMENT SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAVHAN, Gajanan H.;CHAVHAN, Pranali;CHOUDHARY, Naman;KOLHE, Darshan;KOLHE, Harshal Dnyaneshwar;MARAL, Vikas B.;NIKAM, Dipesh Shivaji;SHINDE, Gitanjali R.;WANKHEDE, Disha S.~

2025/05221 ~ Complete ~54:PREPARATION METHOD FOR HYDROPYROLYSIS CATALYST WITH HIGHER DENSITY; BIOMASS HYDROPYROLYSIS PROCESS USING OBTAINED CATALYST ~71:SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., Carel van Bylandtlaan 30, HR The Hague, Netherlands ~72: GANJI, Santosh;GRISAFE, David Anthony;JOSHI, Rikeshchandra Sharadchandra;ROOSE, Milos;VANDER HOOGERSTRAETE, Patrick;VERSCHELDE, Tom~ 33:IN ~31:202341002734 ~32:13/01/2023

2025/05225 ~ Complete ~54:SEALING MATERIAL (SH A 50 - 80) FOR VACUUM SCREW CLOSURES ~71:ACTEGA DS GMBH, Straubinger Str. 12, Germany ~72: Dany MÄNGEL;Matthias KERN~

2025/05227 ~ Complete ~54:A HEALTH SUPPLEMENT COMPOSITION, AND A METHOD OF MANUFACTURING A HEALTH SUPPLEMENT COMPOSITION ~71:CLARKE-BLACK, Kim Jean, 15 Dunker Street, Van Riebeeckstrand, South Africa ~72: CLARKE-BLACK, Kim Jean~ 33:ZA ~31:2024/07900 ~32:18/10/2024;33:ZA ~31:2024/07901 ~32:18/10/2024

2025/05228 ~ Complete ~54:USE OF ESTETROL IN HEPATICALLY IMPAIRED PATIENTS ~71:Estetra SRL, Rue Saint-Georges 5, LIÈGE 4000, BELGIUM, Belgium ~72: GALLEZ, Anne;TAZIAUX, Mélanie~ 33:EP ~31:22215129.2 ~32:20/12/2022

2025/05231 ~ Complete ~54:LSD1 MODULATORS ~71:Recursion Pharmaceuticals, Inc., 41 S. Rio Grande Street, SALT LAKE CITY 84101, UT, USA, United States of America ~72: BESNARD, Jeremy;BRADLEY, Anthony;CULURGIONI, Simone;HENG, Rama;LEPIFRE, Franck;NAIK, Manisha;RICHARDS, Simon;SEBASTIAN- PEREZ, Victor;TANAKA, Daisuke~ 33:EP ~31:22307048.3 ~32:27/12/2022

2025/05232 ~ Complete ~54:BLADE WITH LIGHTNING PROTECTION SYSTEM AND FORMING METHOD THEREFOR ~71:Sinoma Wind Power Blade Co., Ltd., 9th Floor, Block C, Building B6, Dongsheng Technology Park, No. 66 Xixiaokou Road, Haidian District, BEIJING 100192, CHINA (P.R.C.), People's Republic of China ~72: LI, Chengliang;LU, Xiaofeng;MOU, Shuxiang;WANG, Xiangdong;ZHAO, Liyan~ 33:CN ~31:202311354640.8 ~32:18/10/2023

2025/05234 ~ Complete ~54:LIGHTNING PROTECTION SYSTEM, WIND TURBINE BLADE, WIND POWER GENERATION DEVICE, AND BLADE TIP LIGHTNING RECEPTOR ~71:Sinoma Wind Power Blade Co., Ltd., 9th Floor, Block C, Building B6, Dongsheng Technology Park, No. 66 Xixiaokou Road, Haidian District, BEIJING 100192, CHINA (P.R.C.), People's Republic of China ~72: CUI, Xiaopeng;LI, Chengliang;LI, Guoyong;LU, Xiaofeng;WANG, Xiangdong~ 33:CN ~31:202311435654.2 ~32:31/10/2023

2025/05195 ~ Complete ~54:BLIND ORE PREDICTION METHOD BASED ON 3D GEOLOGICAL MODELING AND STRUCTURAL SUPERIMPOSED HALO THEORY ~71:China Metallurgical Exploration Co.,Ltd., 139 Yangguang North Street, Baoding City, Hebei Province, People's Republic of China ~72: LI Yanxiang;PENG Wei;REN Liangliang;WANG Xijun;WANG Xu;WEI Jiang;XIE Zichen;YAO Yuewen;YU Bin;ZHANG Chengyu~

2025/05199 ~ Complete ~54:UROLOGICAL URETHRAL CYSTOSCOPE ~71:Baotou Medical College, Inner Mongolia University of Science and Technology, No. 31 Jianshe Road, Donghe District, Baotou City, Inner Mongolia Autonomous Region, 014040, People's Republic of China;The First Affiliated Hospital of Wenzhou Medical University, The new campus of the First Affiliated Hospital of Wenzhou Medical University, Shangcai Village, Nanbaixiang, Ouhai District, Wenzhou City, Zhejiang Province, 325015, People's Republic of China ~72: JU Hongge;MA Qiang;MING Tianyi;WANG Xingyu;WU Weiqiang;ZHENG Kewen~

2025/05206 ~ Complete ~54:MACHINE-READABLE STORAGE MEDIUM FOR GENERATING A DATABASE QUERY BASED ON WEB CONTENT ANALYSIS ~71:EAZYPATENT LIMITED LIABILITY COMPANY, VN.TER.G. MUNITSYPALNIY OKRUG KOTLOVKA, UL BOLSHAYA CHEREMUSHKINSKAYA, D. 25, STR. 97,

MOSCOW, 117218, Russian Federation ~72: CHERNYAEV Maksim Andreevich;KRAVCHENKO Artem Aleksandrovich~ 33:RU ~31:2025110706 ~32:24/04/2025

2025/05242 ~ Complete ~54:CONSTRUCTION BINDER AND ASSOCIATED CONSTRUCTION MATERIAL ~71:MATERUP, 440 rue des Estagnots, 40230, Saint-Geours-de-Maremne, France ~72: KRAMMER DEVILLARD, Julie;MERCÉ, Manuel;NEUVILLE, Mathieu;TRINCAL, Vincent~ 33:FR ~31:FR2214478 ~32:23/12/2022

2025/05226 ~ Complete ~54:COMBINATION TREATMENT OF CANCERS USING AN ANTIBODY THAT BINDS AT LEAST EGFR AND AN IMMUNE CHECKPOINT INHIBITOR ~71:MERUS N.V., Uppsalalaan 17, 3e en 4e verdieping, Netherlands ~72: PENNELLA, Eduardo Jose;WASSERMAN, Ernesto Isaac~ 33:NL ~31:2033821 ~32:23/12/2022

2025/05241 ~ Complete ~54:CROP NUTRITION COMPOSITION COMPRISING MAGNESIUM AND IRON ~71:BHUKHANWALA, Komal, 13 Ratna, North South Road 4, Next to Sunflower Clinic, JVPD Scheme, Vile Parle West, Mumbai, Maharashtra, 400056, India ~72: BHUKHANWALA, Komal~ 33:IN ~31:202221066606 ~32:18/11/2022

2025/05233 ~ Complete ~54:METHOD OF CONTROLLING A MINING VEHICLE AND SCHEDULING SYSTEM FOR GENERATING A DRIVING SCHEDULE FOR A MINING VEHICLE ~71:ABB Schweiz AG, Bruggerstrasse 66, BADEN CH-5400, SWITZERLAND, Switzerland ~72: ASTRAND, Max;LINDKVIST, Rickard;ONNERLOV, Lisa~

2025/05236 ~ Complete ~54:SYNTHESIS OF SMALL MOLECULE AGONISTS OF NEUROTROPHIN ~71:OCULIS OPERATIONS SÀRL, Avenue de la Gare 39, 1003, Lausanne, Switzerland ~72: GUDRUN MARTA ASGRIMSDOTTIR;JÓN FREYR EGILSSON~ 33:EP ~31:22215831.3 ~32:22/12/2022

2025/05238 ~ Complete ~54:NOVEL CROP NUTRITION COMPOSITION ~71:BHUKHANWALA, Komal, 13 Ratna, North South Road 4, Next to Flower Clinic, JVPD Scheme, Vile Parle, West, Mumbai, Maharashtra, 400056, India ~72: BHUKHANWALA, Komal~ 33:IN ~31:202221063214 ~32:04/11/2022

2025/05209 ~ Complete ~54:VETERINARY DRUG CRUSHING AND PROPORTIONING DEVICE ~71:SHIHEZI UNIVERSITY, NORTH 4TH ROAD, SHIHEZI CITY, People's Republic of China ~72: LI, Yanfang;LIAN, Kexun;ZHANG, Ying;ZHAO, Jing~

2025/05212 ~ Complete ~54:A REAL-TIME LARGE SCALE DATA PREPROCESSING SYSTEM WITH GRAPH-BASED FEATURE SELECTION AND DENSITY-BASED OVER-SAMPLING PROCESSES ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAVHAN, Gajanan H.;CHAVHAN, Pranali G.;MARAL, Vikas B.;PAWAR, Vaishnavi Dattatray;SAKHARE, Sachin R.;SHERKAR, Ishwari Vijay;SHINDE, Gitanjali R.;WANKHEDE, Disha S.;YELPALE, Arpita Niwas~

2025/05229 ~ Complete ~54:PROCESS FOR PREPARING CEMENTED CARBIDE SCRAP FOR RECYCLING ~71:Wolfram Bergbau und Hütten AG, Bergla 33, ST. MARTIN IM SULMTAL 8543, AUSTRIA, Austria ~72: ROYER, Raphael;ZIMMERL, Thomas~ 33:EP ~31:22215109.4 ~32:20/12/2022

2025/05235 ~ Complete ~54:METHOD AND DEVICE FOR WELDING COMPONENTS, WHICH CAN BE TRAVELLED UPON, OF A TRACK BY FLASH BUTT WELDING ~71:voestalpine Railway Systems GmbH, Kerpelystraße 199, LEOBEN 8700, AUSTRIA, Austria ~72: STOCKER, Erik~ 33:AT ~31:GM 92/2022 ~32:30/12/2022

2025/05239 ~ Complete ~54:CROP NUTRITION COMPOSITION ~71:BHUKHANWALA, Komal, 13 Ratna, North South Road 4, Next to Flower Clinic, JVPD Scheme, Vile Parle West, Mumbai, Maharashtra, 400056, India ~72: BHUKHANWALA, Komal~ 33:IN ~31:202221063213 ~32:04/11/2022

2025/05243 ~ Complete ~54:METHODS AND COMPOSITIONS FOR MODIFYING SHADE AVOIDANCE IN PLANTS ~71:PAIRWISE PLANTS SERVICES, INC., 807 East Main Street, Suite 4-100, Durham, United States of America ~72: CRAWFORD, Brian Charles Wilding~ 33:US ~31:63/485,263 ~32:16/02/2023

2025/05201 ~ Complete ~54:MULTI-ELEMENT DRONE FLOW MEASUREMENT METHOD AND SYSTEM ~71:Bureau of Hydrology, Changjiang Water Resources Commission, No. 1863 Jiefang Avenue, Wuhan City, Hubei Province, 430000, People's Republic of China ~72: Bing ZHAO;Bo ZHOU;Chang PENG;He HUANG;Hongliang XU;Jian ZUO;Junya MEI;Ke JIA;Qiong WU;Shan DENG;Shifu WU;Shihan PAN;Siwei JIANG;Wei GUO;Wenjing ZHOU;Yun MOU;Zhiwei JIA~ 33:CN ~31:2024110492684 ~32:01/08/2024

2025/05205 ~ Complete ~54:ARRANGEMENT AND METHOD FOR HANDLING DRILL BITS ~71:Sandvik Mining and Construction Oy, Pihlisselkatie 9, TAMPERE 33330, FINLAND, Finland ~72: ARONEN, Timo~ 33:EP ~31:24191709.5 ~32:30/07/2024

2025/05214 ~ Complete ~54:AN INTEGRATED SYSTEM FOR REAL-TIME SENTIMENT ANALYSIS AND SENTIMENT REVERSAL OF POLITICAL NEWS ARTICLES ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: GAIKWAD, Sujeet Sarjerao;GARG, Ajay Sanjay;INGLE, Yashwant Sudhakar;KADAM, Yash Ravindra;MAHALLE, Parikshit N.;RAUT, Ketan J.;SHINDE, Siddharth Gopal~

2025/05218 ~ Complete ~54:A MACHINE LEARNING BASED REAL-TIME SIGN LANGUAGE RECOGNITION SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: AMBHORE, Vishal Bhaskarrao;DHUTTARGAONKAR, Rajwardhan Mallikarjun;GANESH, Pranali Kirshna;GAWANDE, Pravin Ganpatrao;KULKARNI, Shailesh Vasudeorao;MOTGHARE, Preshit;PATIL, Mileend Sahebrao;RAUT, Ketan Janraoji~

2025/05223 ~ Complete ~54:POLYPEPTIDE INHIBITOR, AND PREPARATION METHOD THEREFOR AND USE THEREOF ~71:JIANGSU HANSON PHARMACEUTICAL GROUP CO., LTD., Economic And Technological Development Zone, People's Republic of China;SHANGHAI HANSON BIOMEDICAL CO., LTD., Building 11, No. 3728 Jinke Road, People's Republic of China ~72: CHEN, Yun;CHENG, Bao;DONG, Jiaqiang;GONG, Zhen;YU, Wensheng~ 33:CN ~31:202211530438.1 ~32:30/11/2022;33:CN ~31:202310206299.5 ~32:03/03/2023;33:CN ~31:202310261818.8 ~32:15/03/2023;33:CN ~31:202310349519.X ~32:31/03/2023;33:CN ~31:202311144489.5 ~32:05/09/2023

2025/05188 ~ Provisional ~54:SYSTEM AND METHOD FOR SEQUENTIAL CONTROL OF EXPLOSIVE DETONATORS USING AN INTERFACE BOX AND DISTINCT DETONATOR GROUPS ~71:AEC ELECTRONICS (PTY) LTD, 3A WILLOW STREET, KEMPTON PARK, 1619, SOUTH AFRICA, South Africa;SAEXCO (PTY) LTD, 9 TEGEL AVE, HIGHVELD, CENTURION, 0157, SOUTH AFRICA, South Africa ~72: DAVIS, Dustin, Michael;PLICHTA, Martin, George~

2025/05189 ~ Provisional ~54:CABLE THEFT DETERRENCE ~71:EICONCONSULTING (PTY) LTD, 08 Koedoe Street, South Africa ~72: EHLERS, Willem Hendrik~

2025/05190 ~ Provisional ~54:MULTI-BARREL RAPID-FIRE GUN ~71:C-FPV APS, H.P. Hanssens Gade 42, DK-6200 Aabenraa, Denmark ~72: JØRGEN LEIF SVANE;RASMUS NORMANN WILKEN ERIKSEN~



2025/05191 ~ Provisional ~54:MARGINS SOCIAL CAPITAL CARD ~71:Lucelle Shevonne Henry, 1202 The Franklin, 4 Pritchard Street, Newtown, Johannesburg, South Africa ~72: LUCELLE SHEVONNE HENRY~ 33:ZA ~31:6 ~32:18/06/2025

2025/05192 ~ Provisional ~54:GOBANOW-SYSTEM AND METHOD FOR COMMUNITY - BASED MICROENTERPRISE ACTIVATION AND LOCALIZED ECONOMIC STIMULATION ~71:Liam Dunn, 118 Holzgen Street, South Africa;Tshegofatso Ngwenya, 0A Klipriver Dr, Rietvlei, South Africa ~72: Liam Dunn;Tshegofatso Ngwenya~

2025/05193 ~ Provisional ~54:EMOTION-AWARE CREW DASHBOARD USING MULTI-MODAL SENSOR FUSION, TRANSFORMER MODELS, VARIATIONAL AUTOENCODERS, AND FEDERATED LEARNING FOR ADAPTIVE IN-FLIGHT SUPPORT ~71:Kabelo Diale, 7 Comet, South Africa ~72: Kabelo Diale~

2025/05197 ~ Complete ~54:ARCHIVE SORTING DEVICE FOR AGRICULTURAL ECONOMIC MANAGEMENT ~71:ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY, NO. 9 DONGHUA ROAD, FENGYANG COUNTY, CHUZHOU CITY, People's Republic of China ~72: WANG, Jinping~ 33:CN ~31:2025105024829 ~32:21/04/2025

2025/05210 ~ Complete ~54:AN AI BASED PERSONALIZED DIET AND WORKOUT RECOMMENDATION SYSTEM WITH INTEGRATED CHATBOT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAVHAN, Gajanan H.;CHAVHAN, Pranali Gajanan;KADALE, Mayuresh Santosh;KOLEKAR, Vikas K.;KOTHAWADE, Bhushan Avinash;NAYAK, Sarvesh Santoshrao;SHETE, Om Sachin~

2025/05213 ~ Complete ~54:A SYSTEM FOR ESTIMATING HUMAN ENERGY DECAY THROUGH VOCAL ACTIVITY ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: GAWANDE, Pravin Ganpatrao;KULKARNI, Shailesh Vasudeorao;RAUT, Ketan Janraoji;WAKCHAURE, Surajkumar~

2025/05219 ~ Complete ~54:A REAL-TIME EMERGENCY ASSISTANCE SYSTEM FOR ENHANCED WOMEN'S SAFETY ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: AHMED, Danyal;GUPTA, Daksh;KULKARNI, Tanish;LADE, Samiksha;MISHRA, Vaishali;SALUNKE, Atharva Vinay;WANKHEDE, Disha Sushant~

2025/05220 ~ Complete ~54:HYDROLYSIS CATALYST ~71:SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., Carel van Bylandtlaan 30, HR The Hague, Netherlands ~72: HUIZENGA, Pieter;JOSHI, Rikeshchandra Sharadchandra;VANDER HOOGERSTRAETE, Patrick~ 33:IN ~31:202341002724 ~32:13/01/2023

2025/05222 ~ Complete ~54:MOBILE IMPACT ATTENUATOR ~71:OTKRYTOE AKTSIONERNOE OBSHESTVO «ZAVOD PRODMASH», Zavodskoye shosse, 1 Samara, Russian Federation ~72: KURBANOV, Eldar Rashitovich;MAKAROV, Georgii Vladimirovich;NEMOV, Ivan Petrovich~ 33:RU ~31:2022132834 ~32:14/12/2022

2025/05224 ~ Complete ~54:REAR OPTICAL DEVICE, ASSEMBLY FORMING A MODULAR ZOOM, AND METHOD FOR CHANGING THE ZOOM OF A CAMERA LENS ~71:THALES, 4 Rue de la Verrerie, France ~72: CHERVIN, Dominique;COUMERT, Bruno;DUBOIS, Guillaume~ 33:FR ~31:FR2214701 ~32:30/12/2022

2025/05240 ~ Complete ~54:LOW-CARBON CONSTRUCTION BINDER AND ASSOCIATED CONSTRUCTION MATERIAL ~71:MATERRUP, 440 rue des Estagnots, 40230, SAINT-GEOURS-DE-MAREMNE, France ~72:

KRAMMER DEVILLARD, Julie;MERCÉ, Manuel;NEUVILLE, Mathieu;TRINCAL, Vincent~ 33:FR  
~31:FR2214479 ~32:23/12/2022

2025/05200 ~ Complete ~54:SAMPLING AND TESTING DEVICE FOR MEAT QUALITY OF LIVESTOCK  
PRODUCTS ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan  
City, Henan Province, People's Republic of China ~72: CHEN Yanyan;HU Yangshuo;LI Zhi;LI Zhigang;LIU  
Junhong;TIAN Mengjie;XU Jiaming;YE Kun;YE Yanxin;ZHAO Yikai~

2025/05203 ~ Complete ~54:CORNEAL TREATMENT SYSTEM BASED ON NEAR-INFRARED LIGHT  
RECOGNITION ~71:Jiamusi University, No.258 Xuefu Road, Xiangyang District, Jiamusi City, Heilongjiang  
Province, 154007, People's Republic of China ~72: Jianwu Hou;Jing He;Lingyi Peng~ 33:CN  
~31:202510452522.3 ~32:11/04/2025

2025/05230 ~ Complete ~54:METHOD OF MAKING A CARBIDE POWDER ~71:Wolfram Bergbau und Hütten  
AG, Bergla 33, ST. MARTIN IM SULMTAL 8543, AUSTRIA, Austria ~72: BICHERL, Annegret;ROYER,  
Raphael;ZIMMERL, Thomas~ 33:EP ~31:22215111.0 ~32:20/12/2022

2025/05194 ~ Complete ~54:RECYCLING DEVICE FOR DECONTAMINATING ACIDIC AND ALKALINE  
INDUSTRIAL WASTEWATER ~71:HENAN CHENGJIANG LOW-ALTITUDE INTEGRATED SERVICES CO.,  
LTD., Longxiang Road, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of  
China;HENAN TUOYA ENVIRONMENTAL TECHNOLOGY CO., LTD., Hongfu Home, Weidu District, Xuchang  
City, Henan Province, 461099, People's Republic of China;HENAN UNIVERSITY OF URBAN CONSTRUCTION,  
Longxiang Road, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China ~72:  
DONG Wenchao;GUO Liping;HEI Qiaoli;HEI Xiaohan;LIU Kai~

2025/05196 ~ Complete ~54:RUBBER RESIN AND ITS PREPARATION PROCESS ~71:Puyang Binder  
Chemical Co., Ltd., No.76 West of Shengli Road, Puyang, Henan, 457000, People's Republic of China ~72:  
Hongyan ZONG;Kai FAN;Qixiang TONG;Wengang Li~ 33:CN ~31:2024108793522 ~32:02/07/2024

2025/05204 ~ Complete ~54:PREPARATION METHOD FOR 131I-CAERIN1.1 POLYPEPTIDE DEVELOPER  
~71:General Hospital of Ningxia Medical University, No. 804 Shengli South Street, Xingqing District, Yinchuan  
City, Ningxia Hui Autonomous Region, 750003, People's Republic of China ~72: BU, Yang;MA, Zhilong;YANG,  
Jiaying;ZHAO, Qian~

2025/05245 ~ Complete ~54:VELOCITY AMBIGUITY RESOLUTION METHOD BASED ON HYPOTHETICAL  
PHASE COMPENSATION ~71:TECH TRAFFIC ENGINEERING GROUP CO., LTD., 8th F HaiTai Building,  
NO.229 Middle Of North 4th Ring Road, Haidian District, People's Republic of China;XI'AN UNIVERSITY OF  
ELECTRONIC SCIENCE AND TECHNOLOGY, No.266, Xinglong Section Xifeng Rd. Chang'an District Xi'an,  
People's Republic of China ~72: GUO, Xiaowei;PENG, Min;TAN, Xiaogang;WEN, Ruyue;YAN, Zihang;ZHANG,  
Wei;ZHANG, Zhihong;ZHAO, Jing~ 33:CN ~31:202411709434.9 ~32:27/11/2024

2025/05208 ~ Complete ~54:CULTIVATION METHOD FOR A NEW GROUP OF CASHMERE GOATS  
SUITABLE FOR HOUSE FEEDING ~71:INNER MONGOLIA ACADEMY OF AGRICULTURAL & ANIMAL  
HUSBANDRY SCIENCES, NO. 22 ZHAOJUN ROAD, YUQUAN DISTRICT, HOHHOT CITY, People's Republic of  
China ~72: CHENG, Hairong;GAO, Yulin;LIU, Bin;LIU, Junyang;WANG, Shengrong;WANG, Tao;WU, Liji;WU,  
Tiecheng;YAN, Xingang~ 33:CN ~31:2025106504518 ~32:20/05/2025

2025/05216 ~ Complete ~54:AN ARTIFICIAL INTELLIGENCE BASED VIDEO RECOGNITION AND METADATA  
RETRIEVAL SYSTEM FOR EMOTIVE REPLACEMENT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY,  
666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72:

GAWANDE, Pravin Ganpatrao;KAVITKAR, Vikrant Yashvant;KINAGI, Nagesh Bharatraj;KULKARNI, Shailesh Vasudeo;RAUT, Ketan Janraoji;SINGH, Saksham Savyasachi;VIJAPURE, Yash Manoj~

2025/05237 ~ Complete ~54:NOVEL CROP NUTRITION COMPOSITION ~71:BHUKHANWALA, Komal, 13 Ratna, North South Road 4, Next to Flower Clinic, JVPD Scheme, Vile Parle West, Mumbai, Maharashtra, 400056, India ~72: BHUKHANWALA, Komal~ 33:IN ~31:202221063210 ~32:04/11/2022

2025/05244 ~ Complete ~54:GLASS COMPOSITION FOR PROTECTIVE COATING ~71:SOLYDERA SPA, via Ai Manfredi 24, Italy ~72: AMARASINGHE, Sudath Dharma Kumara;NAVAK, Babak;RODRIGO, Pulahinge Don Dayananda~ 33:AU ~31:2022903931 ~32:21/12/2022

#### ASSIGNMENTS IN TERMS OF SECTION 60-REGULATIONS 58-60 AND 64 (1)

Application Number	Assignor	Assignee
2021/03048	SAWANT, ARUN VITTHAL and PUTHENVEETIL KUNJUKRISHNA MENON, RAMDAS	SML LIMITED
2024/02157	DOSHI, HITESHKUMAR ANILKANT and PUTHENVEETIL KUMJUKRISHNA MENON, RAMDAS	SML LIMITED
2016/06318	SHAH, DEEPAK	SML LIMITED
2023/04698	DOSHI, HITESHKUMAR ANILKANT	SML LIMITED
2023/04699	DOSHI, HITESHKUMAR ANILKANT	SML LIMITED
2024/04408	TANGSHAN UNIVERSITY	BEIJING ZHIXIN KAIYUAN TECHNOLOGY CO., LTD
2024/07241	TANGSHAN UNIVERSITY	BEIJING XINGJI KAIYUAN TECHNOLOGY (TANGSHAN) CO., LTD
2020/00138	ABRAM ITUMELENG SEHLOGO	ZAR CORP
2018/03649	PHARMENTERPRISES BIOTECH>>LIMITED LIABILITY COMPANY	NEBOLSIN, VLADIMIR EVGENIEVICH
2017/00363	APTA TARGETS, S.L.	MERCK HEALTHCARE KGAA
2017/00363	MERCK HEALTHCARE KGAA	MERCK PATENT GMBH
2022/12019	G1 THERAPEUTICS, INC.	PHARMACOSMOS A/S
2024/07965	G1 THERAPEUTICS, INC.	PHARMACOSMOS A/S
2024/07965	PHARMACOSMOS A/S	PHARMACOSMOS HOLDING A/S
2022/11870	CHENGDU BAIYO PHARMACEUTICAL CO., LTD.	KANGBAIDA (SICHUAN) BIOTECHNOLOGY CO., LTD.
2023/04796	KLIKLOK LLC	KLIKLOK INTERNATIONAL LIMITED
2021/08269	KLIKLOK LLC	KLIKLOK INTERNATIONAL LIMITED
2017/02767	XELLIA PHARMACEUTICALS APS	HIKMA PHARMACEUTICALS USA INC.
2020/04025	GALAPAGOS NV	ONCO3R THERAPEUTICS BV
2021/00277	GALAPAGOS NV	ONCO3R THERAPEUTICS BV
2021/10597	GALAPAGOS NV	ONCO3R THERAPEUTICS BV
2023/00166	ARABELLE SOLUTIONS FRANCE	GENERAL ELECTRIC TECHNOLOGY GMBH
2021/10581	DIZER AB	ZETTACUBES AB
2024/06063	WENZHOU POLYTECHNIC	ZHEJIANG SANKAI ENGINEERING MANAGEMENT CO., LTD.
2024/05714	WENZHOU POLYTECHNIC	ZHEJIANG SANKAI ENGINEERING

Application Number	Assignor	Assignee
		MANAGEMENT CO., LTD.
202503901	ELCARDIO RANDALL THEUNIS; ANDRIES JOHANNES HERBST and IVAN MOOLMAN	GOAL POST MARKETING (PTY) LTD.
2024/07538	BHE TURBOMACHINERY, LLC	OBERMEYER, HENRY K
2023/09777	TERRAPOWER, LLC	TERRAPOWER ISOTOPES, LLC
2023/09772	TERRAPOWER, LLC	TERRAPOWER ISOTOPES, LLC
2018/01821	BASF CORPORATION	BASF MOBILE EMISSIONS CATALYSTS LLC
2023/04505	SCORPION THERAPEUTICS, INC.	ANTARES THERAPEUTICS, INC.
2023/03873	SCORPION THERAPEUTICS, INC.	ANTARES THERAPEUTICS, INC.
2017/02918	THE UNIVERSITY COURT OF THE UNIVERSITY OF EDINBURGH	KYNOS THERAPEUTICS LIMITED
2017/02918	KYNOS THERAPEUTICS LIMITED	DR. FALK PHARMA GMBH
2014/08169	TEMPTIME CORPORATION	ZEBRA TECHNOLOGIES CORPORATION
2016/08639	NEC CORPORATION	VTECT IP INC.
2017/06616	ACHILLES THERAPEUTICS UK LIMITED	MEDIMMUNE LLC
2024/04568	GELESIS, LLC	GELESIS S.R.L.
2023/10586	HARBIN INSTITUTE OF TECHNOLOGY	GUANGLIAN AVIATION INDUSTRY CO., LTD.
2018/07915	SAVIELA AG	BUSHVELD AG
202208199	HUZHOU VOCATIONAL AND TECHNICAL COLLEGE (HUZHOU RADIO AND TELEVISION UNIVERSITY) (HUZHOU COMMUNITY UNIVERSITY)	ZHEJIANG DONGWU GROUP BUILDING MATERIALS AND COMPONENTS CO., LTD.
2024/04921	SERRA MANUFACTURING (PTY) LTD	THOMAZ, PAULO ALBERTO SILVA
2022/13540	WISEGROW INVESTMENTS PTY LTD	INNOTECHT PTY LTD
2019/06623	VESUVIUS U S A CORPORATION	VESUVIUS GROUP, S.A.
2018/02755	VESUVIUS U S A CORPORATION	VESUVIUS GROUP, S.A.
2014/03953	VESUVIUS U S A CORPORATION	VESUVIUS GROUP, S.A.
2017/08517	VESUVIUS U S A CORPORATION	VESUVIUS GROUP, S.A.
2019/03482	DANMARKS TEKNISKE UNIVERSITEL	FMC AGRICULTURAL SOLUTIONS A/S
2020/04637	DR. REDDY'S LABORATORIES LTD.	JOURNEY MEDICAL CORPORATION
2022/05918	MASTER PLASTICS PROPRIETARY LIMITED	BOWWOOD AND MAIN NO 428 (RF) PROPRIETARY LIMITED (HYPOTHECATION)
2025/00744	MASTER PLASTICS PROPRIETARY LIMITED	BOWWOOD AND MAIN NO 428 (RF) PROPRIETARY LIMITED (HYPOTHECATION)
2022/05917	MASTER PLASTICS PROPRIETARY LIMITED	BOWWOOD AND MAIN NO 428 (RF) PROPRIETARY LIMITED (HYPOTHECATION)

**CHANGE OF NAME IN TERMS OF REGULATION 39**

Application Number	In the name of	New name
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Application Number	In the name of	New name
2012/06928	LAILA NUTRACEUTICALS	LAILA NUTRA PRIVATE LIMITED
2019/05526	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2019/02536	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2022/13968	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/04591	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2022/11462	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/04231	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/04252	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2017/06222	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/00363	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/00098	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2017/02618	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2020/02353	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2020/01440	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/07463	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2022/11631	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/04076	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2020/01342	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2016/03084	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2020/01061	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2017/04216	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2017/02926	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2017/02722	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2022/10962	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2020/01341	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/04480	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/04166	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2023/03573	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2019/03758	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2020/00662	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2023/04227	ICHNOS SCIENCES SA	IGI THERAPEUTICS SA
2024/08459	ICHNOS SCIENCES SA	IGI THERAPEUTICS SA
2023/04345	ICHNOS SCIENCES SA	IGI THERAPEUTICS SA
2013/01790	UKHESHE TECHNOLOGIES PROPRIETARY LIMITED	EFT CORP TECHNOLOGIES (PTY) LTD
2009/09042	UKHESHE TECHNOLOGIES PROPRIETARY LIMITED	EFT CORP TECHNOLOGIES (PTY) LTD
2007/02611	IPSEN CONSUMER HEALTHCARE	MAYOLY PHARMA FRANCE
2023/03834	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2010/08558	GW PHARMA LIMITED	JAZZ PHARMACEUTICALS OPERATIONS UK LIMITED
2012/00306	METSO OUTOTEC FINLAND OY	METSO OUTOTEC FINLAND OY
2014/09190	METSO OUTOTEC FINLAND OY	METSO OUTOTEC FINLAND OY
2024/09136	CHROMA MEDICINE, INC.	NCHROMA BIO, INC.
2025/00700	CHROMA MEDICINE, INC.	NCHROMA BIO, INC.
2022/08230	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2023/03343	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2018/00828	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2010/08295	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2022/08227	METSO OUTOTEC FINLAND OY	METSO FINLAND OY



Application Number	In the name of	New name
2022/08226	METSO OUTOTEC FINLAND OY	METSO FINLAND OY
2025/03521	VALERIOT GMBH	VALERIOT FLEXCO
2024/02832	MONTANA TECHNOLOGIES LLC	AIRJOULE TECHNOLOGIES LLC

**PATENT LICENSES IN TERMS OF SECTION 60-REGULATIONS 58-60 AND 64**

Application Number	Licensor	Licensee
2012/03345	MITOTECH S.A.	ESSEX BIO-INVESTMENT LIMITED

**PATENT APPLICATIONS ABANDONED OR WITHDRAWN**

Application Number	Not Open	Date
2024/09342	WITHDRAWN	03/06/2025
2024/09349	WITHDRAWN	03/06/2025
2024/05318	WITHDRAWN	09/06/2025
2023/08029	WITHDRAWN	17/06/2025
2024/09075	WITHDRAWN	17/06/2025

**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 **BADGER LICENSING LLC** whose address for service is **ADAMS & ADAMS, PRETORIA** has applied to the registrar for the restoration of Patent No **2013/05319** entitled **PROCESS FOR REDUCING THE BENZENE CONTENT OF GASOLINE BY ALKYLATING BENZENE USING A LOWER OLEFIN IN THE PRESENCE OF A PARAFFINIC DILUENT** dated **07/02/2011**, which lapsed on **07/02/2019** 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 **PANDA, MPHUTUMI BRANDON** whose address for service is **DE BEER ATTORNEYS INC, CAPE TOWN** has applied to the registrar for the restoration of Patent No **2021/02400** entitled **A SYSTEM FOR AND A METHOD OF ASSISTING PRIMARY SCHOOL LEARNERS WITH HOMEWORK** dated **09/04/2021**, which lapsed on **09/04/2024** 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.

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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: VITO NV Boeretang 200 2400 Mol., KATHOLIEKE UNIVERSITEIT LEUVEN KU Leuven R&D, Waaistraat 6 - Box 5105 3000 Leuven.** Request permission to amend the specification of letters patent no: **2023/09782** of **19/10/2023** for **A PROCESS FOR PRECIPITATING PARTICLES OF PLATINUM GROUP METALS.**

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: NOKIA TECHNOLOGIES OY KARAPORTTI 3, 02610 ESPOO, FINLAND.** Request permission to amend the specification of letters patent no: **2017/01965** of **22/03/2017** for **AUDIO PARAMETER QUANTIZATION.**

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: STC.UNM Lobo Rainforest Building, 101 Broadway Blvd. NE, Suite 1100, ALBUQUERQUE 87102, NM, USA., SZAUTER, Paul 1908 Morningside Drive NE, ALBUQUERQUE 87110, NM, USA., SINCLAIR, Robert B. 1007 Tunnel Road, ASHEVILLE 28805, NC, USA.** Request permission to amend the specification of letters no: **2018/06930** of **17/10/2018** for **METHOD OF DETECTING INHERITED EQUINE MYOPATHY.**

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: Société des Produits Nestlé S.A. Avenue Nestlé 55, VEVEY 1800, SWITZERLAND.** Request permission to amend the specification of letters no: **2021/03290** of **14/05/2021** for **PACK FOR PREPARING FOOD OR BEVERAGE PRODUCTS**.

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: SWISS TOWER MILLS MINERALS AG, Haselstrasse 1, 5401, Baden, Switzerland., METSO FINLAND OY, Rauhalanpuisto 9, Espoo, 02230, Finland.** Request permission to amend the specification of letters patent no: **2019/05162** of **19/10/2023** for **IMPROVEMENTS IN STIRRED BEAD GRINDING MILLS**.

A copy of the original specification on which the proposed amendment is indicated in red, is now available for public inspection at the Patent Office.

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

#### **Registrar of Patents**

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### **INSPECTION OF SPECIFICATIONS**

A complete specification may, after acceptance is advertised, be inspected during office hours at the Patent Office, Pretoria, at a charge of **R4, 00**. Please note, that in terms of section 43 (3) if the acceptance of an application which claims priority in terms of section 31 (1) (c) is not published in terms of section 42 within 18 months from the earliest priority claimed from the relevant application in a convention country, it shall be opened to public inspection after the expiration of 18 months from the earliest priority so claimed.

### **COPIES OF DOCUMENTS**

The Patent Office, Private Bag X400, Pretoria, supplies copies of all patent and trade mark documents at the following rate:

Photocopies: **R1, 00 per page**

### **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: 2015/09234. 22: 2015/12/18. 43: 2025/04/24

51: E21D; E21B

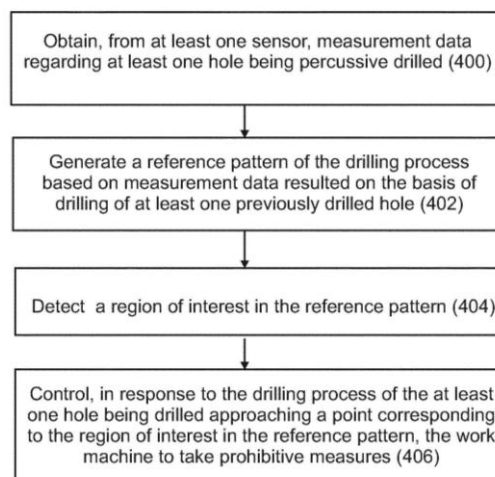
71: Sandvik Mining and Construction Oy

72: PIRINEN, Tuomo, HUIKKOLA, Miika, MÄKELÄ, Mikko, HAVERINEN, Eemeli, HOKKA, Juha, HEIKKILÄ, Tommi

#### **54: ARRANGEMENT FOR CONTROLLING PERCUSSIVE DRILLING PROCESS**

00: -

A method for controlling a percussive drilling process on a work machine, the method comprising: obtaining, from at least one sensor, measurement data regarding at least one hole being percussive drilled; generating a reference pattern of the drilling process based on measurement data resulted on the basis of drilling of at least one previously drilled hole; detecting a region of interest in the reference pattern; and controlling, in response to the drilling process of the at least one hole being drilled approaching a point corresponding to the region of interest in the reference pattern, the work machine to take prohibitive measures.



21: 2016/06471. 22: 2016/09/20. 43: 2025/04/23

51: C07D A61K A61P

71: FROST BIOLOGIC, INC.

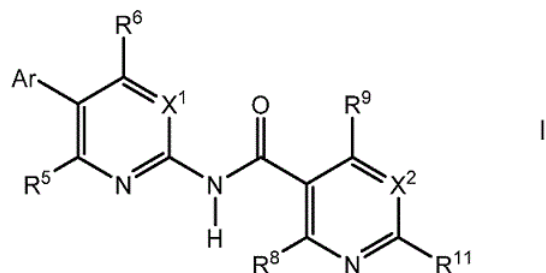
72: SIDDIQUI-JAIN, Adam

33: US 31: 61/942,956 32: 2014-02-21

#### **54: ANTIMITOTIC AMIDES FOR THE TREATMENT OF CANCER AND PROLIFERATIVE DISORDERS**

00: -

Novel, antimitotic heteroaryl amides and pharmaceutically acceptable salts of Formula I where Ar, R5, R6, R8, R9, R11, X1, and X2 are as defined herein, as compounds for treatment and prevention of cancer and proliferative diseases and disorders.



21: 2017/06384. 22: 2017/09/21. 43: 2025/04/23

51: A61K; A61P; C07K

71: Pfizer Inc.

72: KUO, Tracy Chia-Chien, CHAPARRO RIGGERS, Javier Fernando, SASU, Barbra Johnson, GALETTO, Roman, BOLDAJIPOUR, Bijan Andre, SOMMER, Cesar Adolfo, VAN BLARCOM, Thomas John, PERTEL, Thomas Charles, RAJPAL, Arvind, DUCHATEAU, Philippe, JUILLERAT, Alexandre, VALTON, Julien

33: US 31: 62/146,825 32: 2015-04-13

#### 54: CHIMERIC ANTIGEN RECEPTORS TARGETING B-CELL MATURATION ANTIGEN

00: -

The invention provides Chimeric Antigen Receptors (CARs) that specifically bind to BCMA (B-Cell Maturation Antigen). The invention further relates to engineered immune cells comprising such CARs, CAR-encoding nucleic acids, and methods of making such CARs, engineered immune cells, and nucleic acids. The invention further relates to therapeutic methods for use of these CARs and engineered immune cells for the treatment of a condition associated with malignant cells expressing BCMA (e.g., cancer).

21: 2017/08367. 22: 2017/12/11. 43: 2025/04/08

51: G10L

71: Koninklijke Philips N.V.

72: KANIEWSKA, Magdalena, RAGOT, Stéphane

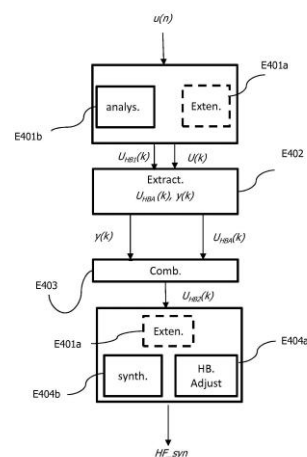
33: FR 31: 1450969 32: 2014-02-07

#### 54: IMPROVED FREQUENCY BAND EXTENSION IN AN AUDIO SIGNAL DECODER

00: -

The invention relates to a method for extending the frequency band of an audio signal during a decoding or improvement process, comprising a step of obtaining the decoded signal in a first frequency band, referred to as a low band. The method is such that it comprises the steps of: extracting (E402) tonal components and a surround signal from a signal

from the low-band signal, combining (E403) tonal components and the surround signal by adaptive mixing using energy-level control factors to obtain an audio signal, referred to as a combined signal, extending (E401a) the low-band decoded signal before the extraction step or the combined signal after the combination step over at least one second frequency band which is higher than the first frequency band. The invention also relates to a frequency-band extension device which implements the described method and to a decoder comprising a device of this type.



21: 2017/08394. 22: 2017/12/11. 43: 2025/06/09

51: C14C

71: PROKLEAN TECHNOLOGIES PVT. LTD, SUSTAINABLE COMMUNITY DEVELOPMENT

72: SANKARAKUMARA PILLAI,

SIVARAMAKRISHNA PILLAI

33: WO 31: PCT/IN2016/050174 32: 2016-06-08

33: IN 31: 2871/CHE/2015 32: 2015-06-09

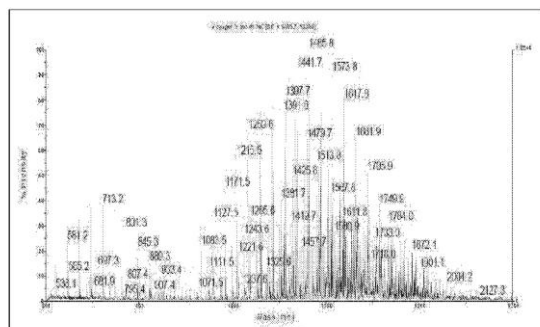
#### 54: PROBIOTIC COMPOSITION AS LEATHER AUXILIARY AGENTS AND USE THEREOF

00: -

The present invention describes a fully bio-degradable probiotic composition and its method of use as leather tanning auxiliary to offer a green technology to reduce waste and increase the value of by-products reducing the need of synthetic chemicals and improving the quality of effluents. Probiotics or beneficial microorganisms are used to obtain biochemicals through a controlled fermentation of natural ingredients. The result of the process is a con-sortium of metabolites used in



conjunction with probiotic bacteria wherein product has properties very similar to traditional leather auxiliaries extensively used during the leather making process, such as wetting, dispersing, degreasing and solubilizing agents. Therefore, they have clear applications not only in the beam house operations, but also in wet-end and finishing.



21: 2018/01722. 22: 2018/03/13. 43: 2025/04/25  
51: A61K: A61P

71: LEO PHARMA A/S, JAPAN TOBACCO INC.

72: SIERRA, MICHAEL, LABUDA, TORD,  
TANIMOTO, ATSUO, SHINOZAKI, YUICHI

33: EP 31: 15186644.9 32: 2015-09-24

33: JP 31: 2015-190849 32: 2015-09-29

## 54: TREATMENT OF ALOPECIA AREATA

00: -

The present invention provides a novel treatment of alopecia areata. The problem to be solved by the invention is to provide a new pharmaceutical use of 3-[(3S,4R)-3-methyl-6-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)-1,6-diazaspiro[3.4]octan-1-yl]-3-oxopropanenitrile. A therapeutic or preventive agent for alopecia areata, containing 3-[(3S,4R)-3-methyl-6-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)-1,6-diazaspiro[3.4]octan-1-yl]-3-oxopropanenitrile as an active ingredient.

21: 2018/02313. 22: 2018/04/09. 43: 2025/03/25  
51: A47J

71: La Marzocco S.r.l.

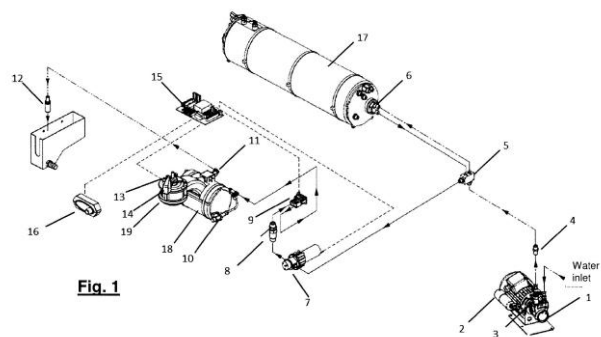
72: GATTI, Riccardo, BERNA, Tommaso, BIANCHI, Roberto

33: IT 31: 102015000064535 32: 2015-10-22

## 54: IMPROVED ESPRESSO COFFEE MACHINE AND METHOD FOR DISPENSING AN ESPRESSO COFFEE

00: -

A machine for preparing and dispensing an espresso coffee comprising: a water supply (1) for feeding cold water; a dispensing group (19) and a corresponding coffee boiler (18); a coffee pump (7) which receives heated water and pumps said heated water towards said coffee boiler (18); a flow meter (9) arranged between said coffee pump (7) and said coffee boiler (18) for measuring an instantaneous water flow rate, i.e., the volume of water that passes from said coffee pump to said coffee boiler per unit of time; a memory for storing at least one pressure profile, wherein said coffee pump (7) is configured to operate according to said pressure profile during coffee dispensing; and a control unit (15) which stops dispensing of coffee based on a measurement of water flow calculated from starting time of the dispensing.



21: 2018/02846. 22: 2018/04/30. 43: 2025/04/23  
51: A61K: C07D

71: Bracco Imaging SpA

72: BOI, Valeria, NAPOLITANO, Roberta,  
LATTUADA, Luciano

33: EP(IT) 31: 15199220.3 32: 2015-12-10

## 54: DIMERIC CONTRAST AGENTS

00: -

The present invention relates to new class of dimeric macrocycles capable of chelating paramagnetic metal ions, their chelated complexes with metal ions and the use thereof as contrast agents, particularly suitable for Magnetic Resonance Imaging (MRI) analysis.

21: 2018/03013. 22: 2018/05/08. 43: 2025/03/25  
51: A01N; A01P

71: Bayer CropScience Aktiengesellschaft

72: DAHMEN, Peter, COQUERON, Pierre-Yves,  
WETCHOLOWSKY, Ingo

33: EP(DE) 31: 15189239.5 32: 2015-10-09

#### 54: USE OF PYDIFLUMETOFEN FOR THE REDUCTION OF MYCOTOXIN CONTAMINATION IN PLANTS

00: -

The present invention relates to the novel use of the pyrazole carboxylic acid amide derivative Pydiflumetofen, compositions comprising this compound and its use in methods for the reduction of mycotoxin contamination in plants. Pydiflumetofen is also useful in increasing yield, in particular in cereals eg, wheat.

21: 2018/04941. 22: 2018/07/23. 43: 2025/03/31

51: E21D

71: Sandvik Intellectual Property AB

72: BISCHOF, Andreas, GALLER, Thomas, KUPPER, Martin

#### 54: MESH HANDLING DEVICE FOR MINING OR TUNNELLING EQUIPMENT

00: -

The invention relates to a mesh handler (1) for a mining machine (1000), comprising a generally U-shaped frame (2) for receiving and positioning a mesh (100) against a roof (110) portion of an underground tunnel; the frame (2) comprising at least one generally U-shaped rail (4, 6); and guide means (8) for guiding the mesh (100) along the rail (4, 6) in a direction substantially perpendicular to a longitudinal direction (A) of the mining machine (1000). Moreover the invention relates to a mining machine (1000).

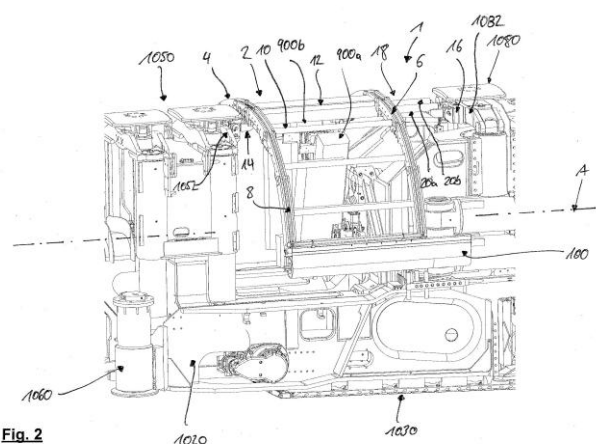


Fig. 2

21: 2018/05576. 22: 2018/08/21. 43: 2025/03/25

51: B65D

71: Colgate-Palmolive Company

72: VANGORDON, Todd, HEASLIP, Thomas

33: US 31: 15/130,871 32: 2016-04-15

#### 54: SLEEVED CONTAINER

00: -

A container apparatus including a container and a sleeve with pre-weakened areas to facilitate detaching the sleeve from the container. The container includes a body and a cap coupled thereto. The sleeve includes tamper evident features and maintains the container in a closed and packaged state prior to purchase and use by a consumer. The sleeve includes different pre-weakened or perforated sections to permit the consumer to remove a first portion (201) of the sleeve to permit the user to open the container and use the product therein without also removing a second portion (202) of the sleeve which may contain product information. The sleeve includes an additional pre-weakened or perforated section (230) to permit the consumer to remove the second portion of the sleeve after the container is empty for sustainability purposes so that the container is more readily recyclable.

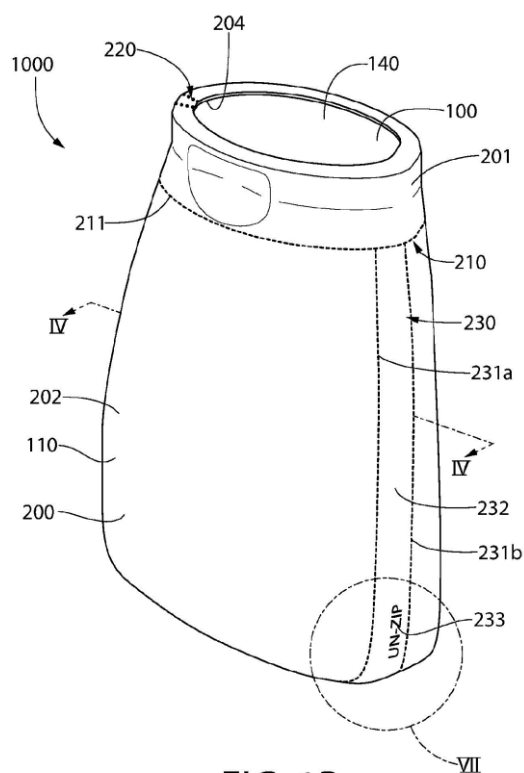


FIG. 1B

21: 2018/05740. 22: 2018/08/28. 43: 2025/03/31

51: B21D; B65D

71: Crown Packaging Technology, Inc.

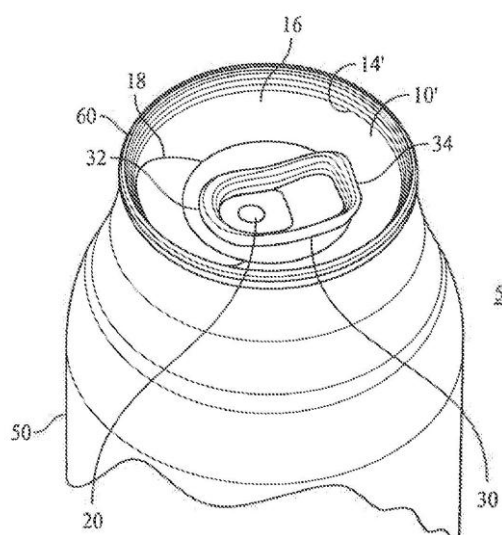
72: MATTIN, Ben, CLARK, Tim, RAMSEY, Christopher Paul

33: US 31: 62/301,128 32: 2016-02-29

#### **54: CONCAVE CAN END**

00: -

A container can end (10) includes a dome shaped center panel (16), concave on a pull tab (30) mounting side, and may forgo a peripheral reinforcing bead around the center panel. The tab (30) may also be curved. Tooling for forming the end and a corresponding method are provided.



21: 2018/06267. 22: 2018/09/18. 43: 2025/03/31

51: C22C; E21B

71: Baker Hughes, a GE Company, LLC, Diamond Innovations, Inc.

72: BIRD, Marc W., GLEDHILL, Andrew

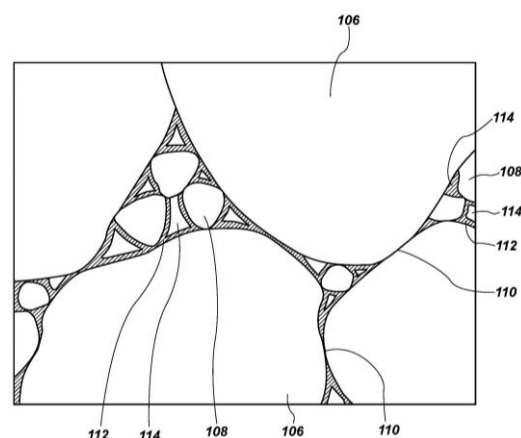
33: US 31: 15/060,911 32: 2016-03-04

#### **54: POLYCRYSTALLINE DIAMOND COMPACTS, METHODS OF FORMING POLYCRYSTALLINE DIAMOND, AND EARTH-BORING TOOLS**

00: -

A polycrystalline diamond compact includes a polycrystalline diamond material having a plurality of grains of diamond bonded to one another by inter-granular bonds and an intermetallic gamma prime ( $\gamma'$ ) or  $\kappa$ -carbide phase disposed within interstitial spaces between the inter-bonded diamond grains. The ordered intermetallic gamma prime ( $\gamma'$ ) or  $\kappa$ -carbide phase includes a Group VIII metal, aluminum, and a stabilizer. An earth-

boring tool includes a bit body and a polycrystalline diamond compact secured to the bit body. A method of forming polycrystalline diamond includes subjecting diamond particles in the presence of a metal material comprising a Group VIII metal and aluminum to a pressure of at least 4.5 GPa and a temperature of at least 1,000°C to form inter-granular bonds between adjacent diamond particles, cooling the diamond particles and the metal material to a temperature below 500°C, and forming an intermetallic gamma prime ( $\gamma'$ ) or  $\kappa$ -carbide phase adjacent the diamond particles.



21: 2018/07209. 22: 2018/10/29. 43: 2025/05/26

51: E05B

71: SUPRA (UK) LIMITED

72: WILLIAMS, Robert

33: US 31: 15/454,354 32: 2017-03-09

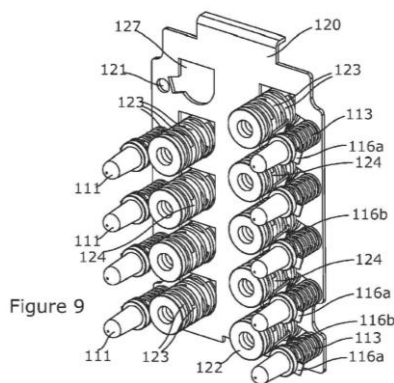
33: EP 31: 16168057.4 32: 2016-05-03

#### **54: A LOCK**

00: -

The present invention provides a lock (100) comprising: a housing having a front section comprising a plurality of apertures therethrough; a plurality of buttons (111) disposed through the apertures in the front section of the housing, each button (111) having an axis along which each of the buttons may be axially pressed between an unpressed position and a pressed position; a biasing member (113) associated with each of the plurality of buttons (111), configured to bias each button (111) towards the unpressed position; a plurality of spools (122), each spool (122) comprising a plurality of circumferential grooves (123), each circumferential

groove (123) having a notch (124) extending over a portion of the circumferential groove, wherein each notch (124) on a given spool (122) is angularly displaced relative to each of the other notches on that spool, the circumferential grooves (123) being parallel and separated spaced apart at a groove spacing from each other; a plurality of legs (116b), each leg (116b) in communication with one of the buttons (111), wherein each leg (116b) is arranged to contact one of the circumferential grooves (123) of one of the spools (122); a locking plate (120) disposed within the housing, the locking plate (120) having a plurality of apertures, each aperture arranged to receive one of the spools (122) therethrough; and an actuator (114) associated with the locking plate (120) and a latch (117), wherein the actuator (114) is configured to move the locking plate (120); wherein pressing one of the buttons (111) causes the leg (116b) in communication with the button (111) to translate the corresponding spool (122) by one groove spacing, with releasing the button (111) causing the leg (116b) to engage an adjacent groove (123); wherein the translation of each spool (122) causes a differently rotationally oriented notch (124) to be adjacent to the locking plate (120), with the locking plate (120) only being able to move into an unlocked position, when driven by the actuator (120), thereby disengaging the latch (117) and unlocking the lock, if all of the notches (124) which are adjacent to the locking plate (120) are in a unlocked rotational orientation.



21: 2018/07437. 22: 2018/11/06. 43: 2025/03/31  
51: B29C; B32B; B65D  
71: Société des Produits Nestlé S.A.

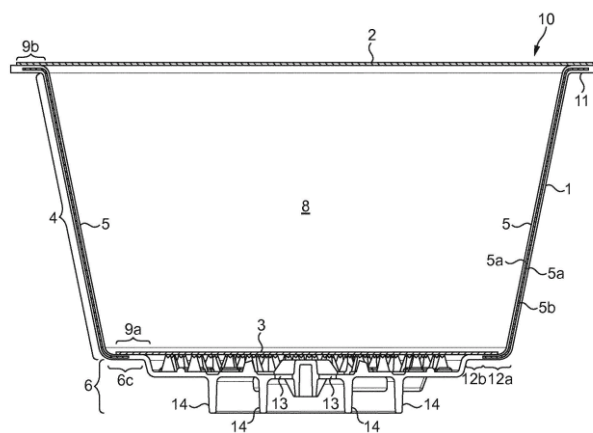
72: NORDQVIST, David, HEYDEL, Christophe  
Sébastien Paul

33: EP(CH) 31: 16164275.6 32: 2016-04-07

#### **54: CLOSED CAPSULE WITH OPENING MEANS AND INTEGRAL BARRIER LAYER**

00: -

The invention relates to a capsule (10) designed for food or beverage preparation, the capsule (10) comprising a cup-shaped base body (1), a top wall (2) and a bottom retaining wall (3) for holding food or beverage preparation ingredients, wherein the base body (1) is made of one single injection-molded piece and wherein a side wall (4) of the base body comprises at least one co-injected multilayer section (5) having two outer layers (5a) being made from a different polymeric material than a core layer (5b), and wherein the base body (1) further comprises a bottom structure (6) which is integrally molded with the side wall (4) and comprising opening means (7) allowing the capsule to be opened at the time of its use.



21: 2018/07693. 22: 2018/11/15. 43: 2025/03/25

51: B60L; G01D; G06F; G07C; H04N

71: Wi-Tronix, LLC

72: JORDAN, Lawrence B., HAMSMITH, Mathew

33: US 31: 62/337,227 32: 2016-05-16

33: US 31: 62/337,228 32: 2016-05-16

33: US 31: 62/337,225 32: 2016-05-16

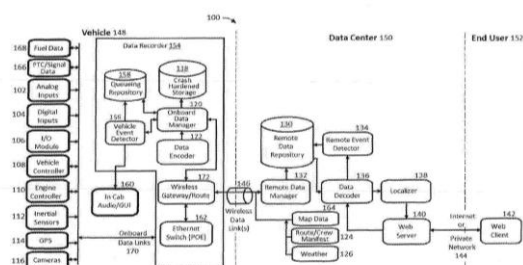
#### **54: REAL-TIME DATA ACQUISITION AND RECORDING SYSTEM**

00: -

A data acquisition and recording system (DARS) for mobile assets that includes a data recorder. The data recorder includes a data encoder, an onboard data manager, a vehicle event detector, at least one local memory component, and a queueing repository. DARS processes data from at least one

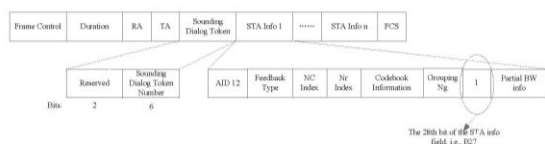


input sensor and stores a compressed record of the data at least once per second in the local memory module. DARS is designed to run in near real-time mode, storing a full record comprising five minutes of data to a remote memory module every five minutes, and in real-time mode, streaming data to the remote memory module by uploading a record of data at least once per second and up to once every tenth of a second. Remotely located users can view video, audio, and data acquired by DARS through a web browser, which provides for quicker emergency response, validate the effectiveness of repairs and rerouting, and monitor crew performance and safety.



21: 2018/07813. 22: 2018/11/20. 43: 2025/04/23  
51: H04B; H04L  
71: Huawei Technologies Co., Ltd.  
72: GUO, Yuchen, YU, Jian, YANG, Xun  
33: CN 31: 201610305870.9 32: 2016-05-10  
**54: RADIO FRAME SENDING AND RECEIVING METHODS AND APPARATUS**

00: -  
A radio frame sending/receiving method and apparatus is provided, including: generating, by a transmit end, a radio frame, where the radio frame includes one or more station information fields, a length of each station information field is 2K bytes, where K is a natural number, and a value of a bit B16j+11 in each station information field is set to 1, where j=1, 2, 3, ..., K-1; and sending the radio frame.



21: 2018/08381. 22: 2018/12/12. 43: 2025/03/31  
51: A61K  
71: Golden Biotechnology Corporation

72: LIU, Sheng-Yung, CHEN, Chih-Ming, CHEN, Pei-Ni, CHENG, Hao-Yu

33: US 31: 62/336,388 32: 2016-05-13

**54: METHODS AND COMPOSITIONS FOR TREATING ADVANCED STAGE NON-SMALL CELL LUNG CANCER**

00: -

The present invention provides methods and compositions for treating advanced stage non-small cell lung cancer by cyclohexenone compounds.

21: 2019/01025. 22: 2019/02/18. 43: 2025/04/08

51: A23L; C01B

71: Tygrus, LLC

72: CARLSON, Lawrence

33: US 31: 62/364,136 32: 2016-07-19

**54: STABLE ELECTROLYTE MATERIAL AND SOLVENT MATERIAL CONTAINING SAME**

00: -

Described is a stable electrolyte and solvent material that includes a compound having the following chemical structure:  $1/2 [H_xO(x-1)] Z_y$  wherein x is an odd integer that is greater than or equal to 3, y is an integer between 1 and 20, and Z is one of a monoatomic ion from Groups 14 through 17 having a charge value between -1 and -3 or a polyatomic ion having a charge between -1 and -3; and that includes a liquid such as a short-chain polar organic material, water or mixtures of the short chain polar organic material and water.

21: 2019/01072. 22: 2019/02/19. 43: 2025/04/23

51: F41A

71: CMI Defence S.A.

72: GRITSKEVITCH, Innokenty, COLOMINE, Anthony

33: BE 31: 2016/5757 32: 2016-10-10

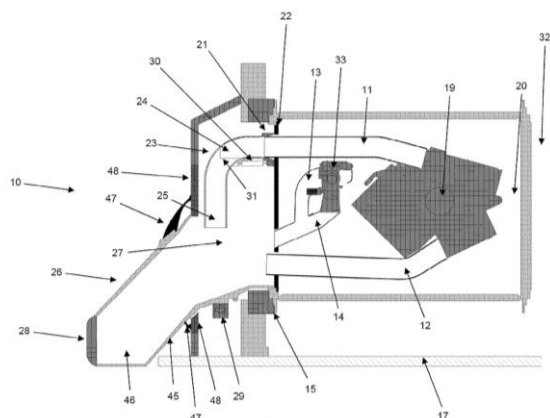
**54: DEVICE FOR EJECTING CARTRIDGES AND/OR LINKS FROM A CHAIN OR AMMUNITION STRIP CONNECTED TO A MAIN AND/OR SECONDARY WEAPON**

00: -

The present invention relates to a device for ejecting (10) cartridges (5) and/or links (2) from a chain or ammunition (1) strip (3) connected to a main (19) and/or secondary (33) weapon in a turret (9) assembled on an armoured vehicle, the ejection device (10) comprising a plurality of structural elements defined geometrically and mechanically, enabling, after shooting ammunition (1), guiding of the movement of the cartridges (5) and/or the links (2) from the inside to the outside of said turret (9), along a predetermined path, and comprising means



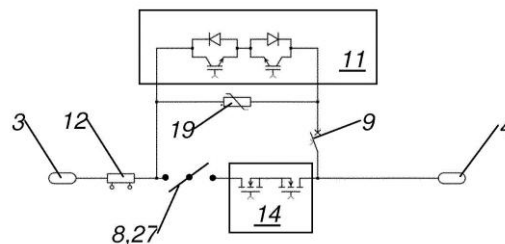
for vibrating at least one part of these structural elements to encourage said movement of cartridges (5) and/or links (2).



21: 2019/02546. 22: 2019/04/23. 43: 2025/04/24  
51: H01H; H02H  
71: Eaton Intelligent Power Limited  
72: ASKAN, Kenan  
33: DE 31: 10 2016 120 070.0 32: 2016-10-21  
**54: LOW-VOLTAGE CIRCUIT BREAKER DEVICE**  
00: -

The invention relates to a low-voltage circuit breaker device (1) comprising at least one outer conductor path (2) which extends from an outer conductor supply connection (3) of the low-voltage circuit breaker device (1) to an outer conductor load connection (4) of said low-voltage circuit breaker device (1), and a neutral conductor path (5) which extends from a neutral conductor connection (6) of the low-voltage circuit breaker device (1) to a neutral conductor load connection (7) of said low-voltage circuit breaker device (1), a mechanical bypass switch (8) being arranged in said outer conductor path (2), a first semiconductor circuit arrangement (11) of the low-voltage circuit breaker device (1) being connected in parallel to the bypass switch (8), a current measuring arrangement (12) being positioned in said outer conductor path (2) and connected to an electronic control unit (13) of said circuit breaker device (1), and said electronic control unit (13) being designed to actuate the bypass switch (8) and the first semiconductor circuit arrangement (11) upon detection of a predefined overload current, particularly a short-circuit current, by the current measuring arrangement (12). According to the invention, a first mechanical disconnecter (9) is arranged in series with the first

semiconductor circuit arrangement (11) and in parallel to the bypass switch (8).



21: 2019/05051. 22: 2019/07/31. 43: 2025/06/03  
51: A61K; C07K; A61P  
71: REGENERON PHARMACEUTICALS, INC.  
72: RIETSCHEL, Petra, LOWY, Israel  
33: US 31: 62/461,672 32: 2017-02-21  
33: US 31: 62/595,190 32: 2017-12-06

**54: ANTI-PD-1 ANTIBODIES FOR TREATMENT OF LUNG CANCER**

00: -

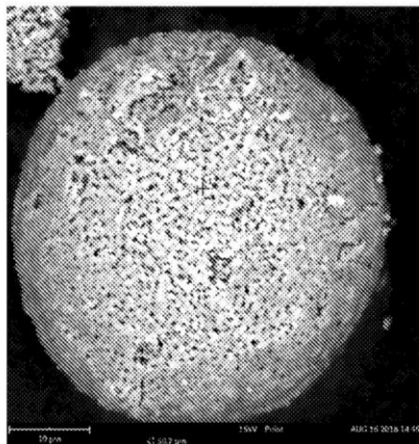
The present invention provides methods for treating, reducing the severity, or inhibiting the growth of cancer (e.g., lung cancer). The methods of the present invention comprise administering a therapeutically effective amount of a programmed death 1 (PD-1) antagonist (e.g., an anti-PD-1 antibody), to a subject with lung cancer wherein the cancer tissue expresses PD-L1.

21: 2019/05644. 22: 2019/08/27. 43: 2025/04/24  
51: A61K; A61L; A61Q; C09C  
71: E.N.A. Impeccable Skincare Solutions Ltd  
72: DVIR, Haim  
33: US 31: 62/570,189 32: 2017-10-10

**54: METHOD OF MANUFACTURING AND DERMAL FILLER COMPOSITIONS CONTAINING HYALURONIC ACID AND HYDROXYAPATITE**

00: -

Compositions based on HA and HAp in the field of soft tissue fillers, and a method of manufacturing thereof. Optionally, the dermal fillers are useful for enhancing facial tissue augmentation by adding volume to facial tissue, correct wrinkles and folds and restore a smooth appearance to the face. Optionally, the dermal filler comprises uncrosslinked or crosslinked HA chemically bonded to HAp.



21: 2019/06360. 22: 2019/09/26. 43: 2025/04/24

51: B01D; B03D; C02F

71: CiDRA Corporate Services LLC

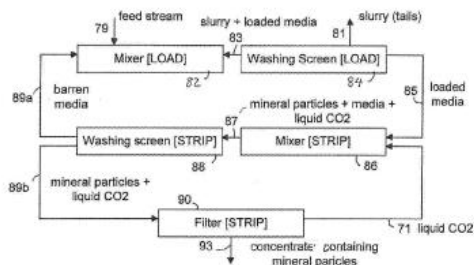
72: RYAN, Michael Stephen

33: US 31: 62/477,126 32: 2017-03-27

#### **54: REMOVAL OF HYDROPHOBIC PARTICLES USING CARBON DIOXIDE**

00: -

A plurality of collection surfaces for use in an aqueous slurry has a polymeric coating to provide a compliant and sticky surface. The polymer coating has a chemical to render the surface hydrophobic so as to attract hydrophobic or hydrophobized mineral particles in the slurry. The substrate can take the form of a conveyor belt, a bead, a mesh, an impeller, a filter or a flat surface. The substrate can also be an open-cell foam. The collection surfaces having the mineral particles attached thereon are caused to interact with liquid and supercritical carbon dioxide so that the mineral particles can be stripped from the collection surfaces.



21: 2019/07031. 22: 2019/10/24. 43: 2025/04/08

51: B01J; F23C

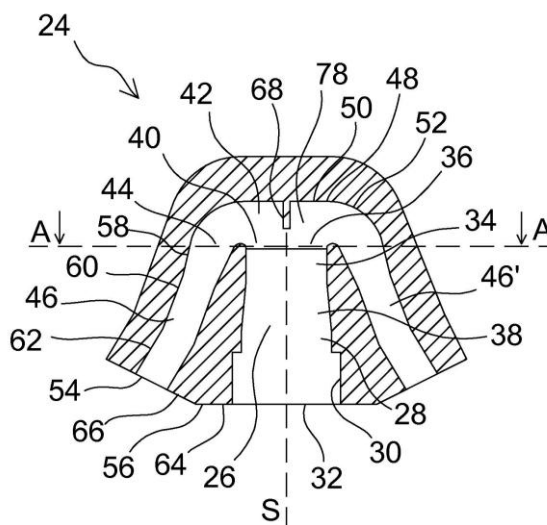
71: Sumitomo SHI FW Energia Oy

72: KLAJNY, Marcin, KAUPPINEN, Kari

#### **54: A FLUIDIZING GAS NOZZLE HEAD AND A FLUIDIZED BED REACTOR WITH MULTIPLE FLUIDIZING GAS NOZZLE HEADS**

00: -

A fluidizing gas nozzle head (24) suitable to be connected to a fluidizing gas feeding device of a fluidized bed reactor, the fluidizing gas nozzle head comprising an inlet channel (26) having a longitudinal axis, an inlet end (32) and a second end (36), the inlet end of the inlet channel being adapted to connect the inlet channel in vertical gas flow connection with the fluidizing gas feeding device, four outlet channels (46), each of the four outlet channels extending from a first end (44) to an outlet end (54), and a gas distribution space (42) having a bottom face (40) and a ceiling (48) opposite to the bottom face, wherein the second end of the inlet channel and the first ends of the four outlet channels are connected to direct gas flow connection with the gas distribution space, wherein each of the first ends of the four outlet channels has a central point, which central points define a rectangle with two long sides and two short sides having an aspect ratio of at least 2:1.



21: 2019/07148. 22: 2019/10/29. 43: 2025/03/26

51: A61K; C07K

71: Vaccinex, Inc.

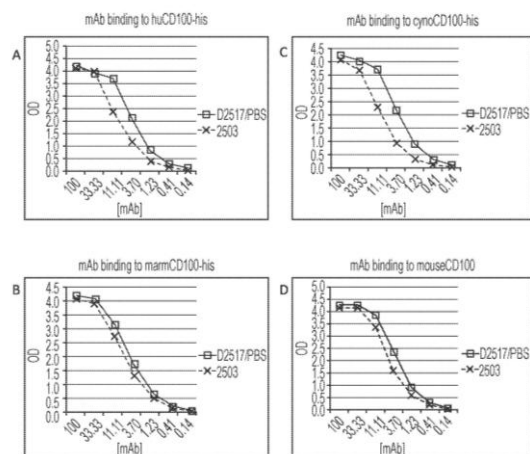
72: SMITH, Ernest S., CORNELISON, Angelica, SCRIVENS, Maria G.M., PARIS, Mark, ZAUDERER, Maurice

33: US 31: 62/501,981 32: 2017-05-05

#### **54: HUMAN ANTI-SEMAPHORIN 4D ANTIBODY**

00: -

Compositions and method are provided for treating diseases associated with semaphorin-4D (SEMA4D) pathology, including autoimmune diseases, inflammatory diseases, cancers, neuroinflammatory disorders and neurodegenerative diseases.



21: 2019/08066. 22: 2019/12/04. 43: 2025/03/31

51: A61B; A61F; A61M

71: Edwards Lifesciences Corporation

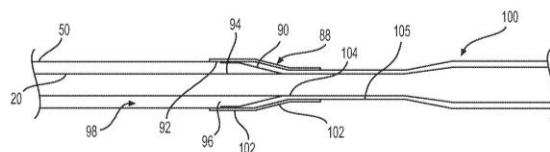
72: LE, Thanh Huy, LE, Tung T., MAK, Sovanpheap, GOWDAR, Alpna Kiran, WHITE, Richard D., TRAN, Sonny

33: US 31: 62/522,986 32: 2017-06-21

#### 54: EXPANDABLE SHEATH AND METHODS OF USING THE SAME

00: -

Disclosed herein are expandable introducer sheaths and methods of making and using the same. The sheaths minimize trauma to a patient's vasculature by allowing for temporary expansion of a portion of the sheath to accommodate passage of a delivery system for an implant, then return to a non-expanded state after the passage of the device. The sheath includes a foldable inner member having a detached flap structure at its distal tip that facilitates expansion of the sheath lumen to increased diameters, and an elastomeric distal end that reduces push and retrieval forces therethrough. The sheath can include a hemostasis seal on its proximal end to prevent the leakage of blood out of the sheath and prevent ballooning of outer layer of the sheath.



21: 2019/08263. 22: 2019/12/11. 43: 2025/04/23

51: B03D

71: STONE THREE DIGITAL (PTY) LTD

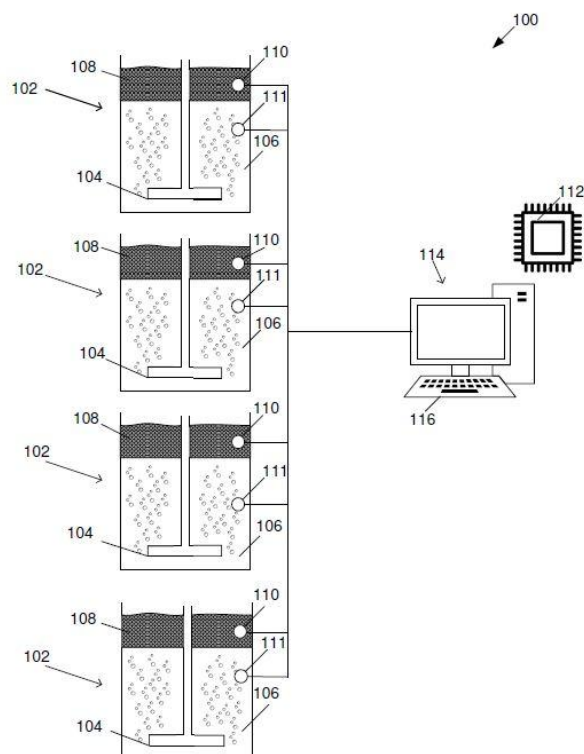
72: HAASBROEK, Adriaan Lodewicus, BROWN, Robert Pieter, STREICHER, Simon Jacobus, VAN DER BIJL, Leendert

33: ZA 31: 2017/03892 32: 2017-06-07

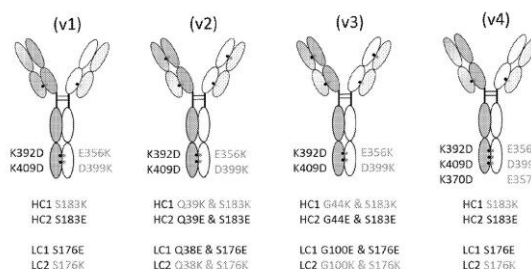
#### 54: REAL-TIME MONITORING AND PERFORMANCE ADVISORY SYSTEM FOR MULTI-CELL FROTH FLOTATION SYSTEM

00: -

The present invention provides systems and methods for monitoring a froth flotation system that includes a number of flotation cells. Any one or more of a plurality of cells forming part of a froth flotation system may be individually monitored with appropriate sensors to determine various properties associated with the flotation process. Plant-specific data may be provided by an operator or may be determined by appropriate measuring components. By analysing the plant-specific data and measured properties, performance indicators of the complete system as well as for individually monitored cells may be determined. The performance indicators may be used to classify system performance. The system may allow operating inefficiencies to be determined, particularly per cell, and provide an operator with an advisory action to address or even cure the operating inefficiency, or the system may facilitate such addressing or curing automatically.



The present invention concerns antigen binding proteins that bind TL1A, including bispecific antigen binding proteins (e.g., antibodies) to TL1A and TNF- $\alpha$ . Such bispecific antibodies can be in a tetrameric immunoglobulin format, in which one heavy chain-light chain pair of the antibody is directed to TL1A and the other to TNF- $\alpha$ . The bispecific antigen binding proteins may also be comprised in an IgG-scFv fusion, in which a conventional tetrameric antibody directed to one antigen is fused to a pair of single chain Fv units directed to the other. The bispecific antigen binding protein may also be comprised in an IgG-Fab fusion, in which a Fab molecule that binds to one antigen is fused to each heavy chain of a conventional tetrameric antibody directed to the other antigen. The invention further relates to uses of the anti-TL1A binding proteins and anti-TL1A/anti-TNF-alpha antigen binding proteins, and pharmaceutical formulations thereof.



21: 2020/03133. 22: 2020/05/27. 43: 2025/04/23  
51: A61K; A61P; C07K  
71: Amgen Inc.

72: HSU, Hailing, KANNAN, Gunasekaran, WALKER, Kenneth W., HORTTER, Michelle, BELOUSKI, Edward J.

33: US 31: 62/268,432 32: 2015-12-16

**54: ANTI-TL1A/ANTI-TNF-ALPHA BISPECIFIC ANTIGEN BINDING PROTEINS AND USES THEREOF**

00: -

21: 2020/04557. 22: 2020/07/23. 43: 2025/04/23  
51: C07H; C12N

71: Voyager Therapeutics, Inc.

72: HOU, Jinzhao, NONNENMACHER, Mathieu E., ZHOU, Pengcheng

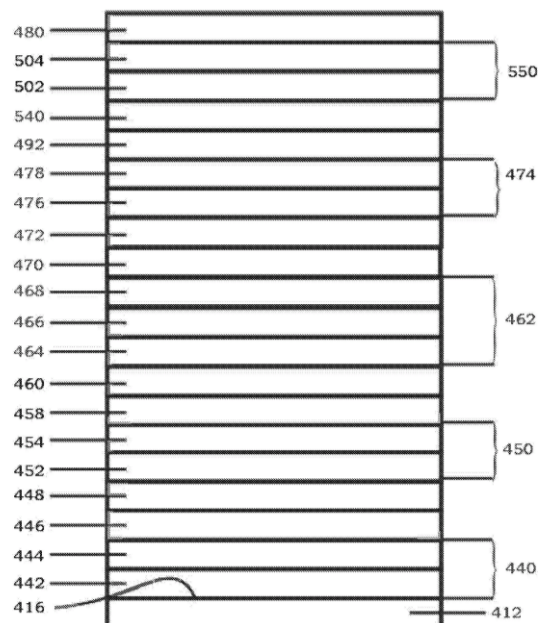
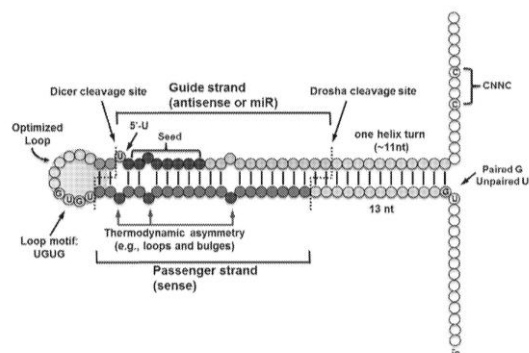
33: US 31: 62/079,590 32: 2014-11-14

**54: MODULATORY POLYNUCLEOTIDES**

00: -

The invention relates to compositions and methods for the preparation, manufacture and therapeutic use of modulatory polynucleotides.





21: 2020/04739. 22: 2020/07/30. 43: 2025/03/28  
 51: A01N  
 71: Sumitomo Chemical Company, Limited  
 72: OGAWA, Toshiya, ZHOU, Ke, TANUWIDJAJA, Jessica  
 33: US 31: 62/631,598 32: 2018-02-16  
**54: AGRICULTURAL FORMULATIONS, USES THEREOF AND PROCESSES FOR PREPARATION THEREOF**

00: -

The present invention is generally directed to an agricultural formulation comprising, ethaboxam, metalaxyl and a compound selected from the group consisting of 3-(difluoromethyl)-1-methyl-N-[(3R)-1,1,3-trimethyl-2,3-dihydroinden-4-yl]pyrazole-4-carboxamide and mandestrobin, a process for preparing the agricultural formulation and methods of use thereof.

21: 2020/04740. 22: 2020/07/30. 43: 2025/03/28  
 51: C03C  
 71: Vitro Flat Glass LLC  
 72: FISHER, Patrick, MEDWICK, Paul A., WAGNER, Andrew, POLCYN, Adam D.  
 33: US 31: 62/626,332 32: 2018-02-05  
**54: SOLAR CONTROL COATINGS WITH QUADRUPLE METALLIC LAYERS**

00: -

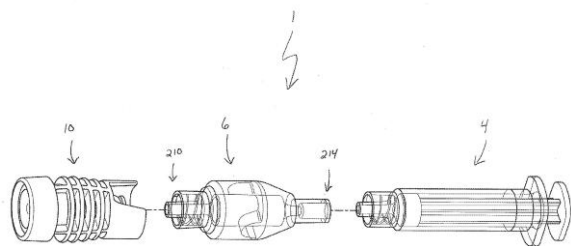
A coated article includes a substrate, a first dielectric layer, a first metallic layer, a second dielectric layer, a second metallic layer, a third dielectric layer, a third metallic layer, a fourth dielectric layer, a fourth metallic layer and a fifth dielectric layer. At least one of the metallic layers is a discontinuous metallic layer having discontinuous metallic regions. An optional primer is positioned over any one of the metallic layers. Optionally a protective layer is provided as the outer most layer over the fifth dielectric layer.

21: 2020/04826. 22: 2020/08/04. 43: 2025/03/28  
 51: A61B  
 71: Becton, Dickinson and Company  
 72: EDELHAUSER, Adam, WILKINSON, Bradley M.  
 33: US 31: 62/626,904 32: 2018-02-06  
**54: BIOLOGICAL FLUID COLLECTION AND STABILIZATION SYSTEM**

00: -

A biological fluid collection system that receives a sample and provides flow-through blood stabilization technology and a precise sample dispensing function for point-of-care and near patient testing applications is disclosed. A biological fluid collection system of the present disclosure is able to effectuate distributed mixing of a sample stabilizer within a blood sample and dispense the stabilized sample in a controlled manner. In this manner, a biological fluid collection system of the present disclosure enables blood micro-sample management, e.g., passive mixing with a sample stabilizer and controlled dispensing, for point-of-care and near patient testing applications.





21: 2020/05294. 22: 2020/08/25. 43: 2025/04/03  
 51: A61K; A23P; A61J; A23L  
 71: R.P. SCHERER TECHNOLOGIES, LLC  
 72: AHMAD, HUMERA, DO, JONATHAN, LIN, JING  
 33: US 31: 62/643,516 32: 2018-03-15

#### 54: ENTERIC SOFTGEL CAPSULES

00: -

Enteric softgel capsules comprise a fill material and an enteric shell composition, characterized in that the enteric nature of the capsules may be achieved without an enteric coating or added conventional enteric polymers.

21: 2020/05353. 22: 2020/08/27. 43: 2025/03/28  
 51: A47F

71: Colgate-Palmolive Company  
 72: ZHANG, Reid, CHEN, Sophia, HAN, Michelle

#### 54: MODULAR POINT-OF-SALE DISPLAY

00: -

Described herein is a modular point-of-sale display comprising a plurality of inter-lockable display units comprising a primary display unit comprising a primary multi-panel structure comprising a plurality of primary product display apertures configured and arranged to receive a plurality of first products for display a hanger element for mounting the primary display unit to a support structure; and a primary mounting element; and an add-on display unit comprising: an add-on structure comprising a plurality of add-on product display apertures configured and arranged to receive a plurality of second products for display; an add-on mounting element configured to mate with the primary mounting element to hang the add-on display unit from the primary display unit.

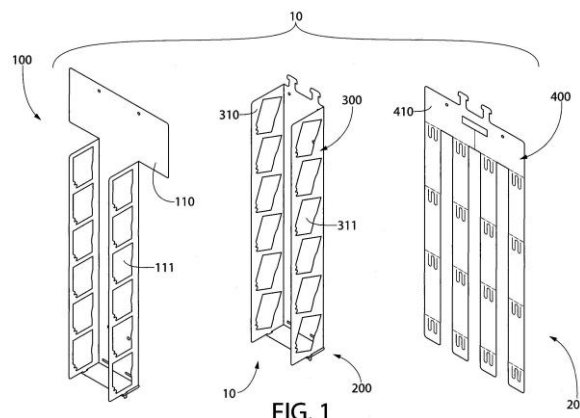


FIG. 1

21: 2020/05387. 22: 2020/08/28. 43: 2025/03/28  
 51: C01F; C01G; H01M

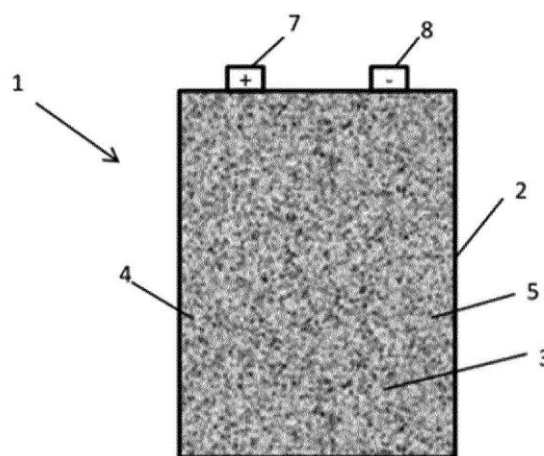
71: High Performance Battery Technology GmbH  
 72: HAMBITZER, Günther

33: DE 31: 10 2018 105 271.5 32: 2018-03-07

#### 54: SOLID IONIC CONDUCTOR FOR RECHARGEABLE ELECTROCHEMICAL BATTERY CELLS

00: -

The invention relates to a solid ionic conductor for a rechargeable non-aqueous electrochemical battery cell having the stoichiometric formula  $K(ASXX')_p \times q SO_2$ , where K represents a cation from the group of the alkali metals with  $p=1$ , of the alkaline-earth metals with  $p=2$  or of the zinc group with  $p=2$ , A represents an element from the third main group, S represents sulfur, selenium or tellurium, X and X' represent a halogen, and the numerical value q is greater than 0 and less than or equal to 100.

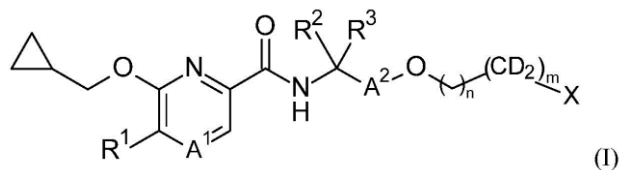


21: 2020/05426. 22: 2020/08/31. 43: 2025/03/27  
 51: A61K; A61P; C07D  
 71: F. Hoffmann-La Roche AG, ETH Zuerich  
 72: GOBBI, Luca, GREThER, Uwe, KRETZ, Julian, AMETAMEY, Simon M.  
 33: EP(CH) 31: 18180137.4 32: 2018-06-27

#### 54: NOVEL PYRIDINE AND PYRAZINE COMPOUNDS AS INHIBITORS OF CANNABINOID RECEPTOR 2

00: -

The invention relates to a compound of formula (I) wherein A, A<sup>2</sup>, X and R<sup>1</sup>-R<sup>3</sup> are as defined in the description and in the claims. The compound of formula (I) can be used as a medicament, due to its inhibition of cannabinoid receptor 2.



21: 2020/05849. 22: 2020/09/21. 43: 2025/06/10

51: H02S

71: AUTARQ GMBH

72: PAUL, Cornelius, NEBERG, Dieter, MACK, Martin

33: DE 31: 102018002476.9 32: 2018-03-27

#### 54: ROOF COVERING ELEMENT, SOLAR ROOF COVERING ELEMENT, ASSEMBLY OF SOLAR ROOF COVERING ELEMENTS, AND METHOD FOR PRODUCING A SOLAR ROOF COVERING ELEMENT

00: -

The invention relates to a roof covering element, to a solar roof covering element, to an assembly of solar roof covering elements, and to a method for producing a solar roof covering element. The invention is characterized by a roof covering element with a flat main part (27), the upper face of which has a receiving surface (29) for a solar module (22) and which has an opening (30) or a bore running perpendicularly to the main surface, at least two electric lines (5, 5', 5'', 6, 6', 6'') being guided together through said opening or bore, wherein the lines (5, 5', 5'', 6, 6', 6'') end on the upper face of the main part (27) in the region of the receiving surface (29) as contact means (12, 12', 13, 13').

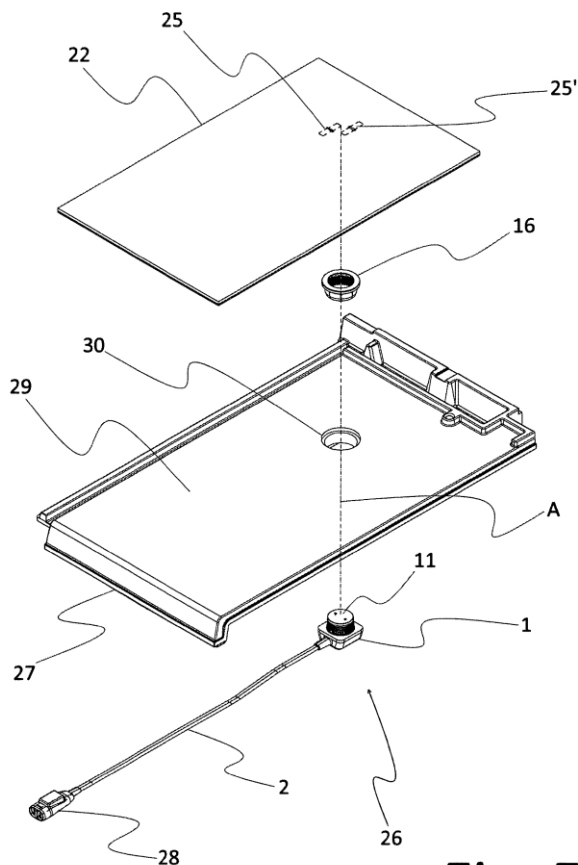


Fig. 5

21: 2020/06507. 22: 2020/10/20. 43: 2025/03/25

51: A61K; A61P; C07D

71: Merck Sharp & Dohme LLC

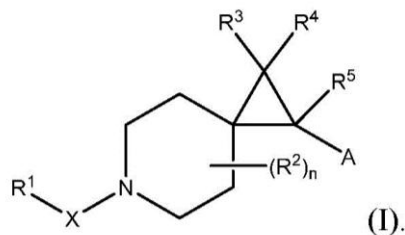
72: CROWLEY, Brendan M., CAMPBELL, Brian T., CHOBANIAN, Harry R., FELLIS, James I., GUIADEEN, Deodial G., GRESHOCK, Thomas J., LEAVITT, Kenneth J., RADA, Vanessa L., BELL, Ian M.

33: US 31: 62/665,091 32: 2018-05-01

#### 54: SPIROPIPERIDINE ALLOSTERIC MODULATORS OF NICOTINIC ACETYLCHOLINE RECEPTORS

00: -

The present disclosure relates to compounds of formula I that are useful as modulators of 7 nAChR, compositions comprising such compounds, and the use of such compounds for preventing, treating, or ameliorating disease, particularly disorders of the central nervous system such as cognitive impairments in Alzheimer's disease, Parkinson's disease, and schizophrenia, as well as for L-DOPA induced-dyskinesia and inflammation (I).



21: 2020/06549. 22: 2020/10/21. 43: 2025/04/01

51: C07D

71: Ribon Therapeutics Inc.

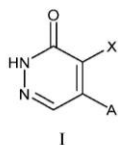
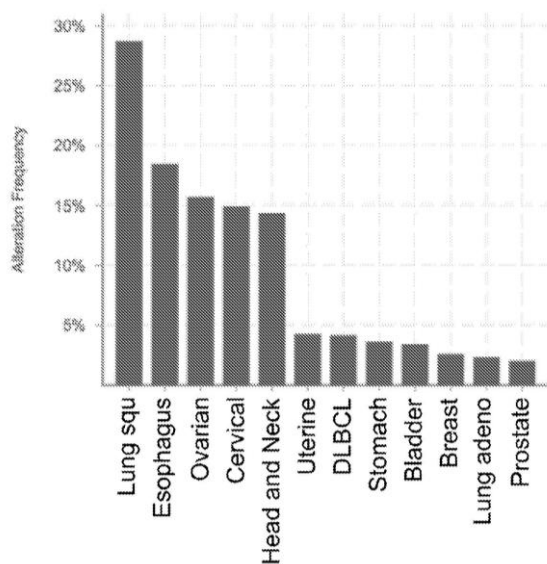
72: VASBINDER, Melissa Marie, SCHENKEL, Laurie B., SWINGER, Kerren Kalai, KUNTZ, Kevin Wayne

33: US 31: 62/664,544 32: 2018-04-30

**54: PYRIDAZINONES AS PARP7 INHIBITORS**

00: -

The present invention relates to pyridazinones and related compounds of Formula I which are inhibitors of PARP7 and are useful in the treatment of cancer.



21: 2020/06616. 22: 2020/10/23. 43: 2025/03/27

51: B01D; B01J; C01F

71: Climate Solutions ApS

72: TRAMPE, Erik

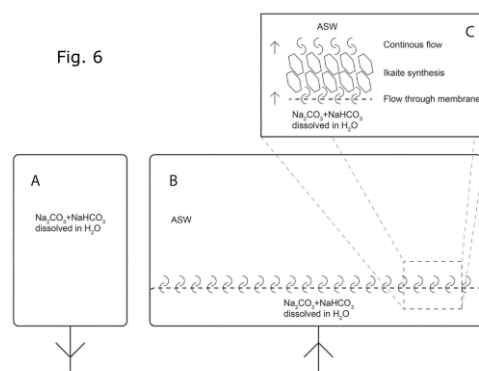
33: EP(DK) 31: 18170406.5 32: 2018-05-02

**54: PERMANENT STORAGE OF CARBON DIOXIDE**

00: -

Disclosed is a method for fast and cost-efficient preparation of ikaite crystals. The method comprises contacting an alkaline aqueous solution, which comprises carbonate and bicarbonate ions, with a water solution, which comprises  $\text{Ca}^{2+}$ , at a temperature not exceeding  $15^\circ\text{C}$ , wherein contact between the alkaline aqueous solution and the water solution takes place at a permeable or porous surface, through which either solution is fed to the other at a flow rate facilitating formation of ikaite crystals. Also disclosed is system for carrying out the ikaite preparation process. The process and system provides a cost efficient and effective means for capture and storage of carbon dioxide.

Fig. 6



21: 2020/06650. 22: 2020/10/26. 43: 2025/03/28

51: G01T

71: Southern Innovation International Pty Ltd

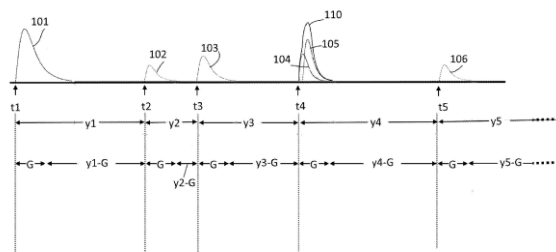
72: PAULEY, Michael, SCOLLAR, Paul, MCLEAN, Christopher, CHOW, Andi, DRABKIN, Nir

33: AU 31: 2018202912 32: 2018-04-27

**54: INPUT COUNT RATE ESTIMATION IN RADIATION PULSE DETECTORS**

00: -

The invention provides a method of estimating an input count rate of a radiation pulse detector from a detector signal where some individual signal pulses making up the detector signal are closely spaced in time less than a minimum reliable detection gap (104, 105;  $t_c$ ,  $t_d$ ). In one aspect, the individual signal pulses are detected using a detection algorithm and a plurality of interval start times ( $s_k$ ) are defined each interposed with at least one of the detected individual signal pulse arrival times ( $t_k$ ), each interval start time ( $s_k$ ) being later by at least the minimum reliable detection gap than a corresponding most recent detected individual signal pulse arrival time ( $t_{k-1}$ ). A corresponding plurality of individual signal pulse arrival intervals are calculated between each of the interval start times ( $s_k$ ) and a corresponding next detected individual signal pulse arrival time ( $t_k$ ).

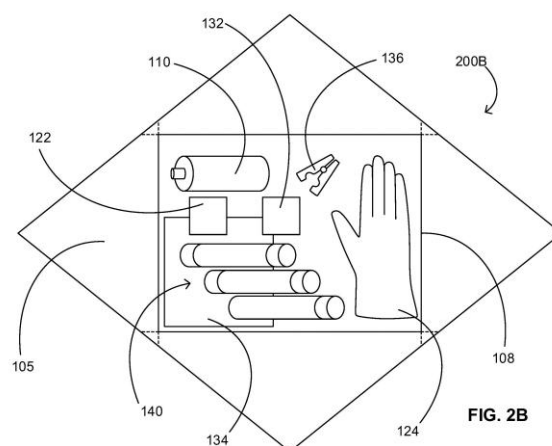


21: 2020/06687. 22: 2020/10/27. 43: 2025/03/27  
51: A61B; A61M  
71: C.R. Bard, Inc.  
72: WAITKUS, Tim, FODOUOP, Chris, LEEKE, Kelsey, GOHDE, John  
33: US 31: 62/675,112 32: 2018-05-22

#### 54: URINE-SAMPLING KIT AND METHODS THEREOF

00: -  
Disclosed is a urine-sampling kit including, in some embodiments, a sampling-port access device, a package of hand sanitizer, a pair of sterile gloves, and a packaged antiseptic wipe, towelette, or swabstick. The sampling-port access device includes a barrel ending with a tip configured to fluidly connect the sampling-port access device to a urine-sampling port of a catheter assembly, and a hollow needle coaxial with the barrel. The needle is fluidly connected to but directed away from the tip of the barrel. Contents of the urine-sampling kit including the sampling-port access device, the package of

hand sanitizer, the pair of sterile gloves, and the packaged antiseptic wipe, towelette, or swabstick are packaged in accordance with step-by-step instructions for aseptic urine sampling. A catheterization-and-urine-sampling kit including at least some of the foregoing components is also disclosed, as is a method for aseptic urine sampling with the urine-sampling kit and the catheterization-and-urine-sampling kit.



21: 2020/07785. 22: 2020/12/14. 43: 2025/03/31  
51: A23K; A23L; A61K

71: Elanco Animal Health GmbH  
72: HOFMANN, Stefan, JIRITSCHKA, Wolfgang  
33: EP(DE) 31: 18176139.6 32: 2018-06-05

#### 54: FORMULATIONS CONTAINING TRIAZINONES AND IRON WITH A LOW AMOUNT OF FREE IRON IONS

00: -  
Formulations containing triazinones, selected from toltrazuril, ponazuril and diclazuril, a polynuclear iron(III) polysaccharide complex compound which are suitable for the simultaneous control of coccidiosis and anaemic states in animals and which exhibit a low amount of free iron ions even after storage, while the formulations comprises  $\text{Ca}^{2+}$  and  $\text{Na}^+$  in a molar ratio of  $\text{Ca}^{2+}:\text{Na}^+$  from  $\geq 0$  to  $\leq 3$ . In one embodiment the triazinone is toltrazuril and the polynuclear iron(III) polysaccharide complex compound is iron(III) dextran glucoheptonate.

21: 2020/07952. 22: 2020/12/18. 43: 2025/03/27  
51: A01K; B64C

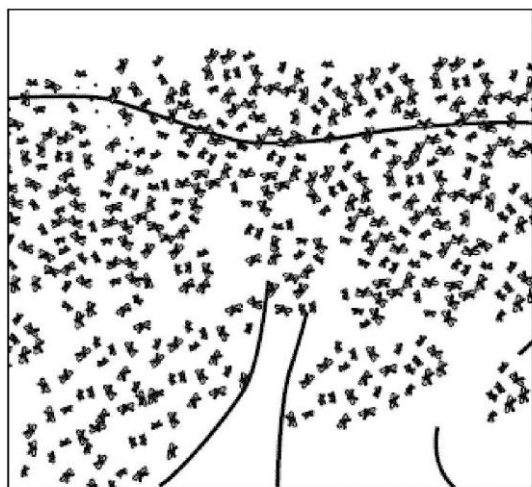
71: Elanco Animal Health GmbH  
72: HAMAEEKERS, Veerle, TORUN, Nazim, BERNIS, Georg  
33: EP(DE) 31: 18174587.8 32: 2018-05-28

#### 54: APPARATUS FOR FLY MANAGEMENT

00: -



The present invention relates to an apparatus (10) for fly management. It is described to provide (310) a processing unit with at least one image of an agricultural environment, wherein the agricultural environment contains a plurality of bovine animals. The at least one image comprises image data of at least a part of at least one bovine animal of the plurality of bovine animals. The processing unit determines (320) a number of flies in the image data of the at least a part of at least one bovine animal. The processing unit determines (330) information relating to fly infestation of the plurality of bovine animals. The determination comprises utilisation of the determined number of flies. An output unit outputs (340) an indication relating to a treatment for fly infestation of the plurality of bovine animals based on the determined information relating to fly infestation of the plurality of bovine animals.



21: 2021/00024. 22: 2021/01/04. 43: 2025/05/02  
51: B32B; G06F; G09F  
71: ARUN AGARWAL, SONIA AGARWAL  
72: ARUN AGARWAL  
33: US 31: 201911026363 32: 2019-07-01  
**54: SECURITY LABEL STOCK AND SYSTEM FOR MANUFACTURING THEREOF**

00: -  
The present invention relates to a smart and secure label stock with security features. The present invention relates to a label stock produced from a substrate utilizing adhesive and liner materials and having a plurality of security features on the rear side of the substrate 5 made using specialized inks

and various authentication features for different applications.

21: 2021/01118. 22: 2021/02/18. 43: 2025/04/10  
51: A61K; A61P  
71: MERCK PATENT GMBH  
72: DYROFF, MARTIN, MITCHELL, DAVID, PAPASOULIOTIS, ORESTIS  
33: US 31: 62/839,273 32: 2019-04-26  
33: US 31: 62/700,977 32: 2018-07-20  
33: US 31: 62/730,184 32: 2018-09-12  
**54: A SUBSTITUTED AMINO-PYRIMIDINE COMPOUND FOR USE IN A METHOD FOR TREATMENT AND PREVENTION OF MULTIPLE SCLEROSIS**

00: -  
The invention provides methods, compositions, and medical kits for treating and preventing multiple sclerosis using 1-(4-(((6-amino-5-(4-phenoxyphenyl)pyrimidin-4-yl)amino)methyl)piperidin-1-yl)prop-2-en-1-one or a pharmaceutically acceptable salt thereof according to preferred dosing regimens.

21: 2021/01258. 22: 2021/02/24. 43: 2025/04/10  
51: C07K; A61P; A61K  
71: CULLINAN MICA CORP.  
72: GIBSON, NEIL, CHAPMAN, JUSTIN, DU, XIN  
33: US 31: 62/712,608 32: 2018-07-31  
**54: ANTI-MICA/B ANTIBODIES THAT BLOCK MICA/B SHEDDING AND METHODS OF USE**  
00: -  
Provided herein are antibodies that specifically bind to MICA/B having heavy chain, light chain, variable heavy chain domains (VH), variable light chain domains (VL), and complementarity determining regions (CDRs) disclosed herein, as well as methods and uses thereof.



FIG. 1A

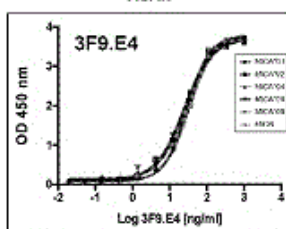
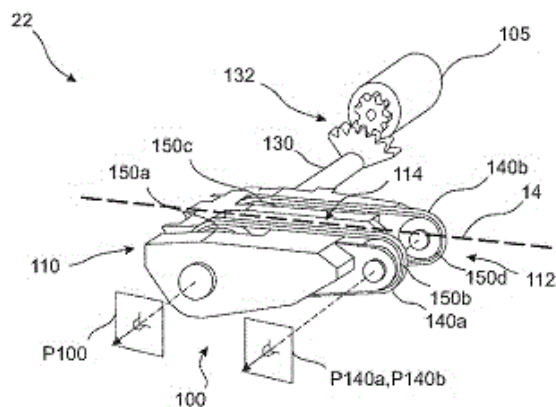
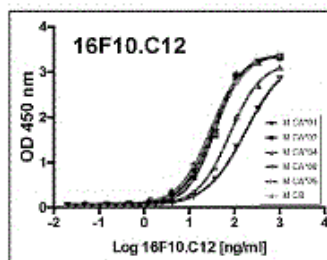


FIG. 1B



21: 2021/01396. 22: 2021/03/01. 43: 2025/04/25  
51: G07D; B65H

71: SUZOHAPP CANADA ULC, SCAN COIN AB  
72: RUSAKOV, YURIY, KYSELOV, ANDRIY,  
SOTNIKOV, ANTON, RABINOVICH, PAVEL  
33: SE 31: 1850955-4 32: 2018-08-03

#### 54: A BANKNOTE HANDLING MACHINE

00: -

The disclosure relates to a banknote handling machine (10) comprising: a banknote transport arrangement (20) configured to transport banknotes along transport paths within the machine (10), wherein the banknote transport arrangement (20) comprises a diverter assembly (22) comprising: a diverter (100) rotatably attached to a structure (12) of the machine (10), and an electric motor (105) configured to transfer kinetic energy to the diverter (100) so as to rotate the diverter (100) between a first position (P1) and a second position (P2), wherein the diverter (100), when in the first position (P1), is configured to control banknotes to be transported along a first transport path (T1), and wherein the diverter (100), when in the second position (P2), is configured to control banknotes to be transported along a second transport path (T2).

21: 2021/01475. 22: 2021/03/03. 43: 2025/04/25

51: B01J; C07C

71: JOHNSON MATTHEY DAVY TECHNOLOGIES LIMITED

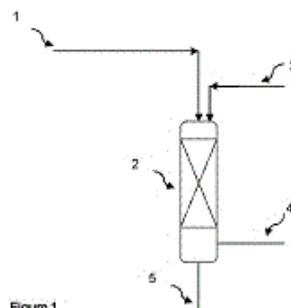
72: BAINBRIDGE, MICHAEL

33: GB 31: 1814682.9 32: 2018-09-10

#### 54: PROCESS FOR THE ACTIVATION OF OXIDISED CATALYSTS

00: -

The present invention relates to a process for the liquid phase activation of catalysts. Such activated catalysts have particular utility in hydrogenation of aldehydes to alcohols. As such, the present invention relates to a process for the hydrogenation of aldehydes to alcohols in the presence of a catalyst which has been activated in accordance with the first aspect of the present invention.



21: 2021/01494. 22: 2021/03/04. 43: 2025/04/25

51: C07K; A61P

71: DEUTSCHES

KREBSFORSCHUNGSZENTRUM STIFTUNG DES  
ÖFFENTLICHEN RECHTS, EBERHARD KARLS  
UNIVERSITÄT TÜBINGEN

72: JUNG, GUNDRAM, SALIH, HELMUT, VOGT,  
FABIAN, ZEKRI-METREF, LATIFA, PFLÜGLER,  
MARTIN, EHNE, ISABELLE

33: EP 31: 19189566.3 32: 2019-08-01

33: EP 31: 18193889.5 32: 2018-09-11

#### **54: IMPROVED ANTI-FLT3 ANTIGEN BINDING PROTEINS**

00: -

The present invention provides novel human fms related tyrosine kinase 3 (FLT<sub>3</sub>) antigen binding proteins, such as antibodies, having improved FLT<sub>3</sub> binding affinity, and/or anti-tumor activity. The FLT<sub>3</sub> antibodies of the invention were generated by mutation of a parent FLT<sub>3</sub> antibody and tested *in vitro* in binding assays as well as *in vivo* in a mouse tumor model and in human patient tumor samples. The antibodies of the invention are provided as monospecific constructs or in a bispecific FLT<sub>3</sub>×CD<sub>3</sub> antibody format and show excellent target affinity and/or tumor cell killing. The present invention also relates methods for producing the antigen binding proteins of the invention as well as nucleic acids encoding them, vectors for and host cells for their expression. The invention further relates to methods of treating or diagnosing a disease such as leukemia using an FLT<sub>3</sub> antigen binding protein (ABP) of the invention.

21: 2021/01648. 22: 2021/03/11. 43: 2025/04/25

51: A61M; A24F

71: ALTRIA CLIENT SERVICES LLC

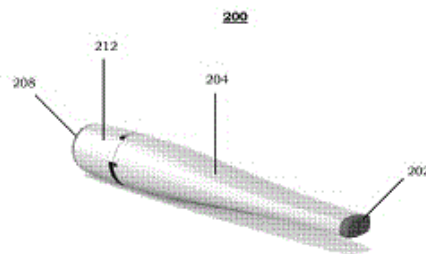
72: HAWES, ERIC, LAU, RAYMOND, SHARP, BEN

33: US 31: 62/151,248 32: 2015-04-22

#### **54: E-VAPOR DEVICES INCLUDING PRE-SEALED CARTRIDGES**

00: -

An e-vapor device comprising a cartridge and a dispensing body. The cartridge is a sealed container and is configured to hold a vapor precursor therein. The dispensing body includes a mouthpiece end and a vaporizer at an opposing base end. The base end is configured to couple with the cartridge such that the vapor precursor is in fluidic communication with the vaporizer. The vaporizer configured to heat the vapor precursor to generate a vapor. The cartridge may be sealed with a ball check valve arrangement.



21: 2021/01798. 22: 2021/03/17. 43: 2025/04/25

51: E04B; E04C; E04G

71: WRIGHT, JOHN DAVID

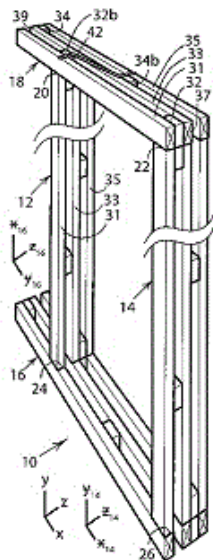
72: WRIGHT, JOHN DAVID

33: US 31: 62/720,808 32: 2018-08-21

#### **54: INSULATABLE, INSULATIVE FRAMEWORK APPARATUS AND METHODS OF MAKING AND USING SAME**

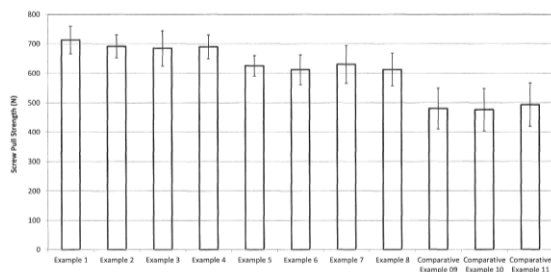
00: -

An insulative structural member including a first elongated frame member having a first length and a second elongated frame member spaced from and substantially parallel to the first elongated frame member, the second elongated frame member having a second length substantially the same as the first length. The insulative structural member includes a central elongated frame member spaced between and parallel to the first and second frame members, the central frame member having a third length substantially the same as the first length and a plurality of first connecting members joining the first elongated member to one surface of the central frame member. The insulative structural member includes a plurality of second connecting members joining the second elongated member to an opposite surface of the central frame member. The structural member provides no direct path of conductive heat flow, in a direction perpendicular to the first length.



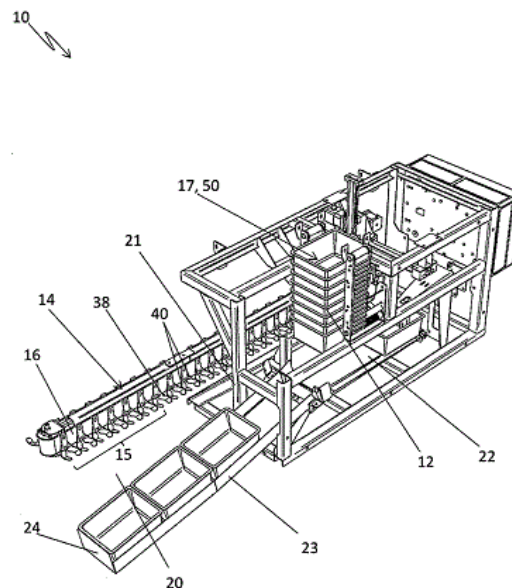
21: 2021/02243. 22: 2021/04/01. 43: 2025/05/26  
 51: C04B  
 71: SAINT-GOBAIN PLACO  
 72: WALTON, Kirsty, JONES, Nicholas, CUTLER, David, JUPP, Nicola, BROOKS, Laura  
 33: GB 31: 1818653.6 32: 2018-11-15  
**54: METHOD OF PREPARING A GYPSUM-BASED PRODUCT**

00: -  
 A method of preparing a gypsum-based product comprises the steps of mixing calcined gypsum with polymer particles and water to provide a slurry. The polymer particles comprise principally polyvinyl acetate, and have a particle size distribution, measured using laser diffractometry, such that particles having a diameter of 4.5  $\mu\text{m}$  or less provide at least 90% of the total particle volume.



21: 2021/06150. 22: 2021/08/25. 43: 2025/03/28  
 51: B65B A23N A01G  
 71: EDWARDS, Alan, EDWARDS, Sharon  
 72: EDWARDS, Alan  
 33: GB 31: 1901444.8 32: 2019-02-01  
**54: A MUSHROOM PACKAGING SYSTEM**

00: -  
 A mushroom packaging system 10 comprising a mushroom packaging apparatus 11 wherein empty containers 12 are at least partially filled with mushrooms 13. The system further comprises a mushroom loading apparatus 14 comprising a mushroom loading station 15 and a mushroom conveyor 16 for retaining and conveying mushrooms loaded thereon by an operator to the mushroom packaging apparatus 11. A container storage apparatus 50 is also provided which provides a container loading station 17 positioned such that an operator may load empty containers 12 thereinto. A container conveyance apparatus 22 conveys empty containers 12 from the container storage apparatus 50 to a packaged mushroom collection station 18 via the mushroom packaging apparatus 11. Packaged mushrooms 19 received at the packaged mushroom collection station 18 may be retrieved by the operator. A single operator may load mushrooms to the mushroom loading station 15, load containers to the container loading station 17, and retrieve containers from the packaged mushroom collection station 18.

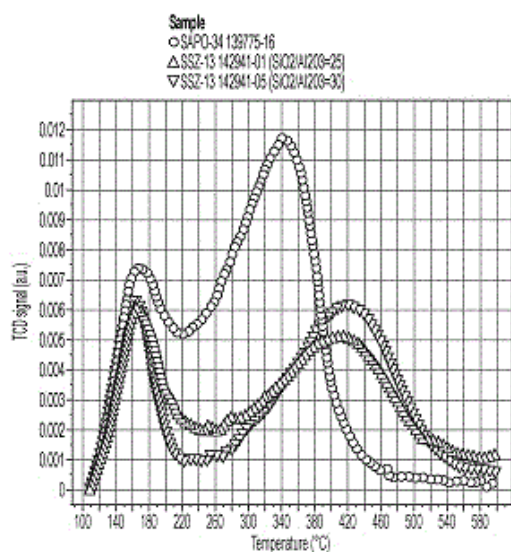


21: 2021/09498. 22: 2021/11/24. 43: 2025/04/10  
 51: C10G; B01J  
 71: DOW GLOBAL TECHNOLOGIES LLC  
 72: KIRILIN, ALEXEY, CHOJECKI, ADAM, DEWILDE, JOSEPH F, POLLEFEYT, GLENN, NIESKENS, DAVY L.S., MALEK, ANDRZEJ  
 33: US 31: 62/851,999 32: 2019-05-23

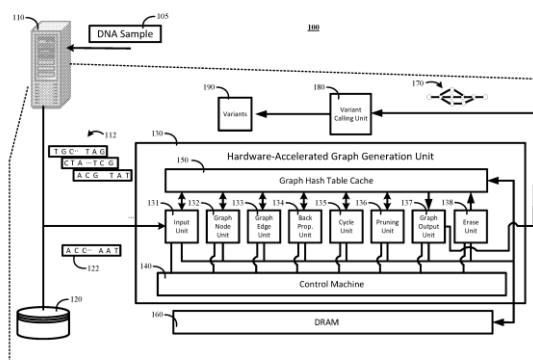
#### 54: METHODS FOR PRODUCING C2 TO C5 PARAFFINS USING A HYBRID CATALYST COMPRISING A HIGH ACIDITY MICROPOROUS COMPONENT

00: -

A method for preparing C2 to C5 paraffins including introducing a feed stream of hydrogen gas and a carbon-containing gas selected from carbon monoxide, carbon dioxide, and mixtures thereof into a reaction zone of a reactor. Converting the feed stream into a product stream that includes C2 to C5 paraffins in the reaction zone in the presence of a hybrid catalyst. The hybrid catalyst including a microporous catalyst component; and a metal oxide catalyst component. The metal oxide catalyst component including a metal component present on a metal oxide support material. The metal oxide support material includes at least one oxide of a metal selected from Group 4 of the IUPAC periodic table of elements. The product stream has a C3/C2 carbon molar ratio greater than or equal to 4.0.



acid sequences, generating a K-mer graph using the obtained first set of nucleic acid sequences and using a plurality of non-pipelined hardware logic units of a programmable logic device, and periodically updating, with a control machine, graph description data for the K-mer graph after performance of the one or more operations by each hardware logic unit.



21: 2021/09987. 22: 2021/12/03. 43: 2025/05/26  
51: G01N

71: OTR WHEEL SAFETY, INC.

72: SHUMKA, Thomas, SHUMKA, Jason

33: CA 31: 3,042,657 32: 2019-05-06

#### 54: INTEGRATED SYSTEM FOR ASSESSING AND MODELING INTEGRITY OF WHEELS AND RIMS OF OFF THE ROAD VEHICLES

00: -

A method and system for inspecting a steel wheel or steel rim of an off the road vehicle is provided. A method and system for predictive modeling of health and remaining useful life of a steel wheel or steel rim of the off the road vehicle is also provided. The off the road vehicles include vehicles at remote locations such as mine sites.

21: 2021/09965. 22: 2021/12/03. 43: 2025/04/07

51: G16B

71: ILLUMINA, INC.

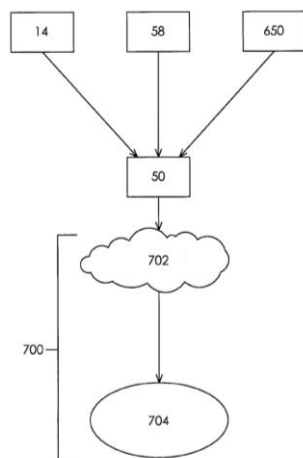
72: RUEHLE, Michael

33: US 31: 63/006,668 32: 2020-04-07

#### 54: HARDWARE ACCELERATED K-MER GRAPH GENERATION

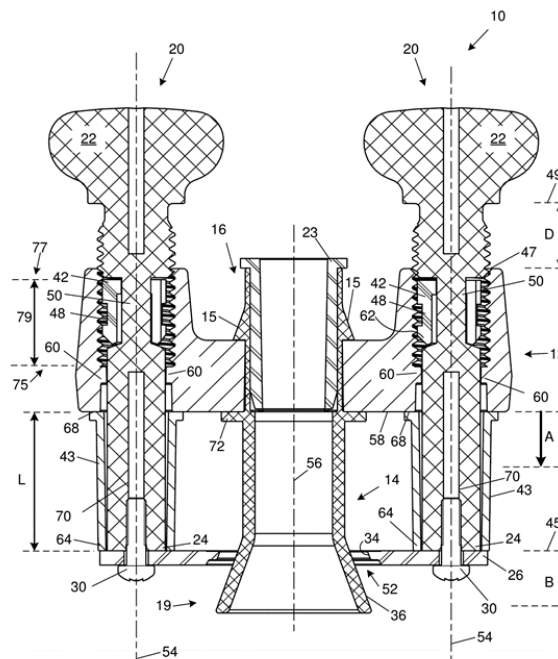
00: -

Methods, systems, and apparatus for hardware-accelerated generation of a K-mer graph using a programmable logic device. In one aspect, a method includes actions of obtaining a first set of nucleic



21: 2021/10360. 22: 2021/12/13. 43: 2025/04/07  
 51: A61B  
 71: INNOVATIVE MEDICAL TECHNOLOGY (PTY) LTD  
 72: PARKER, Elisabeth Regina, PARKER, Cyril Norman  
 33: ZA 31: 2019/03137 32: 2019-05-20  
**54: CIRCUMCISION DEVICE**  
 00: -

There is disclosed a circumcision device (10) comprising a support (12) having a glans penis locating member (14) mountable thereto. The support is provided with at least one pillar (20) that includes a proximal end (27) and a distal end (24), the distal end being fastened to a crush plate (26). The pillar facilitates movement of the crush plate relative to the support. A locking device (42) is moveable between a locked position and an unlocked position, such that axial movement of the pillar is inhibited in the locked position and enabled in the unlocked position. The locking device is at least partially hidden by the support. A blocking device (43) is interposed between the support and the crush plate to block movement of the crush plate towards the support past a predefined point (45) to inhibit the locking device from becoming exposed.



V-V

21: 2021/10476. 22: 2021/12/15. 43: 2025/04/23  
 51: C12R A61K  
 71: EOS2021 S.R.L.  
 72: SANTINI, Gino  
 33: IT 31: 102019000009951 32: 2019-06-24  
**54: COMPOSITION WITH ANTIBACTERIAL AND RE-EPITHELIALIZING ACTION INCLUDING PROBIOTICS**  
 00: -

The present invention relates to the strain of *Lactobacillus plantarum* NCIMB 43029, the strain of *Lactobacillus acidophilus* NCIMB 43030, a composition with both antibacterial and re-epithelializing action which includes *Lactobacillus plantarum* and *Lactobacillus acidophilus* and optionally *Streptococcus thermophilus* and/or *Bacillus amyloliquefaciens* intended to be used as a medicament for the re-epithelialisation of lesions or wounds, a bandage comprising said composition and kits comprising such a composition.

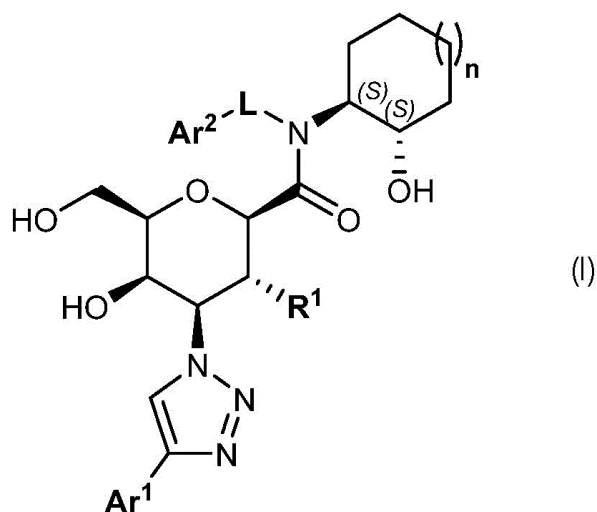
21: 2022/00181. 22: 2022/01/03. 43: 2025/04/16  
 51: A61K; A61P; C07D  
 71: Idorsia Pharmaceuticals Ltd  
 72: BOLLI, Martin, GATFIELD, John, GRISOSTOMI, Corinna, REMEN, Lubos, SAGER, Christoph, ZUMBRUNN, Cornelia  
 33: PCT/EP(CH) 31: 2019/071921 32: 2019-08-15



**54: 2-HYDROXYCYCLOALKANE-1-CARBAMOYL DERIVATIVES**

00: -

The present invention relates to compounds of Formula (I) wherein  $Ar^1$ ,  $Ar^2$ , L, n, and  $R^1$  are as described in the description, their preparation, to pharmaceutically acceptable salts thereof, and to their use as pharmaceuticals, to pharmaceutical compositions containing one or more compounds of Formula (I), and especially to their use as Galectin-3 inhibitors.



21: 2022/00397. 22: 2022/01/07. 43: 2025/04/16

51: C12N

71: CHO PLUS INC.

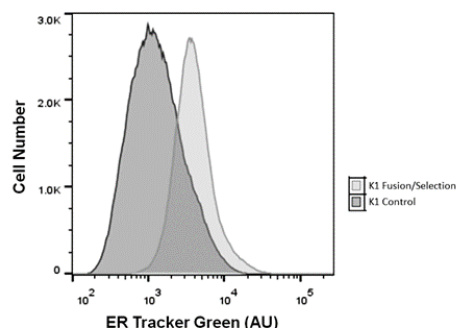
72: FORMAN, Lawrence

**54: HYBRID CELL LINES FOR HIGH LEVEL PRODUCTION OF PROTEIN FOR USE IN PHARMACEUTICALS AND OTHER COMMERCIAL PRODUCTS**

00: -

This disclosure provides improved cell lines for manufacture of protein-based pharmaceutical agents, considerably reducing the cost of commercial production. The cell lines are obtained by selecting cells from a mixed population for one or more characteristics that support protein production on a non-specific basis, such as the level of

endoplasmic reticulum, Golgi apparatus, and/or other desired phenotypic features, compared with other cells in the starting mixture. Particularly effective producer cell lines can be obtained by preparing the cells for functional selection by making cell hybrids. A gene encoding a therapeutic protein of interest may be transfected into the cells before or after one or more cycles of fusion and selection. Depending on the protein product being expressed, cell lines may be obtained that produce eight grams or more of protein per liter of culture fluid.



21: 2022/00827. 22: 2022/01/18. 43: 2025/04/23

51: A61K

71: The Global Alliance for TB Drug Development, Inc.

72: GOLD, Thomas Brad, LEONARD, Graham Stanley, TANEJA, Rajneesh

33: US 31: 62/876,257 32: 2019-07-19

**54: PRETOMANID COMPOSITIONS**

00: -

Described is an oral pharmaceutical composition including a granulate including a pharmaceutically effective amount of pretomanid or pharmaceutically acceptable solvate thereof. Such granulate may have a bulk density in a range of about 0.3 to 0.8 g/mL and/or a particle size distribution such that no more than about 30 wt.% of the granulate is retained on an ASTM #60 (250 $\mu$ m) sieve. In particular, the composition may provide that at least 40 wt.% of the pretomanid (e.g., at least 60 wt.%) is dissolved within 20 minutes as measured in a USP-II Apparatus at 37 $\pm$  2 $^{\circ}$  C in 0.5% hexadecyltrimethylammonium bromide (HDTMA) in 0.1N HCl.

21: 2022/01713. 22: 2022/02/09. 43: 2025/04/23

51: A61K A61P

71: ENYO PHARMA

72: VONDERSCHER, Jacky, ROY, Elise, DARTEIL, Raphaël, SCALFARO, Pietro

33: EP 31: 19186947.8 32: 2019-07-18

**54: IMPROVED TREATMENT USING EYP001**

00: -

The present invention relates to a method of treatment with an FXR agonist allowing to decrease pruritus and improve efficacy.

21: 2022/01946. 22: 2022/02/15. 43: 2025/04/10

51: C07K; C12N; A61K; A61P; G01N

71: SHANGHAI HANSOH BIOMEDICAL CO., LTD., JIANGSU HANSOH PHARMACEUTICAL GROUP CO., LTD.

72: HUA, HAIQING, BAO, RUDI

33: CN 31: 201910695597.9 32: 2019-07-30

**54: ANTI-BCMA ANTIBODY, ANTIGEN-BINDING FRAGMENT THEREOF AND MEDICAL USE THEREOF**

00: -

Provided are an anti-BCMA antibody, an antigen-binding fragment thereof, and a medical use thereof. Further provided are a chimeric antibody and a humanized antibody containing a CDR region of the anti-BCMA antibody, a pharmaceutical composition containing the anti-BCMA antibody or the antigen-binding fragment thereof, and the use of same as an anti-cancer drug and for treating autoimmune diseases. Particularly, provided are a humanized anti-BCMA antibody, and the use of same in the preparation of a drug for treating BCMA-mediated diseases or conditions and the use of same in disease detection and diagnosis.

21: 2022/02027. 22: 2022/02/17. 43: 2025/06/05

51: A01C

71: PRECISION PLANTING LLC

72: SCHLIPF, Ben, KLOPFENSTEIN, Matthew

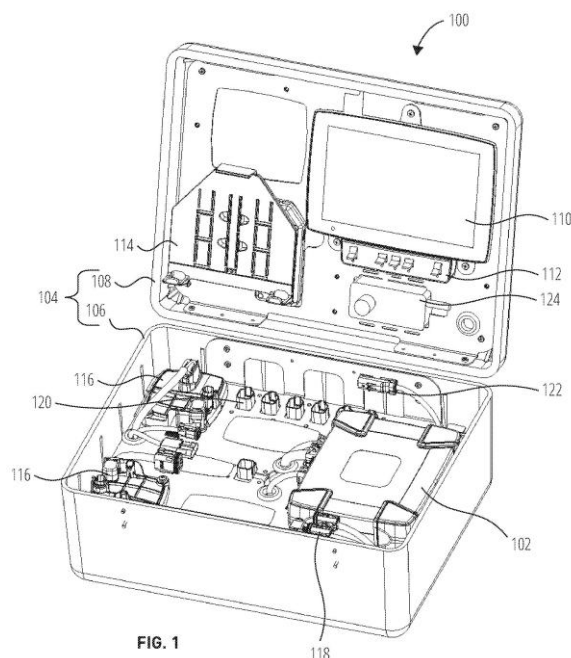
33: US 31: 62/911,715 32: 2019-10-07

**54: SYSTEMS AND METHODS FOR TESTING AGRICULTURAL IMPLEMENTS**

00: -

A portable system for testing or demonstrating an agricultural implement includes a case (104) carrying a power supply (206), a plurality of electrical couplers (120) configured to receive wiring harnesses associated with test devices, a simulator module (214) configured to simulate at least one operating parameter of the agricultural implement on which test devices are carried, and a control system. The control system includes a graphical user

interface (110) and processing circuitry operably electrically coupled to the graphical user interface (110) and to the wiring harnesses. The processing circuitry is configured to monitor and display information pertaining to operation of the test devices. A method for testing or demonstrating an agricultural implement includes connecting a test device an electrical coupler of the portable system, sending a control signal to the test device, and monitoring performance of the test device with the control system. The control signal is based at least in part on the data input.



21: 2022/02043. 22: 2022/02/17. 43: 2025/04/10

51: A01G; A01H; A01N; C12N; C12Q

71: BOOST BIOMES, INC.

72: PEARCE, JAMES, BACHER, JAMIE, GARCIA, VERONICA, ANDRIKOPOULOS, SOPHIA, FROLAND, JENSINA, TRINIDAD, KELLY, PIAMONTE, CHRISTY

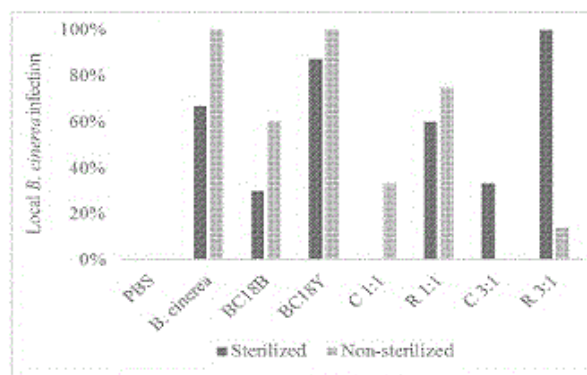
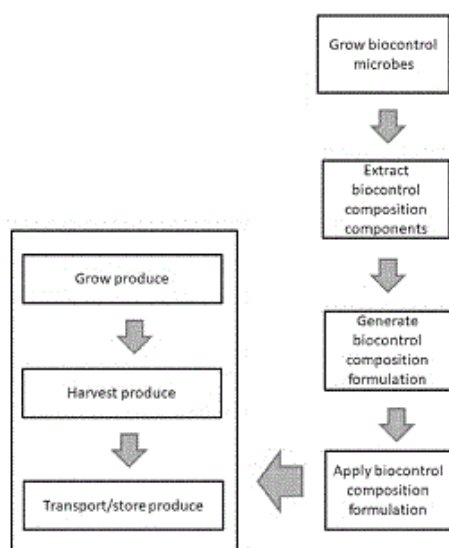
33: US 31: 62/885,114 32: 2019-08-09

**54: MICROBIAL COMPOSITIONS FOR USE WITH PLANTS FOR THE PREVENTION OR REDUCTION OF FUNGAL PATHOGENS**

00: -

Disclosed herein are biocontrol compositions against plant fungal pathogens and methods of use thereof for the prevention or reduction of crop loss or food spoilage. The biocontrol composition may comprise at least one microbe, or a secondary metabolite of

the at least one microbe, with anti-fungal or anti-pathogenic activity. The methods and compositions disclosed herein may prevent or inhibit the growth of a variety of different pathogens, including pathogens of the genus *Penicillium*. The biocontrol compositions may be applied to a plant, a seed, or a produce thereof or to a packaging material used to transport or store the produce.



21: 2022/02129. 22: 2022/02/18. 43: 2025/04/10  
51: C07D

71: FMC CORPORATION, FMC AGRO  
SINGAPORE PTE. LTD.

72: MAO, JIANHUA, MA, JINGYI, PENG, DONGJIE,  
HUO, CHUNYAN

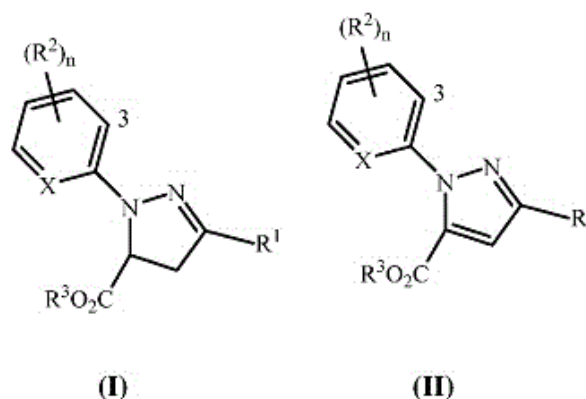
33: US 31: 62/888,667 32: 2019-08-19

33: US 31: 62/890,154 32: 2019-08-22

#### 54: PROCESS FOR THE PREPARATION OF CARBOXYLIC ACID DERIVATIVES OF 3-BROMO- 4,5-DIHYDRO-1H-PYRAZOLES

00: -

Disclosed a method for preparing compound of  
Formula (I) and (II) wherein  $R^1$ ,  $R^2$ ,  $R^3$ , X and n are  
as defined in the disclosure.



21: 2022/02130. 22: 2022/02/18. 43: 2025/04/10  
51: B65D; B67D

71: CARLSBERG BREWERIES A/S

72: BACH, PETER

33: EP 31: 19199007.6 32: 2019-09-23

#### 54: RFID-EQUIPPED PRESSURE CHAMBER FOR KEG

00: -

The present disclosure relates to a radio-frequency  
identification-equipped pressure chamber for a

21: 2022/02044. 22: 2022/02/17. 43: 2025/04/10  
51: F25B; F25D

71: BOOST BIOMES, INC.

72: GARCIA, VERONICA, ANDRIKOPOULOS,  
SOPHIA, FROLAND, JENSINA, TRINIDAD, KELLY,  
PIAMONTE, CHRISTY, PEARCE, JAMES,  
BACHER, JAMIE, BECKER, NATHANIEL T, VIRAG,  
ALEKSANDRA, BEDEKAR, AMRUTA J, MALINICH,  
ELIZABETH A

33: US 31: 62/886,883 32: 2019-08-14

#### 54: MICROBIAL COMPOSITIONS FOR THE PREVENTION OR REDUCTION OF GROWTH OF FUNGAL PATHOGENS ON PLANTS

00: -

Disclosed herein are biocontrol compositions against  
plant fungal pathogens and methods of use thereof  
for the prevention or reduction of crop loss or food  
spoilage.

beverage container, said pressure chamber comprising: a lid part; a base part, said lid and said base part defining a sealed inner space for accommodating and encapsulating said beverage container, said base part or lid part comprising an inner connector part adapted to be engaged to a corresponding beverage container outlet, said inner connector part arranged on an inside of the base part or lid part; and an outer substantially annular gasket part arranged on the inside of the base part or lid part and surrounding the inner connector part, said outer substantially annular gasket part adapted to be engaged with a corresponding hollow annular space of a closure of the beverage container, the outer substantially annular gasket part comprising a substantially planar annular antenna adapted to propagate radio waves to a radio- frequency identification tag arranged of an outer rim of the closure. The disclosure further relates to pressure system for a beverage comprising a collapsible beverage container and a pressure chamber, wherein the pressure system includes RFID capabilities.

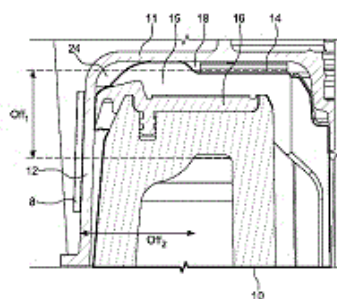


FIG. 1A

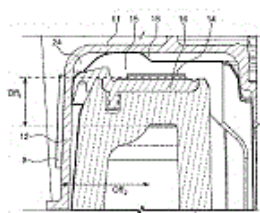


FIG. 1B

21: 2022/02380. 22: 2022/02/24. 43: 2025/04/10  
51: C07K; C12N; A61K; G01N; A61P  
71: AKESO BIOPHARMA, INC  
72: XIA, YU, WANG, ZHONGMIN MAXWELL,  
ZHANG, PENG, LI, BAIYONG

33: CN 31: 201911040745.X 32: 2019-10-29  
33: CN 31: 201910706137.1 32: 2019-07-30  
33: CN 31: 201911171754.2 32: 2019-11-25

#### **54: ANTI-HUMAN P40 PROTEIN DOMAIN ANTIBODY AND USE THEREOF**

00: -

Provided is an antibody for the treatment or prevention of autoimmune diseases, comprising a heavy chain variable region represented by SEQ ID NO: 1 or SEQ ID NO: 24, and a light chain variable region represented by SEQ ID NO: 6, SEQ ID NO: 11, SEQ ID NO: 13, SEQ ID NO: 15, SEQ ID NO: 17, or SEQ ID NO: 25.

21: 2022/02922. 22: 2022/03/10. 43: 2025/04/25  
51: A61K; A61Q

71: UNILEVER GLOBAL IP LIMITED

72: JIN, HUAJIN, LI, XIAOKE

33: EP 31: 19209021.5 32: 2019-11-14

33: CN 31: PCT/CN2019/111460 32: 2019-10-16

#### **54: ANTIPERSPIRANT EMULSION**

00: -

The present invention is in the field of antiperspirant compositions, in particular, compositions comprising antiperspirant actives. Disclosed is an antiperspirant composition free from aluminum and/or zirconium salt, and/or zinc based antiperspirant active, comprising an oil-in-water emulsion comprises oil phase and an emulsifier, wherein said oil phase comprises a lipophilic material having a melting point greater than 40°C; wherein said composition comprises at least 4 wt% of said lipophilic material.

21: 2022/03258. 22: 2022/03/18. 43: 2025/04/23

51: C22C; E21D

71: RAND YORK CASTINGS (PTY) LIMITED

72: CORBETT, Michael Robert

33: ZA 31: 2019/05563 32: 2019-08-23

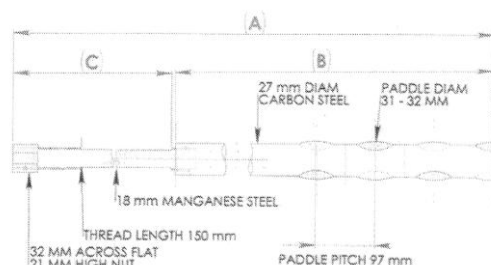
#### **54: ROCK BOLT ASSEMBLY**

00: -

A rock bolt assembly includes a first section made substantially from carbon steel (12) and a second section (14) made from high strength, austenitic steel with a manganese content in the range of 10% to 24%. The second section has an ultimate tensile strength of more than 575 MPa and exhibits elongation to failure of more than 10% of the effective yielding length. A connecting arrangement (16,18,24) operatively connects a first end region of the first section to a first end region of the second



section such that the first section and the second section function as a unitary rock bolt, in use. A rock bolt kit is also disclosed.



21: 2022/03259. 22: 2022/03/18. 43: 2025/05/30

51: G06Q

71: XU, Wei

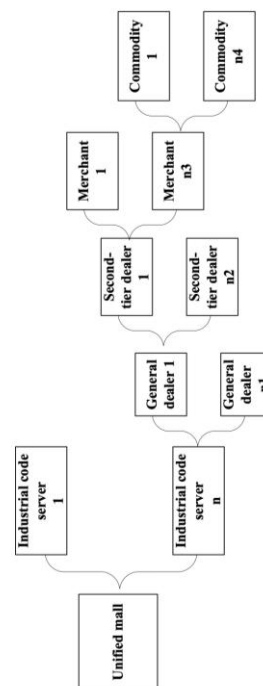
72: XU, Wei

33: CN 31: 201910927163.7 32: 2019-09-27

#### **54: UNIFIED ACCESS METHOD APPLYING DIGITAL HUMAN BEING CODECHAIN**

00: -

Disclosed is a unified access method applying a digital human being CodeChain, including: obtaining information corresponding to a first principal, and obtaining information corresponding to at least one further principal via a heterogeneous access route; identifying the Globe grid coding medium to obtain the information corresponding to the first principal: digital human being identification information of a partner corresponding to the industrial code server; a matter corresponding to the industrial code server and an Globe grid corresponding to the matter, wherein the Globe grid representing a right to share an income from the matter; and information representing association between the partner and the Globe grid and/or the digital human being identification information of the partner with the Globe grid. Through CodeChain access and forward, the present disclosure seamlessly links the offline real world to the online virtual world, thereby realizing omni-channel management and digitalized distribution of the circulation and dissemination value system. The Globe grid coding medium may further act as an embodiment of digitalized assets, wherein SGR serves as a unit of measurement for equivalent barter, which is circulated and exchanged in a system where respective industrial code servers are interconnected.



21: 2022/05114. 22: 2022/05/09. 43: 2025/05/29

51: C09K; C05G

71: LINCOLN UNIVERSITY

72: PODOLYAN, Andriy, RENNISON, David, COOK, Gregory, DI, Hong Jie, CAMERON, Keith Craig, BRIMBLE, Margaret Anne, FERGUSON, Scott, RONIMUS, Robert Starr, CARBONE, Vincenzo

33: NZ 31: 764712 32: 2020-05-25

33: NZ 31: 764783 32: 2020-05-26

33: NZ 31: 764780 32: 2020-05-29

33: NZ 31: 765203 32: 2020-06-08

33: NZ 31: 765211 32: 2020-06-08

33: NZ 31: 765239 32: 2020-06-09

33: NZ 31: 771062 32: 2020-12-14

33: NZ 31: 774851 32: 2021-04-09

33: NZ 31: 774955 32: 2021-04-12

#### **54: IMPROVEMENTS IN AND RELATING TO NITRIFICATION INHIBITORS**

00: -

The present invention generally relates to nitrification inhibitors and uses of same to prevent nitrate leaching or nitrous oxide emissions as well as increase pasture or crop production. The present invention also relates to nitrification inhibitors and formulations including same for direct or indirect application to soil or pasture.

21: 2022/05149. 22: 2022/05/10. 43: 2025/06/03

51: A61K; C07D; A61P

71: AGOMAB SPAIN, S.L.U.

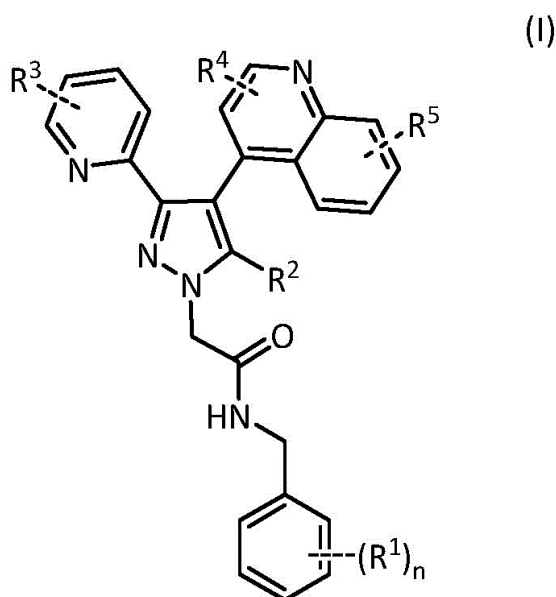


72: BOSSER ARTAL, Ramón, PAMPÍN CASAL, Begoña, PALOMINO LARIA, Julio Castro  
33: EP 31: 19383057.7 32: 2019-11-28

**54: BENZYLAMIDE DERIVATIVES AS INHIBITORS OF TRANSFORMING GROWTH FACTOR-BETA RECEPTOR I/ALK5**

00: -

The present invention relates to novel benzylamide derivatives of formula (I) to processes for the preparation of said compounds; to pharmaceutical compositions comprising said compounds and to said compounds for use in the treatment of pathological conditions or diseases that can improve by inhibition of transforming growth factor- $\beta$  receptor I (TGF $\beta$ RI)/ALK5, such as diseases and disorders associated to fibrotic conditions of gastrointestinal system, skin and eyes, to methods for the treatment and/or prevention of said diseases or pathological conditions and to combinations comprising said compounds and further comprising therapeutically effective amounts of other therapeutic agents useful for the treatment of said diseases or pathological conditions.



21: 2022/10638. 22: 2022/09/26. 43: 2025/04/11  
51: A61K; C07K; C12N

71: Nuo-Beta Pharmaceutical Technology (Shanghai) Co., Ltd.

72: HUANG, Fude, WANG, Wenan, HONG, Feng, ZHENG, Linan, JIAO, Changping, CAO, Luxiang, XIE, Yuyu

33: CN 31: 202010246586.5 32: 2020-03-31

**54: APPLICATIONS OF PI4K INHIBITOR IN INTRACELLULAR PROTEIN MISFOLDING-RELATED DISEASES AND LYSOSOMAL STORAGE DISEASES**

00: -

Provided are uses of a PI4KIIIa-specific inhibitor in preventing or treating intracellular protein misfolding-related diseases, also provided are uses of the PI4KIIIa-specific inhibitor in preventing or treating lysosomal storage diseases.

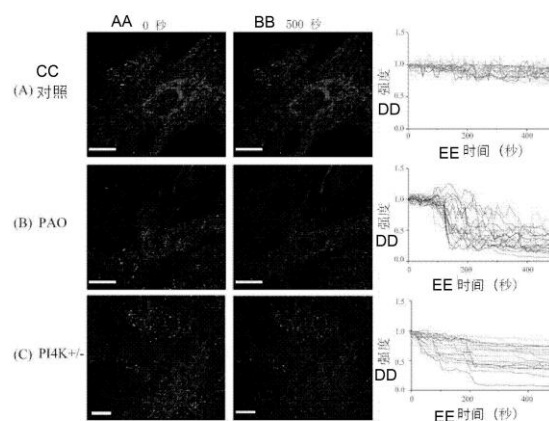


图1

AA 0 seconds  
BB 500 seconds  
CC (A) Control  
DD Intensity  
EE Time (seconds)

21: 2022/10640. 22: 2022/09/26. 43: 2025/04/11

51: A61K; A61P; C07F

71: Nuo-Beta Pharmaceutical Technology (Shanghai) Co., Ltd.

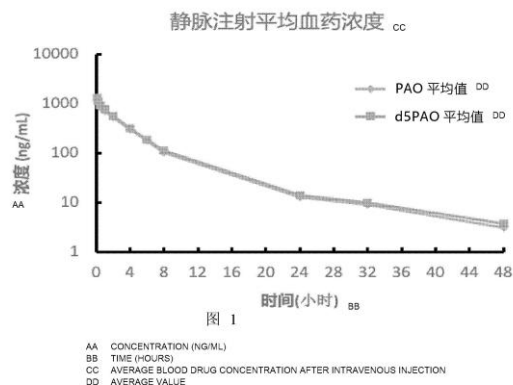
72: HUANG, Fude, WANG, Wenan, HONG, Feng, WEI, Wanguo, ZHANG, Jiangang, JIAO, Changping, CAO, Luxiang

33: CN 31: 202010246586.5 32: 2020-03-31

**54: DEUTERATED OXOPHENYLARSINE COMPOUND AND USE THEREOF**

00: -

Disclosed are a deuterated oxophenylarsine, or a pharmaceutically acceptable salt thereof, and a pharmaceutical composition containing a pharmaceutically acceptable carrier and the deuterated oxophenylarsine. The deuterated oxophenylarsine can be used for treating and preventing cancers and related diseases.



21: 2022/10651. 22: 2022/09/26. 43: 2025/05/26  
51: A23L; A61K; A61P  
71: BIOPRONEO B.V.

72: SPAANS, Edwin, GOUW, Martin Han Kuang Erwin, VAN BREDERODE, Floris Jan, NOUWEN, Mirena

33: NL 31: 2025261 32: 2020-04-02

33: NL 31: 2025263 32: 2020-04-02

#### 54: COMPOSITION AND METHOD FOR PRODUCING A COMPOSITION

00: -

The invention relates to a method for producing a composition, in particular a gel composition, more in particular a glucose gel, the method comprising the steps of providing an aqueous glucose solution, adding at least one first fraction of acid, adding a fraction of a gelling agent and mixing of the solution and gelling agent such that a composition is obtained. A container is subsequently filled with said composition.

21: 2022/10873. 22: 2022/10/03. 43: 2025/03/31  
51: C08L; C09J

71: SASOL SOUTH AFRICA LIMITED

72: MOABELO, Morris, VAN HELDEN, Pieter

33: ZA 31: 2020/03162 32: 2020-05-28

#### 54: USE OF HYDROTREATED SYNTHETIC FISCHER-TROPSCH-WAXES IN POLYOLEFIN-BASED HOT MELT ADHESIVES

00: -

The present invention is concerned with the use of hydrotreated synthetic Fischer-Tropsch waxes in polyolefin-based hot melt adhesive compositions, wherein the hydrotreated synthetic Fischer-Tropsch waxes modify the color degradation in the polyolefin-based hot melt adhesive compositions and are

characterized by a polydispersity between 1.02 and 1.06.

21: 2022/11070. 22: 2022/10/10. 43: 2025/04/11

51: A41D; A63B

71: George TFE SCP

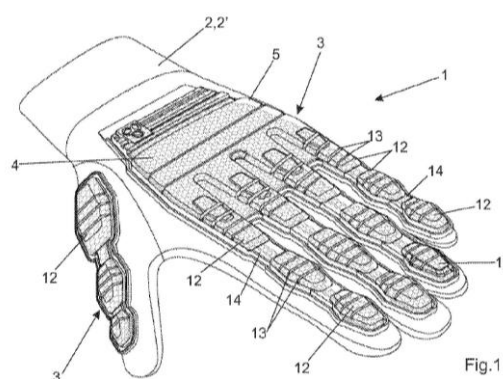
72: LLOYD, John George, STOREY, Piers Christian

33: EP(MC) 31: 20020197.8 32: 2020-04-24

#### 54: BODY-PROTECTOR

00: -

Body-protector (1,1') comprising: a wearable article (2,2'); a shock-absorbing pad (3) anchored to the wearable article (2,2'); wherein the shock-absorbing pad (3) comprises a first member (4) configured to absorb shock energy by an irreversible plastic deformation and a second member (5) configured to absorb shock energy by a reversible elastic deformation and wherein the first member (4) is embedded in the second member (5); wherein the first member (4) comprises a plurality of cells (6) interconnected each other via their sidewalls (7) to form a pliable sheet (8) configured to absorb energy through irreversible deformation of said sidewalls (7) or said interconnections in response to a compressive load applied to said sheet (8). Said wearable article (2) being a glove (2') wherein said shock-absorbing pad (3) is anchored to a back of the glove (2').



21: 2022/11264. 22: 2022/10/13. 43: 2025/04/11

51: B01D; B60H

71: Mercedes-Benz Group AG

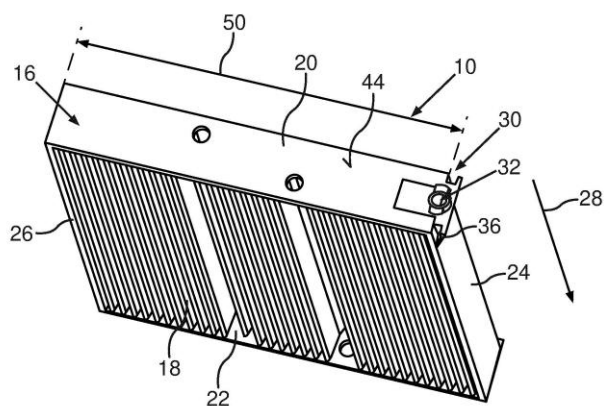
72: SCHUMACHER, Eric

33: DE 31: 10 2020 110 940.7 32: 2020-04-22

#### 54: FILTER ELEMENT FOR AN AIR FILTER DEVICE IN A MOTOR VEHICLE, AND AIR FILTER DEVICE

00: -

The invention relates to a filter element for an air filter device in a motor vehicle, having a frame (16), which surrounds a filter material (18) of the filter element (10) at least in some regions, wherein the frame (16) comprises an elastically deformable front wall (20), which extends perpendicular to an insertion direction (28) in which the filter element (10) can be inserted into a receiving space (14) of a housing (12) of the air filter device, and wherein at least one fastening element (32) is arranged on the frame (16), on which fastening element a cover (34) of the air filter device can be fixed, said cover being designed to close the receiving space (14), wherein at least one lead-in chamfer (36) is formed on the frame (16), by means of which lead-in chamfer, when the filter element (10) is inserted into the receiving space (14), the front wall (20) can be brought into an elastically deformed state in which a longitudinal extension (50) of the front wall is smaller than in a non-deformed starting state of the front wall (20), and the fastening element (32) is formed integrally with an intrinsically rigid component (30) of the filter element (10) which comprises the lead-in chamfer (36). The invention also relates to an air filter device having such a filter element.



21: 2022/11465. 22: 2022/10/19. 43: 2025/04/11  
51: A61K; A61P; C07D

71: C4X Discovery Limited

72: LUCAS, Cathy Louise, RAY, Nicholas Charles, SEWARD, Eileen Mary, HYND, George

33: GB 31: 2005863.2 32: 2020-04-22

#### **54: TETRAHYDROISOQUINOLINE COMPOUNDS AS NRF2 ACTIVATORS**

00: -

The present invention relates to compounds that are Nrf2 activators. The compounds have the structural

formula I defined herein. The present invention also relates to processes for the preparation of these compounds, to pharmaceutical compositions comprising them, and to their use in the treatment of diseases or disorders associated with Nrf2 activation.

21: 2022/12088. 22: 2022/11/04. 43: 2025/04/11  
51: B42D

71: SICPA HOLDING SA

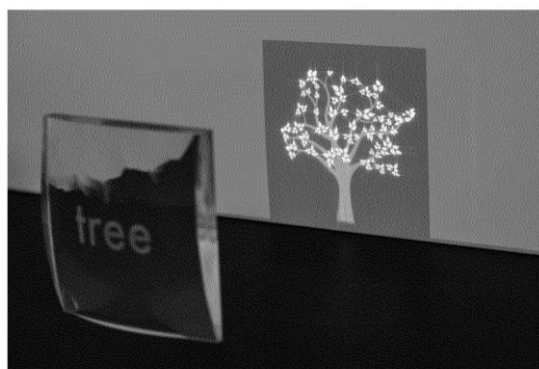
72: SCHWARTZBURG, Yuliy, TESTUZ, Romain, CALLEGARI, Andrea

33: EP(CH) 31: 20168421.4 32: 2020-04-07

#### **54: AN OPTICAL ELEMENT AND A METHOD OF VISUALLY AUTHENTICATING AN OBJECT**

00: -

The invention relates to an anti-copy optical element comprising a caustic layer and a mask layer configured to simultaneously display a visible image reproducing a reference image and form a projected image containing a visible caustic pattern reproducing a reference pattern, upon illumination of the optical element with a light source, the projected image being distinct from the reference image. The invention also relates to a method for designing a relief pattern of a light-redistributing surface of said caustic layer consistently with the transmission properties of the mask layer.



21: 2022/12146. 22: 2022/11/07. 43: 2025/04/01  
51: A61K; A61P; C07D

71: Halia Therapeutics, Inc.

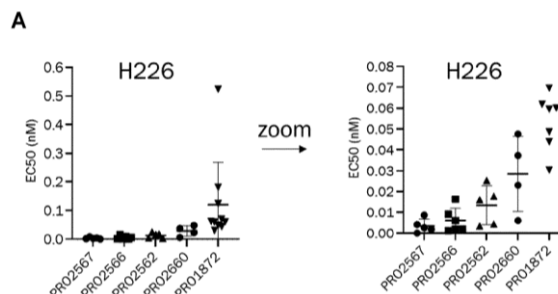
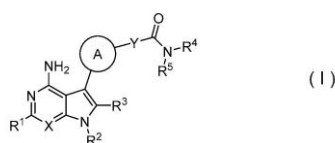
72: BEARSS, David James, KAUWE III, John Sai Keong, MOLLARD, Alexis Henri Abel

33: US 31: 63/022,159 32: 2020-05-08

#### **54: INHIBITORS OF NEK7 KINASE**

00: -

Compounds having activity as inhibitors of NEK7 are provided. The compounds have Structure (I): (I) or a pharmaceutically acceptable salt, stereoisomer or prodrug thereof, wherein, A, X, Y, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are as defined herein. Methods associated with preparation and use of such compounds, pharmaceutical compositions comprising such compounds and methods to modulate the activity of the NLRP3 inflammasome are also provided.



21: 2022/12359. 22: 2022/11/11. 43: 2025/05/06

51: A61K; C07K

71: NUMAB THERAPEUTICS AG

72: LICHTLEN, Peter, URECH, David, HESS, Christian, GUNDE, Tea, SIMONIN, Alexandre, WARMUTH, Stefan, BROCK, Matthias, CHATTERJEE, Bithi, JOHANSSON, Maria, SNELL, Daniel

33: EP 31: 20177337.1 32: 2020-05-29

**54: MULTISPECIFIC ANTIBODY**

00: -

The present invention relates to a multispecific antibody comprising two antibody-based binding domains, which specifically binds to mesothelin (MSLN-BD); and at least one antibody-based binding domain, which specifically binds to CD3 (CD3-BD); wherein said multispecific antibody does not comprise an immunoglobulin Fc region polypeptide, and wherein each of said MSLN-BD binds to mesothelin (MSLN) with a monovalent dissociation constant ( $K_D$ ) in the range of from 0.5 to 20 nM, when measured by SPR. The present invention further relates to nucleic acid sequence(s) encoding said multispecific antibody, vector(s) comprising said nucleic acid sequence(s), host cell(s) comprising said nucleic acid sequence(s) or said vector(s), and a method of producing said multispecific antibody. Additionally, the present invention relates to pharmaceutical compositions comprising said multispecific antibody and methods of use thereof.

21: 2022/12405. 22: 2022/11/14. 43: 2025/04/10

51: C21D; C22C

71: Baoshan Iron & Steel Co., Ltd.

72: WEI, Jiao, SUN, Quanshe, WANG, Shuangcheng, TAO, Xiaoyong, DAI, Xuecheng, LIN, Changqing, WANG, Junkai, WANG, Jintao, WANG, Mu

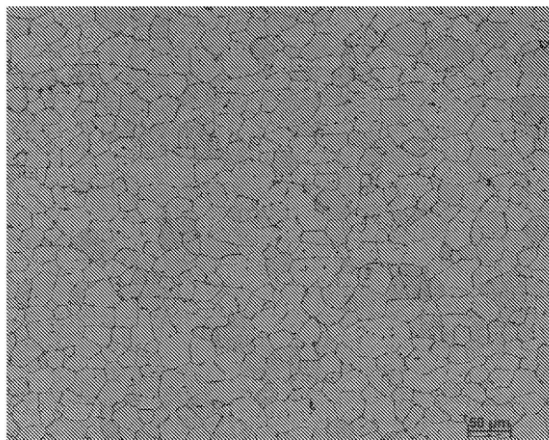
33: CN 31: 202010418537.5 32: 2020-05-18

**54: COLD-ROLLED ENAMEL STEEL FOR DEEP DRAWING INNER CONTAINER AND MANUFACTURING METHOD THEREFOR**

00: -

Disclosed in the present invention are cold-rolled enamel steel for deep drawing an inner container and a manufacturing method therefor. The cold-rolled enamel steel comprises the following chemical elements in percentage by mass: 0.02-0.06% of C, 0<Si≤0.08%, 0.1-0.7% of Mn, P≤0.055%, S≤0.03%, 0.01-0.07% of Al, 0.002-0.010% of N, 0.002-0.009% of B, 0.002-0.015% of Ti, 0.002-0.012% of Nb, 0.01-0.08% of Cr, and at least one of Cu, Ni, and Mo, wherein Cu+Ni+Mo≤0.40%. The cold-rolled enamel steel for deep drawing the inner container in the present invention is designed by using reasonable chemical components and a process, and has good formability, high strength after high-temperature firing, excellent weldability, and good fish-scaling resistance.





21: 2022/12408. 22: 2022/11/14. 43: 2025/04/10  
51: A61K; A61P; C07K

71: Eli Lilly and Company

72: BRENNAN, Seamus Patrick, FLORA, David Benjamin, KISSELEV, Valdislav, LIU, Wen, VALENZUELA, Francisco Alcides

33: US 31: 63/025,463 32: 2020-05-15

#### **54: EXTENDED TIME ACTION ACYLATED INSULIN COMPOUNDS**

00: -

The presently described compounds relate to the treatment of Type I and /or Type II diabetes and/or hyperglycemia. More particularly, the described compounds relate to extended time action acylated insulin compounds that lower blood glucose, pharmaceutical compositions containing such compounds, therapeutic uses of such compounds, and an intermediate compound used to make the acylated insulin compounds.

21: 2022/12450. 22: 2022/11/15. 43: 2025/04/10  
51: A01N; A01P

71: Bayer Aktiengesellschaft

72: GÖRTZ, Andreas, GÖHLICH, Frank, KLÜKEN, Agostinos Michael

33: EP(DE) 31: 20169947.7 32: 2020-04-16

#### **54: ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE**

00: -

The present invention relates to active compound combinations comprising as compound (A) methyl 2-[2-chloro-4-(4-chlorophenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoate, 2-[2-chloro-4-(4-chloro- phenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoic acid or a mixture thereof, as compound

(B) spiroxamine and at least one further fungicide (C) selected from inhibitors of the ergosterol synthesis and inhibitors of the respiratory chain at complex I or II, to compositions comprising such compound 10 combination, and to the use thereof as biologically active agents, especially for control of harmful microorganisms in crop protection and in the protection of industrial materials.

21: 2022/12452. 22: 2022/11/15. 43: 2025/04/10  
51: A01N; A01P

71: Bayer Aktiengesellschaft

72: GÖRTZ, Andreas, GÖHLICH, Frank, KLÜKEN, Agostinos Michael

33: EP(DE) 31: 20169954.3 32: 2020-04-16

#### **54: ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE**

00: -

The present invention relates to active compound combinations comprising as compound (A) methyl 2-[2-chloro-4-(4-chlorophenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoate, 2-[2-chloro-4-(4-chloro- phenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoic acid or a mixture thereof, at least one fungicide (B) selected from the group of inhibitors of the respiratory chain at complex I or II and at least one further fungicide (C) selected from the group of specified inhibitors of the respiratory chain at complex III, to compositions comprising such compound combination, and to the use thereof as biologically active agents, especially for control of harmful microorganisms in crop protection and in the protection of industrial materials.

21: 2022/12453. 22: 2022/11/15. 43: 2025/04/10  
51: A01N; A01P

71: Bayer Aktiengesellschaft

72: GÖRTZ, Andreas, GÖHLICH, Frank, KLÜKEN, Agostinos Michael

33: EP(DE) 31: 20169949.3 32: 2020-04-16

#### **54: ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE**

00: -

The present invention relates to active compound combinations comprising methyl 2-[2-chloro-4-(4-chlorophenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoate, 2-[2-chloro-4-(4-chlorophenoxy)-phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoic



acid or a mixture thereof, isoflucypram and at least one further fungicide (C), to compositions comprising such compound combination, and to the use thereof as biologically active agents, especially for control of harmful microorganisms in crop protection and in the protection of industrial materials.

21: 2022/12454. 22: 2022/11/15. 43: 2025/04/10

51: A01N; A01P

71: Bayer Aktiengesellschaft

72: GÖRTZ, Andreas, GÖHLICH, Frank, KLÜKEN, Agostinos Michael

33: EP(DE) 31: 20169944.4 32: 2020-04-16

**54: ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE**

00: -

The present invention relates to active compound combinations comprising as compound (A) methyl 2-[2-chloro-4-(4-chlorophenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoate, 2-[2-chloro-4-(4-chloro-phenoxy)phenyl]-2-hydroxy-3-(1,2,4-triazol-1-yl)propanoic acid or a mixture thereof, as compound (B) at least one fungicide selected from specified inhibitors of the ergosterol synthesis and fungicides capable of having a multisite action, and as compound (C) at least one further fungicide selected from inhibitors of the respiratory chain at complex I or II and specified inhibitors of the respiratory chain at complex III, to compositions comprising such compound combination, and to the use thereof as biologically active agents, especially for control of harmful microorganisms in crop protection and in the protection of industrial materials.

21: 2022/12574. 22: 2022/11/17. 43: 2025/04/10

51: E21B

71: Sandvik Mining and Construction Tools AB

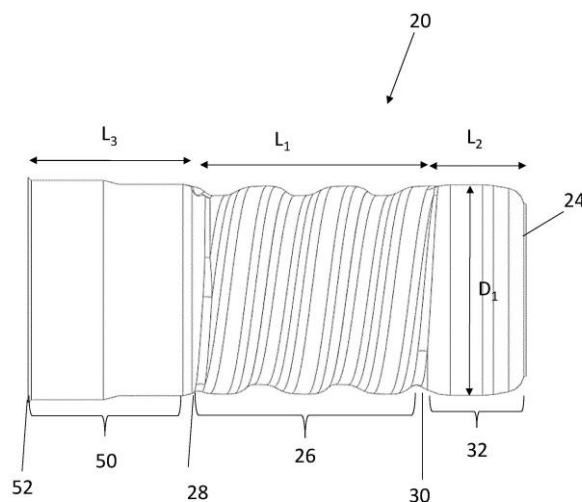
72: HAMMARGREN, John

33: EP(SE) 31: 20183128.6 32: 2020-06-30

**54: THREAD CLEARANCE**

00: -

A female portion to form part of a thread joint for a percussive drilling tool comprising a mounting sleeve having an axial end, wherein the mounting sleeve surrounds an internal cavity having an axial inner wall at the opposing end of the mounting sleeve compared to the axial end; wherein the mounting sleeve has at least one substantially cylindrical internally threaded section having a length  $L_1$ , a thread entrance towards the axial end and a thread exit towards the axial inner wall; a thread clearance section positioned between the axial inner wall and the thread exit having a length  $L_2$  and a diameter  $D_1$ ; a guiding section positioned between the thread entrance and the axial end of the sleeve having a length,  $L_3$ ; characterized in that:  $0 \text{ mm} < L_3 - L_2 < 12 \text{ mm}$ .



21: 2022/12637. 22: 2022/11/21. 43: 2025/04/10

51: A23N; G05B; G05D

71: Société des Produits Nestlé S.A.

72: DUBIEF, Flavien Florent, BIGLER, Nicolas

33: EP(CH) 31: 20171659.4 32: 2020-04-27

**54: METHOD OF ROASTING**

00: -

The invention concerns a method of roasting coffee beans with a roasting apparatus (X), said roasting apparatus comprising a control system (80) configured to control the heating device (2) and to reproduce roasting recipes, said control implementing a feedback loop regulation based on the temperature  $T_{reg}$  measured by the at least one temperature probe (5), wherein, before roasting coffee beans by reproducing coffee beans roasting

recipes defined with one specific master roasting apparatus (M), the feedback loop regulation is adjusted, said operation of adjustment comprising the step applying pre-determined correction KC to the feedback loop regulation.

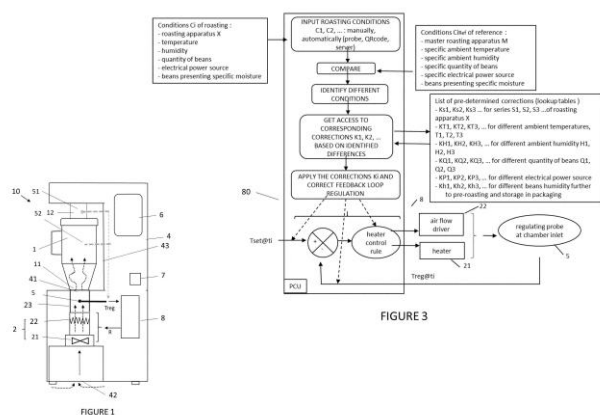


FIGURE 3

21: 2022/12638. 22: 2022/11/21. 43: 2025/04/10  
51: A23F; A23N

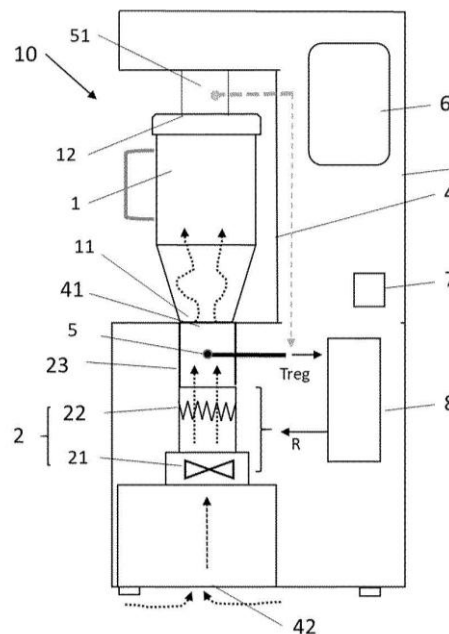
71: Société des Produits Nestlé S.A.  
72: DUBIEF, Flavien Florent, BIGLER, Nicolas,  
PINDJUROV, Riste, MARTIN, Vincent  
33: EP(CH) 31: 20171665.1 32: 2020-04-27

#### 54: PROCESS OF CALIBRATION OF A ROASTING APPARATUS

00: -

The invention concerns process of calibration of a coffee beans roasting apparatus in order to reproduce coffee beans roasting recipes defined with one specific master roasting apparatus, said calibration process comprising the steps of : a - introducing at least one second temporary temperature probe inside the chamber of the roasting apparatus, b - controlling the heating device to reproduce a preset curve R said control being based on the temperature Treg regulated by the at least one first temperature probe, c - during the reproduction of the preset curve Rset, measuring the temperature Tcal in function of time inside the chamber, d - comparing the temperature Tcal@ti with the temperature Tref@ti of a pre-determined calibration curve Rref obtained with the master roasting apparatus (M), said calibration curve Rref representing the temperature Tref measured in the chamber of the specific master apparatus (M) while controlling the heating device of the master apparatus to reproduce said preset curve Rset, e - based on this comparison, calibrating the roasting

apparatus by applying a correction, to the temperature Treg regulated by the first temperature probe inside the control system of the roasting apparatus.



21: 2022/12715. 22: 2022/11/22. 43: 2025/04/10  
51: B41M; C09D

71: SICPA HOLDING SA

72: PITTET, Hervé, DEMARTIN MAEDER, Marlyse,  
VEYA, Patrick, GRIGORENKO, Nikolay, OSWALD,  
Andre, RICHERT, Michelle

33: EP(CH) 31: 20171031.6 32: 2020-04-23

#### 54: PROCESS FOR PRODUCING DICHROIC SECURITY FEATURES FOR SECURING VALUE DOCUMENTS

00: -

The present invention provides a process for manufacturing a security feature for securing a value document, wherein said security feature exhibits a blue color upon viewing in transmitted light and a metallic yellow color upon viewing in incident light. The manufacturing process comprises the following steps: a) printing a specific UV-Vis radiation curable ink on a transparent or partially transparent region of a substrate of a value document; b) heating the ink layer obtained at step a) at a temperature of about 55 °C to about 100 °C for at least one second so that the ink layer exhibits a metallic yellow color upon viewing in incident light; and c) UV-Vis curing the ink layer obtained at step b) to form the security feature. The manufacturing process according to the present

invention enables the expedient production of security features exhibiting a blue color upon viewing in transmitted light and a metallic yellow color upon viewing in incident light and is particularly useful for industrial printing of value documents.

21: 2022/13002. 22: 2022/11/30. 43: 2025/04/10

51: F28D; F28F

71: HiRef S.p.A.

72: FACCIO, Matteo, POLETTO, Fabio, SIMONATO, Luca, MANTOVAN (Deceased), Mauro  
33: IT 31: 102021000030377 32: 2021-12-01

#### **54: AIR COOLER FOR LIQUIDS**

00: -

An air cooler for liquids has at least two refrigeration modules (2, 3) mounted in series, each provided with two heat exchangers (10) extending in respective containing planes (P) arranged so as to form a V, with a ventilation unit (12) to generate an air flow through the heat exchangers (10) and with a hydraulic feeding unit (14) to feed a liquid to be cooled through the heat exchangers (10); the hydraulic feeding units (14) of the two refrigeration modules (2, 3) being provided with respective delivery manifolds (15) connected to one another to feed the liquid to be cooled to the relative heat exchangers (10) and with respective return manifolds (16) connected to one another to receive the liquid cooled by the relative heat exchangers (10).

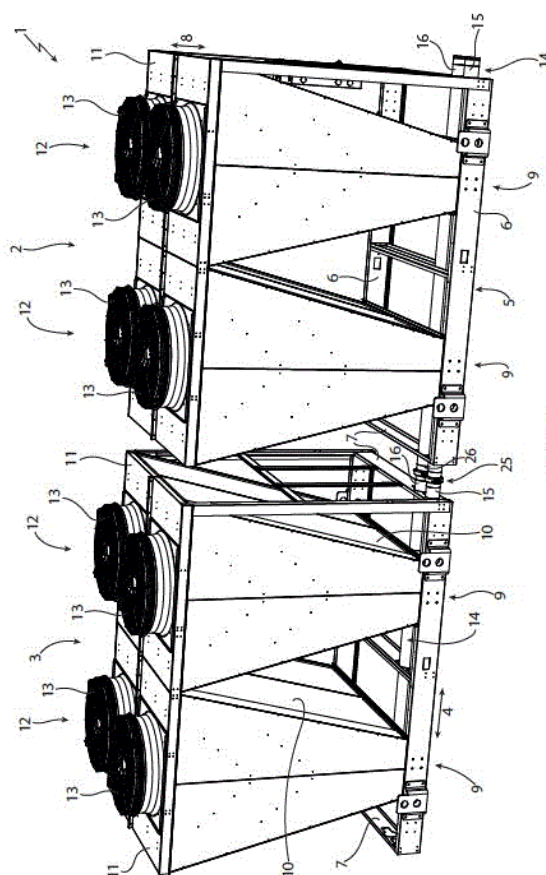


Figure 1

21: 2022/13154. 22: 2022/12/05. 43: 2025/04/10

51: A01N; A61K; C07D

71: Bayer Aktiengesellschaft

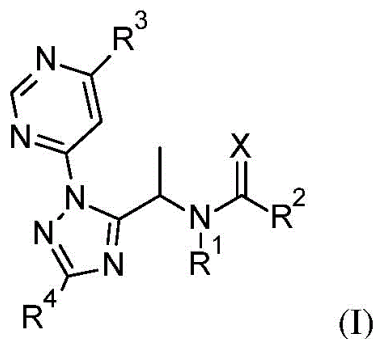
72: JESCHKE, Peter, FÜSSLEIN, Martin, SCHWARZ, Hans-Georg, TELSER, Joachim, CANCHO GRANDE, Yolanda, ARLT, Alexander, MÜLLER, Steffen, EBBINGHAUS-KINTSCHER, Ulrich, LÖSEL, Peter, LINKA, Marc, DAMIJONAITIS, Arunas Jonas, HEISLER, Iring, TURBERG, Andreas, MANDZHULO, Oleksandr

33: EP(DE) 31: 20173275.7 32: 2020-05-06

#### **54: NOVEL HETEROARYL-TRIAZOLE COMPOUNDS AS PESTICIDES**

00: -

The present invention relates to novel heteroaryl-triazole compounds of the general formula (I), in which the structural elements X, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> have the meaning given in the description, to formulations and compositions comprising such compounds and for their use in the control of animal pests including arthropods and insects in plant protection and to their use for control of ectoparasites on animals.



21: 2022/13419. 22: 2022/12/12. 43: 2025/04/11

51: G01R; H05K

71: OMICRON electronics GmbH

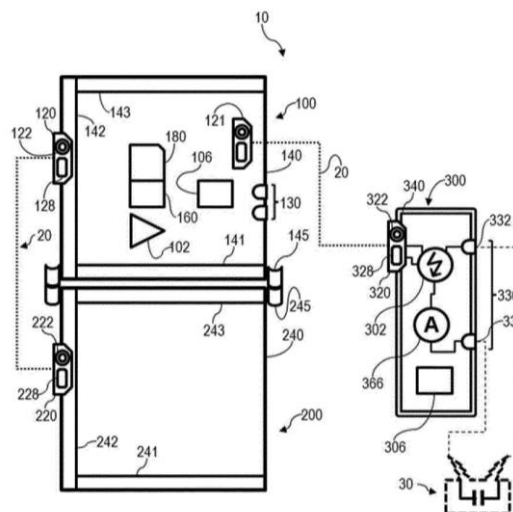
72: STUDER, Klaus, KAUFMANN, Reinhard, RÄDLER, Michael, UNTERER, Boris, DE VILLIERS, Wernich, KUKUK, Matthias, FEUSTEL, Felix, BITSCHNAU, Lukas, SCHEDLER, Horst

33: AT 31: A50416/2020 32: 2020-05-13

**54: TEST SYSTEM AND MAIN DEVICE AND ADDITIONAL DEVICE THEREOF FOR TESTING AN ELECTRIC DEVICE**

00: -

The invention relates to a test system (10) for testing an electric device (30), in particular a high-voltage device, having a portable main device (100) with a housing (140), an electric connection assembly (120, 121), and a mechanical connection assembly (145) and having a portable additional device (200, 300) with a separate housing (240, 340), an electric connection assembly (220, 320), and a mechanical connection assembly (245). The main device (100) can be mechanically connected to the additional device (200, 300) in a releasable manner by coupling the mechanical connection assemblies (145, 245) in order to form a structural unit, wherein the main device (100) can be electrically connected to the additional device (200, 300) via the first electric connection assemblies (120, 121, 220, 320).



21: 2022/13507. 22: 2022/12/14. 43: 2025/04/02

51: C08F; G01N

71: STELLENBOSCH UNIVERSITY

72: KLUMPERMAN, Lubertus, KUYLER, Gestél Christine

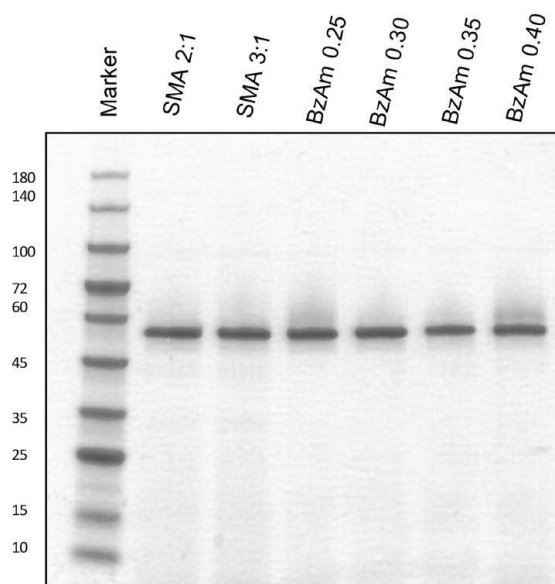
33: GB 31: 2118192.0 32: 2021-12-15

**54: TERPOLYMERS FOR LIPID NANODISC FORMATION**

00: -

Terpolymers comprising optionally at least partially substituted styrene repeat units, N-alkylmaleimide repeat units and repeat units selected from the group consisting of maleic anhydride repeat units, maleic acid repeat units or maleic anhydride derivative repeat units and having a narrow molecular weight distribution are provided. The terpolymers may be used to solubilize lipid bilayers to form lipid nanodiscs and isolate membrane proteins.





21: 2022/13569. 22: 2022/12/14. 43: 2025/04/11

51: G01N; G06T

71: F. Hoffmann-La Roche AG

72: ALPEROWITZ, Lukas, BERG, Max, HAILER, Fredrik, LIMBURG, Bernd

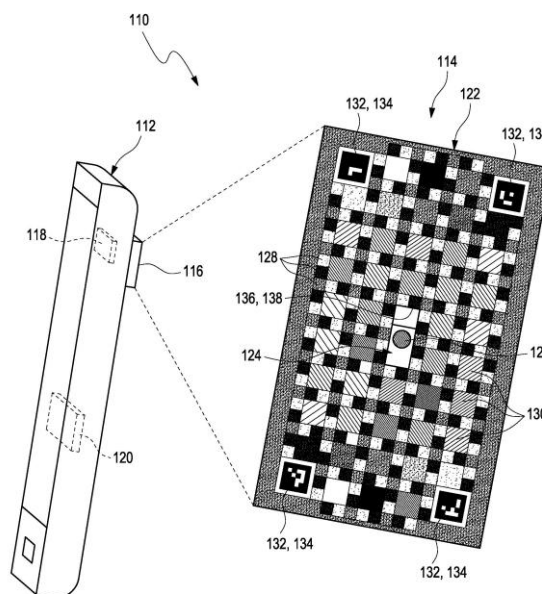
33: EP(CH) 31: 20184181.4 32: 2020-07-06

**54: METHOD OF PERFORMING AT LEAST ONE ANALYTICAL MEASUREMENT BY USING A MOBILE DEVICE**

00: -

A method of performing at least one analytical measurement is disclosed. The method comprises using using a mobile device (112) having at least one camera (116). The method further comprises: i) capturing, by using the camera (116), a time series of images of at least a part of at least one medical article (114); ii) deriving, from the time series of images, image-derived position information on a relative position of the mobile device (112) and the medical article (114), thereby generating a first time series of position information; iii) capturing, by using at least one sensor device (118) of the mobile device (112), measurement information on the relative position of the mobile device (112) and the medical article (114); iv) deriving, from the measurement information, measurement-derived position information on the relative position of the mobile device (112) and the medical article (114), thereby generating a second time series of position information; v) generating an augmented time series of position information by combining the first time series of position information and the second time

series of position information; and vi) providing guidance to a user, based on the augmented time series of position information, for changing the relative position of the mobile device (112) and the medical article (114) in order to have the user bring the mobile device (112) into at least one relative target position of the mobile device (112) and the medical article (114). Further, a mobile device (112), a kit (110) for performing at least one analytical measurement, a computer program and a computer-readable storage medium is disclosed.



21: 2023/01503. 22: 2023/02/06. 43: 2025/04/23

51: G01S; H04W

71: ZTE CORPORATION

72: DOU, Jianwu, FANG, Min, CHEN, Yijian, ZHANG, Nan, PENG, Lin

33: CN 31: 202010615392.8 32: 2020-06-30

**54: POSITIONING METHOD, DEVICE AND SYSTEM FOR TRANSMITTING DEVICE, AND STORAGE MEDIUM AND ELECTRONIC DEVICE**

00: -

Provided are a positioning method, device and system for a transmitting device, and a storage medium and an electronic device. The method comprises: determining adjustment and control information by means of a receiving device, wherein the adjustment and control information comprises time sequence information and adjustment and control direction information, and the adjustment and control direction information is used for indicating that a meta-surface control unit adjusts a reflection



coefficient of a meta-surface to a target reflection coefficient corresponding to a preset direction; transmitting a pilot signal to the meta-surface by means of a transmitting device; sending the adjustment and control information to the meta-surface control unit by means of the receiving device, wherein the adjustment and control information is used for indicating that the meta-surface control unit adjusts the reflection coefficient of the meta-surface to the target reflection coefficient corresponding to the preset direction within a target time period; and determining a signal measurement result corresponding to the preset direction, and positioning the transmitting device according to the preset direction and the signal measurement result.



5302 Determine adjustment and control information by means of a receiving device, wherein the adjustment and control information comprises time sequence information and adjustment and control direction information. The adjustment and control direction information is used for indicating that a meta-surface control unit adjusts a reflection coefficient of a meta-surface to a target reflection coefficient corresponding to a preset direction, such that a beam in the direction from the receiving device to the meta-surface forms a reflection beam of the preset direction on the meta-surface, the preset direction is a direction indicated by preset direction information corresponding to a target time period, the preset direction points to a target area, the time sequence information comprises the target time period, and the adjustment and control direction information comprises the preset direction information.

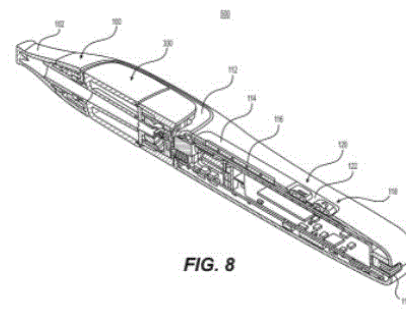
5304 Transmit a pilot signal to the meta-surface by means of a transmitting device, wherein the transmitting device is located in the target area.

5306 Send the adjustment and control information to the meta-surface control unit by means of the receiving device, wherein the adjustment and control information is used for indicating that the meta-surface control unit adjusts the reflection coefficient of the meta-surface to the target reflection coefficient corresponding to the preset direction within the target time period.

5308 Determine a signal measurement result corresponding to the preset direction, and position the transmitting device according to the preset direction and the signal measurement result, wherein the signal measurement result is a measurement result that is obtained by means of the receiving device receiving a received target signal, the target pilot signal is reflected by the meta-surface that is adjusted to the target reflection coefficient and is then received by the receiving device, and the pilot signal transmitted by the transmitting device comprises the target pilot signal.

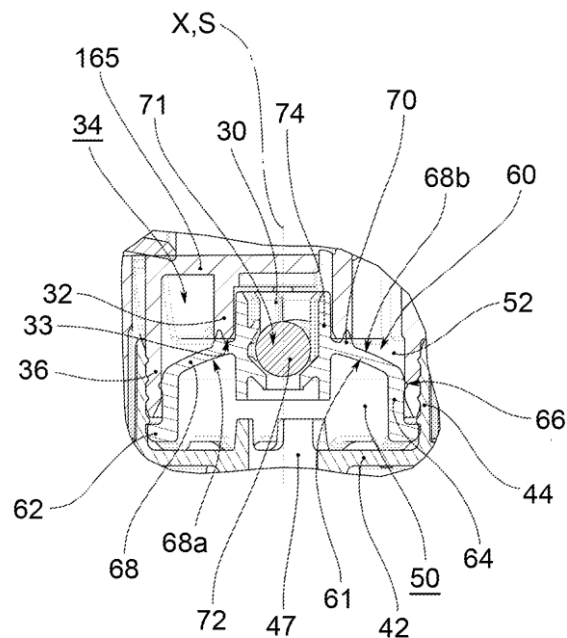
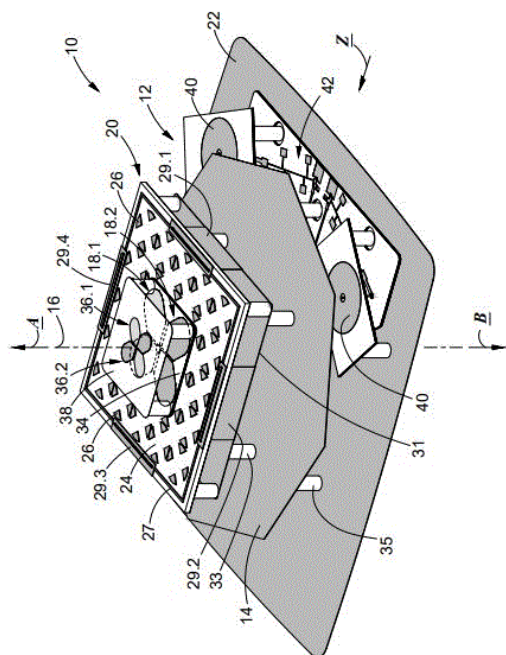
21: 2023/01575. 22: 2023/02/08. 43: 2025/05/28  
51: A24F  
71: PHILIP MORRIS PRODUCTS S.A.  
72: BACHE, Terrance, Theodore, GALLAGHER, Niall, HAWES, Eric, KEEN, Jarrett, LAU, Raymond, W., SUNDAR, Rangaraj, S.  
33: US 31: 16/929,452 32: 2020-07-15  
**54: NICOTINE ELECTRONIC VAPING DEVICES HAVING NICOTINE PRE-VAPOR FORMULATION LEVEL DETECTION AND AUTO SHUTDOWN**  
00: -

A device assembly includes a controller (2105), which is configured to control a nicotine electronic vaping device (500) to output an indication of a current level of a nicotine pre-vapor formulation in a nicotine reservoir of a nicotine pod assembly (300) in response to determining that an aggregate amount of nicotine pre-vapor formulation drawn from the nicotine reservoir or an aggregate amount of vaporized nicotine pre-vapor formulation is greater than or equal to the at least one nicotine pre-vapor formulation level threshold.



21: 2023/01766. 22: 2023/02/14. 43: 2025/05/30  
51: H01Q  
71: POYNTING ANTENNAS (PTY) LIMITED  
72: NITCH, Derek, Colin, MOYCE, Shane Alexander  
33: ZA 31: 2022/02053 32: 2022-02-18  
**54: BROAD BAND DIRECTIONAL ANTENNA**  
00: -

A broad band directional antenna 10 comprises a patch antenna 12 comprising a conductive and non-circular patch 14 and having a main axis 16 extending perpendicularly to the patch. The antenna further comprises at least one active radiator 18.1, 18.2 which is axially spaced from the patch 14 in a first direction A. A metamaterial ground plane assembly 20 is located between the patch antenna 12 and the at least one active radiator 18.1, 18.2. The patch antenna 12 comprises a conductive ground plane 22 which is axially spaced from the patch 14 in a second and opposite direction B.



21: 2023/01913. 22: 2023/02/16. 43: 2025/05/28  
51: B05B

71: GUALA DISPENSING S.P.A.

72: ALLUIGI, Riccardo

33: IT 31: 102020000028214 32: 2020-11-24

**54: TRIGGER DISPENSING DEVICE**

00: -

A trigger dispensing head (10) applicable to a bottle comprises valve means comprising a dome-shaped valve body (60) provided with an elastically deformable membrane (68), comprising an annular sealing ring (70) that forms a head seal of pre-stressing valve means.

21: 2023/01914. 22: 2023/02/16. 43: 2025/06/06

51: B32B; C08K; C08L

71: AQUAPAK IP LIMITED

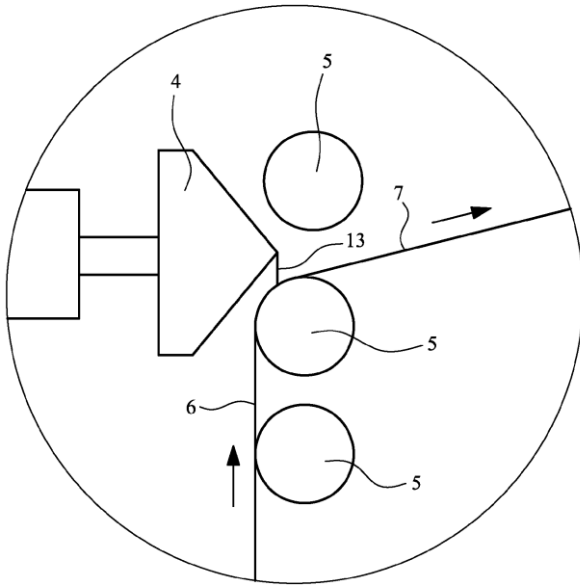
72: WILLIAMS, John, GRIFFITHS, Sian,  
ASHWORTH, Robert, MEADOWS, David Lee

33: EP 31: 20192950.2 32: 2020-08-26

**54: POLYVINYL ALCOHOL COATED  
CELLULOSIC PRODUCTS**

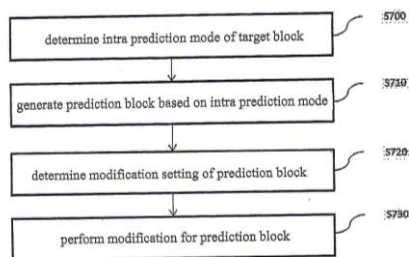
00: -

A method of manufacture of a coated material comprising the steps of: providing a cellulosic substrate; melting a polyvinyl alcohol polymer, wherein the polyvinyl alcohol polymer has a degree of hydrolysis of 90% or greater and a melting point in the range of 180°C to 225°C; extruding the melted polyvinyl alcohol polymer to form a molten polyvinyl alcohol polymeric film; applying the molten film directly to the surface of the substrate; and allowing the film to solidify on the surface to form a coated material.



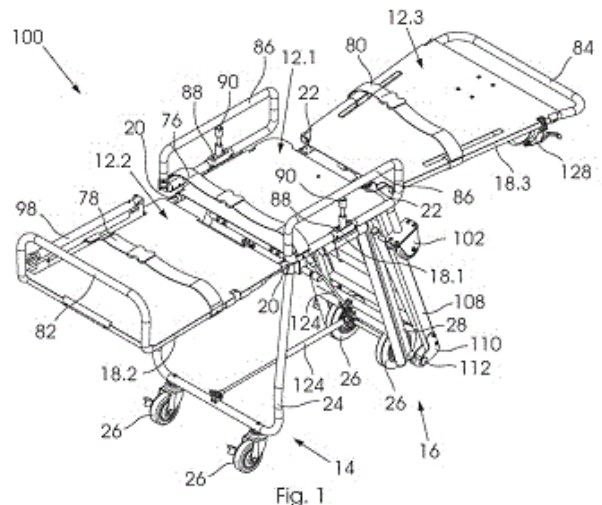
21: 2023/01938. 22: 2023/02/02. 43: 2025/06/05  
 51: H04N  
 71: B1 INSTITUTE OF IMAGE TECHNOLOGY, INC.  
 72: KIM, Ki Baek  
 33: KR 31: 10-2018-0107256 32: 2018-09-07  
**54: IMAGE ENCODING/DECODING METHOD AND DEVICE**

00: -  
 Image encoding/decoding method and device according to the present invention enable deciding of an intra-screen prediction mode of a target block, generation of a prediction block of the target block on the basis of the intra-screen prediction mode, and correction of the generated prediction block.



21: 2023/02156. 22: 2023/02/21. 43: 2025/04/10  
 51: A61G  
 71: UNIVERSITY OF JOHANNESBURG  
 72: MOSELEY, ASHTON MARGARETE, WHITE, DOMINIC  
 33: ZA 31: 2020/04481 32: 2020-07-21  
**54: PATIENT TRANSPORT APPARATUS**  
 00: -

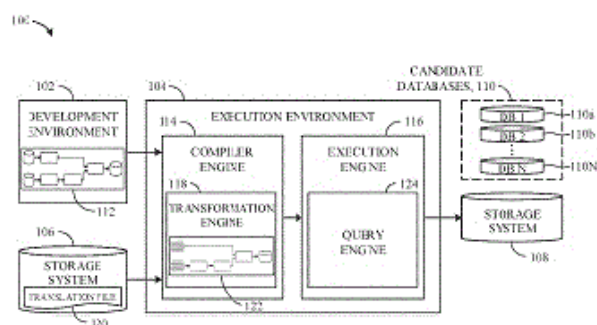
A patient transport apparatus (100, 10) which is configurable in at least three modes of operation, according to specific operational requirements. The apparatus (100, 10) comprises a patient support assembly 12 and at least a first and second wheel arrangement (14, 16). The patient support assembly 12 comprises a main portion 12.1, and a first and second portion (12.2, 12.3) extending from opposite sides of the main portion 12.1. The first and second portions (12.2, 12.3) are independently adjustable relative to the main portion 12.1. The first and second wheel arrangements (14, 16) are independently adjustable relative to the patient support assembly 12. The patient transport apparatus (100, 10) is configurable as a stretcher, as a chair (or wheelchair) and as a stair chair, by relative adjustment of the patient support assembly 12 and the first and second wheel arrangements (14, 16).



21: 2023/02160. 22: 2023/02/21. 43: 2025/04/10  
 51: G06F  
 71: AB INITIO TECHNOLOGY LLC  
 72: DICKIE, GARTH, SCHECHTER, IAN  
 33: US 31: 17/012,633 32: 2020-09-04  
**54: TRANSFORMING OPERATIONS OF A COMPUTER PROGRAM FOR EXECUTION AT A DATABASE**

00: -  
 A method includes executing a program that specifies operations and accessing a translation file that includes instructions for translating the language of the program into a language of a database. The translation file specifies operations in the language

of the program that are supported by the database and the semantic meaning of the supported operations in the language of the database. Operations of the program that are unsupported by the database are processed by the program. Operations of the program that are supported by the database are determined from the translation file, and a portion of the program representing the supported operations is translated, using the translation file, into the language of the database and transmitted to the database. Data resulting from execution, within the database, of the translated portion of the program representing the operations that are supported by the database is received by the program.



21: 2023/02557. 22: 2023/02/24. 43: 2025/04/10  
51: C08G; C08K; C08L  
71: DANIMER IPCO, LLC  
72: JOHNSON, ADAM, SAMANTA, SATYABRATA  
33: US 31: 63/058,563 32: 2020-07-30

#### **54: BIOBASED MATERIAL FOR CONSUMER GOODS PACKAGING**

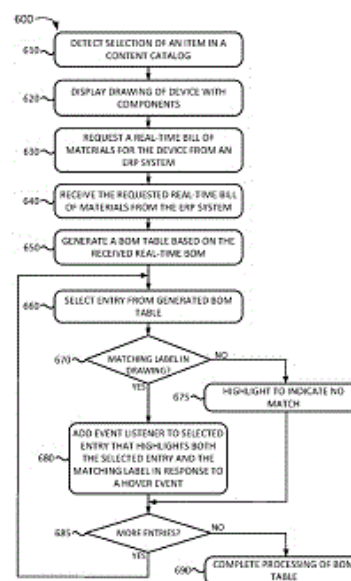
00: -  
A biodegradable polymeric composition for food contact applications is disclosed. This polymeric composition includes at least (1) from about 5 weight percent to about 95 weight percent poly(hydroxyalkanoates); (2) from about 5 weight percent to about 95 weight percent of at least one biodegradable polymer selected from the group consisting of poly(butylene succinate), poly(butylene succinate-co-adipate), poly(butylene adipate-co-terephthalate), poly(caprolactone), poly(lactic acid), cellulose esters (such as cellulose acetate) thermoplastic starch, and mixtures thereof; and (3) from about 0.1 weight percent to about 5 weight percent of a nucleating agent.

21: 2023/02894. 22: 2023/02/27. 43: 2025/04/10  
51: G06Q

71: CORNELL PUMP COMPANY LLC  
72: FLEMING, GRAYSON, JOHNSON, ERICK, ENTERLINE, ANDREW, LINDEMAN, ADAM  
33: US 31: 63/077,961 32: 2020-09-14

#### **54: INTERACTIVE PARTS DRAWINGS WITH A REAL-TIME BILL OF MATERIALS**

00: -  
A computer device may include a memory storing instructions and a processor configured to execute the instructions to detect a selection of an item in a content catalog and display a drawing of a device corresponding to the selected item, wherein the device includes a set of components. The processor may be further configured to request a real-time bill of materials (BOM) corresponding to the device from an Enterprise Resource Planning (ERP) system, in response to detecting the selection of the item; receive the requested real-time BOM from the ERP system device; generate a BOM table based on the received real-time BOM; and match particular entries in the generated BOM table with particular ones of the plurality of components.



21: 2023/02895. 22: 2023/02/27. 43: 2025/04/10  
51: A61K

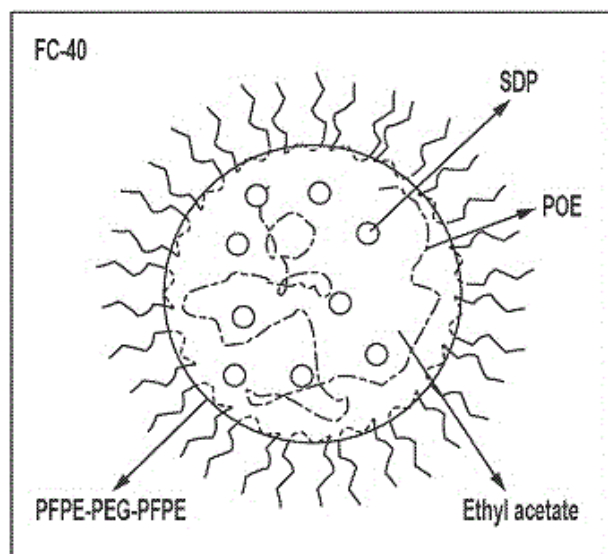
71: REGENERON PHARMACEUTICALS, INC.  
72: CHEN, HUNTER, ZHAO, YIMING  
33: US 31: 63/118,264 32: 2020-11-25

#### **54: SUSTAINED RELEASE FORMULATIONS USING NON-AQUEOUS MEMBRANE EMULSIFICATION**



00: -

Non-aqueous membrane emulsion methods for producing polymeric and polymer-coated microparticles are provided. Some embodiments provide methods for producing a sustained release or controlled release microparticle by combining micronized protein powder and a polymer into a hydrocarbon solvent to form a non-aqueous first solution, agitating the first non-aqueous solution to form a suspension, feeding the suspension into a dispersion pump, wherein the suspension is infused through a porous membrane into a continuous phase comprising a fluorocarbon liquid and a fluorosurfactant to form a hydrocarbon-in-fluorocarbon emulsion. The hydrocarbon solvent, the fluorocarbon liquid, and the fluorosurfactant are removed, and the microparticles are collected.



21: 2023/03415. 22: 2023/03/08. 43: 2025/04/17

51: G01M

71: WAGNER, Knut

72: WAGNER, Knut

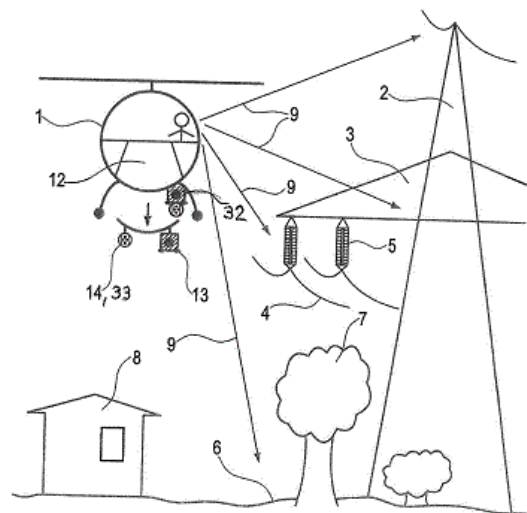
33: DE 31: 10 2020 210 622.3 32: 2020-08-20

**54: METHOD AND AIRCRAFT FOR MONITORING OPERATIONAL STATES AND FOR DETERMINING OUTAGE PROBABILITIES OF CURRENT-CARRYING LINE SYSTEMS**

00: -

A method for monitoring operational states and for determining outage probabilities of overhead power line systems from the air using an aircraft 1, and an aircraft provided to this end are described. To this end, the aircraft 1 in the form of a helicopter is

equipped with a sensor system 14 for measuring physical properties of the overhead power line systems with high-resolution digital cameras 13 for image data and with a high-resolution laser scanning system 12 for detecting ambient conditions. The sensor system 14, the digital cameras 13 and the laser scanning system 12 are coupled to satellite navigation systems, apart from GPS, with the detected data being assigned to one another and correlated with one another in relation to both space and time. Monitoring is implemented by way of a single fly-past using the aircraft 1 on the basis of a specified flight profile, and the determined data are supplied to a processing unit which, following an appropriate evaluation, directly indicates or outputs necessary repairs and/or maintenance recommendations on an output unit.



21: 2023/03481. 22: 2023/03/10. 43: 2025/04/25

51: C07D; C07B

71: ARCHER DANIELS MIDLAND COMPANY

72: TABER, IMAN, STENSRUD, KENNETH F, HOFFMAN, WILLIAM CHRISTOPHER

33: US 31: 63/064,872 32: 2020-08-12

**54: PURIFICATION OF 2,5-FURANDICARBOXYLIC ACID, DIMETHYL ESTER AND OTHER ESTERIFIED PRODUCTS**

00: -

Methods are disclosed for the purification of crude compositions comprising 2,5-furandicarboxylic acid, dimethyl ester (FDME) or other diester derivatives (e.g., dialkyl ester derivatives) of 2,5-furandicarboxylic acid (FDCA), by crystallization. In this regard, certain solvents, and classes of solvents,



have been discovered to promote the selective crystallization of FDME over impurities often generated in its production by FDCA esterification and other upstream processing steps. Importantly, certain impurities that are selectively removed include those that would otherwise be detrimental to the color and/or color stability of the purified composition. Other improvements in crystallization reside in the use of techniques such as liquid-liquid extraction and pre-treatment of the crystallization solution by contact with a solid medium.

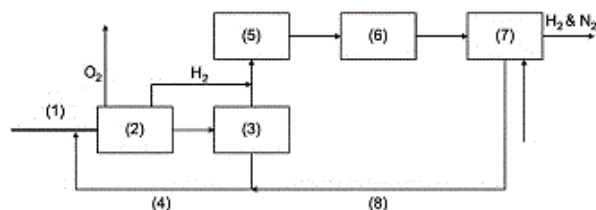
21: 2023/03485. 22: 2023/03/10. 43: 2025/04/25  
51: C01B; C25B; F02C  
71: TOPSOE A/S  
72: HØJLUND NIELSEN, POUL ERIK, HAN, PAT A, BØGILD HANSEN, JOHN

33: EP 31: 20205667.7 32: 2020-11-04

#### **54: METHOD FOR CRACKING AMMONIA**

00: -

The present invention refers to a method for cracking ammonia, producing hydrogen and generating electrical power comprising electrolysis (2) of water in feed ammonia, evaporation (3), pre-heating (5) and cracking (6) of ammonia, using ammonia synthesis catalysts at low temperatures.



21: 2023/03502. 22: 2023/03/10. 43: 2025/06/05  
51: A01M  
71: PRECISION PLANTING LLC  
72: HERRMANN, Tristan, STRNAD, Michael, RUSTAN, Samuel

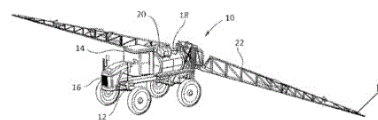
33: US 31: 63/105,543 32: 2020-10-26  
33: US 31: 63/105,552 32: 2020-10-26  
33: US 31: 63/105,566 32: 2020-10-26  
33: US 31: 63/105,575 32: 2020-10-26  
33: US 31: 63/105,584 32: 2020-10-26

#### **54: BOOM ADJUSTMENT SYSTEM**

00: -

An implement comprising a boom having at least one section, a boom height controller, an actuator in communication with the boom height controller and disposed to adjust a position of the boom, a boom

nudge controller in communication with the boom height controller, at least one boom height sensor for measuring a height of the boom in communication with the boom nudge controller, at least one camera in communication with the boom nudge controller. The boom nudge controller compares height measurements from the at least one boom height sensor and the at least one camera and communicates with the boom height controller to adjust the position of the boom to avoid contacting a crop or ground.



21: 2023/03567. 22: 2023/03/14. 43: 2025/06/11  
51: A01C

71: PRECISION PLANTING LLC

72: PLATTNER, Chad, E.

33: US 31: 63/127,229 32: 2020-12-18

33: US 31: 63/127,277 32: 2020-12-18

33: US 31: 63/127,300 32: 2020-12-18

33: US 31: 63/127,327 32: 2020-12-18

33: US 31: 63/127,370 32: 2020-12-18

33: US 31: 63/127,437 32: 2020-12-18

#### **54: AIR CART WITH MODULAR METERING SYSTEM**

00: -

An air cart (10) having a modular metering system. The modular metering system includes a plurality of meter modules (200) disposed laterally adjacent to one another in a metering bank (110). Each of the meter modules (200) is independently removable from the metering bank (110). Each meter module (200A, 200B, 200C, 200) includes a metering mechanism (210) rotatable about a longitudinal axis (211) disposed generally parallel with a forward direction of travel (11) of the air cart (10). The metering mechanism (210) is in communication with a supply of product held within a tank (40). As the metering mechanism rotates about its longitudinal axis (211), the product is metered by the metering mechanism (210) into an air tube (64) associated with each of the plurality of meter modules (200). An air stream provided by at least one fan (62) carries the metered product through the air tubes (64).

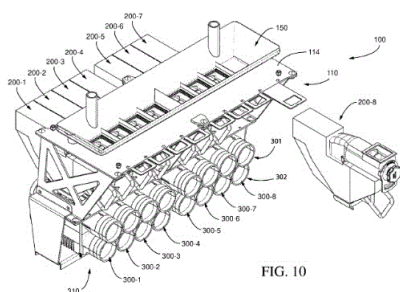


FIG. 10

21: 2023/03595. 22: 2023/03/15. 43: 2025/06/10

51: C01B; G01F; H01M

71: H2 POWERTECH, LLC

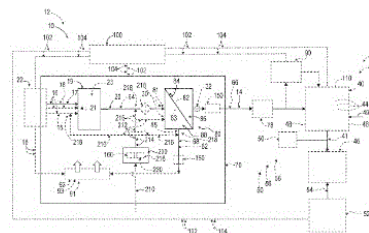
72: HILL, Charles, R., WRIGHT, Christopher, J., PLEDGER, William, A.

33: US 31: 17/079,312 32: 2020-10-23

**54: SYSTEMS AND METHODS FOR INCREASING THE HYDROGEN PERMEANCE OF HYDROGEN-SEPARATION MEMBRANES IN SITU**

00: -

Hydrogen-producing fuel processing systems and related methods. The systems include a hydrogen-producing region configured to produce a mixed gas stream from a feedstock stream, a hydrogen-separation membrane module having at least one hydrogen-selective membrane and configured to separate the mixed gas stream into a product hydrogen stream and a byproduct stream, and an oxidant delivery system configured to deliver an oxidant-containing stream to the hydrogen-separation membrane module in situ to increase hydrogen permeance of the hydrogen-selective membrane. The methods include operating a hydrogen-producing fuel processing system in a hydrogen-producing regime, and subsequently operating the hydrogen-producing fuel processing system in a restoration regime, in which an oxidant-containing stream is delivered to the hydrogen-separation membrane module in situ to expose the at least one hydrogen-selective membrane to the oxidant-containing stream to increase the hydrogen permeance of the at least one hydrogen-selective membrane.



21: 2023/03596. 22: 2023/03/15. 43: 2025/06/13

51: F01K

71: ENERSCALE GMBH

72: FLEISCHER, Gerhard, P, OBERWALDER, Hermann

33: AT 31: A 50816/2020 32: 2020-09-28

**54: APPARATUS AND METHOD FOR CONVERTING THERMAL ENERGY**

00: -

The invention relates to an apparatus (1) for converting thermal energy into mechanical energy by means of a cycle, comprising a heat exchanger (4), a store (3) for an operating medium, a feed line (5), a turbine (2) and a return line (6) comprising at least one regenerative device (9). In order to be able to also use waste heat to generate electrical energy, according to the invention the turbine (2) is designed as a disc rotor turbine. The invention furthermore relates to a method for converting thermal energy into mechanical energy in a cycle, wherein thermal energy is supplied to an operating medium in a store (3), wherein the operating medium is evaporated and/or a pressure in the operating medium is increased, whereupon the operating medium emits energy in a turbine (2), whereupon the operating medium is returned to the store (3).

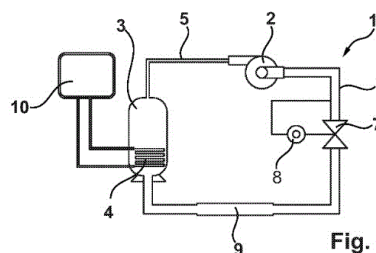


Fig. 1

21: 2023/03607. 22: 2023/03/15. 43: 2025/04/25

51: A47D

71: STICHTING TOT BEHEER EN ONTWIKKELING VAN INTELLECTUELE EIGENDOM VAN "BABYMOON"

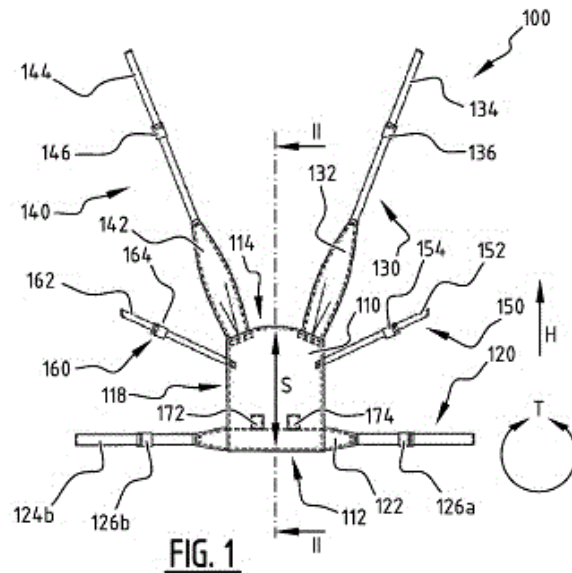
72: RASCIUC, GEORGETA

33: NL 31: 2026561 32: 2020-09-28

**54: A BABY CARRIER FOR CARRYING AND DEVELOPING A BABY ON A BODY OF A PERSON; USE OF A BABY CARRIER FOR WEARING THE BABY CARRIER ON A BODY OF A PERSON**

00: -

A baby carrier (100) for carrying and developing a baby on a body of a person, said baby carrier comprising: a body panel member (110) shaped for providing a seat for a baby and a back support for the baby; a waist support member (120) connected to a lower end of the body panel member (110) for fastening the body panel member to a waist of the person; a pair of shoulder fastening members (130, 140) connected to an upper end of the body panel member (114) and arranged for fastening the body panel member over each shoulder of the person, respectively; a pair of side fastening members (150, 160), each side fastening member being connected to a side of the body panel member (116, 118), respectively, and comprising a fastening means (154, 164); wherein each shoulder fastening member comprises: a shoulder strap (132, 142) arranged for extending over a shoulder, respectively; and a belt (134, 144) and a fastening means (136, 146) mounted onto the belt for releasably connecting the adjustable belt to one of the side fastening members or to the fastening means of another one of the shoulder fastening member; wherein the waist support member (120) including the body panel member (110) are arranged for selectively adjusting a body height support length (S) of the body panel member, by selectively folding or rolling the lower end of the body panel member (110) in the direction of the body height support length (S) before tightening the waist support member (120) including the body panel member (110) to the waist of the person.



**FIG. 1**

21: 2023/03637. 22: 2023/03/16. 43: 2025/04/25

51: A24F

71: ALTRIA CLIENT SERVICES LLC

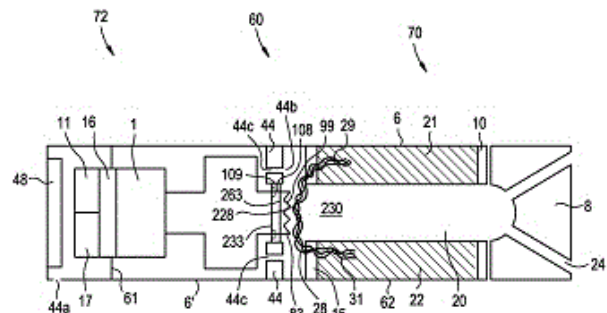
72: LIPOWICZ, PETER

33: US 31: 62/064,065 32: 2014-10-15

**54: ELECTRONIC VAPING DEVICE AND COMPONENTS THEREOF**

00: -

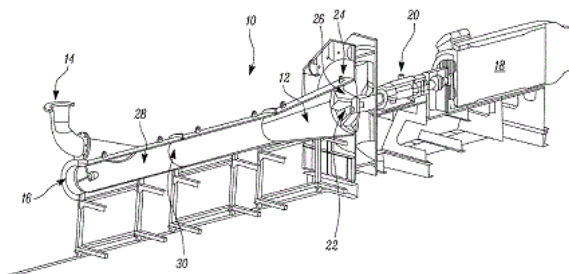
A power supply component of an electronic vaping device. The component comprises an outer housing extending in a longitudinal direction, a power source, a heater element positioned adjacent an end of the power supply component, and an alternator in electrical communication with the power source. The heater is magnetic and electrically conductive. The alternator is configured to (i) produce an alternating current when powered by the power source, and (ii) drive the magnetic and electrically conductive heater element with the alternating current.



21: 2023/05239. 22: 2023/05/12. 43: 2025/04/07  
 51: B02C B04C  
 71: VORTEX INDUSTRIAL SOLUTIONS LIMITED  
 72: RAWSON, Colin, Bruce  
 33: ZA 31: 2020/06742 32: 2020-10-29  
**54: AN AERO ACOUSTIC PROCESSING APPARATUS AND PROCESS FOR PROCESSING WASTE**

00: -

An aero acoustic processing apparatus includes an aero acoustic processing machine (10) having a cyclone chamber (12) having an inlet (14) for receiving waste to be processed and an inlet (16) for an entraining gas in the form of air. A rotational drive apparatus in the form of an electric motor (18) is coupled to a shaft (20) to which an impeller (22) is coupled rotates the impeller (22) within an impeller housing (24) to draw the air and the waste material to be processed into the cyclone chamber (12) and through an axial inlet system (26) into the impeller (22) and impeller housing (24) and to expel the processed material through the impeller housing (24) radially through a transverse outlet.

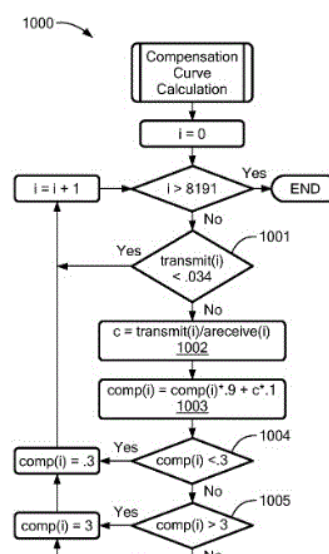


21: 2023/07679. 22: 2023/08/03. 43: 2025/06/05  
 51: H04R; H04S  
 71: THAT CORPORATION  
 72: DARR, Roger, R, EASLEY, Matthew  
 33: US 31: 63/182,413 32: 2021-04-30  
**54: PASSIVE SUB-AUDIBLE ROOM PATH LEARNING WITH NOISE MODELING**

00: -

Frequency domain compensation is provided for spectral impairment resulting from the audio path characteristics for a given audio device in a given listening space. Selected segments of an audio stream are recorded at a listener position to measure degradation in the audio path and to update compensation filter characteristics of the audio device. Recorded transmitted and received audio sequences are aligned based and compared in the frequency domain. The difference between the

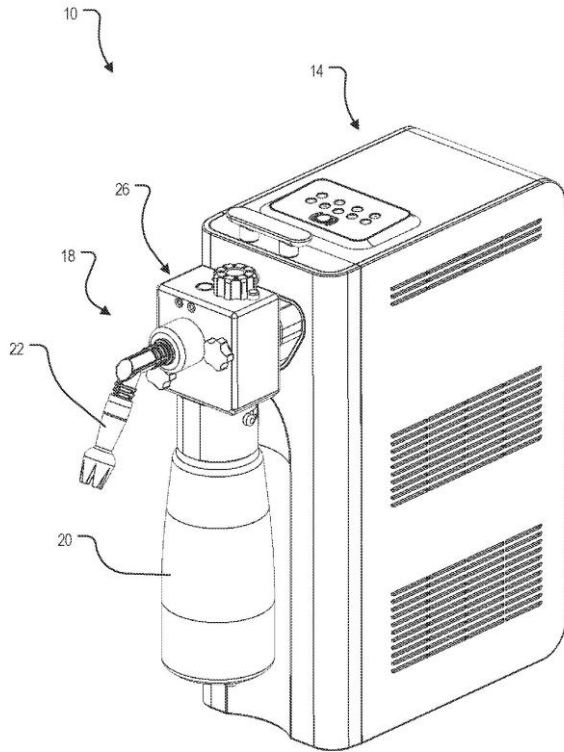
aligned transmitted and received sequences represents the frequency domain degradation along the acoustic path due to the speaker, the physical attributes of the room, and noise. A dynamically updated noise model is determined for adjusting compensation filter characteristics of the audio device, which can be updated during use of the audio device. A compensation curve is derived which can adapt the equalization of the audio device passively during normal usage.



21: 2023/08141. 22: 2023/08/23. 43: 2025/04/17  
 51: A01J; A47J  
 71: Rich Products Corporation  
 72: REISER, Ralf, CAMPBELL, Shawn, KIM, Jeff  
 33: US 31: 62/985,142 32: 2020-03-04  
**54: FOOD PRODUCT DISPENSER WITH REMOVABLE MODULE**

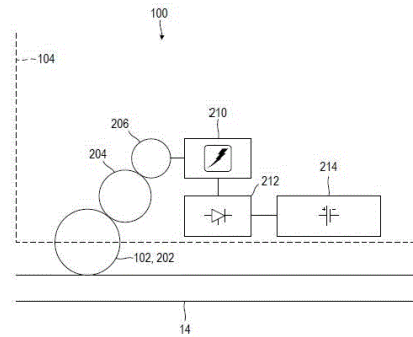
00: -

A food product dispenser includes a drive unit and a dispensing unit removably coupled to the drive unit. The dispensing unit includes a product reservoir configured to store the food product, a dispensing nozzle, and a product transfer assembly including a pump assembly configured to be driven by the drive unit when the dispensing unit is coupled to the drive unit to convey the food product from the product reservoir to the dispensing nozzle.



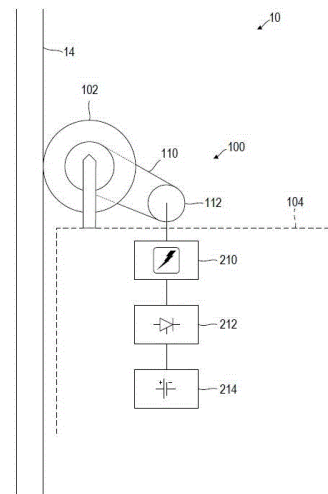
21: 2023/08354. 22: 2023/08/30. 43: 2025/03/31  
 51: B61D; E21F  
 71: GREYLING, Richard  
 72: GREYLING, Richard  
 33: ZA 31: 2022/07181 32: 2022-06-29  
**54: A Guard Car for a Locomotive Train**  
 00: -

A guard car for a locomotive train has a plurality of wheels and a battery which is rechargeable. The guard car includes a generator drivingly connected to a wheel of the plurality of wheels, the generator configured to be driven by the connected wheel, thereby to receive a mechanical input from the connected wheel to deliver an electrical output. The guard car also includes control circuitry coupled to the electrical output of the generator, the control circuitry being configured to provide a controlled or regulated electrical output which is connected to the battery and configured to recharge the battery.



21: 2023/08355. 22: 2023/08/30. 43: 2025/03/31  
 51: B66B; E21F  
 71: GREYLING, Richard  
 72: GREYLING, Richard  
 33: ZA 31: 2022/07182 32: 2022-06-29  
**54: A Cage Assembly for a Mining Elevator**  
 00: -

A cage assembly for a mining elevator in a mineshaft has a cage with a shaft guide wheel configured to cooperate with a shaft guide provided in the mineshaft and a battery which is rechargeable. The cage assembly includes a generator drivingly connected to the shaft guide wheel, the generator configured to be driven by the shaft guide wheel, thereby to receive a mechanical input from the shaft guide wheel to deliver an electrical output. The cage assembly further includes control circuitry coupled to the electrical output of the generator, the control circuitry being configured to provide a controlled or regulated electrical output which is connected to the battery and configured to recharge the battery.





21: 2023/08364. 22: 2023/08/30. 43: 2025/03/31  
51: G06Q

71: ALWAYS DIGITAL (PTY) LTD.

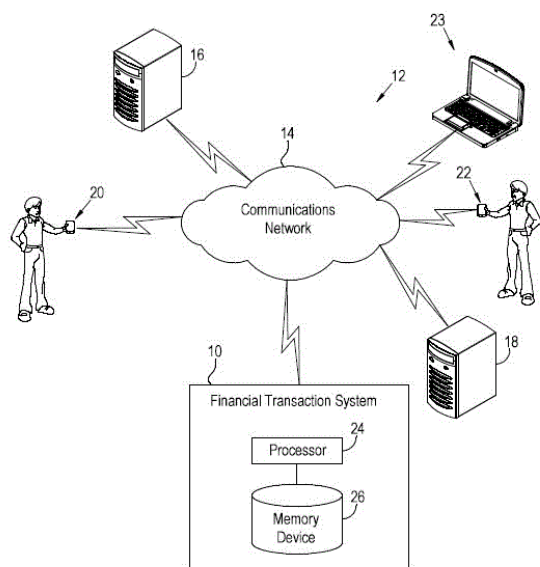
72: SEBATI, Kabelo Molau

33: ZA 31: 2022/07866 32: 2022-07-15

#### **54: A TRANSACTION SYSTEM AND METHOD**

00: -

The invention relates to a computer-implemented financial transaction method for facilitating the purchasing of goods from a merchant. The method comprising: generating, by at least one processor, a unique code associated with a predefined amount of funds; collecting, by the at least one processor, the unique code associated with the predefined amount of funds; validating, by the at least one processor, the unique code; after validating the unique code, deducting, by the at least one processor, the funds associated with the unique code from the amount of money owed for goods which are being purchased from the merchant; and transferring, by the at least one processor, the deducted funds to a financial account associated with the merchant of the goods which are being purchased. The invention also extends to a system and computer-readable medium for performing the method of the present invention.



21: 2023/08453. 22: 2023/09/01. 43: 2025/04/23  
51: B65D; B65G; E21F

71: NEXUS MINE PTY LTD.

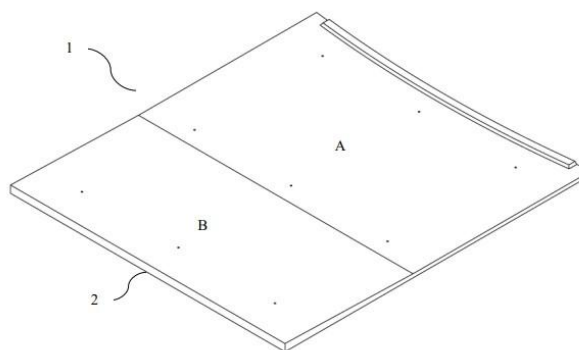
72: MEDEL ECHEVERRÍA, Manuel Alexander

33: CL 31: 202202383 32: 2022-09-01

#### **54: MULTI-THICKNESS ORE UNLOADING MAT**

00: -

The invention relates to a multi-thickness ore unloading mat, designed to favor the circulation of an ore over said mat, and which presents improved resistance to impact and/or wear. The proposed ore unloading mat presents a body that has different thicknesses distributed in such a way that a thickness gradient is generated, which prevents ore stagnation on the unloading mat and at the same time increases the resistance to impact and/or wear of the body that forms said unloading mat.



21: 2023/08457. 22: 2023/08/31. 43: 2025/04/17  
51: G06F

71: LIGHTHOUSE TECHNOLOGIES LIMITED

72: STEYNFAARDT, Stephan, Van REENEN, Pieter Meyer

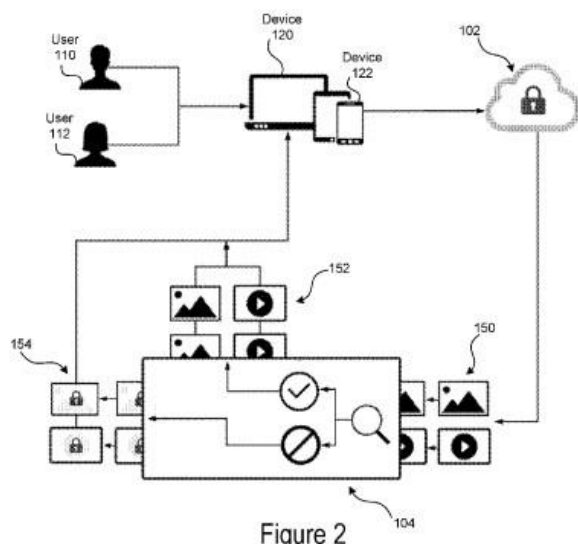
33: GB 31: 2020296.6 32: 2020-12-21

#### **54: METHOD AND SYSTEM FOR REDACTING UNDESIRABLE DIGITAL CONTENT**

00: -

A method and system for redacting digital content are disclosed. The system includes an identification server and an inspection engine. The server is configured to receive a content request originating from a user device and to identify a user account associated with the content request. The server is further configured to tag the content request with a restriction identifier which is indicative of a restriction level of a user of the user device. The engine is configured to analyse visual content forming part of digital content requested by way of the content request before the digital content is transmitted to the user device. A result of the analysis performed by the inspection engine is used to determine whether the visual content is undesirable based on the restriction parameter. If classified as undesirable, the digital content or part thereof is redacted or

censored before transmission thereof to the user device.

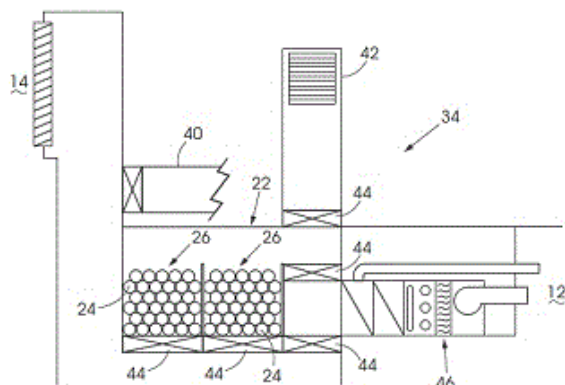


21: 2023/08620. 22: 2023/09/08. 43: 2025/04/25  
51: F24F

71: SPOORMAKER & PARTNERS INC  
72: COSTELLO, PATRICK SHELDON  
33: ZA 31: 2022/07747 32: 2022-07-13

**54: THERMAL STORAGE AIR CONDITIONING**  
00: -

A system and method for providing air conditioning to a building, making use of renewable thermal storage. The system comprises a chamber, having at least a first opening and a second opening allowing air to flow through the chamber in use and a thermal store arranged within the chamber. The thermal store comprises a plurality of containers, each of which are at least partially filled with a high heat capacity medium. The system furthermore comprises an air flow inducing means for causing air to flow through the chamber.



21: 2023/08663. 22: 2023/09/11. 43: 2025/04/25  
51: G06F; G06Q

71: DISCOVERY LIMITED

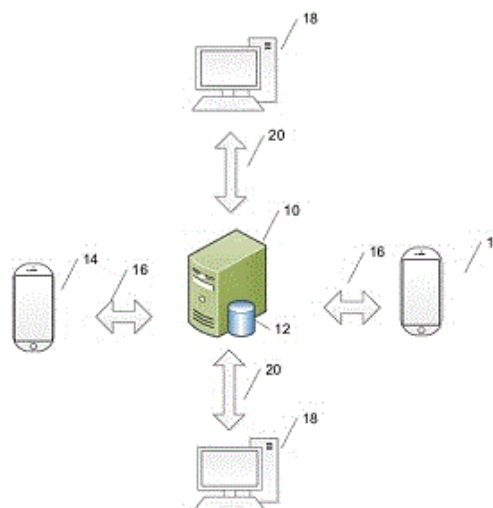
72: ROBERTS-YORK, IVAN

33: ZA 31: 2022/12317 32: 2022-11-11

**54: A GEOLOCATION VERIFICATION SYSTEM AND METHOD**

00: -

The invention relates to a system and method for verifying the geolocation of a user's mobile telephone. The method involves determining a first geofence around the geolocation to be verified, and periodically receiving location data from the mobile telephone. The method then determines whether the mobile telephone is inside or outside the first geofence for each received location data. The method verifies the geolocation based on the number of times the mobile telephone is inside the first geofence within a predetermined time period. The method can be used for various applications, such as fraud prevention, location-based services, and authentication.



21: 2023/08733. 22: 2023/09/13. 43: 2025/04/23  
51: C12N C12P

71: CJ CHEILJEDANG CORPORATION

72: RYU, Mi, MOON, Min Woo, HONG, In Pyo, PARK, Seok Hyun, PARK, Joon Hyun

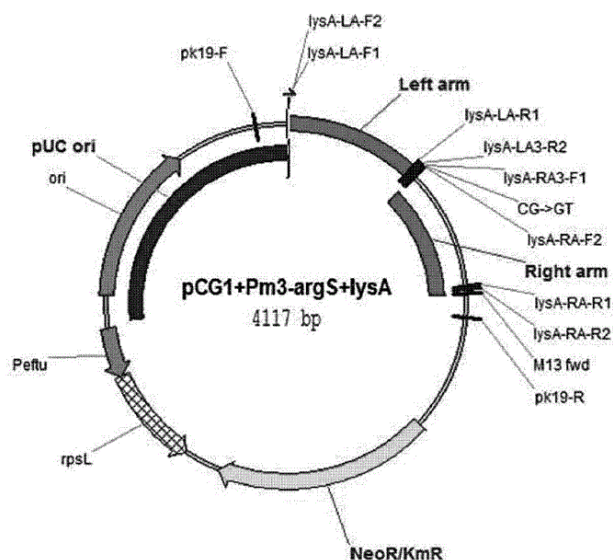
33: KR 31: 10-2021-0030960 32: 2021-03-09

33: KR 31: 10-2021-0054313 32: 2021-04-27

**54: CORYNEBACTERIUM GLUTAMICUM VARIANT HAVING IMPROVED L-LYSINE PRODUCTION ABILITY, AND METHOD FOR PRODUCING L-LYSINE BY USING SAME**

00: -

The present invention relates to a *Corynebacterium glutamicum* variant having an improved L-lysine production ability, and a method for producing L-lysine by using same. The *Corynebacterium glutamicum* variant increases or enhances the expression of a gene encoding diaminopimelate decarboxylase, and thus can have a L-lysine production yield superior to that of a parental strain.



21: 2023/09140. 22: 2023/09/28. 43: 2025/04/01  
51: F24H

71: HOT NOZZLE (PTY) LTD.

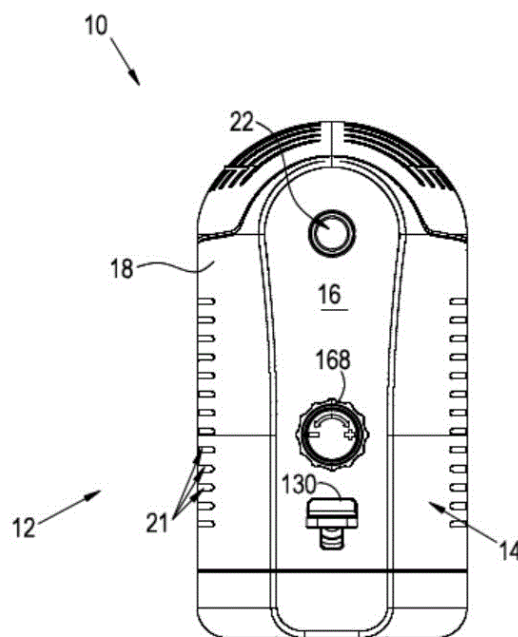
72: HOZA, Thamsanqa Mongezi

33: ZA 31: 2022/09499 32: 2022-08-25

#### **54: WATER HEATING DEVICE**

00: -

The disclosure relates to a portable, self-contained water heater device comprising a heat transfer arrangement defining an inlet for receiving a fluid at a first temperature and an outlet for discharging fluid at a second temperature. A gas supply arrangement is provided for supplying gas. The water heater device also comprises a gas ignition arrangement for igniting the supplied gas, wherein upon ignition of the gas, heat generated from the ignition of the gas is arranged to at least heat the heat transfer arrangement thereby heating the water contained therein.



21: 2023/09255. 22: 2023/10/03. 43: 2025/04/14  
51: A23F

71: Société des Produits Nestlé S.A.

72: MORA, Federico, DAVIDEK, Tomas, POLSTER, Johannes

33: US 31: 63/158,972 32: 2021-03-10

#### **54: AROMA-INFUSED COFFEE BEANS**

00: -

The present invention relates to a method for preparing aroma-infused coffee beans. Further aspects of the invention are roasted aromatic alcoholic beverage-infused coffee beans having low levels of ethyl carbamate, as well as the use of reduced-alcohol aromatic alcoholic beverage to infuse coffee beans.

21: 2023/09284. 22: 2023/10/04. 43: 2025/04/23  
51: B03B; B07B; B60B

71: GACW INCORPORATED

72: KEMENY, Zoltan

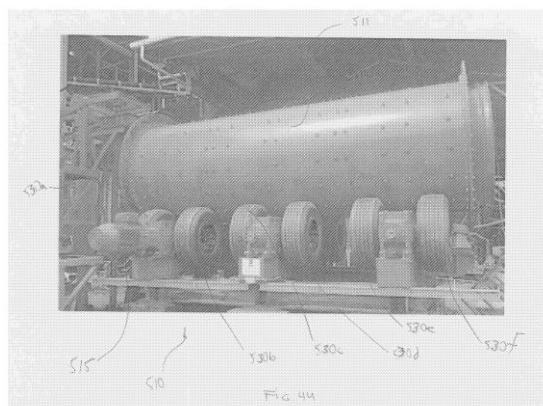
33: US 31: 63/162,241 32: 2021-03-17

#### **54: MINE MATERIAL PROCESSING APPARATUS INCLUDING GAS SPRING WHEEL ASSEMBLIES AND RELATED METHODS**

00: -

A mine material processing apparatus (510) comprises a rotatable drum (511) to process mine material, and wheel assemblies (530a-530f) configured for rotation of the rotatable drum (511). Each wheel assembly may include an inner rim, an

outer rim surrounding the inner rim, and gas springs operatively coupled between the inner rim and the outer rim.



21: 2023/09285. 22: 2023/10/04. 43: 2025/04/23

51: B27N; D21J

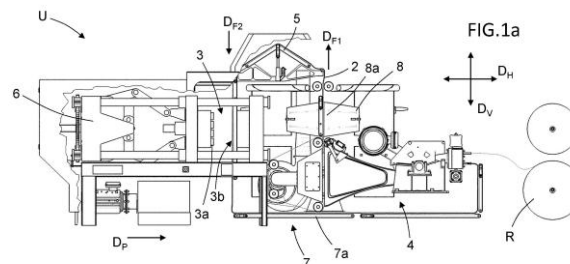
71: PulPac AB

72: LARSSON, Ove, HÖGBLOM, Olle, LJUNGBERG, Martin

**54: A METHOD FOR MANUFACTURING CELLULOSE PRODUCTS AND A PRODUCT FORMING UNIT FOR MANUFACTURING CELLULOSE PRODUCTS**

00: -

A method for manufacturing non-flat cellulose products from an air-formed cellulose blank structure in a product forming unit. The product forming unit comprises a buffering module and a pressing module comprising one or more forming moulds. The method comprises the steps: providing the cellulose blank structure and feeding the cellulose blank structure to the buffering module; buffering the cellulose blank structure in the buffering module, and feeding the cellulose blank structure from the buffering module to the pressing module; forming cellulose products from the cellulose blank structure in the one or more forming moulds by heating the cellulose blank structure to a forming temperature, and pressing the cellulose blank structure with a forming pressure. The cellulose blank structure is continuously fed to the buffering module in a first feeding direction, and intermittently fed from the buffering module in a second feeding direction, wherein the second feeding direction differs from the first feeding direction.



21: 2023/09311. 22: 2023/10/05. 43: 2025/04/23

51: B01D

71: UNIVERSITY OF THE WESTERN CAPE

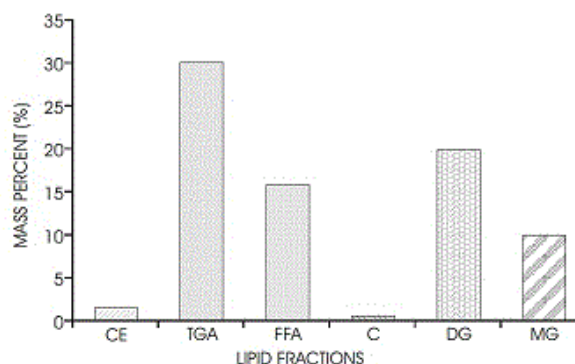
72: OKWUOSA, RAISSA, PETRIK, LESLIE FELICIA

33: ZA 31: 2022/12250 32: 2022-11-10

**54: A METHOD OF FRACTIONATING A LIPID CONTAINING MATERIAL OBTAINED FROM AN INSECT SOURCE**

00: -

This invention relates to a method for fractionating a lipid containing material obtained from an insect source. In one embodiment of the invention there is provided a method for fractionating a lipid containing material obtained from *Hermetia illucens* larvae. The method provides for a solvent elution profile and system that efficiently fractionates the material into one or more fractions selected from the group consisting of cholesterol esters, triglycerides, cholesterol, fatty acids, diglycerides, and monoglycerides.



21: 2023/09347. 22: 2023/10/06. 43: 2025/04/23

51: C10G

71: LINDE GMBH

72: ZELHUBER, Mathieu, BRUDER, David, HÖRENZ, Michael, GLOMB, Stefan, EBERSTEIN, Christopher

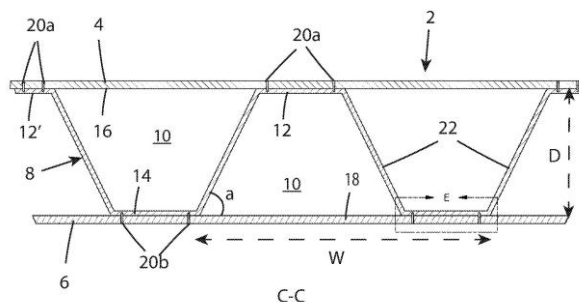
33: EP 31: 21161729.5 32: 2021-03-10

**54: METHOD AND PLANT FOR STEAM CRACKING**



00: -

A method for steam cracking hydrocarbons is described, wherein hydrocarbon-containing input streams are processed in cracker furnaces. These furnaces have radiation zones heated by burning gas and air, part of which is preheated alongside steam generated from feed water. This water is also preheated in the furnace's convection zones. Notably, the air preheating uses heat from the feed water before it undergoes its own preheating. The invention encompasses both the method and the associated system.

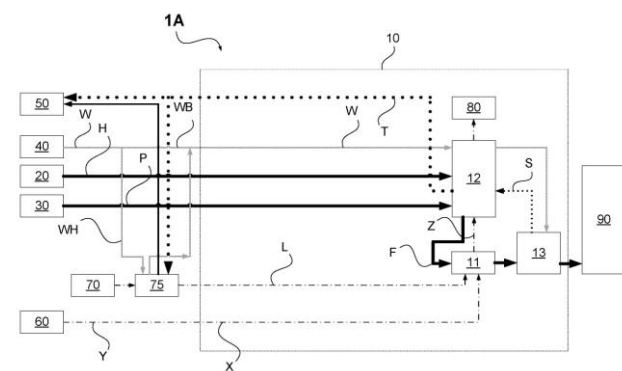


21: 2023/09543. 22: 2023/10/12. 43: 2025/04/14  
 51: B60R; B60S; G01N  
 71: BELRON INTERNATIONAL LIMITED  
 72: FRANCIS, Kelly, DAVIES, Christopher  
 33: GB 31: 1701924.1 32: 2017-02-06

#### **54: SYSTEMS AND METHODS FOR DAMAGE DETECTION**

00: -

A system for detecting damage to a glass surface particularly vehicle glazing panels such as vehicle windscreens. The system uses a sensor unit disposed proximate the surface and a processor in communication with the sensor unit. The processor is configured to analyse data received from the sensor unit in order to determine the integrity of the surface and a communication unit is configured to output a signal in response to the processor determining that the surface has been damaged. For vehicle glass the system is preferably integrated into the vehicle management and control systems such that the system is active when the vehicle is active or moving. The management and or control system may monitor for instances or situations when changes, such as above threshold changes, occur in order to produce an output warning signal.



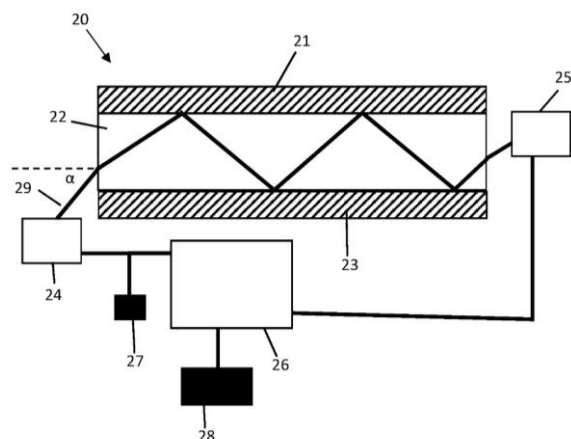
21: 2023/09419. 22: 2023/10/09. 43: 2025/04/14  
 51: B23K; E04B; E04H; F03D  
 71: PowerTower AB  
 72: JONSSON, Fredrik  
 33: SE 31: 2150517-7 32: 2021-04-23

#### **54: A component for supporting a wind turbine and a method for manufacturing the component**

00: -

The present invention relates to a component for supporting a wind turbine. The component comprises a plurality of wall segments (2) attached to each other so that the component in a cross section has a polygonal shape. Each of the wall segments (2) comprises an outer wall element (4) and an inner wall element (6) arranged in parallel. Each of the wall segments (2) 5 comprises a core element (8) having a trapezoidal corrugated shape arranged between the outer and inner wall elements (4,6). The outer wall element (4), the inner wall element (6), and the core element (8) are made of steel suitable for laser welding. The core element (8) comprises first and second straight sections (12, 12', 14) arranged in parallel with the outer and inner wall elements, and the first and second straight sections (12, 14) are attached to the 10 inner and outer wall elements respectively by laser welded joints (20a-b).





21: 2023/09587. 22: 2023/10/13. 43: 2025/04/23  
51: B01J; C07C

71: LINDE GMBH

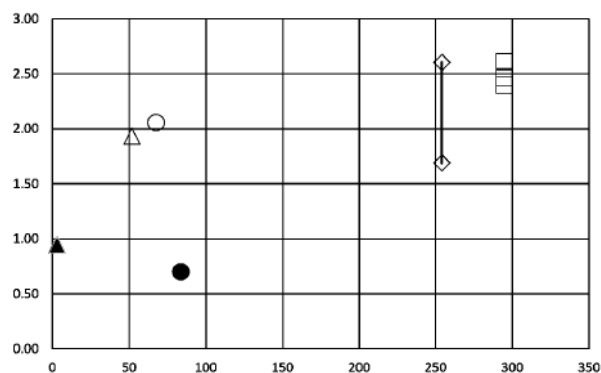
72: ZELLHUBER, Mathieu, SCHUBERT, Martin,  
MEISWINKEL, Andreas

33: EP 31: 21162659.3 32: 2021-03-15

#### **54: PRODUCING ETHYLENE BY OXIDATIVELY DEHYDROGENATING ETHANE**

00: -

The invention relates to a method for producing ethylene by oxidatively dehydrogenating ethane, wherein a multitubular reactor (10) having reaction tubes (11) which extend between a first end (11A) and a second end (11B) is used. One or more catalyst beds are disposed in each of the reaction tubes (11). In each of the reaction tubes (11), the ratio of the total length of the one or more catalyst beds between the first end (11A) and the second end (11B) to the diameter of each of the reaction tubes (11) has a value between 150 and 400. The multitubular reactor (10) is operated at a linear velocity of 250 to 800 cm/s, and the one or more catalyst beds are designed such that the ratio of active catalyst mass to effective cooling surface lies in a range between 1.5 and 5 kg/m<sup>2</sup>. The invention also relates to a corresponding plant (100).



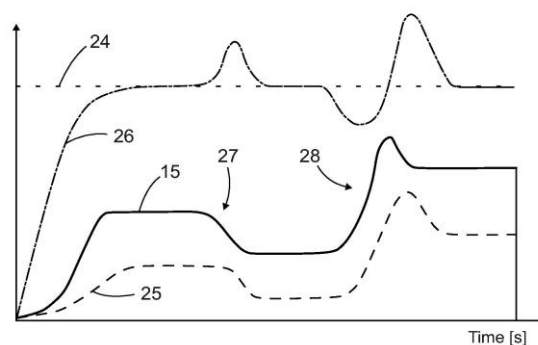
21: 2023/09640. 22: 2023/10/16. 43: 2025/04/14  
51: E21B; E21F

71: Sandvik Mining and Construction Oy  
72: ANTONEN, Pekka, SETÄLÄ, Timo, KIVELÄ,  
Tuomo, LAUNIS, Sirpa

33: EP(FI) 31: 21171309.4 32: 2021-04-29

#### **54: APPARATUS AND METHOD FOR CONTROLLING FLUSHING IN ROCK DRILLING** 00: -

An apparatus, method and computer program product for controlling flushing in rock drilling, and a rock drilling rig. The apparatus comprises a control unit (CU) and a computer program (22) for controlling feeding of liquid component (LC) in air mist flushing system in response to detected penetration rate (15) of executed drilling. An operator (22) may set a desired moisture target value (16) for drilling cuttings (19) removed from a drill hole (12) and the control system automatically adjusts the flushing system to control the feeding of the liquid component.



21: 2023/09722. 22: 2023/10/18. 43: 2025/04/14  
51: G01S; H04W

71: UnaBiz

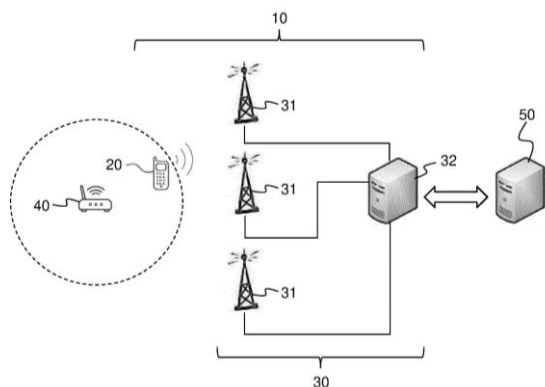
72: ISSON, Olivier, MARTY, Renaud, TREGARO,  
Maxime, CHEVALLIER, Robert, ZUNIGA, Juan  
Carlos, BOITE, Julien

33: FR 31: 2104083 32: 2021-04-20

**54: METHOD FOR UPDATING A DATABASE OF A GEOLOCATION SERVER**

00: -

The invention relates to a method for updating a database of a geolocation server (50) using a wireless communication system (10). The database comprises a table associating an identifier of a transmitting device (40) with at least one piece of information about its geographical position. The communication system comprises an access network (30) and a terminal (20) suitable for communicating with the access network and with the transmitting devices according to two separate protocols. The terminal receives a message sent by a transmitting device and comprising an identifier of the transmitting device. The terminal sends a message with this identifier to the access network. The access network determines a piece of information on the geographical position of the terminal. A consistency check is performed between the terminal position information determined by the access network and the piece(s) of position information present in the table. The table is updated according to the result of the consistency check.



21: 2023/09781. 22: 2023/10/19. 43: 2025/04/23

51: A61K

71: OMISAN FARMACEUTICI S.R.L.

72: VONA, NEVIO, QUATTROCCHI, WALTER, DEL VECCHIO, GIUSEPPE

33: IT 31: 102021000006839 32: 2021-03-22

**54: WATER-SOLUBLE TOPICAL OPHTHALMIC PREPARATION CONTAINING LUTEIN AND PRODUCTION METHOD THEREOF**

00: -

A method for the production of a topical ophthalmic preparation useful as a tear substitute and agent for

the treatment of the computer vision syndrome and the related product are disclosed. In addition to the water-soluble ingredients typical of aqueous eye drops or gels, the preparation also contains a stable micellar solution (or microemulsion) of lutein with vitamin E TPGS. The preparation method involves a sequence of four steps, of which the second, of preparation of the oily component consisting of vitamin E TPGS and lutein, is carried out by bringing the vitamin E TPGS to the liquid state and adding lutein to it under constant stirring and at a temperature of 90-170 °C, and the third, for the formation of the lutein/TPGS micellar solution stably suspended in aqueous solution, is carried out by adding, gradually and under stirring, the aqueous solution previously heated to 80-90 °C to the oil solution, and continuing the stirring at a higher temperature until an optically homogeneous and clear orange micellar solution is formed.

21: 2023/09958. 22: 2023/10/25. 43: 2025/04/04

51: C02F; C25B

71: De Nora Permelec Ltd

72: DOMON, Hiroki, OHARA, Masahiro, KATO, Masaaki

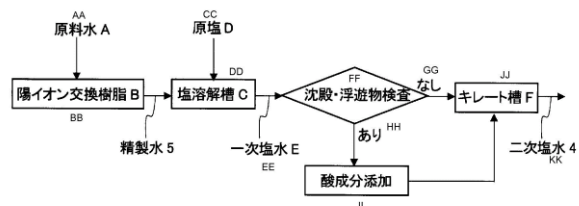
33: JP 31: 2021-077761 32: 2021-04-30

**54: METHOD AND DEVICE FOR MANUFACTURING SODIUM HYPOCHLORITE SOLUTION**

00: -

Provided are a method and device for manufacturing a sodium hypochlorite solution on-site with high efficiency and while suppressing initial cost and operating cost, without the problem of impurities arising from raw material water or a raw material salt. The present invention is a method for manufacturing a sodium hypochlorite solution on-site in the vicinity of a facility where the sodium hypochlorite solution is used. The present invention includes, when manufacturing a sodium hypochlorite solution by supplying a secondary brine to the positive electrode chamber of an electrolysis tank partitioned into a positive electrode chamber and a negative electrode chamber by an ion exchange membrane and reacting the electrolyzed component in the positive electrode chamber and the negative electrode chamber in a reaction tank, the steps of treating raw material water A with a cation exchange resin B to produce purified water 5, dissolving a raw

salt D in the purified water to produce a primary brine E, performing an inspection to confirm the presence of a precipitate or suspended matter in the primary brine, and producing a secondary brine 4 by performing a chelating treatment of the primary brine directly when no precipitate or suspended matter is present therein, and otherwise performing the chelating treatment after dissolving the precipitate or suspended matter by adding an acid component thereto.



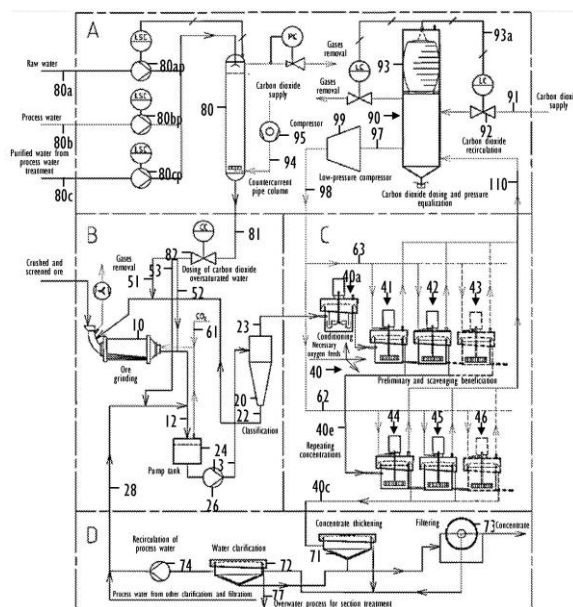
5 ... Purified water	FF ... Precipitate/suspended matter inspection
AA ... Raw material water	GG ... Absent
BB ... Cation exchange resin	HH ... Present
CC ... Raw salt	II ... Add acid component
DD ... Salt dissolving tank	JJ ... Chelating tank
FF ... Primary brine	KK ... Secondary brine

21: 2023/09993. 22: 2023/10/26. 43: 2025/04/04  
51: B02C: B03D

71: Kaakkois-Suomen Ammattikorkeakoulu Oy  
72: KUOPANPORTTI, Hannu, LINNANEN, Teijo  
33: FI 31: 20206294 32: 2020-12-14

## 54: METHOD AND APPARATUS FOR SEPARATING VALUABLE MINERALS FROM ORE

The invention relates to a method for a beneficiation process of minerals wherein: ore which contains valuable minerals is comminuted; a classification is performed in which ore of too large a particle size is returned to a comminuting step, and the ore of the desired particle size is directed onwards to the following step of the method, where the comminuted ore is beneficiated by flotation for separating valuable minerals; and, in order to displace oxygen, carbon dioxide oversaturated water and/or carbon dioxide gas is fed to at least one of the following process steps: ore comminution, classification of comminuted ore, intermediate step between comminution and classification, feeding of the comminution and/or classification.



21: 2023/10026. 22: 2023/10/26. 43: 2025/04/03  
51: C04B; F27B

71: TECFORLIME

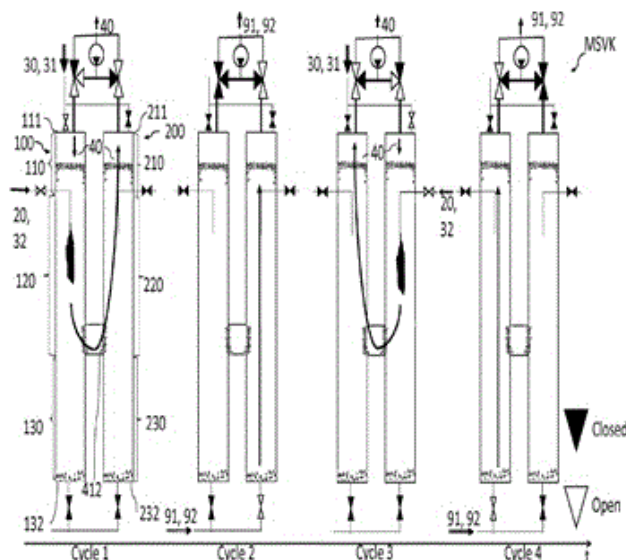
72: THIBEAUMONT, ETIENNE, AUBERT, ALEX,  
CAMBIER, PIERRE-OLIVIER, ROBIN, CHARLES

33: EP 31: 21173263.1 32: 2021-05-11  
33: EP 31: 21214127.9 32: 2021-12-13  
33: EP 31: 21214125.3 32: 2021-12-13  
33: EP 31: 21173260.7 32: 2021-05-11  
33: EP 31: 21197038.9 32: 2021-09-16  
33: EP 31: 21197039.7 32: 2021-09-16

## 54: DECARBONATION PROCESS OF CARBONATED MATERIALS IN A MULTI-SHAFT VERTICAL KILN

The present invention discloses a decarbonation process of carbonated materials, in particular limestone and dolomitic limestone, with CO<sub>2</sub> recovery in a multishaft vertical kiln (MSVK) comprising a first, a second, and optionally a third shaft with preheating, heating and cooling zones and a cross-over channel between each shaft, alternately heating carbonated materials by a combustion of at least one fuel with at least one comburent up to a temperature range in which carbon dioxide of the carbonated materials is released, the combustion of the fuel and the decarbonation generating an exhaust gas, the decarbonated materials being cooled in the cooling zones with one or more cooling streams, wherein a mixing between the exhaust gas and the one or more cooling streams is minimized by

operating said kiln in a mode in which between two subsequent alternating heating cycles between the first and the second or the third shaft, the decarbonated materials in at least the first, the second and/or the third shaft are cooled with the one or more cooling streams while a supply of the fuel in each shaft is stopped.



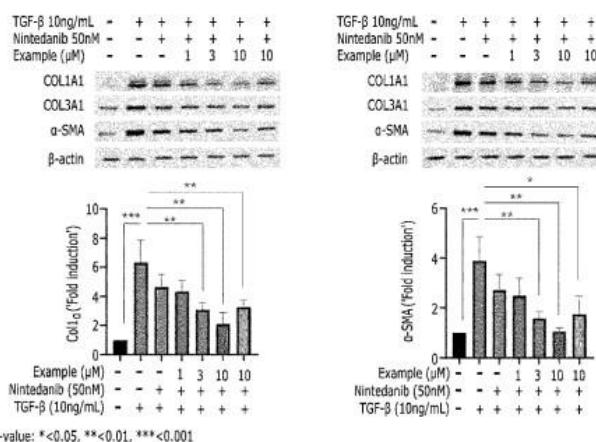
21: 2023/10049. 22: 2023/10/27. 43: 2025/04/02  
51: A61K; A61P  
71: DAEWOONG PHARMACEUTICAL CO., LTD.  
72: BAE, Da Jeong, LEE, Caroline Hee, CHO, Min  
Jae, PARK, Min Young, KIM, Ji Hyeon, PARK, Joon  
Seok

33: KR 31: 10-2021-0062252 32: 2021-05-13

**54: PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING FIBROSIS**

00: -

The present invention relates to a pharmaceutical composition that can be usefully used for the prevention or treatment of fibrosis. By using a first component and a second component together according to the present invention, the prevention or treatment effect on fibrosis can be further enhanced.



21: 2023/10050, 22: 2023/10/27, 43: 2025/04/02

51: A61K: A61P

71: DAEWOONG PHARMACEUTICAL CO., LTD.

72: LEE, Caroline Hee, CHO, Min Jae, PARK, Min Young, HAN, Ju Mi, PARK, Joon Seok

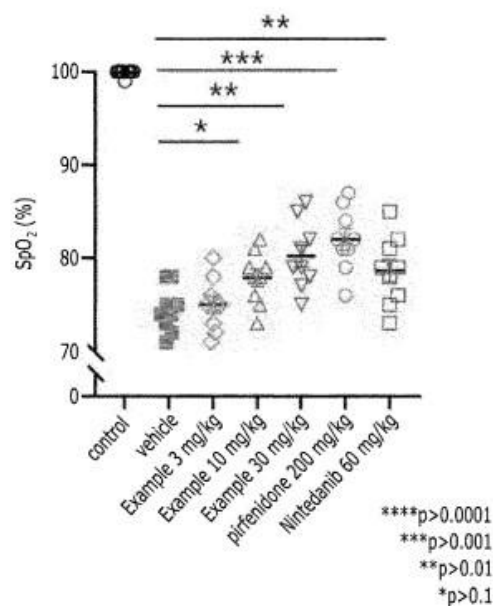
33: KR 31: 10-2021-0062252 32: 2021-05-13

33: KR 31: 10-2021-0110520 32: 2021-08-20

## 54: PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING FIBROSIS

00: -

A pharmaceutical composition according to the present invention is used in a specific therapeutic dosage regimen, and can be effectively used for the prevention or treatment of fibrosis.



21: 2023/10/08. 22: 2023/10/30. 43: 2025/04/02

51: B32B

71: Plantics Holding B.V.



72: BAKKER, Wridzer Jan Willem, GERARDIN, Lucas

33: EP(NL) 31: 21167263.9 32: 2021-04-07

**54: PANEL AND METHOD FOR MANUFACTURING THEREOF**

00: -

The invention pertains to a panel comprising a core layer and at least one surface layer bonded to the core layer, wherein the core layer comprises particulate material bonded with a resin and the surface layer comprises fibrous material bonded with a resin, the resins comprising a polymer derived from an aliphatic polyol with 2-15 carbon atoms and an aliphatic polycarboxylic acid with 3 to 15 carbon atoms, wherein the polymer has an extent of polymerization, determined gravimetrically, of at least 0.6, and wherein the ratio of the resin content (in wt.%) of the core layer to the total resin content (in wt.%) of the surface layer(s) is in the range of 1 :1.5 to 1 :15. The invention also pertains to a method of manufacturing the panel.

21: 2023/10160. 22: 2023/10/31. 43: 2025/04/02

51: A46B

71: Orkla Health AS

72: KAVANAGH, Christopher John, ABRY, Christian

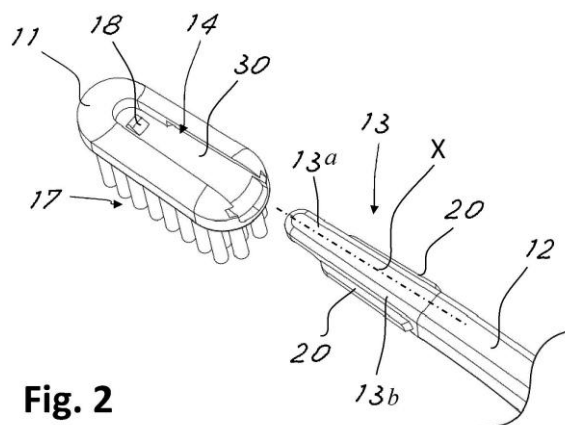
33: EP(NO) 31: 21168873.4 32: 2021-04-16

**54: TOOTHBRUSH WITH REPLACABLE BRUSH HEAD**

00: -

A toothbrush (10) includes a handle (12) forming a gripping portion (12a) of the toothbrush and a replaceable brush head (11) carrying a plurality of bristles (17), wherein the replaceable head (11) is connectable to the handle (12) in a detachable manner by means of a snap locking mechanism (13, 14), the snap locking mechanism including a finger (13) protruding from the handle (12) and a recess (14) formed in the brush head (11), wherein the finger (13) extends along a longitudinal direction (X). The finger (13) includes a flexible portion (13a) and a non-flexible portion (13b) that are configured to be at least partly received in the recess (14) when the brush head (11) is mounted on the handle (12); the non-flexible portion (13b) connects the flexible portion (13a) to the handle (12); the flexible portion (13a) is configured to elastically flex away from the bristles (17) with respect to the non-flexible portion (13b) in a direction transversal to the longitudinal direction (X) during the insertion of the finger (13)

into the recess (14) along the longitudinal direction (X); the flexible finger portion (13a) is configured to flex due to the interaction with an inclined surface (18) formed in the recess (14) during insertion of the finger (13) into the recess (14) along the longitudinal direction (X); the flexible portion (13a) includes a protrusion (19) configured to snap into an engagement position with the recess (14) when the protrusion (19) slides beyond the inclined surface (18) inside the recess (14).



**Fig. 2**

21: 2023/10316. 22: 2023/11/06. 43: 2025/04/04

51: A61K; C07D

71: Tenaya Therapeutics, Inc.

72: MANDEGAR, Mohammad A., PATEL, Snahel, DING, Pingyu, BHATT, Ulhas, HOLAN, Martin, LEE, John, LI, Yihong, MEDINA, Julio, NERURKAR, Alok, SEIDL, Frederick, SPERANDIO, David, WIDJAJA, Tien

33: US 31: 62/951,853 32: 2019-12-20

**54: FLUOROALKYL-OXADIAZOLES AND USES THEREOF**

00: -

Provided herein are compounds identified as inhibitors of HDAC6 activity that can be used to treat various diseases and disorders.

21: 2023/10335. 22: 2023/11/06. 43: 2025/04/04

51: A61M

71: Vectura Delivery Devices Limited

72: MELINIOTIS, Andreas, BAYLISS, Justin

33: EP(BE) 31: 21172658.3 32: 2021-05-07

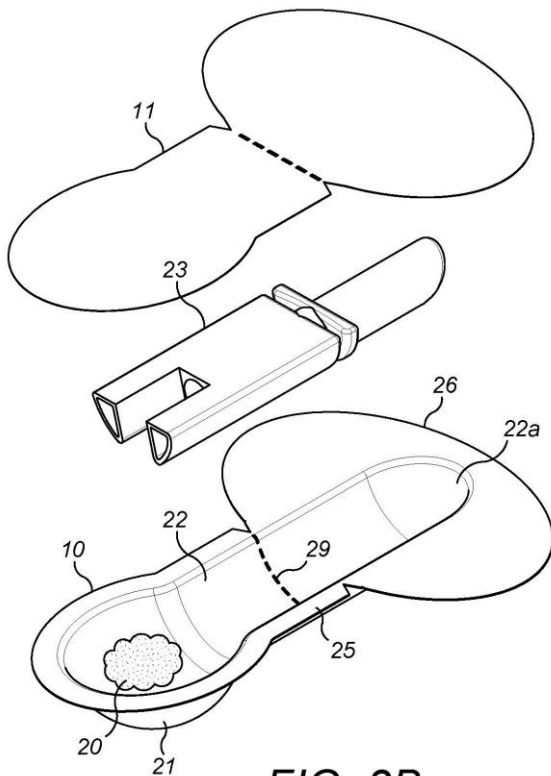
**54: UNIT DOSE DRY POWDER INHALER**

00: -

The present invention provides a unit dose dispenser in the form of a blister containing a dry



powder for inhalation. The dispenser has a lid, a base with a bowl that contains the powder and a channel that contains an airway. The airway has a mouthpiece and a body portion comprising one or more air inlet and air outlet passages. The body portion forms an interference fit in the channel. The air inlet(s) and the air outlet(s) abut, and are closed by, the base and / or the lid. Part of the lid and the base of the dispenser is detachable. When the detachable part is removed, the air inlet(s) and the air outlet(s) are opened, so that when a user inhales on the mouthpiece, air flows through the air inlet(s) and aerosolizes the powder, which then flows through the mouthpiece to the user's lungs.



**FIG. 3B**

21: 2023/10374. 22: 2023/11/07. 43: 2025/05/08

51: A01G; F16H

71: VALMONT INDUSTRIES, INC.

72: KASTL, John

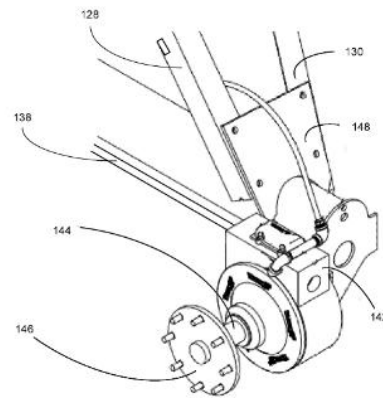
33: US 31: 63/190,322 32: 2021-05-19

**54: ENVELOPING WORM GEAR GEARBOX FOR MECHANIZED IRRIGATION MACHINES**

00: -

The present invention teaches an irrigation motor and gearset which include an enveloping worm drive

gearbox for use with a mechanized irrigation machine. According to a preferred embodiment, the system of the present invention may include a gearbox which includes a worm drive and a reduction assembly. According to a preferred embodiment, the worm drive preferably includes a worm shaft, a worm, a first gear wheel, and a first wheel shaft. Preferably, the worm shaft and the first wheel shaft are oriented orthogonally to each other. According to a further preferred embodiment, the worm drive of the present invention is preferably a double enveloping worm drive with the worm and the first gear wheel each being throated, mated and fully enveloped gears.



21: 2023/10450. 22: 2023/11/09. 43: 2025/04/04

51: E02F; G01B

71: Sandvik Mining and Construction Australia (Production/Supply) Pty Ltd

72: KNOWLES, Bruce, JAVADI, Mehrdad

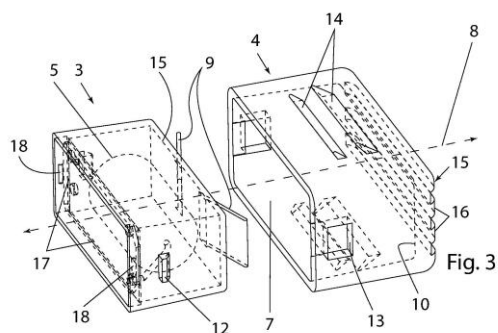
33: EP(SE) 31: 21172982.7 32: 2021-05-10

**54: SENSOR ASSEMBLY FOR USE BETWEEN A GROUND ENGAGING TOOL AND A BUCKET**

00: -

A sensor assembly (1) for attachment to a ground engaging tool (2), wherein the sensor assembly comprises an inner case (3) and an outer case (4), wherein the inner case (3) houses a sensor (5) configured to measure a gap (6) to an adjacent surface, wherein the outer case (4) is provided with a first cavity (7) for receiving the inner case (3) through an opening of the first cavity (7) such that the inner case (3) is movably guided in the outer case (4) for movement into and out of the outer case (4) along a predetermined path of movement (8), and wherein the sensor assembly (1) comprises a biasing means (9) adapted to bias the inner case (3)

in a direction out of the outer case (4) along said predetermined path of movement (8).



21: 2023/10511. 22: 2023/11/13. 43: 2025/04/04

51: H02K; H02P

71: Tau Motors, Inc.

72: PREINDL, Matthias, PENNINGTON III, Walter Wesley, RUBIN, Matthew J., STEVENSON, Gregory Gordon, OWEN, Michael Parker, BAGGET SWINT, Ethan

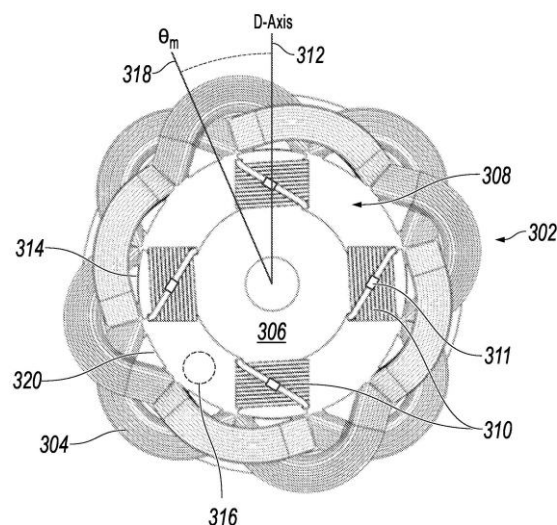
33: US 31: 63/059,930 32: 2020-07-31

**54: POWER DISTRIBUTION WITHIN AN ELECTRIC MACHINE WITH RECTIFIED ROTOR WINDINGS**

00: -

An electric machine includes a stator defining multiple stator poles with associated stator windings configured to receive a stator current. The electric machine also includes a rotor defining multiple fixed rotor poles with associated rotor windings, wherein the rotor defines a field energizable by magnetic fields produced by the stator windings when receiving the stator current to produce relative motion between the rotor and the stator and wherein the rotor is maintained in synchronicity with the magnetic fields produced by the stator during operation of the electric machine. The electric machine also includes a rectification system configured control against an alternating current being induced in the rotor poles as the field is energized by magnetic fields produced by the stator windings when receiving the stator current.

300



21: 2023/10683. 22: 2023/11/17. 43: 2025/04/02

51: A23K

71: Barlaa B.V.

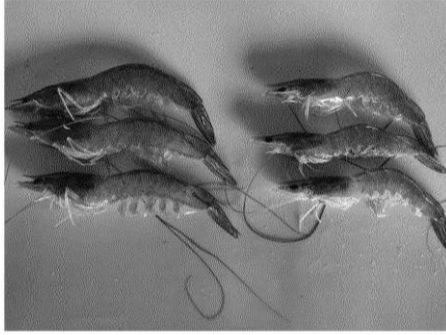
72: LAANE, Henk Maarten, VAN STEE, Cornelis Hendrik Geuvel

33: EP(NL) 31: 21174738.1 32: 2021-05-19

**54: SILICIC ACID IN AQUACULTURE**

00: -

The present invention concerns the field of aquaculture or aquafarming, such as farming offish, crustaceans and mollusks. In these fields there is still an unmet need for new modalities that can improve productivity, improve water quality and/or reduce environmental impact. The present invention resides in the finding that this can be realized by using bioavailable forms of silicic acid, typically as a fertilizer, feed additive and/or biostimulant. Experiments have shown that the use of certain bioavailable silicic acid compounds in aquaculture has a remarkable, beneficial impact on productivity and water quality, such as increased growth, increased feed conversion ratio, increased zooplankton and phytoplankton levels, improved dissolved oxygen content, favorable pH values, lower N (ammonia) levels, etc.

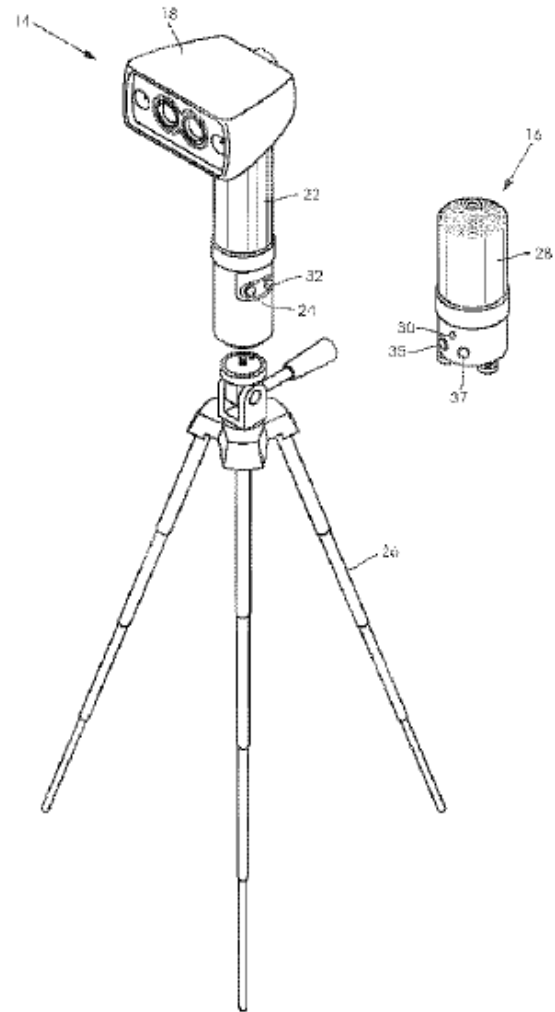


21: 2023/10728. 22: 2023/11/20. 43: 2025/04/02  
 51: G01S; G08G  
 71: STELLA CONSULTING SERVICES (PTY) LTD  
 72: MARAIS, Louis James  
 33: ZA 31: 2021/02596 32: 2021-04-20

#### **54: VEHICLE WARNING SYSTEM**

00: -

A vehicle warning system is disclosed. The system provides a warning of oncoming traffic to a person positioned at or near a stationary vehicle on a roadway. The vehicle warning system comprises a monitoring component and an alarm component. The monitoring component is configured to detect an oncoming vehicle travelling within a predetermined range of the stationary vehicle on a possible collision course. The alarm component is configured to be communicatively coupled to the monitoring component and spaced apart from the monitoring unit, in use. In response to detection of the oncoming vehicle, a warning signal is sent from the monitoring component to the alarm component and an alarm is activated. The alarm component includes a visual indicator configured to indicate that a communication link between the monitoring component and the alarm component has been established and/or is active.



21: 2023/10866. 22: 2023/11/24. 43: 2025/04/03

51: H04N

71: QUALCOMM Incorporated

72: HUANG, Han, SEREGIN, Vadim, CHIEN, Wei-Jung, ZHANG, Zhi, CHEN, Chun-Chi, KARCZEWICZ, Marta

33: US 31: 63/216,468 32: 2021-06-29

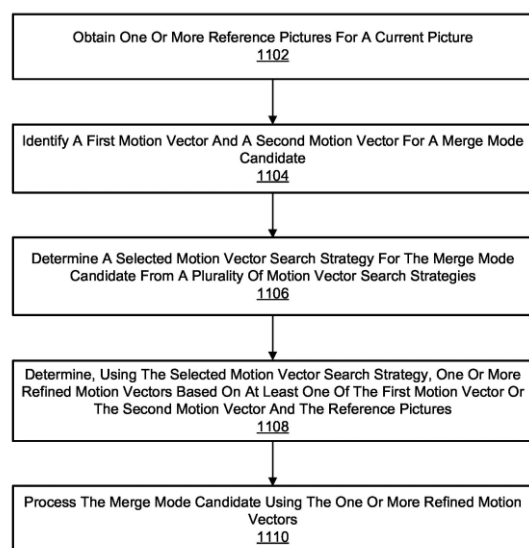
#### **54: ADAPTIVE BILATERAL MATCHING FOR DECODER SIDE MOTION VECTOR REFINEMENT**

00: -

Systems and techniques are provided for processing video data. For example, the systems and techniques can include obtaining a current picture of video data and obtaining reference pictures for the current picture from the video data. A merge mode candidate can be determined for the current picture. First and second motion vectors can be identified for the merge mode candidate. A motion vector search strategy can be selected for the merge mode candidate from a plurality of motion vector search

strategies. The selected motion vector search strategy can be associated with one or more constraints corresponding to at least one of the first motion vector or the second motion vector. The selected motion vector search strategy can be used to determine refined motion vectors based on the first motion vector, the second motion vector, and the reference pictures. The merge mode candidate can be processed using the refined motion vectors.

1100



21: 2023/10905. 22: 2023/11/27. 43: 2025/04/04  
51: A61K; C07K; C12N

71: Virion Therapeutics, LLC, The Wistar Institute  
72: ERTL, Hildegund CJ, MAGOWAN, Colin Stephen

33: US 31: 62/958,809 32: 2020-01-09

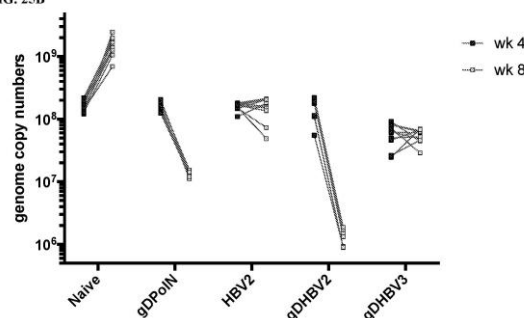
33: US 31: 62/958,827 32: 2020-01-09

#### **54: ADENOVIRAL VECTORS ENCODING HEPATITIS B VIRAL ANTIGENS FUSED TO HERPES VIRUS GLYCOPROTEIN D AND METHODS OF USING THE SAME**

00: -

Provided herein are non-naturally occurring variants of the hepatitis B virus (HBV) Core protein, the HBV polymerase N-terminal domain, and the HBV polymerase C-terminal domain, as well as immunogenic fragments thereof. Fusion proteins comprising the HBV variants fused to a herpes simplex virus (HSV) glycoprotein (gD) sequence, as well as methods of using the fusion proteins, are also provided.

FIG. 25B



21: 2023/11066. 22: 2023/11/30. 43: 2025/04/02  
51: G06F

71: Methodical Mind, LLC.

72: WOHLSTADTER, Jacob, VOCK, Michael, PRABHU, Arvind, CHRISTIANSEN, Bradley, CONG, Xinri

33: US 31: 62/954,052 32: 2019-12-27

#### **54: GRAPHICAL USER INTERFACE SYSTEM**

00: -

Provided are systems, methods, and apparatuses for aggregating information adapted for output to a graphical user interface. The methods can include providing a first menu command for a first menu of one or more user-selectable menu items to be displayed on a menu portion of an Aggregated User Interface (AUI) display and providing a content command for content to be displayed on the menu portion of the AUI display in response to the user's selection. The methods can further aggregate information relating to the one or more user-selectable menu items from the first menu and adapt them to be displayed on a content portion of the AUI display. By aggregating new information and displaying it on a graphical user interface, users can quickly and efficiently view and manipulate content in a more organized fashion.

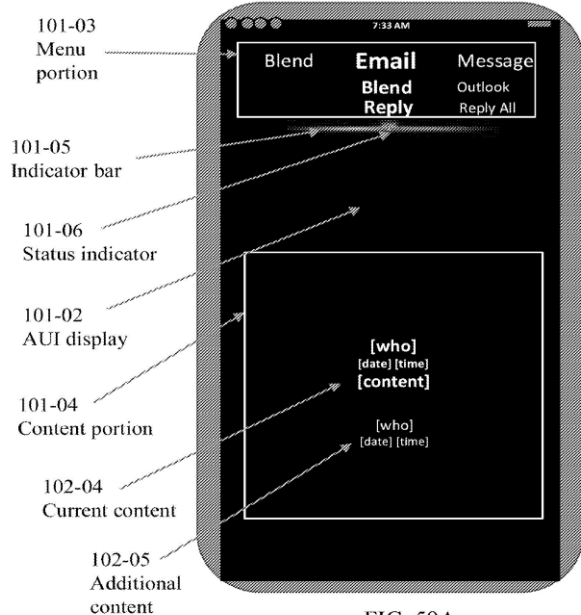


FIG. 59A

21: 2023/11201. 22: 2023/12/05. 43: 2025/04/02  
 51: A61K; A61N  
 71: ALPHA TAU MEDICAL LTD.  
 72: KELSON, Itzhak, KEISARI, Yona, GAT, Amnon,  
 DEN, Robert, B, MAGEN, Ofer, DOMANKEVICH,  
 Vered, ARAZI, Lior, COOKS, Tomer, HEGER, Guy,  
 DUMANČIĆ, Mirta, LUZ, Ishai, VATARESCU,  
 Maayan Hedva  
 33: US 31: 17/343,786 32: 2021-06-10  
**54: ACTIVITY LEVELS FOR DIFFUSING ALPHA-  
 EMITTER RADIATION THERAPY**  
 00: -

A method for treating a cancerous tumor, by  
 implanting in the cancerous tumor at least one  
 diffusing alpha-emitter radiation therapy (DaRT)  
 source (21) with a suitable radon release rate and  
 for a given duration, such that the source (21)  
 provides during the given duration a cumulated  
 activity of released radon of at least 10 Mega  
 becquerel (MBq) hour, per centimeter length.  
 Optionally, the sources (21) are implanted in an  
 array (160) of sources (21), each source separated  
 from its neighboring sources (21) in the array by not  
 more than 4.5 millimeters.

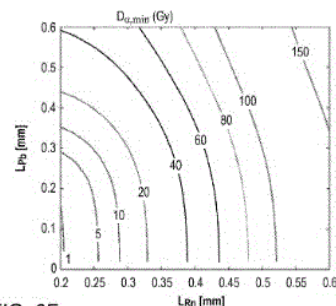
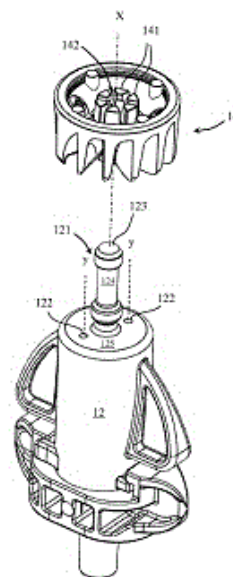


FIG. 6F

21: 2023/11206. 22: 2023/12/05. 43: 2025/04/02  
 51: A01G; B05B  
 71: NETA FIM LTD  
 72: BEN HERZEL, IDO  
 33: US 31: 63/211,167 32: 2021-06-16  
**54: SPRINKLER**  
 00: -

A strip irrigator sprinkler (10) has a central axis (X) and includes a stationary body (12) and a diffuser (14) coupled to the stationary body. The diffuser (14) can rotate about the central axis (X) relative to the stationary body (12) and the sprinkler (10) includes in addition at least one outlet opening (122) out of the stationary body (12) that is arranged to emit liquid towards the diffuser (14) along an axis (Y) that extends generally alongside axis (X) at a given lateral side of axis (X).



21: 2023/11272. 22: 2023/12/07. 43: 2025/04/04  
 51: E01D  
 71: Maurer Engineering GmbH  
 72: BRAUN, Christian

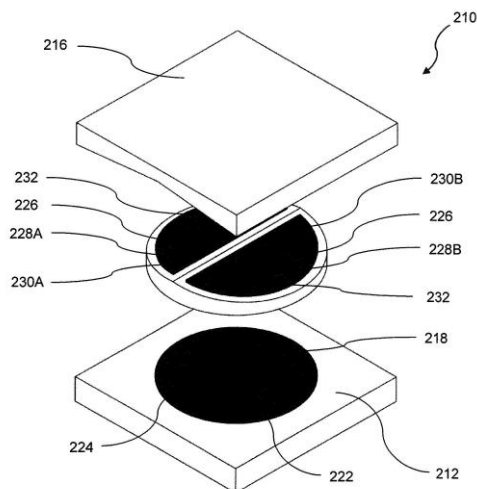


33: DE 31: 10 2020 201 078.1 32: 2020-01-29

**54: STRUCTURAL SLIDING BEARING AND STRUCTURAL BEARING SYSTEM**

00: -

A structure sliding bearing (210) for connecting a first part of a structure to a second part of a structure. The structure sliding bearing (210) has a bearing lower part (212), which can be brought into connection with the first part of the structure; a sliding plate (216), which can be brought into connection with the second part of the structure; and a bearing intermediate part (214), which is arranged between the bearing lower part (212) and the sliding plate (216), wherein a main sliding surface (226) of the structure bearing (210) is arranged between the bearing intermediate part (214) and the sliding plate (216). The main sliding surface (226) has at least two component sliding surfaces (228A) and (228B), which are each arranged in sliding planes (230A) and (230B) that are angled with respect to one another, wherein the sliding planes (230A) and (230B) meet at a common line of intersection S that forms a movement axis A of the structure sliding bearing (210), along which axis the sliding plate (216) can move. The two sliding planes (230A) and (230B) enclose a first angle  $\alpha$ , where the first angle  $\alpha$  is chosen such that, with the structure sliding bearing (210) in the use state, no gaping gap arises in the region of the main sliding surface (226). There is also disclosed a structure bearing system (700) in which the advantageous principle of the structure sliding bearing (210) is applied.



21: 2023/11644. 22: 2023/12/19. 43: 2025/04/03

51: E21D

71: BERGTEAMET AB

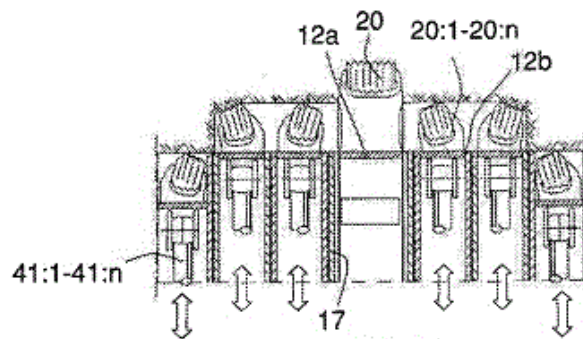
72: BERGKVIST, MAGNUS

33: SE 31: 2150660-5 32: 2021-05-25

**54: METHOD, ARRANGEMENT AND MACHINE FOR FULL FACE REAMING**

00: -

A method, an arrangement and a machine for powering holes in mountains through so-called full face reaming. According to the method according to the invention a plurality of cutterheads (20:1-20:n) independently of each other are displaceably moveably accommodated in a drill head (11) by operation of a linear drive arrangement (22:1 -22:n) for each cutterhead (20:1-20:n), and which cutterheads from a condition retracted in the drill head (11) are conveyable to a projecting mountain-grinding condition from the front side (11') simultaneously with the drill head (11) rotating, whereby the hole front is gradually drilled along concentric rings "drill rings" that go from an inner smallest circle to an outer largest circle by new cutterheads (20:1-20:n) with gradually increasing radius from the centre of the drill head in successive steps are conveyed in mountain-grinding condition.



21: 2023/11714. 22: 2023/12/20. 43: 2025/04/03

51: H04W

71: ZTE CORPORATION

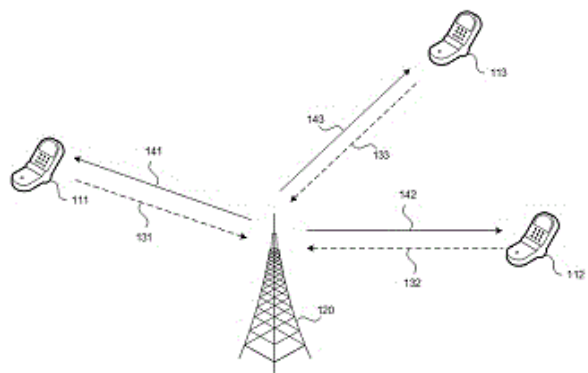
72: YAO, KE, GAO, BO, ZHANG, SHUJUAN, MEI, MENG

**54: SYSTEMS AND METHODS FOR SOUNDING REFERENCE SIGNAL ENHANCEMENT**

00: -

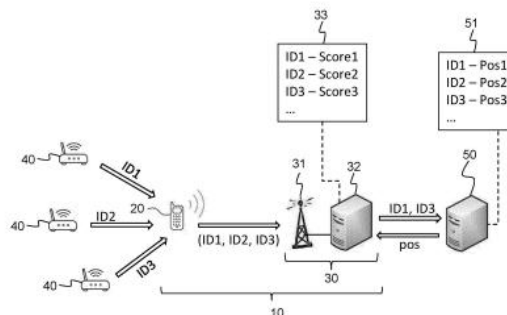
This disclosure is directed to methods, systems, and devices related to wireless communication, and more specifically, to support high capability user equipment and to improve uplink. A method of wireless communication, comprising receiving, by a wireless communication device, from a network

device, a configuration of a sounding reference signal (SRS) resource with a plurality of ports or port groups; determining, by the wireless communication device, a parameter for an SRS port or an SRS port group of the SRS resource; and wherein the parameter comprises at least one of: one or more symbols, a comb offset, or a cyclic shift (CS) offset.



21: 2023/11768. 22: 2023/12/21. 43: 2025/04/03  
51: H04W  
71: UnaBiz  
72: ISSON, Olivier, MARTY, Renaud, ZUNIGA, Juan Carlos, BOITE, Julien  
33: FR 31: 2106964 32: 2021-06-29  
**54: INCREASING RELIABILITY OF THE GEOLOCATION OF A TERMINAL BASED ON ONE OR MORE IDENTIFIERS OF NEIGHBOURING TRANSMITTING DEVICES**  
00: -

The invention relates to a method for geolocating a terminal (20) of a wireless communication system (10). The terminal detects one or more identifiers (ID1, ID2, ID3) of neighbouring transmitting devices (40). The terminal sends the detected identifiers in a message to an access network (30). A server (32) of the access network determines, for each identifier, a score representative of the reliability of said identifier relative to a geolocation database (51). For this purpose, the server (32) uses an identifier reliability database (33) that stores identifiers of transmitting devices (40) and their respective scores. The geolocation database (51) stores identifiers of transmitting devices (40) and their respective geographical positions. The server (32) selects the identifiers having the best scores to geolocate the terminal (20) using the geolocation database (51).



21: 2024/00117. 22: 2024/01/02. 43: 2025/04/24  
51: A61K; A61P; C07D  
71: Albireo AB  
72: GILLBERG, Per-Göran, STARKE, Ingemar, KULKARNI, Santosh S.  
33: IN 31: 202111024711 32: 2021-06-03  
**54: BENZOTHIA(DI)AZEPINE COMPOUNDS AND THEIR USE AS BILE ACID MODULATORS**  
00: -

The invention relates to 1,5-benzothiazepine and 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: 2024/00123. 22: 2024/01/02. 43: 2025/04/25  
51: G01N  
71: PHARMISTA TECHNOLOGIES AB  
72: MATTSSON, Alice Anna Lovisa, PORTER, Robert Andrew  
33: SE 31: 2150868-4 32: 2021-07-02  
**54: A REUSABLE TEST DEVICE**  
00: -

The present invention relates to a reusable test device. The test device comprises: a wick adapted to collect a fluid to be analyzed; a reusable sensor unit, comprising: a layer (8) comprising at least one type of molecular imprinted polymer adapted to bind at least one analyte present in said fluid; and a layer (7) comprising at least one electrode, wherein said reusable sensor unit is regenerable upon cleansing. The reusable test device further comprises a rechargeable electronic unit adapted to read out results from said reusable sensor unit.

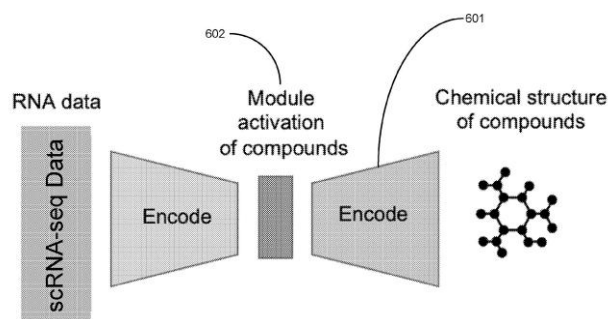
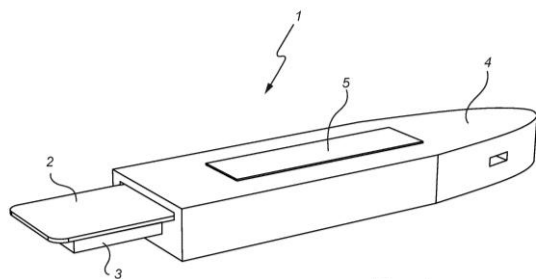


Figure 10A

21: 2024/00197. 22: 2024/01/04. 43: 2025/04/24  
51: G16B

71: Flagship Pioneering Innovations VI, LLC  
72: WOLF, Fabian Alexander, HADDAD, Ragy, PLUGIS, Nicholas McCartney

33: US 31: 63/210,930 32: 2021-06-15

**54: SYSTEMS AND METHODS FOR ASSOCIATING COMPOUNDS WITH PHYSIOLOGICAL CONDITIONS USING FINGERPRINT ANALYSIS**

00: -

Systems and methods for associating a compound with physiological conditions are provided. A fingerprint of a compound chemical structure is obtained and inputted to a model that outputs one or more calculated activation scores. Each activation score represents a cellular constituent module in a set of modules, where each module includes a subset of cellular constituents and a first module in the set of modules is associated with the physiological condition. When the activation score for the first module satisfies a threshold criterion, the compound is identified as associated with the physiological condition. In some aspects, each activation score represents a perturbation signature associated with the physiological condition and the compound is identified when the activation score for a first perturbation signature satisfies a threshold criterion. Systems and methods for training a model that associates compounds with physiological conditions are also provided.

21: 2024/00326. 22: 2024/01/09. 43: 2025/03/27

51: A61K; A61P

71: DAEWOONG PHARMACEUTICAL CO., LTD.

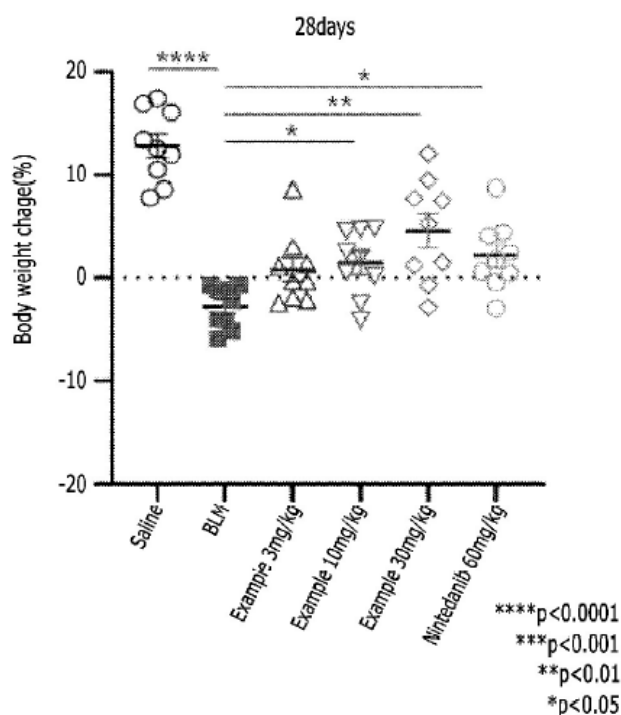
72: LEE, Caroline Hee, BAE, Da Jeong, CHO, Min Jae, PARK, Joon Seok

33: KR 31: 10-2021-0097163 32: 2021-07-23

**54: PHARMACEUTICAL COMPOSITION FOR PREVENTION OR TREATMENT OF SYSTEMIC SCLEROSIS**

00: -

A pharmaceutical composition according to the present invention can be usefully used for the prevention or treatment of systemic sclerosis.



21: 2024/00388. 22: 2024/01/11. 43: 2025/03/27

51: A61K; A61P

71: New Frontier Labs, LLC

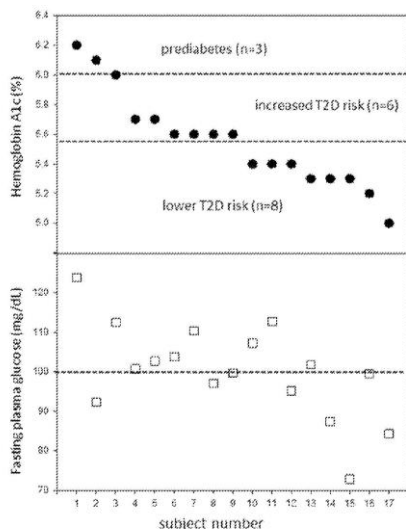
72: STREEPER, Robert T., IZBICKA, Elzbieta

33: US 31: 62/978,785 32: 2020-02-19

**54: AZELAIC ACID ESTERS IN THE TREATMENT OR PREVENTION OF DYSLIPIDEMIA AND ASSOCIATED CONDITIONS**

00: -

Pharmaceutical compositions comprising a C<sub>1</sub>-C<sub>4</sub> alkyl ester azelate, such as diethyl azelate (DBA), dimethyl azelate (DMA), di-isopropyl azelate (DiPA), di-isobutyl azelate (DiBuA), and di-2-pentyl azelate (D2PA), and methods of, *inter alia*, improving abnormal lipid levels and treating or preventing dyslipidemias and/or diseases of conditions associated therewith comprising administering to a subject such pharmaceutical compositions, are provided.



21: 2024/00441. 22: 2024/01/12. 43: 2025/04/25

51: G09B

71: LUTCHMAN, Castell Shoben

72: LUTCHMAN, Castell Shoben

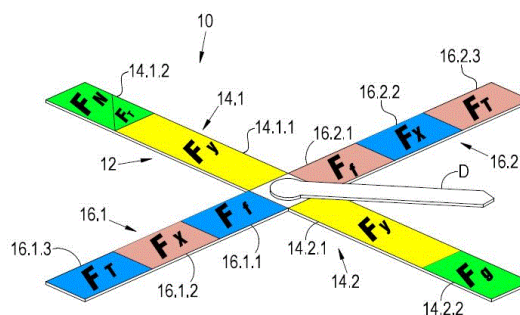
33: ZA 31: 2022/11190 32: 2022-10-13

**54: EDUCATIONAL APPARUSES AND METHODS OF TEACHING**

00: -

This invention relates to an educational apparatus and a method of teaching. The educational

apparatus comprises a body comprising a first arm having at least one major face defining segments with indicia provided thereon. The body comprises a second arm having at least one major face defining segments with indicia provided thereon, wherein the first and second arm are arranged transversely relative to each other in a cross-like fashion. The apparatus also comprises a dial attached, or attachable, to the body, adjacent a region of intersection where the first and second arm intersect, wherein the dial is rotatable about a dial axis provided adjacent the region of intersection. The indicia is typically mathematics or physical science equations and/or symbols.



21: 2024/00462. 22: 2024/01/12. 43: 2025/04/25

51: A61B; A61L

71: Becton, Dickinson and Company

72: TORRIS, Anthony V., YAKHNICH, Vlad, WENTZELL, Scott, BOKKA SRINIVASA RAO, Kishore K., MARCHIARULLO, Daniel J.

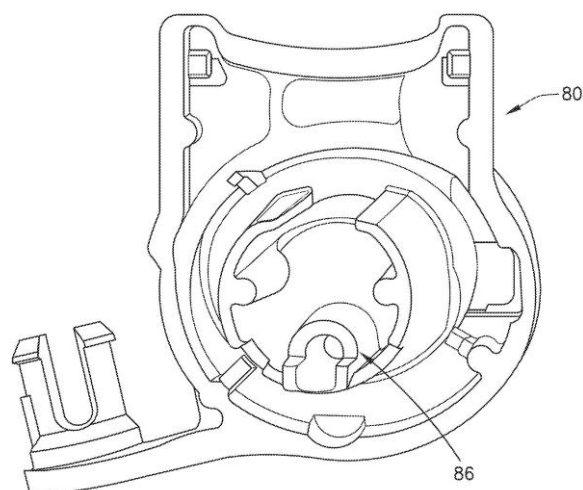
33: US 31: 63/216,239 32: 2021-06-29

**54: CAPILLARY BLOOD COLLECTION DEVICE**

00: -

A device for obtaining a blood sample may include a holder for receiving a sample source, the holder having an actuation portion and a port; a blood collector attachment removably connected to the holder; and a collection container removably connectable to the blood collector attachment, the container defining a collection cavity, wherein the blood collector attachment comprises a post member configured to direct the blood sample from a patient's finger to the collection container.





21: 2024/00463. 22: 2024/01/12. 43: 2025/04/24  
51: G16B

71: Flagship Pioneering Innovations VI, LLC  
72: WOLF, Fabian Alexander, ESER, Umut,  
PLUGIS, Nicholas McCartney

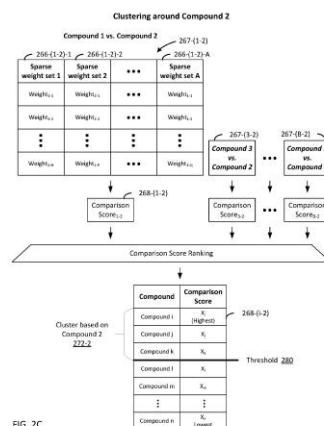
33: US 31: 63/210,736 32: 2021-06-15

#### 54: SYSTEMS AND METHODS FOR ASSOCIATING COMPOUNDS WITH PROPERTIES USING CLIQUE ANALYSIS OF CELL-BASED DATA

00: -

Methods of associating a test compound with a compound property. One or more datasets including: for each of a plurality of cell lines and each of a plurality of compounds: for each respective exposure condition: a corresponding response signature for the respective compound in the respective cell line under the respective exposure condition is obtained.

A correlation is determined for each unique combination of exposure conditions for a respective pair of compounds based on the corresponding response signature. A weight is determined for each respective pair of compounds based on the determined correlations. A plurality of compound clusters is formed, where each cluster represents compounds that satisfy one or more weight criteria with respect to a particular compound. A compound property of the test compound is determined from properties of one or more compounds in a one or more compound clusters that contain the test compound.



21: 2024/00624. 22: 2024/01/18. 43: 2025/04/24  
51: A61L

71: IBERHOSPITEX, S.A.

72: LÓPEZ MOYA, Mario, RAMOS PÉREZ, Víctor

33: EP 31: 21382685.2 32: 2021-07-26

#### 54: COMPOSITIONS FOR EMBOLIZATION 00: -

The invention refers to a liquid polymeric composition comprising: (a) from about 2 to about 20 weight percent of a polymer; (b) from about 5 to about 40 weight percent of a radiopaque molecule with a molecular weight below 2000 g/mol; and (c) from about 40 to about 93 weight percent of a non-physiological solvent or solvent system; wherein (i) the sum of the weight percent of all components in the composition is 100, (ii) the polymer and the radiopaque molecule are not covalently bound and are both dissolved in the non-physiological solvent or solvent system, and (iii) the polymer is soluble in the non-physiological solution and insoluble in a physiological solution at room temperature, and (iv) the liquid polymeric composition is capable of forming, upon contact with physiological conditions, a radiopaque precipitate which maintains at least 50% of its radiopacity during at least 30 minutes and loses at least 50% of its radiopacity in less than 6 months.

21: 2024/00687. 22: 2024/01/19. 43: 2025/04/24  
51: F16L

71: Saipem S.A.

72: HALLOT, Raymond, GOURIOU, Morgan,  
DELAPLACE, Thomas

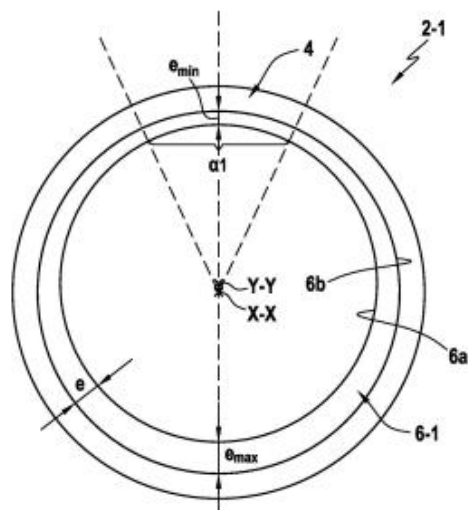
33: FR 31: 2107956 32: 2021-07-22

#### 54: PIPE FOR TRANSPORTING FLUIDS WITH CONTROL OF THE BUCKLING OF THE INTERNAL ANTI-CORROSION LINER



00: -

The invention relates to a pipe (2-1) for transporting fluids, comprising a steel tube (4) intended to receive a flow of fluids to be transported, and an annular protective lining (6-1) made of polymer material, inserted with a tight fit into the tube against an internal surface of the latter and intended to protect the steel against the corrosion caused by the fluids to be transported, the protective lining having, in a cross-sectional plane, at most two weakened angular portions (a1), of which the mechanical strength with regard to radial deformation is lower than that of the remaining angular portion of the protective lining so as to control the angular location and to promote the axial propagation of buckling of the protective lining following depressurization of the pipe.



21: 2024/00755. 22: 2024/01/22. 43: 2025/04/24

51: A01C

71: Schierbecker Handels GmbH &amp; Co. KG

72: SCHIERBECKER, Torben

33: DE 31: 10 2021 116 842.2 32: 2021-06-30

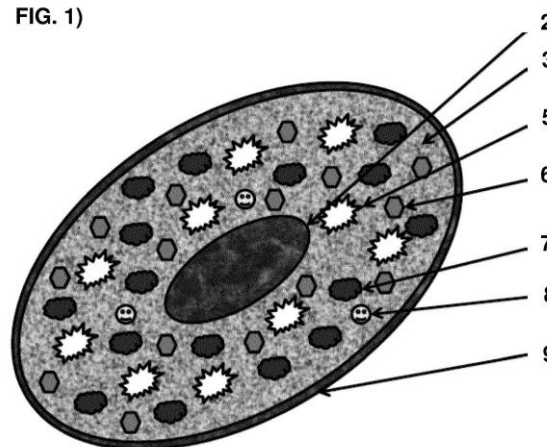
**54: SEED UNIT COMPRISING PLANT CHARCOAL AND POLYMERIC SUPERABSORBENT**

00: -

The invention relates to a seed unit (1) comprising at least one seed (2), a layer (3), for example composed of plant charcoal and a polymeric superabsorbent (5), for example a crosslinked acrylamide/acrylic acid copolymer potassium salt, and optionally a shell (9) and further auxiliaries, wherein the polymeric superabsorbent (5) optionally

has a grain size of 50  $\mu\text{m}$ -400  $\mu\text{m}$  and serves not only as water storage medium but also as disintegrant element.

FIG. 1)



21: 2024/00817. 22: 2024/01/24. 43: 2025/04/30

51: H04W H04L

71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

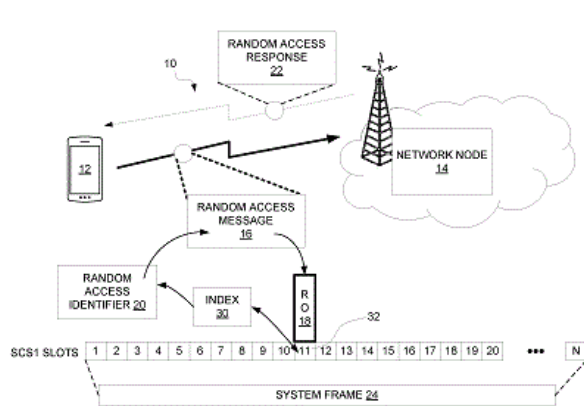
72: WANG, Min

33: US 31: 63/217,059 32: 2021-06-30

**54: RANDOM ACCESS IN A WIRELESS COMMUNICATION NETWORK**

00: -

A wireless communication device (12) computes a random access identifier (20) associated with a random access channel occasion (18). The wireless communication device (12) in particular computes the random access identifier (20) as a function of an index of the first slot (32) of the random access channel occasion (18) in a system frame (24). In some embodiments, the subcarrier spacing used to determine the index (30) is different than a subcarrier spacing of the random access channel occasion (18). Regardless, the wireless communication device (12) transmits a random access message (16) using the random access channel occasion (18) and the computed random access identifier (20).



21: 2024/00991. 22: 2024/01/30. 43: 2025/06/10  
51: A61M

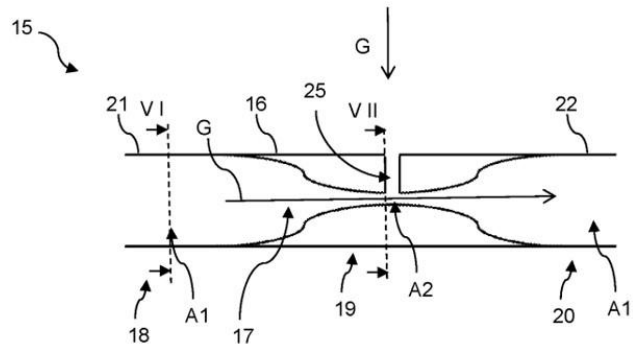
71: ZOLL MEDICAL CORPORATION

72: Christopher M. VARGA, Martin Björn HESS,  
Matthias VAN DER STAAY

#### 54: GAS VALVE FOR A VENTILATION APPARATUS AND A CIRCUIT FOR A VENTILATION SYSTEM

00: -

The invention discloses a leakage gas valve 15 ventilation apparatus comprising a first valve body 16 having a main gas path chamber 17 for guiding an inhalation gas to a patient, comprising at least three chamber sections (first 18, second 19 and third chamber section 20), an inlet duct 21 for supplying the ventilation gas to the first chamber section 18, an outlet duct 22 for releasing the ventilation gas from the third chamber section 20, wherein said first chamber section 18 and said third chamber section 20 comprise a first cross-section area (A1) and said second chamber section 19 comprises a second cross-section area (A2), wherein said second cross-section area (A2) is smaller than said first cross-section area (A1), and said second chamber section 19 comprises a leakage channel 25 for allowing a leakage gas flow out of the gas valve 15 during exhalation. The invention further discloses circuits with a ventilation limb comprising a gas valve.



21: 2024/00999. 22: 2024/01/30. 43: 2025/05/02

51: E04G

71: PERI SE

72: ROUTH, Anibrata, ARUN, KS, RAO, CNVS,  
SHARANAPPA, A, RATHOD, Ankush

33: IN 31: 202111034969 32: 2021-08-03

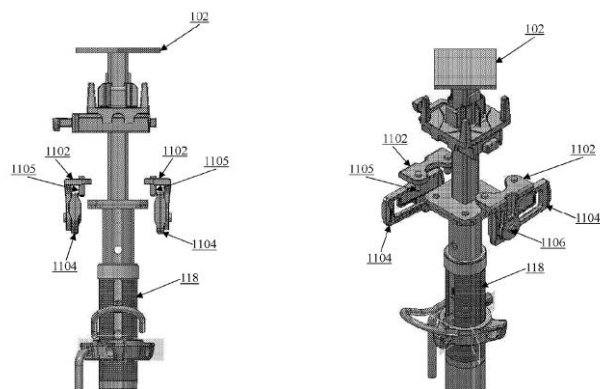
33: IN 31: 202111049578 32: 2021-10-29

33: IN 31: 202211011077 32: 2022-03-01

#### 54: GRID BEAM SYSTEM FOR SLAB FORMWORK

00: -

The present disclosure relates to a grid beam slab formwork (100) comprising of primary beams (104), secondary beams (106), multi-level drophead unit (102), and props (118). The multi-level drophead unit (102) offers up to or more than six connection points for the primary beams (104) and the secondary beams (106). The multi-level drophead unit (102) allows the construction of an additional structure that otherwise requires a separate drophead or an adaptor thereby reducing an overall cost associated with the formwork. Moreover, the multi-level drophead unit (102) enables the creation of the platform wherever needed. On the other hand, the adapter (116, 301) prevents entrapment of the sheathing members, such that the beams can be removed when the concrete has achieved required strength and the load can be taken by the props (118).



21: 2024/01130. 22: 2024/02/05. 43: 2025/06/05

51: A24B; A24D

71: PHILIP MORRIS PRODUCTS S.A.

72: FEDELI, Francesco, HUANG, Houxue

33: EP 31: 21184365.1 32: 2021-07-07

33: EP 31: 22178767.4 32: 2022-06-13

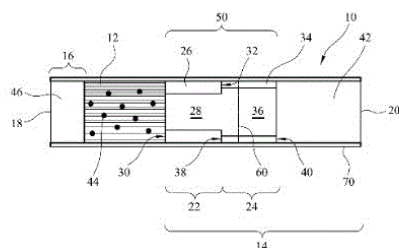
33: EP 31: 22178770.8 32: 2022-06-13

33: EP 31: 22178772.4 32: 2022-06-13

#### **54: AEROSOL-FORMING SUBSTRATE WITH EXPANDED GRAPHITE**

00: -

An aerosol-forming substrate for use in a heated aerosol-generating article including expanded graphite particles. Expanded graphite particles have high thermal conductivity and low density and may improve efficiency of aerosol delivery from the substrate.



21: 2024/01131. 22: 2024/02/05. 43: 2025/05/30

51: A24B

71: PHILIP MORRIS PRODUCTS S.A.

72: DE PALO, Damien, HUANG, Houxue, FEDELI, Francesco

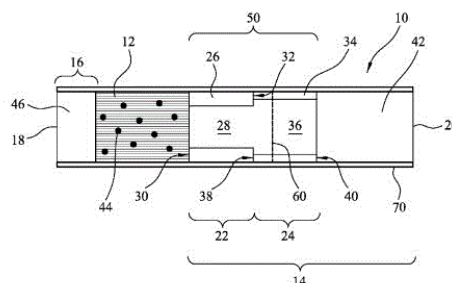
33: EP 31: 21184365.1 32: 2021-07-07

#### **54: AEROSOL-FORMING SUBSTRATE WITH IMPROVED THERMAL CONDUCTIVITY**

00: -

There is provided an aerosol-forming substrate for use in a heated aerosol-generating article (10), the aerosol-forming substrate comprising an aerosol-

forming material and greater than 0.1 weight percent carbon particles (44), the carbon particles having a volume mean particle size of greater than 10 microns.



21: 2024/01132. 22: 2024/02/05. 43: 2025/06/05

51: A24B

71: PHILIP MORRIS PRODUCTS S.A.

72: HUANG, Houxue, AJITHKUMAR, Anu

33: EP 31: 21184365.1 32: 2021-07-07

33: EP 31: 22178767.4 32: 2022-06-13

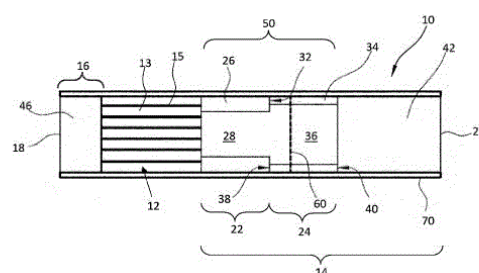
33: EP 31: 22178770.8 32: 2022-06-13

33: EP 31: 22178772.4 32: 2022-06-13

#### **54: THERMALLY ENHANCED AEROSOL-FORMING SUBSTRATE**

00: -

There is provided an aerosol-forming substrate for use in a heated aerosol-generating article, the aerosol-forming substrate comprising a co-laminated sheet comprising a layer of aerosol-forming material and a layer of carbon-based thermally conductive material.



21: 2024/01133. 22: 2024/02/05. 43: 2025/05/30

51: A24B; A24D

71: PHILIP MORRIS PRODUCTS S.A.

72: WAIRIMU, Esther, HUANG, Houxue, FEDELI, Francesco

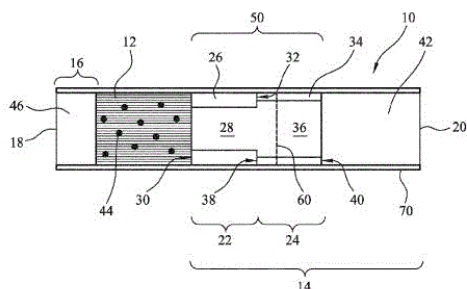
33: EP 31: 21184365.1 32: 2021-07-07

33: EP 31: 22178770.8 32: 2022-06-13

#### **54: IMPROVED AEROSOL-FORMING SUBSTRATE**

00: -

There is provided an aerosol-forming substrate comprising, on a dry weight basis: between 10 and 90 wt % thermally conductive particles, each thermally conductive particle of the thermally conductive particles having a thermal conductivity of at least 1 W/(mK) in at least one direction at 25 degrees Celsius; between 7 and 60 wt % of an aerosol former; between 2 and 20 wt % of fibres; and between 2 and 10 wt % of a binder. The aerosol-forming substrate has a thermal conductivity of at least 0.22 W/(mK) in at least one direction at 25 degrees Celsius. There is also provided an aerosol-generating article comprising the aerosol-forming substrate and a method of forming the aerosol-forming substrate.



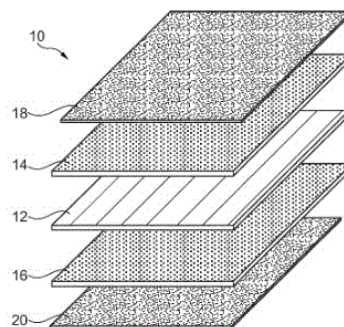
21: 2024/01232. 22: 2024/02/08. 43: 2025/06/05  
51: A24D; A24F; A61M

71: PHILIP MORRIS PRODUCTS S.A.  
72: BATISTA, Rui Nuno Rodrigues Alves,  
VERCRUYSSSE, Nicolas  
33: EP 31: 21211954.9 32: 2021-12-02

#### **54: PLANAR CONSUMABLE FOR AEROSOL-GENERATING DEVICE**

00: -

The invention relates to a consumable for an aerosol-generating device. The consumable comprises a first planar substrate layer of aerosol-forming substrate. The consumable further comprises a second planar substrate layer of aerosol-forming substrate. The consumable further comprises a planar porous layer allowing airflow through the porous layer in the planar extension direction of the porous layer. The porous layer is arranged between the first and second substrate layers.



21: 2024/01402. 22: 2024/02/15. 43: 2025/04/09

51: B65D

71: ALPLA WERKE ALWIN LEHNER GMBH & CO KG

72: RIEDMANN, JÜRGEN

33: CH 31: 070117/2021 32: 2021-07-29

#### **54: TRAY, STACK OF TRAYS AND METHOD FOR LOADING/UNLOADING TRAYS**

00: -

The invention relates to a tray (20) for storing and/or transporting goods, in particular plastic containers (10). The tray (20) comprises two first side walls (22) and two second side walls (23) and four corner elements (24). The side walls (22, 23) are connected to the corner elements (24) by way of plug connections (25). The tray (20) has a movable base (26).

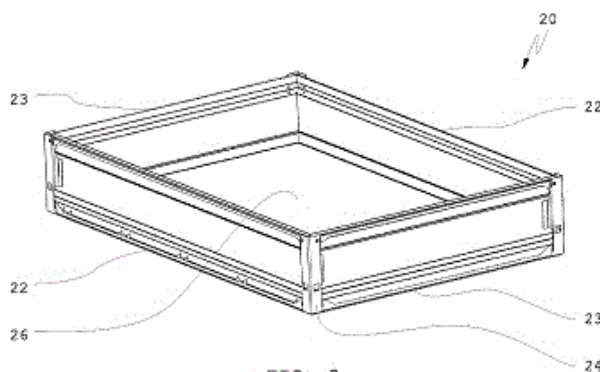


FIG. 2

21: 2024/01403. 22: 2024/02/15. 43: 2025/04/09

51: B65D

71: ALPLA WERKE ALWIN LEHNER GMBH & CO KG

72: ZMÖLNIG, CHRISTIAN, DEMIR, ADEM,  
GRIECO, DANILO

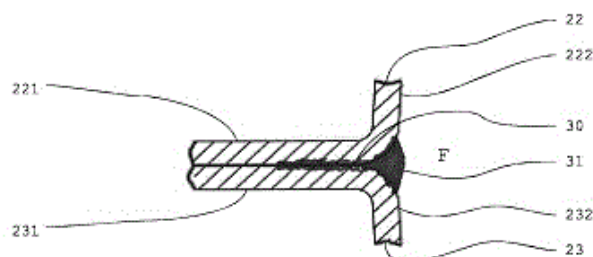
33: CH 31: CH070211/2021 32: 2021-08-27

#### **54: STRETCH-BLOW-MOLDED PLASTIC CONTAINER AND METHOD FOR PRODUCING SAME**



00: -

The invention relates to a stretch-blow-molded plastic container (100) with a container body (20), which forms a filling volume (F), and a handle (21), which is formed on the container body. In order to form the handle (21), a first sub-region (221) of a first wall (22) of the container body (20) is bonded to a second sub-region (231) of a second wall (23) of the container body (20) lying opposite the first wall (22). The filling volume (F) extends circumferentially about the bonded connection. A bead (31) made of melted material is arranged within the filling volume between the first wall (22) and the second wall (23).



21: 2024/01405. 22: 2024/02/15. 43: 2025/04/10

51: C07K; A61K; A61P

71: CEPHALON LLC

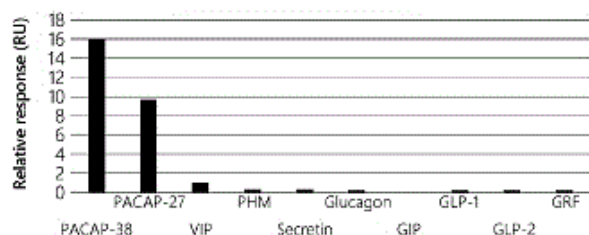
72: DOYLE, ANTHONY GERARD, CLARKE, ADAM, BUTT, DANYAL, LAINE, DAVID, MACRAE, HUGH, VO, JENNY, ROZENFELD, JULIA, SURADE, SACHIN

33: US 31: 63/226,875 32: 2021-07-29

#### 54: COMPOSITIONS AND METHODS FOR ANTI-PACAP ANTIBODIES

00: -

The present disclosure generally relates to anti-PACAP antibodies, pharmaceutical compositions comprising such antibodies, and methods of producing and using such antibodies.



21: 2024/01408. 22: 2024/02/15. 43: 2025/04/10

51: A61K; C12N

71: SONOMA BIOTHERAPEUTICS, INC., CURARA AB

72: MATTHAEI, JAMES, VAN DER VUURST DE VRIES, ANNE-RENEE, BEILKE, JOSHUA, MALMSTRÖM, VIVIANNE, HOOPER, KATHRYN, JOHNSON, REBECCA, KLARESKOG, LARS

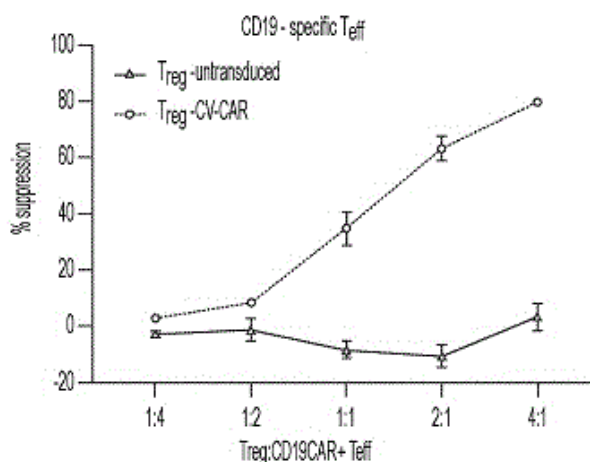
33: US 31: 63/227,320 32: 2021-07-29

33: US 31: 63/339,361 32: 2022-05-06

#### 54: SYNOVIAL EXTRACELLULAR MATRIX-SPECIFIC CHIMERIC ANTIGEN RECEPTOR FOR TARGETING REGULATORY T CELLS TO TREAT AUTOIMMUNE DISEASES

00: -

Disclosed herein are chimeric antigen receptors ("CARs") comprising an antigen binding site that recognizes citrullinated polypeptides. Citrullinated polypeptides, such as citrullinated vimentin, fibrinogen, and filaggrin, are expressed in the synovium of subjects with rheumatoid arthritis. Further disclosed are T cells, and in particular, Treg cells, that express these CARs. Administration of these CAR-T cells is useful in the treatment of rheumatoid arthritis as well as other diseases associated with citrullinated peptides.



21: 2024/01409. 22: 2024/02/15. 43: 2025/04/10

51: C22C; B01D; C01B; C22F; H01M

71: TANAKA KIKINZOKU KOGYO K.K.

72: HORIKAWA, DAISUKE, MATSUMURA, TORU, EBISUGI, MASATO, KUBOTA, SHUICHI

33: JP 31: 2021-147050 32: 2021-09-09

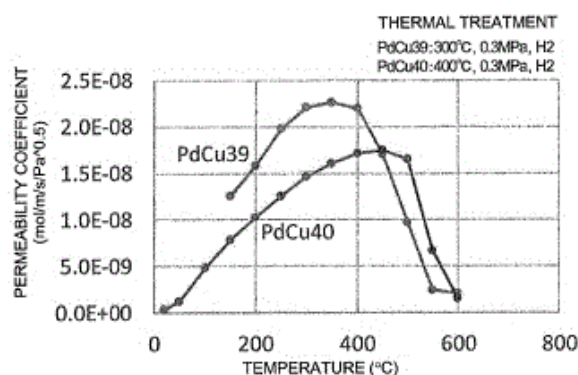
#### 54: HYDROGEN PERMEABLE MEMBRANE INCLUDING PDCU ALLOY AND METHOD FOR PURIFYING HYDROGEN WITH HYDROGEN PERMEABLE MEMBRANE

00: -

The present invention relates to a hydrogen permeable membrane that includes a PdCu alloy and can be used for hydrogen purification. The



hydrogen permeable membrane includes 38.75 mass% or more and 39.5 mass% or less of Cu with the balance being Pd and inevitable impurities as the PdCu alloy, and the area percentage of a b phase on an arbitrary cross section is 95% or more. The hydrogen permeable membrane of the present invention has a hydrogen permeability coefficient  $f$  of  $2.0 \times 10^{-8} \text{ mol/m} \times \text{S} \times \text{Pa}^{1/2}$  or more at any temperature in a temperature range of 150°C or higher and 350°C or lower. This value exceeds the hydrogen permeability coefficient of a PdCu alloy membrane containing 40 mass of Cu, which has been thus far considered to be optimal, demonstrating that the present invention is excellent in terms of hydrogen permeability.



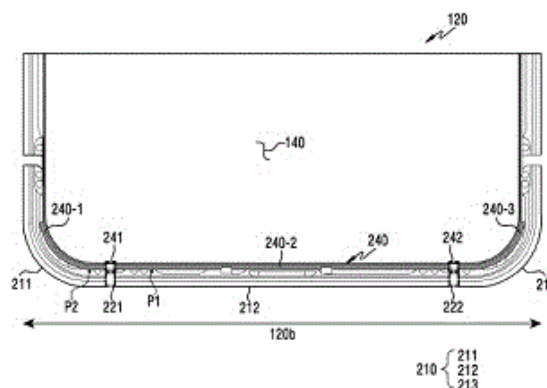
21: 2024/01428. 22: 2024/02/16. 43: 2025/04/10  
51: H01Q; G06F; G09F; H04M  
71: SAMSUNG ELECTRONICS CO., LTD.  
72: HWANG, SOONHO, LEE, KYUNGJAE, SEO, KYUNGIL, YOON, SHINHO, KIM, SEUNGHWAN  
33: KR 31: 10-2021-0180895 32: 2021-12-16  
33: KR 31: 10-2021-0105677 32: 2021-08-10

#### 54: ELECTRONIC DEVICE COMPRISING ANTENNA

00: -

An electronic device according to one embodiment comprises: a first housing comprising a first edge facing a first direction and a second edge facing a second direction perpendicular to the first direction; a second housing connected to the first housing by means of a connecting member so as to be rotatable about the first housing, and comprising a third edge corresponding to the first edge and a fourth edge corresponding to the second edge when the first housing and the second housing are facing each other; a flexible display forming the front surface of the electronic device and disposed over the first

housing and the second housing; a dielectric surrounding at least a part of the periphery of the flexible display and at least partly disposed between the flexible display and the fourth edge of the second housing; a conductive member located between the dielectric and the flexible display; and a wireless communication circuit disposed inside the first housing or the second housing, wherein the fourth edge comprises a first conductive portion, a first non-conductive portion, a second conductive portion, a second non-conductive portion and a third conductive portion, a first segmental portion and a second segmental portion are formed on the conductive member so as to respectively correspond to the first non-conductive portion and the second non-conductive portion of the fourth edge of the second housing, and the wireless communication circuit may transmit and receive a radio signal by means of at least one from among the first conductive portion, the second conductive portion and the third conductive portion of the second housing. Other various embodiments are possible.



21: 2024/01433. 22: 2024/02/16. 43: 2025/04/10  
51: C02F

71: VEOLIA WATER SOLUTIONS & TECHNOLOGIES SUPPORT

72: LALIBERTÉ, MARC, DE LADURANTAYE-NOËL, MYRIAM

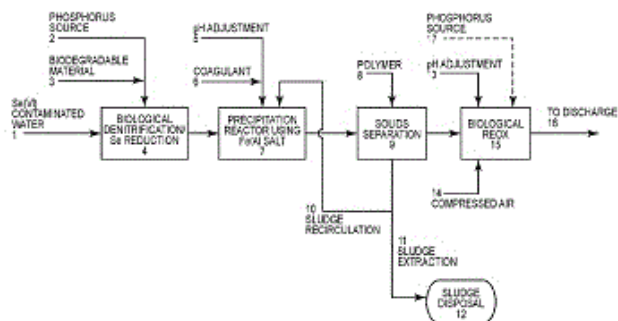
33: US 31: 63/227,366 32: 2021-07-30

#### 54: PROCESS FOR REMOVING SELENIUM FROM WASTEWATER USING BIOLOGICAL REDUCTION AND SURFACE COMPLEXATION

00: -

A process for removing selenium from water is described. Through a biological reduction process, selenium +6 species are reduced to selenium +4 species. A coagulant is mixed with the water and as

a result, solids having complexation binding sites are formed. The reduced selenium +4 species is adsorbed onto the complexation binding sites of the solids. Thereafter, the solids having adsorbed selenium +4 species is separated from the water and ultimately separate from the process. The resulting effluent is subjected to a second biological treatment under aerobic conditions which converts residual selenium and organo-selenium to selenate.



21: 2024/01466. 22: 2024/02/19. 43: 2025/04/10

51: H04N

71: LG ELECTRONICS INC.

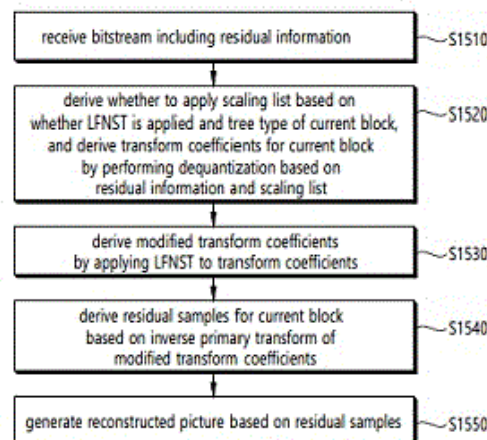
72: KOO, MOONMO, KIM, SEUNGHWAN, LIM, JAEHYUN

33: US 31: 62/959,815 32: 2020-01-10

#### 54: TRANSFORM-BASED IMAGE CODING METHOD AND DEVICE THEREFOR

00: -

An image decoding method according to the present document comprises the steps of: receiving residual information from a bitstream; deriving transform coefficients for a current block by performing inverse quantization on the basis of the residual information; and deriving modified transform coefficients by applying LFNST to the transform coefficients, wherein the inverse quantization is performed on the basis of a predetermined scaling list, and wherein whether to apply the scaling list can be derived on the basis of whether the LFNST is applied and a tree type of the current block.



21: 2024/01473. 22: 2024/02/19. 43: 2025/04/10

51: C07F; C07C

71: LIER CHEMICAL CO., LTD.

72: XU, MIN, LIU, YONGJIANG, ZHOU, LEI, ZENG, WEI, CHENG, KE

33: CN 31: 202110817871.2 32: 2021-07-20

#### 54: METHOD FOR PREPARING GLUFOSINATE OR ANALOG THEREOF

00: -

Provided is a method for preparing glufosinate or an analog thereof.

21: 2024/01475. 22: 2024/02/19. 43: 2025/04/10

51: E06B

71: ROYAL BOON EDAM INTERNATIONAL B.V.

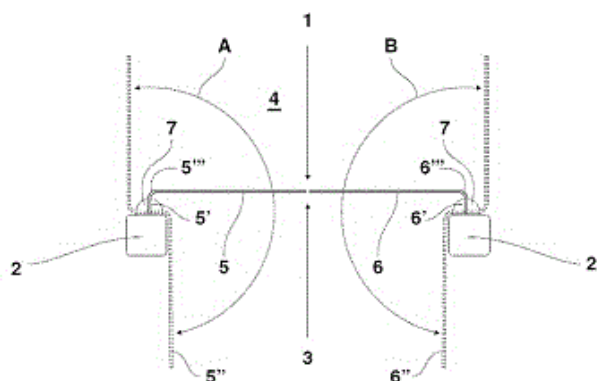
72: DE JONG, MARK, WEEL, CHRIS

33: NL 31: 2028911 32: 2021-08-03

#### 54: A DOOR ARRANGEMENT

00: -

A door arrangement (1) provided with a door frame profile (2) that defines an opening (3) in a passageway (4), and further provided with at least one door (5, 6) which is openable in opposite directions of the passageway (4), and which at least one door (5, 6) is suspended with one or more hinges (7) from the door frame profile (2), wherein the one or more hinges (7) are mounted on the door frame profile (2) outside the opening (3) in the passageway (4).



21: 2024/01478. 22: 2024/02/19. 43: 2025/04/10  
 51: C07F; C07C  
 71: LIER CHEMICAL CO., LTD.  
 72: LIU, YONGJIANG, ZHOU, LEI, ZENG, WEI, XU,  
 MIN, CHENG, KE

33: CN 31: 202110817019.5 32: 2021-07-20

#### 54: PREPARATION METHOD FOR GLUFOSINATE-AMMONIUM

00: -

A preparation method for glufosinate-ammonium or a salt, an enantiomer or a mixture of enantiomers in all ratios thereof, the method being especially suitable for the preparation of glufosinate-ammonium, and greatly shortening steps in an existing preparation process. Especially in the preparation of L-glufosinate-ammonium, the product can effectively retain the ee value of the raw materials.

21: 2024/01503. 22: 2024/02/20. 43: 2025/04/10  
 51: G06F; G09F

71: SAMSUNG ELECTRONICS CO., LTD.  
 72: HYUN, KYUNGHOON, PARK, DAEHYEONG,  
 SHIM, HEEBO, LEE, MINSUNG

33: KR 31: 10-2022-0013699 32: 2022-01-28

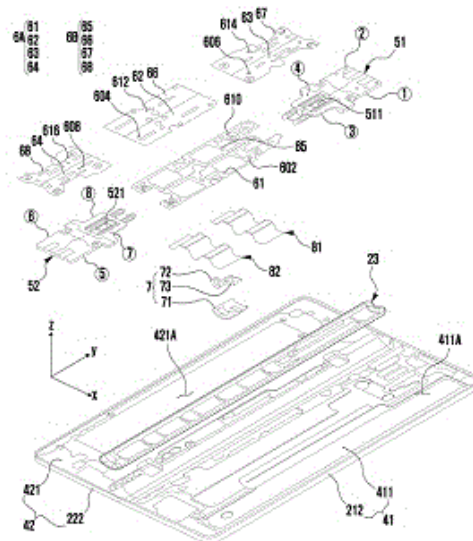
33: KR 31: 10-2021-0104909 32: 2021-08-09

#### 54: FOLDABLE ELECTRONIC DEVICE

00: -

An electronic device according to an exemplary embodiment of the present document comprises a foldable housing, a flexible display, a first support structure, a second support structure, a first hinge assembly and a second hinge assembly, and a first plate assembly. The foldable housing may include a first housing, a second housing, and a folding portion between the first housing and the second housing, and the flexible display may be located in the inner space of the foldable housing and visible through the

front of the foldable housing. The first support structure may be located in the inner space of the first housing and support a first portion of the flexible display, and the second support structure may be located in the inner space of the second housing and support a second portion of the flexible display. The first hinge assembly and the second hinge assembly may be located in the inner space of the foldable housing so as to correspond to the folding portion, connect the first support structure to the second support structure, and be spaced apart from each other in the direction of the folding axis of the foldable portion. The first plate assembly may be located in the inner space of the foldable housing so as to correspond to the folding portion, be coupled to the first support structure, support a third portion of the flexible display corresponding to the folding portion, and include a first plate, a second plate, a third plate, and a fourth plate.



21: 2024/01504. 22: 2024/02/20. 43: 2025/04/10  
 51: A61K

71: PHARVARIS GMBH

72: GIBSON, CHRISTOPH

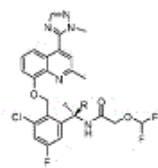
33: EP 31: 21189990.1 32: 2021-08-05

#### 54: LIPID-BASED COMPOSITION FOR ORAL ADMINISTRATION OF BRADYKININ B2-RECEPTOR ANTAGONISTS

00: -

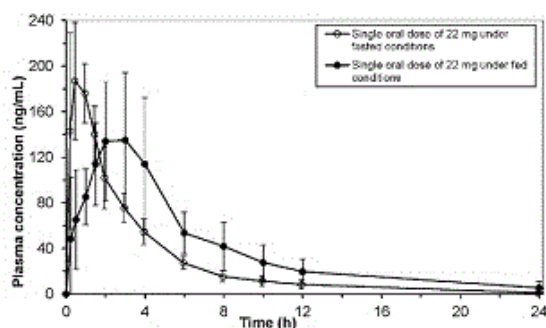
The invention relates to pharmaceutical compositions for oral administration comprising a bradykinin (BK) B2 receptor antagonist having a chemical structure according to Formula 1, or a salt

or solvate thereof, wherein R is deuterium or hydrogen: Formula (1), such as (S)-N-(1-deutero-1-(3-chloro-5-fluoro-2-((2-methyl-4-(1-methyl-1H-1,2,4-triazol-5-yl)quinolin-8-yloxy)methyl)phenyl)ethyl)-2-(difluoromethoxy)acetamide. The compositions comprise the BK B2 receptor antagonist in a dissolved form in a liquid vehicle comprising propylene glycol monocaprylate, polyoxyl castor oil, and propylene glycol. Furthermore, therapeutic uses of the compositions are provided.



(1)

FIG. 3



21: 2024/01505. 22: 2024/02/20. 43: 2025/04/10

51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: KOHLI, GURPREET SINGH, RANE, PRAJKTA  
RUPESH, TELKAR, ASHA

33: EP 31: 21193557.2 32: 2021-08-27

33: EP 31: 21193565.5 32: 2021-08-27

#### 54: DETERGENT COMPOSITION

00: -

The present invention relates to a detergent composition, particularly a solid laundry detergent composition. There is a need in the art to provide laundry detergent composition that maintain or sustain at least some level of beneficial bacteria. This may be accomplished so that beneficial bacteria may regulate or suppress the growth of non-autotrophic bacteria. e.g., pathogenic bacteria and/or maintain a suitable microbiome on a subject to benefit from health improvements that the non-pathogenic bacteria may provide. It is thus an object

of the present invention to provide a laundry detergent composition which does not harm the good bacteria and commensals in the skin microbiome. We have found that when a detergent composition having an alkyl sulphate surfactant along with no or low levels of alkyl benzene sulphonate surfactant and with no or low levels of a bleach system, the solid detergent composition is gentle on the good bacteria and the commensal bacteria present on the skin surface. The solid detergent composition of the present invention provides a skin microbiome-friendly detergent composition while maintaining the cleaning performance of the composition.

21: 2024/01506. 22: 2024/02/20. 43: 2025/04/10

51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: BHUNIA, PANCHANAN, SUBRAHMANYAM,  
NARAYANAN

33: EP 31: 21193056.5 32: 2021-08-25

#### 54: DETERGENT COMPOSITION

00: -

The present invention relates to a laundry detergent composition having a desirable foam profile during the laundering process. It is thus an object of the present invention to provide a detergent composition which provides good foam profile. It is yet another objection of the present invention to provide a detergent composition which reduces the amount of water required for rinsing. The present inventors have found that a detergent composition having specifically selected primary anionic detergent surfactant when present in combination with cosurfactant and a foam suppressing agent surprisingly provides good foam formation in the wash stage while eliminating the foam quickly during the rinsing stage.

21: 2024/01507. 22: 2024/02/20. 43: 2025/04/10

51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: KALATHIL, RAMITHA, CARSWELL, ROBERT  
JOHN

33: EP 31: 21193359.3 32: 2021-08-26

#### 54: A CONCENTRATED CLEANING COMPOSITION

00: -

The present invention is in the field of cleaning compositions. It relates to a concentrated liquid

cleaning composition for forming a liquid detergent on dilution in water comprising: 10 to 50 wt% of an anionic surfactant selected from alkyl sulphate, alkyl ether sulphate, alkyl benzene sulphonate and combinations thereof; 1 to 10 wt% of an amphoteric surfactant; 1 to 20 wt% of a rhamnolipid; 1 to 10 wt% of a hydrotrope; and 0.1 to 15 wt% of a water-soluble inorganic salt, wherein the composition has a viscosity in the range 300 to 800 mPa.s and when diluted in water in 1:4 ratio by weight has a viscosity at least 1000 at 20 S<sup>-1</sup> shear rate, 25°C, and wherein the pH of the composition is in the range from 4 to 7, wherein the ratio of rhamnolipid to hydrotrope is in the range from 1:1 to 6:1 by weight.

21: 2024/01508. 22: 2024/02/20. 43: 2025/04/10  
51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: JIMENEZ SOLOMON, MARIA FERNANDA,  
PARKER, ANDREW PHILIP

33: EP 31: 21193542.4 32: 2021-08-27

#### **54: FILMS AND CAPSULES**

00: -

A water-soluble film comprising a polysaccharide and bittering agent and a water-soluble capsule comprising the film and containing e.g. a home care composition.

21: 2024/01509. 22: 2024/02/20. 43: 2025/04/10  
51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: KOHLI, GURPREET SINGH, RANE, PRAJKTA  
RUPESH, TELKAR, ASHA

33: EP 31: 21193557.2 32: 2021-08-27

33: EP 31: 21193565.5 32: 2021-08-27

#### **54: USE OF A DETERGENT COMPOSITION**

00: -

The present invention relates to the use of a solid detergent composition for protecting skin microbiome. There is a need in the art to provide a laundry detergent composition that maintain or sustain at least some level of beneficial bacteria on skin surface. It is thus an object of the present invention to use a detergent composition to achieve protective effect on the good bacteria and commensal bacteria on the skin microbiome. We have now found that the use of a combination of 1 wt.% to 20 wt.% alkyl benzene sulphonate surfactant, a carbonate builder, 0 wt.% to 3 wt.% bleach system in a detergent composition having a

pH from 9 to 12 provides for a detergent composition which is gentle on the good bacteria and/or commensal bacteria present on skin surface.

21: 2024/01510. 22: 2024/02/20. 43: 2025/04/10  
51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: HIBARE, SUJITKUMAR SURESH, JOSHI,  
HEMENDRA DILIP, KHARE, SHASHANK,  
MHAMUNKAR, RAJAN CHANDRAKANT, MANNA,  
SUBHAJIT

33: EP 31: 21193576.2 32: 2021-08-27

#### **54: DETERGENT COMPOSITION**

00: -

The present invention relates to a detergent composition, particularly to a solid detergent composition which has good dissolution. Thus, there remains a need for a granular laundry detergent composition comprising an anionic deterative surfactant and a carbonate builder having a good fabric-cleaning performance and very good dispensing and dissolution profiles. The present invention provides a solid laundry detergent composition which exhibits good dissolution properties. The good dissolution properties of solid laundry detergent composition being attributed to the presence of carefully and specifically controlled levels of carbonate builder, an anionic surfactant selected from the group consisting of sulphate surfactant, sulphonate surfactant or mixtures thereof in combination with a hydrotrope.

21: 2024/01511. 22: 2024/02/20. 43: 2025/04/10  
51: C11D

71: UNILEVER GLOBAL IP LIMITED

72: CHACKO, ABRAHAM, KUMAR, GIRISH,  
PAWAR, KUNAL SHANKAR, SHAIKH, NADEEM,  
KUMAR, SHARAVAN, SINGH, SATYENDRA  
PRASAD

33: EP 31: 21196792.2 32: 2021-09-15

#### **54: PROCESS FOR PREPARING A SPRAY DRIED DETERGENT PARTICLE**

00: -

The present invention relates to a process for preparing a spray-dried detergent particle. Particularly to spray-dried laundry detergent particles with low pH, low alkalinity and have good particle characteristics. It is yet another object of the present invention to provide a spray dried detergent particle with low levels of alkaline builders such as carbonate



and silicate and yet having good powder properties over extended storage periods. The present inventors have found that a spray dried detergent particle having an in-situ formed reaction product selected from the group consisting of organic carboxylic acid salt of aluminium, aluminium complex of organic carboxylic acid or mixtures thereof, provides for excellent powder properties and extended shelf life without getting caked. It is also surprisingly found that the spray-dried particle provides desired pH in wash solution required for good stain removal performance without being harsh on the hands or the fabrics.

21: 2024/01512. 22: 2024/02/20. 43: 2025/04/10  
51: A61K; A61Q

71: UNILEVER GLOBAL IP LIMITED

72: DAMODARAN, ANITA, KULKARNI, ADITI JAYAVANT, VENKATESH, SATISH KUMAR, MATHAPATHI, MRUTHYUNJAYA SWAMY, PAWAR, ANKITA RUTU, THOMAS, TANYA RACHAEL

33: EP 31: 21201525.9 32: 2021-10-07

#### **54: A TOPICAL COMPOSITION FOR PROVIDING ENERGIZING GLOW ON SKIN**

00: -

The present invention relates to a topical composition that provides energizing glow to skin. It more particularly relates to a personal care composition for topical application that delivers a fresh, young and lively look to skin. This is achieved through a combination of Olivine extract and a vitamin C compound.

21: 2024/01513. 22: 2024/02/20. 43: 2025/04/10  
51: C11D; B65D

71: UNILEVER GLOBAL IP LIMITED

72: PARKER, ANDREW PHILIP, JIMENEZ SOLOMON, MARIA FERNANDA

33: EP 31: 21193547.3 32: 2021-08-27

#### **54: FILMS AND CAPSULES**

00: -

A water-soluble film comprising a pectin and bittering agent wherein the film has a thickness of at least 40 micrometres. A water soluble capsule comprising this film.

21: 2024/01528. 22: 2024/02/21. 43: 2025/04/10  
51: A45D

71: JEMELLA LIMITED

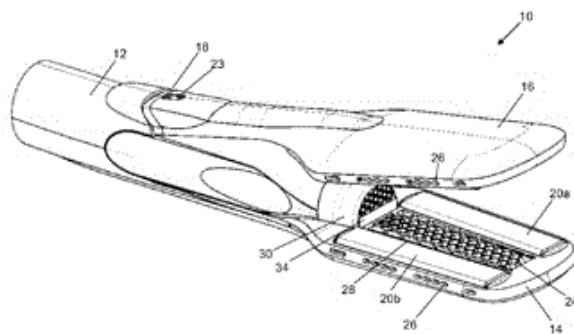
72: HARRISON, ALEX, WEATHERLY, ROBERT, GOLD, RICHARD, WRIGHT, LIAM, HONE, TIM, STONE, ADAM, SURRIDGE, ED, SARGEANT, ANTHONY, MOORE, TIMOTHY

33: GB 31: 1910869.5 32: 2019-07-30

#### **54: APPARATUS AND METHOD FOR DRYING AND STYLING HAIR**

00: -

Apparatus for drying and styling hair, comprising: first and second mutually-opposing arms adapted for movement between an open configuration for receiving a length of wet hair therebetween and a closed configuration adjacent the hair, such that, in use, when the arms are in the closed configuration they form an inter-arm chamber across which the hair passes, and wherein an airflow conduit is provided within and along at least one of the first and second arms; and means for delivering a flow of air along the conduit in the at least one of the first and second arms, and subsequently into the inter-arm chamber. Also provided is a method of drying (and optionally simultaneously styling) hair using such apparatus.



21: 2024/01546. 22: 2024/02/21. 43: 2025/04/10  
51: H05K; H04M

71: SAMSUNG ELECTRONICS CO., LTD.

72: JUNG, KIYOUNG, CHUN, WOOSUNG, AN, JUNGCHUL, CHOI, SEUNGKI, HONG, HYUNJU

33: KR 31: 10-2021-0106361 32: 2021-08-11

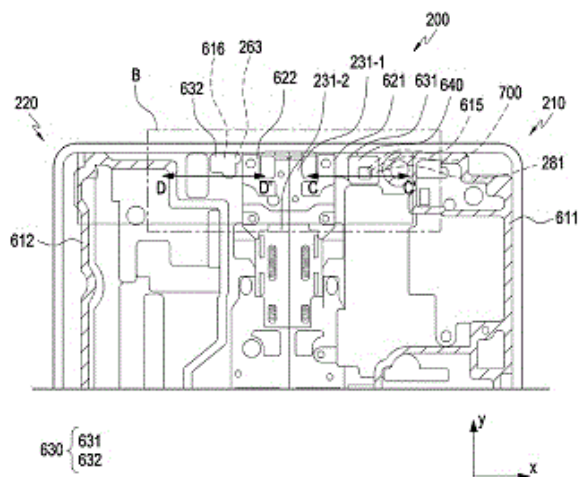
33: KR 31: 10-2021-0105368 32: 2021-08-10

#### **54: ELECTRONIC DEVICE HAVING WATERPROOF STRUCTURE APPLIED THERETO**

00: -

According to various embodiments, an electronic device comprises: a first housing; a second housing; a hinge assembly disposed between the first housing and the second housing and comprising a hinge plate and a hinge module disposed at both ends of the hinge plate in a longitudinal direction; a

first circuit board disposed on the first housing; a second circuit board disposed on the second housing; a flexible display disposed on the first housing, the second housing, and the hinge assembly; a first waterproof member disposed between the first housing and the flexible display; a first adhesive member disposed between the hinge module and the flexible display; an electrical part disposed between the first waterproof member and the first adhesive member; an electrical part waterproof member disposed between the electrical part and the flexible display; and a first support member disposed between the electrical part waterproof member and the flexible display.



21: 2024/01552. 22: 2024/02/21. 43: 2025/04/10  
51: C25B

71: VIERING, JENTSCHURA & PARTNER MBB  
PATENT UND RECHTSANWÄLTE  
72: NUZZO, DANIELE, SPONCHIADO, MICHELE,  
PEREGO, MICHELE

33: EP 31: 21191769.5 32: 2021-08-17

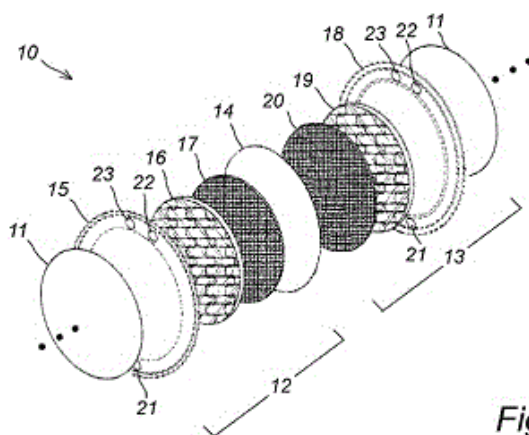
#### **54: METHOD FOR THE ELECTROLYSIS OF WATER AT VARIABLE CURRENT DENSITIES**

00: -

The present invention concerns a method for alkaline water electrolysis of water in an electrolyzer and an electrolyzer configured to carry out the method, the electrolyzer comprising at least one electrolytic cell having an anodic compartment provided with an anode, a cathodic compartment provided with a cathode, and a separator arranged between said anodic and cathodic compartments.

The method comprises selecting a threshold current density such that at operating current densities up to

said threshold current density, the migration of hydrogen generated in said cathodic compartment through said separator into said anodic compartment is limited, and at operating current densities above said threshold current density, a migration of oxygen generated in said anodic compartment through said separator into said cathodic compartment is limited.



**Fig. 1**

21: 2024/01553. 22: 2024/02/21. 43: 2025/04/10  
51: A63B

71: LAKSHMIPATHY, NARENDRANATH

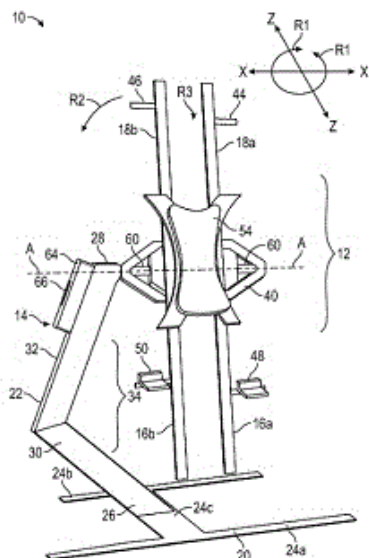
72: LAKSHMIPATHY, NARENDRANATH

33: US 31: 63/234,298 32: 2021-08-18

#### **54: EXERCISE SYSTEM AND CLIMBING SIMULATOR**

00: -

The present invention is directed toward an exercise machine and climbing simulator that enables its users to initiate the climbing or crawling motion whilst being rotated at different angles. This invention includes a rotatable framework and a plurality of foot spines and arm spines that are configured to support the feet and arms of a user. As the framework rotates, the user incurs exercise in maintaining contact with the plurality of foot and hand spines. Each of the foot and hand spines is decoupled from each other, that is, each of the foot and hand spines is configured with independent rotational and lateral movement. By changing the angles of rotation and the positions of the foot and hand spines, gravity is applied in different ways and therefore different muscle groups are targeted. Thus, this invention assists users in acquiring varying degrees of physical fitness and mountain climbing preparation.



21: 2024/01567. 22: 2024/02/22. 43: 2025/04/10  
51: C07D; A61K; A61P  
71: FUJIAN AKEYLINK BIOTECHNOLOGY CO., LTD.

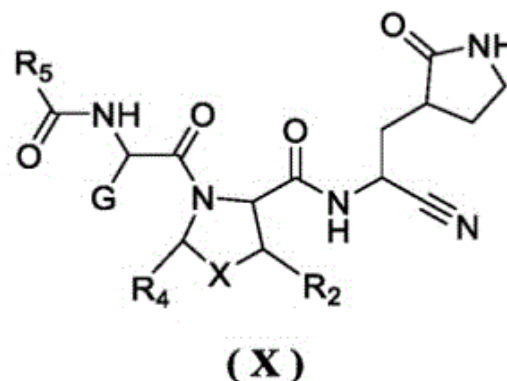
72: CHEN, SHUHUI, YANG, YAXUN, ZHANG, JIANCHEN, LI, PENG, HE, HAIYING, WANG, ZHENG, LI, JIAN

33: CN 31: 202111307043.0 32: 2021-11-05  
33: CN 31: 202110413867.X 32: 2021-04-16  
33: CN 31: 202111040878.4 32: 2021-09-06  
33: CN 31: 202111433962.2 32: 2021-11-29  
33: CN 31: 202110637580.5 32: 2021-06-08  
33: CN 31: 202110879570.2 32: 2021-07-30  
33: CN 31: 202111088812.2 32: 2021-09-16  
33: CN 31: 202111343012.0 32: 2021-11-12  
33: CN 31: 202210029887.1 32: 2022-01-12  
33: CN 31: 202110517743.6 32: 2021-05-12  
33: CN 31: 202110659242.1 32: 2021-06-11  
33: CN 31: 202111567163.4 32: 2021-12-20  
33: CN 31: 202210170046.2 32: 2022-02-23

#### 54: RING-MODIFIED PROLINE SHORT PEPTIDE COMPOUND AND USE THEREOF

00: -

Disclosed are a ring-modified proline short peptide compound and the use thereof, and specifically disclosed is a compound represented by formula (x) or a pharmaceutically acceptable salt thereof.



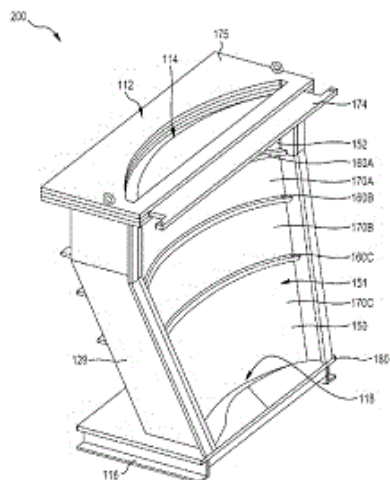
21: 2024/01585. 22: 2024/02/22. 43: 2025/04/09  
51: F24S

71: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION  
72: KIM, JIN-SOO, GARDNER, WILSON, SOO TOO, YEN CHEAN, POTTER, DANIEL

#### 54: MULTI-STAGE FALLING PARTICLE RECEIVER

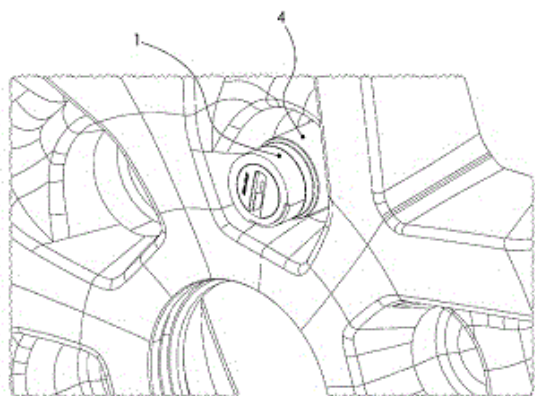
00: -

A solid particle solar receiver comprising: a housing which includes at least one opening for receiving concentrated solar irradiance; and an inclined receiver surface about and along which particles fall downwardly from a particle inlet, the receiver surface being located in the housing in a position through which concentrated solar irradiance can incident through the at least one opening, wherein the receiver surface comprises at least two particle falling stages, each stage separated by at least one particle retention formation configured to receive, accumulate and progressively discharging particles into a subsequent stage. and wherein the receiver surface is configured with a frustoconical shaped curve.



21: 2024/01586. 22: 2024/02/22. 43: 2025/04/09  
 51: F16B; E05B; B60B  
 71: RIMGARD SWEDEN AB  
 72: IVARSSON, LARS, EKSTRÖM, MARCUS  
 33: SE 31: 2150999-7 32: 2021-08-13  
 33: US 31: 17/401,572 32: 2021-08-13  
**54: ANTI-THEFT LOCKING BOLT ASSEMBLY**  
 00: -

An anti-theft locking bolt assembly is disclosed. The assembly comprises an anti-theft bolt threadably attachable to an article to be protected, a bolt cap snugly fitting into a bore on the head of the anti-theft bolt, a lock cylinder housing at least partially rotatably connected to the head of the anti-theft bolt, the lock cylinder housing configured to cover the bolt cap and a locking cylinder and to provide means to prevent removal of the bolt cap. The anti-theft locking bolt assembly is suitable to lock a vehicle wheel and also to replace a spark plug of an combust engine to prevent unauthorized use of the vehicle.

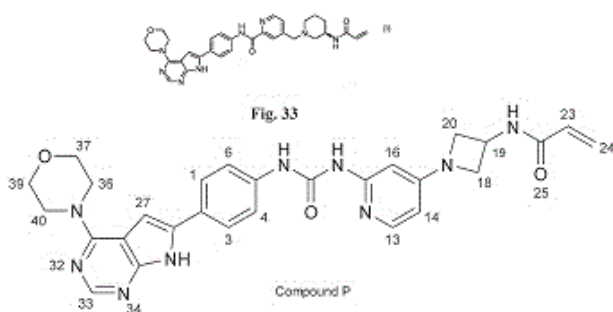


21: 2024/01605. 22: 2024/02/23. 43: 2025/04/09  
 51: C07D; A61K; A61P  
 71: BIOMEA FUSION, INC.  
 72: HE, HONGYAN, JAING, SIYI, SOMANATH, PRIYANKA, LU, DANIEL, KINOSHITA, TAISEI, LAW, BRIAN, BUTLER, THOMAS, PALMER, JAMES T, WONG, ANGELINA SAU MAN, LIN, NAN-HORNG, TAN, HEOW  
 33: US 31: 63/279,053 32: 2021-11-12  
 33: US 31: 63/235,662 32: 2021-08-20  
 33: US 31: 63/310,076 32: 2022-02-14

**54: CRYSTALLINE FORM OF N-[4-[4-(4-MORPHOLINYL)-7H-PYRROLO[2,3-D]PYRIMIDIN-6-YL]PHENYL]-4-[[3(R)-[(1-OXO-2-PROPEN-1-YL)AMINO]-1-PIPERIDINYL]METHYL]-2-PYRIDINECARBOXAMIDE, AN IRREVERSIBLE MENIN-MLL INHIBITOR FOR THE TREATMENT OF CANCER**

00: -

The present invention relates to crystalline forms of N-[4-[4-(4-morpholinyl)-7H-pyrrolo[2,3-d]pyrimidin-6-yl]phenyl]-4-[[3(R)-[(1-oxo-2-propen-1-yl)amino]-1-piperidiny]methyl]-2-pyridinecarboxamide (formula (I)). The compound of formula (I) is an irreversible menin-MLL inhibitor for use in the treatment of e.g. cancer, including e.g. lymphoma and leukemia, and autoimmune diseases. The present invention discloses the characterisation of crystalline forms by e.g. XRPD, FTIR, DSC and TGA as well as pharmacological data.

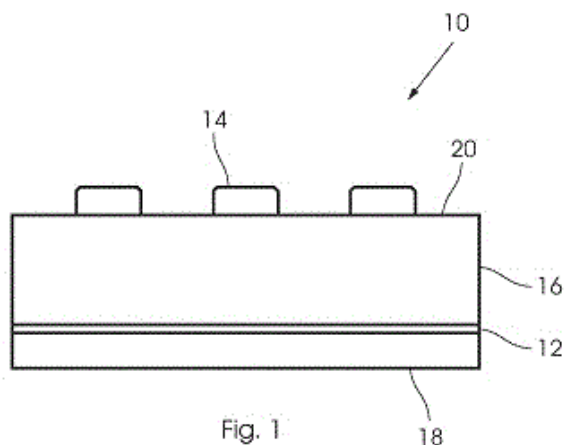


21: 2024/01607. 22: 2024/02/23. 43: 2025/04/09  
 51: H01L  
 71: UNIVERSITY OF SOUTH AFRICA  
 72: VALLABHAPURAPU, SREEDEVI, VALLABHAPURAPU, VIJAYA SRINIVASU, DLAMINI, ZOLILE WISEMAN  
 33: ZA 31: 2021/06263 32: 2021-08-30

**54: NON-VOLATILE RESISTIVE RANDOM-ACCESS MEMORY AND A MANUFACTURING METHOD THEREOF**

00: -

A non-volatile resistive random-access memory (ReRAM), which includes a first electrode, a second electrode, and a resistive switching/active layer which is located between the first and second electrode. The switching layer contains milk or is milk-based, or contains an emulsion containing lactose, fat, protein and water. The switching layer may more specifically contain cow milk.



21: 2024/01608. 22: 2024/02/23. 43: 2025/04/09

51: C06B; B01J

71: BAE SYSTEMS PLC

72: BURN, ANDY ODEN, DIDSBURY, MATTHEW PAUL, MURRAY, IAN EWART PATERSON, MCWHIR, NIALl JOHN, JUBB, DANIEL, JONES, CHRISTOPHER, KENNEDY, NICOLA, KENNEDY, STUART

33: GB 31: 2112498.7 32: 2021-09-02

**54: IMPROVED FLOW SYNTHESIS**

00: -

The invention relates to a method of synthesising an organic high explosive, comprising the steps of i) providing a first solution A ii) providing a second solution B, wherein the admixture of solution A and solution B are selected such that they are capable upon formation of the admixture of reacting together to provide an organic high explosive, iii) causing the solution A and B to be mixed and passed through a flow reactor to create an admixture, wherein the flow reactor comprises a pipe, wherein the internal diameter of the pipe is selected such that it is less than the critical diameter of the organic high

explosive, thereby preventing detonation of the formed organic high explosive in said flow reactor.

21: 2024/01645. 22: 2024/02/26. 43: 2025/04/09

51: A01N; A01P

71: AGRO INNOVATION INTERNATIONAL, UNIVERSITE DE ROUEN-NORMANDIE

72: NGUEMA-ONA, EMMANUEL ERIC, CRUZ, FLORENCE, JAMOIS, FRANK, PLUCHON, SYLVAIN, MOLLET, JEAN-CLAUDE, LEHNER, ARNAUD

33: FR 31: FR2108546 32: 2021-08-06

**54: USE OF AN ACID WHEY TO STIMULATE THE GERMINATION OF A PLANT POLLEN GRAIN**

00: -

The invention relates to the use of an acid whey to stimulate the germination of a plant pollen grain and/or to stimulate the elongation of the pollen tube of said pollen grain. According to another aspect, the invention relates to a method for stimulating the germination of a plant pollen grain and/or for stimulating the elongation of the pollen tube of said pollen grain, in which an acid whey is applied to the plant in an amount sufficient to stimulate the germination of the pollen grain and/or to stimulate the elongation of the pollen tube of said pollen grain. According to a final aspect, the invention relates to a composition comprising (i) an acid whey and (ii) a brown seaweed extract.

21: 2024/01685. 22: 2024/02/27. 43: 2025/04/09

51: C22B

71: UMICORE

72: VERHEES, PIETER

33: EP 31: 21188417.6 32: 2021-07-29

**54: CRYSTALLIZATION PROCESS FOR THE SEPARATION OF METALS**

00: -

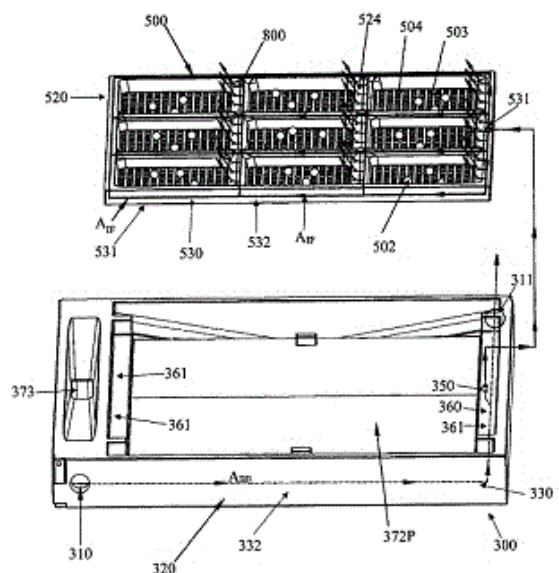
The present disclosure is related to a crystallization process for the recovery of metals from starting materials comprising Ni and Li. The starting materials, either in aqueous solution or solid form, are reacted with an aqueous solution, reaching an acidity of preferably at least 500 g/L sulfuric acid, at a temperature of at least 45 °C. Upon solid/liquid separation of the reaction products, a solid residue comprising the major part of the Ni as a hydrated sulfate, and an effluent solution comprising the major part of the Li, are obtained. This process is



particularly suitable for recycling lithium-ion rechargeable batteries.

21: 2024/01690. 22: 2024/02/27. 43: 2025/04/09  
51: B07B  
71: ORENDA AUTOMATION TECHNOLOGIES INC.  
72: LEFAS, HRISTOS, BAIRD, MALCOLM LAWRENCE  
33: US 31: 17/490,169 32: 2021-09-30  
**54: AIR COOLED SIFTING DEVICE**

00: -  
A sifter insert for use in a sifting device has an insert frame and a screening media affixed thereto. An insert frame air channel is located within the insert frame. The sifter insert is sized to be received in a sifter box frame of an associated sifter box. The sifter box frame has a box frame air channel in fluid communication with the insert box frame channel of the received sifter insert. The passage of air through the box frame air channel and the insert frame air channel may cool the sifter box and the insert frame, and, may cool the screening media and the material being sifted thereon. Channel holes in the inset frame may direct air from the insert frame air channel to the screening surface of the screening media.

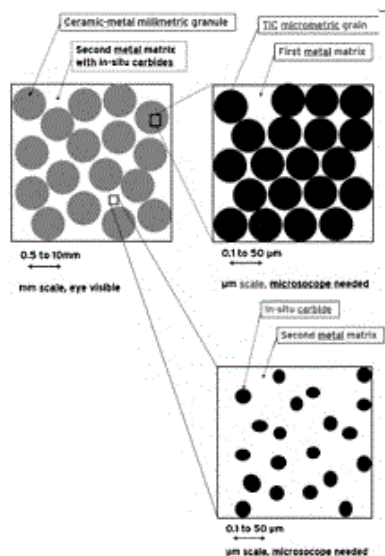


21: 2024/01719. 22: 2024/02/28. 43: 2025/04/09  
51: B22D; B22F; C22C; B02C  
71: MAGOTTEAUX INTERNATIONAL S.A.  
72: DESILES, STÉPHANE  
33: EP 31: 21198590.8 32: 2021-09-23

## **54: COMPOSITE WEAR COMPONENT**

00: -

The present invention discloses a hierarchical composite wear component comprising a reinforced part and a non-reinforced part, the reinforced part comprising a three- dimensionally interconnected network of periodically alternating millimetric ceramic- metal composite granules with millimetric interstices, said ceramic-metal composite granules comprising at least 52 vol%, preferably at least 61 vol%, more preferably at least 70 vol% of micrometric particles of titanium carbide embedded in a first metal matrix, the porosity of the ceramic-metal composite granules being lower than 5 vol%, preferably lower than 3 vol% and most preferably lower than 2 vol%, the volume fraction of porosity of the granules embedded in the first metal matrix being determined according to ISO 13383-2:2012; the three-dimensionally interconnected network of ceramic-metal composite granules with its millimetric interstices being embedded in a second metal matrix, the volume content of ceramic-metal composite granules in the reinforced part is comprised between 45 and 65 vol%, preferably between 50 and 60 vol%, the composition of the first metal matrix being substantially different from the composition of the second metal matrix, the second metal matrix comprising the ferrous cast alloy present in the millimetric interstices of the reinforced part, said millimetric interstices additionally comprising at least 1 vol%, preferably at least 3 vol% of micrometric carbide particles selected from the group consisting of tungsten carbide, vanadium carbide, molybdenum carbide, titanium carbide, niobium carbide, hafnium carbide and zirconium carbide or mixtures thereof, the volume percentage of additional carbides in the second metal matrix being determined according to ISO 13383-2:2012.



21: 2024/01759. 22: 2024/02/29. 43: 2025/04/09  
51: E02F

71: CATERPILLAR INC.

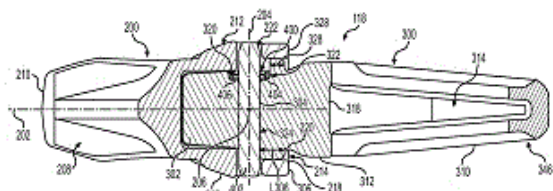
72: SERRURIER, DOUGLAS C, SINN, ERIC T,  
JURA, JASON G, WELLS, COREY M

33: US 31: 17/464,793 32: 2021-09-02

#### 54: ADAPTER FOR A WORK IMPLEMENT WITH THRU-HOLE AND RAIL

00: -

A work implement assembly (100) with replaceable tips comprises a tip and adapter assembly (118) including a base (300) that may take the form of an adapter, the base (300) including a male portion (302a) including a first projection (306a), and a second projection (328a) facing in a diametrically opposed manner to the first projection (306a). A stepped bore (320) extends from the first projection (306a) to the second projection (328a) that has a large diameter portion (322) that is at least partially formed by the first projection (306a). A retaining mechanism (400) uses a rail (306, 328) to foolproof the type of tip (200) or tooth that can be attached to the adapter.



21: 2024/01760. 22: 2024/02/29. 43: 2025/04/10  
51: E02F; F16B

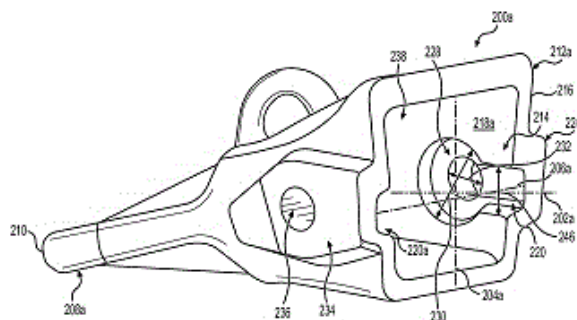
71: CATERPILLAR INC.

72: SERRURIER, DOUGLAS C, SINN, ERIC T,  
JURA, JASON GRANT, WELLS, COREY MICHAEL  
33: US 31: 17/464,838 32: 2021-09-02

#### 54: TIP WITH THRU-HOLE AND PIN RETAINING GEOMETRY

00: -

A wear member (200a) includes a forward working portion (208a) that is disposed along its longitudinal axis (202a) including a closed end (210), and a rear attachment portion (212a) that is disposed along the longitudinal axis (202a) including an open end (214) with an exterior surface (216), and an interior surface (218a). The interior surface (218a) defines an interior counterbore (228) with a major diameter (230), and a minor diameter (232). A ratio of the major diameter (230) to the minor diameter (232) ranges from 1.8 to 2.2.



21: 2024/01763. 22: 2024/02/29. 43: 2025/05/26  
51: C09K; E21B

71: GLENSOL (PTY) LIMITED

72: GREUB, Fritz

33: ZA 31: 2021/06400 32: 2021-09-02

#### 54: EMULSIFIER COMPOSITIONS

00: -

This invention relates to an emulsifier composition and more specifically, but not exclusively to a micro emulsifier composition for use in enhanced oil recovery (EOR). The emulsifier composition comprises a mixture of at least one ethoxylated alkyl phenol, at least one fatty acid amide, and at least one unsaturated fatty acid. The invention further relates to a method of forming an aqueous emulsion using the emulsifier composition, as well as a process of separating a hydrocarbon composition from an associated substrate making use of the same.

21: 2024/01784. 22: 2024/02/29. 43: 2025/04/10  
 51: A61K; A61P  
 71: ESTEVE PHARMACEUTICALS, S.A.  
 72: VELA-HERNANDEZ, JOSE-MIGUEL, MERLOS-ROCA, MANUEL, NAVARRO-ACEBES, XAVIER, HERRANDO-GRABULOSA, MIREIA

33: EP 31: EP21382845 32: 2021-09-20

**54: OXADIAZASPIRO COMPOUNDS FOR USE IN THE TREATMENT OF MOTONEURON DEGENERATION OR IN NEUROPROTECTION**

00: -

The present invention relates to compounds having pharmacological activity towards the sigma ( $\sigma$ ) receptor, and more particularly to oxadiazaspiro compounds having this pharmacological activity, for use in neuroprotection or in the treatment of motoneuron degeneration.

21: 2024/01786. 22: 2024/02/29. 43: 2025/04/10  
 51: C12N; A61K

71: AIM IMMUNOTECH INC.

72: EQUELS, THOMAS K, STRAYER, DAVID R

33: US 31: 63/235,388 32: 2021-08-20

33: US 31: 63/342,562 32: 2022-05-16

**54: COMPOSITIONS AND METHODS FOR TREATING POST-COVID CONDITIONS OF FATIGUE**

00: -

Disclosed is a method for treating a subject that has previously been infected with SARS-CoV-2 and exhibiting at least one Post COVID- 19 Conditions of fatigue (PCC of fatigue) symptom. The method comprises administering to the subject a therapeutically effective amount of a composition comprising therapeutic double-stranded RNA (tdsRNA). Compositions, medicaments and delivery systems comprising tdsRNA for the treatment of PCC of fatigue are also disclosed.

21: 2024/01799. 22: 2024/03/01. 43: 2025/06/10  
 51: C08J; B01J; B29B; B29C  
 71: ALPLA WERKE ALWIN LEHNER GMBH & CO. KG

72: Andreas WEBER, Patrik KARRER, Wibke BECKER

33: CH 31: 70154/2021 32: 2021-08-11

**54: METHOD FOR PRODUCING A PLASTIC GRANULATE**

00: -

The invention relates to a method for the production of granulate suitable for the production of extrusion-

blow-molded hollow bodies, comprising the following steps: (a) sorting by type, washing and comminuting of PET articles originating from the post-consumer collection of plastic packaging, (b) removing contaminants such as metal or paper, before, at the same time or after method step (a), (d) drying the PET material obtained from steps (a) and (b), (e) melting the dried PET material, (f) pressing the PET material through a melt filter, (g) dividing the PET material into individual melt streams, (h) cooling and solidifying the melt streams in a water bath and separating the solidified melt flows into pellets, wherein the pellets thus obtained have an intrinsic viscosity of 0.5 to 0.75dl/g, (i) crystallizing the pellets, (j) drying and condensing the crystallized pellets in a solid-phase polycondensation reactor until they reach an intrinsic viscosity of 1.0 to 1.7 dl/g. In a step (c) after step (b), PET material from various type-sorted sorting processes according to step (a) is premixed in such a way that the Trouton ratio of the mixed PET material at a shear rate of 50 to 200 s<sup>-1</sup> is less than 4.

21: 2024/01869. 22: 2024/03/05. 43: 2025/04/24  
 51: B65G; G01G; A23N

71: UNITEC S.P.A.

72: BENEDETTI, LUCA

33: IT 31: 102021000021629 32: 2021-08-10

**54: STATION FOR THE CONVEYANCE AND MEASUREMENT OF HORTICULTURAL PRODUCTS**

00: -

A station for the conveyance and measurement of horticultural products (A), comprising means (2) for the movement and support, along a predefined trajectory (B), of a plurality of horticultural products (A), which can be arranged in series so that they rest on the movement and support means (2). The conveyance and measurement station comprises at least one primary dispenser (3) of pressurized fluid, configured to direct a continuous or intermittent jet of the fluid toward the predefined trajectory (B), and an apparatus (4) for measuring at least one parameter which represents the extent of the deviation imposed by the jet on each product (A) in transit, with respect to the predefined trajectory (B), for the consequent indirect verification of the weight and/or of the specific gravity of the respective product (A), correlated with the extent of the deviation.

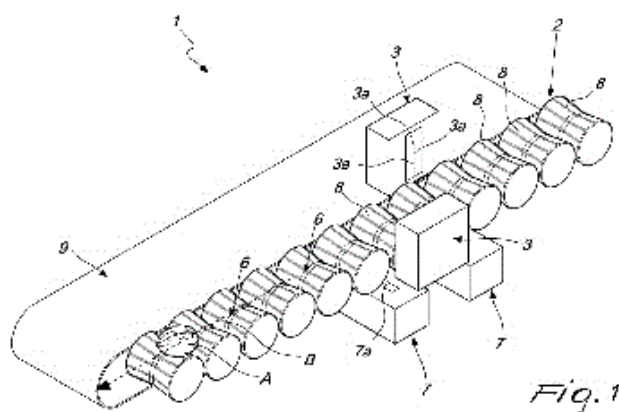


Fig. 1

21: 2024/01888. 22: 2024/03/06. 43: 2025/04/24

51: A23K; C12P; C12N; A23J

71: PRAIRIE AQUATECH LLC

72: HARSTAD, DENNIS, NATES, SERGIO F

33: US 31: 17/093,557 32: 2020-11-09

33: US 31: 63/036,274 32: 2020-06-08

33: US 31: 63/052,745 32: 2020-07-16

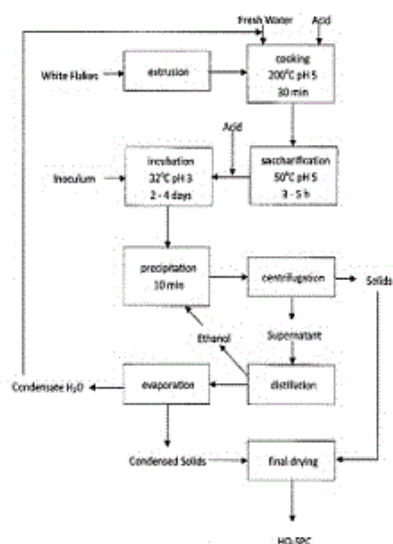
33: US 31: 63/035,797 32: 2020-06-07

33: US 31: 63/039,694 32: 2020-06-16

#### 54: MICROBIAL-BASED PROCESS FOR IMPROVED QUALITY PROTEIN CONCENTRATE

00: -

The present invention describes a bio-based process to produce high quality protein concentrate (HQPC) by converting plant derived celluloses and carbohydrates into bioavailable protein via aerobic incubation, including the use of such HQPC so produced as a nutrient, including use as a fish meal replacement in aquaculture diets.



21: 2024/01892. 22: 2024/03/06. 43: 2025/04/17

51: C12N C07K C12P

71: CJ CHEILJEDANG CORPORATION

72: KWON, Nara, BONG, Hyun-Ju, LEE, Ah Reum, HEO, Jung Ok

33: KR 31: 10-2021-0125842 32: 2021-09-23

#### 54: STRAIN FOR PRODUCING HIGH CONCENTRATION L-GLUTAMIC ACID AND METHOD FOR PRODUCING L-GLUTAMIC ACID USING THE SAME

00: -

The present application relates to a strain and a microorganism for producing high concentration L-glutamic acid and a method of use thereof.

21: 2024/01899. 22: 2024/03/06. 43: 2025/04/24

51: A24F; A24D

71: ADALSIA LIMITED

72: SAWHNEY, RAVI KUMAR, VERNON, JOHN MARK VERNON, ELAM, JOHN MICHAEL, HUSSEY, LANCE GORDON

33: US 31: 63/242,764 32: 2021-09-10

33: US 31: 63/242,787 32: 2021-09-10

33: US 31: 63/242,757 32: 2021-09-10

33: US 31: 63/242,775 32: 2021-09-10

33: US 31: 63/242,735 32: 2021-09-10

#### 54: HOOKAH DEVICE AND IMPROVED CONSUMABLE POD

00: -

Described is a hookah device (100) with various hookah components that provide an improvement over traditional hookah devices. The hookah device (100) includes a heater head (102) with a pivotally mounted controller housing (106) that seals against a consumable pod (200) to form a pair of airflow seals therebetween. An inductively heated heat plate (600) is used, in conjunction with a pair of sensors (518, 1902), to precisely control the temperature of the heat plate (600) and consumable pod (200). A vase (1501) is secured against the heater head using a load dispersing mechanism. The load dispersing mechanism secures the vase while dispersing a clamping pressure to preventing breakage thereof. The load dispersing mechanism also provides hanger hooks (116) to secure a handle for directional control while carrying the hookah device.



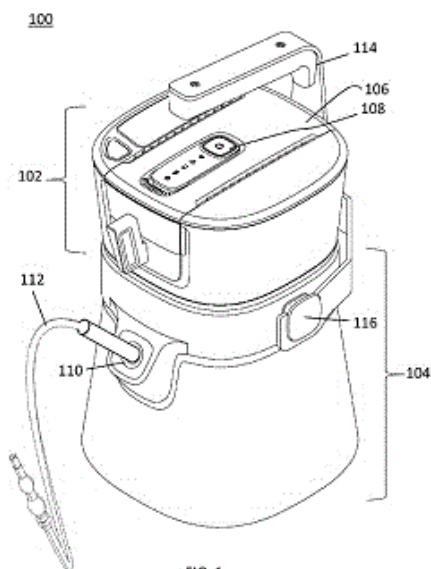


FIG. 1

21: 2024/01901. 22: 2024/03/06. 43: 2025/04/24  
51: E05B

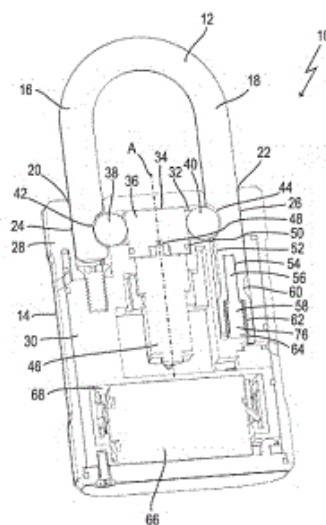
71: ABUS AUGUST BREMICKER SÖHNE KG  
72: BURK, MARTIN, JERGER, CHRISTIAN  
JOHANNES

33: DE 31: 10 2021 122 250.8 32: 2021-08-27

#### **54: MOBILE ELECTRONIC LOCK**

00: -

The invention relates to a mobile electronic lock comprising a lock body and a securing part which can be moved relative to the lock body between a closed position and an open position, the lock body comprising an electromechanical locking device which has: an electric motor having a rotor; a bolt coupled to the rotor; and a control circuit. The bolt can be electrically driven by means of the electric motor out of a locking position, in which the securing part located in the closed position is locked to the lock body, into an unlocking position, in which the securing part is released for movement into the open position. By moving the securing part out of the open position into the closed position, it is possible to mechanically drive the bolt, the bolt being drivingly coupled with the rotor of the electric motor in such a way that mechanically driving the bolt brings about a forced rotational movement of the rotor. The control circuit is designed to detect the forced rotational movement of the rotor.



21: 2024/01939. 22: 2024/03/07. 43: 2025/04/24  
51: C11D

71: UNILEVER GLOBAL IP LIMITED  
72: CHACKO, ABRAHAM, KUMAR, GIRISH,  
KUMAR, SHARAVAN, PAWAR, KUNAL SHANKAR,  
SHAIKH, NADEEM, SINGH, SATYENDRA PRASAD  
33: EP 31: 21196805.2 32: 2021-09-15

#### **54: PROCESS FOR PREPARING A SPRAY DRIED DETERGENT PARTICLE**

00: -

The present invention relates to a process for preparing of a particulate, free flowing detergent particle by a slurry making and spray drying technique. In particular it relates to the process for preparing a slurry with lower alkalinity for the production of spray dried laundry detergent particle. Accordingly, it is one object of this invention to provide a process for preparing a spray dried detergent particle where the spray dried particle has excellent powder properties and provides a wash liquor with lower alkalinity and provides good stain removal performance without being harsh on hands and fabrics. The present inventors have found that a spray-dried detergent particle having an aluminium hydrate, alkaline builder at certain specific levels provides for excellent powder properties with extended shelf life without getting caked and the spray-dried particles provides desired pH in wash solution to provide for good stain removal performance without being harsh on the hands or the fabrics.

21: 2024/01940. 22: 2024/03/07. 43: 2025/04/24



51: C10G

71: CHEVRON PHILLIPS CHEMICAL COMPANY LP

72: SYDORA, ORSON L

33: US 31: 63/241,121 32: 2021-09-07

**54: HEAVY OLIGOMER COMPOSITIONS OF A SELECTIVE 1-HEXENE AND 1-OCTENE CATALYST**

00: -

A C<sub>10</sub> hydrocarbon composition of greater than 55 wt. % C<sub>10</sub> mono-olefins containing from 11 to 45 wt. % 1-decene, at least 0.5 wt. % 2-butyl-1-hexene, at least 1 wt. % 3-propyl-1-heptene, from 0.5 to 12 wt. % 4-ethyl-1-octene, at least 4 wt. % 4-penten-1-yl-cyclopentane, and from 2 to 40 wt. % 5-methyl-1-nonene. A C<sub>12</sub> hydrocarbon composition of greater than 60 wt. % C<sub>12</sub> mono-olefins containing at least 8 wt. % 1-dodecene and at least 0.5 wt. % 6-hepten-1-yl-cyclopentane, and the composition also containing heptylcyclopentane and n-dodecane at a weight ratio of heptylcyclopentane to n-dodecane from 0.3: 1 to 8: 1. A C<sub>14</sub> hydrocarbon composition of greater than 60 wt. % C<sub>14</sub> mono-olefins containing at least 12 wt. % 1-tetradecene and at least 0.5 wt. % 8-nonen-1-yl-cyclopentane, and the composition also containing from 3 to 30 wt. % of n-tetradecane and nonylcyclopentane.

21: 2024/01941. 22: 2024/03/07. 43: 2025/04/24

51: A61K; A61L; A61P

71: ARC MEDICAL INC.

72: SUN, HESONG, MILLET, IAN, SPRINGATE, CHRISTOPHER MICHAEL KEVIN

33: US 31: 63/354,322 32: 2022-06-22

33: US 31: 63/235,316 32: 2021-08-20

**54: FUCAN AND MODIFIED FUCAN COMPOSITIONS FOR THE TREATMENT OF CONDITIONS RELATED TO CAPSULAR CONTRACTURE AND TO INHIBITING FIBROUS GROWTH AROUND OR ON TRANSPLANTS**

00: -

Compositions and methods comprising medically-acceptable fucans suitable for medical and surgical applications, including treatment of capsular contracture and other foreign body reaction (FBR) conditions, and medical and surgical applications related to transplants and transplant operations, such as GVHD and fibrous growth around or on implants or transplants after implantation/transplantation, and related diseases, infections, and traumas.

21: 2024/01942. 22: 2024/03/07. 43: 2025/04/24

51: C08L; C08F; C08J; A61B

71: PUBLIC JOINT STOCK COMPANY "SIBUR HOLDING" (PJSC "SIBUR HOLDING")

72: KORYSTINA, LUDMILA ANDREEVNA, BAGRYASHOV, SERGEJ VIKTOROVICH

33: RU 31: 2021128244 32: 2021-09-27

**54: BUTADIENE NITRILE LATEX, LATEX COMPOSITION FOR DIP-MOLDING, AND DIP-MOLDED ARTICLE**

00: -

The present invention relates to carboxylated butadiene nitrile latex, used for manufacturing of the dip-molded articles, in particular for production of latex gloves for industrial and medical purpose. More particular, the present invention relates to a latex for the manufacture of the dip-molded articles, comprising structural units formed from at least one monomer which is conjugated diene, at least one ethylene unsaturated monomer comprising a nitrile group, and at least one monomer which is an unsaturated carboxylic acid, where the value of the solubility index (A), calculated by the formula  $A=100 \cdot p \cdot S / (M_n + M_w)$  is 0.5 to 22 wt%\*nm\*mol\*g<sup>-1</sup>, where p is polymer solubility in methyl ethyl ketone (wt%), S - latex particle size (nm), M<sub>n</sub> – number-average molecular weight of the tetrahydrofuran-soluble fraction of butadiene-nitrile latex (g/mol), M<sub>w</sub> is weight average molecular weight of the tetrahydrofuran-soluble fraction of butadiene-nitrile latex (g/mol), with the polydispersity value of latex polymer M<sub>w</sub>/M<sub>n</sub> of 2.0 to 5.0. The present invention also relates to a dip-molding composition based on butadiene-nitrile latex, to a dip-molded article and to a glove, manufactured based on the latex composition according to the present invention.

21: 2024/01945. 22: 2024/03/07. 43: 2025/04/24

51: A61K; A61Q

71: UNILEVER GLOBAL IP LIMITED

72: EKANI NKODO, AXEL HERVE, HAMER, BETHANY REBECCA LOUISE, MOGHADAM, ARASH MOHAJER

33: EP 31: 21198036.2 32: 2021-09-21

**54: CONDITIONING SHAMPOO COMPOSITION**

00: -

The present invention is in the field of rinse-off compositions; in particular, relates to shampoo compositions for improved hair conditioning and styling properties. There is a constant need to

improve conditioning properties such as low friction and ease of combing for hair after drying, with a reduction in the heavy, greasy feel. It is an object of the present invention to provide a hair treatment composition which can provide improved hair conditioning and styling properties from a single composition without increasing the conditionings agents for eg: silicones. It has been found that using specific pressure sensitive adhesives in combination with a silicone can improve hair conditioning and styling properties.

21: 2024/01966. 22: 2024/03/08. 43: 2025/04/24

51: H04B

71: SAMSUNG ELECTRONICS CO., LTD.

72: KIM, JONGHWAN, SHIM, SEIJOON, OH, JONGHO, HA, KILSIK

33: KR 31: 10-2021-0014497 32: 2021-02-02

33: KR 31: 10-2020-0120102 32: 2020-09-17

#### **54: TRANSMISSION METHOD AND APPARATUS FOR MIMO SYSTEM**

00: -

A communication technique for convergence between an IoT technology and a 5th generation (5G) communication system for supporting a higher data transmission rate beyond a 4th generation (4G) system, and a system thereof is provided. The method includes intelligence services (for example, smart homes, smart buildings, smart cities, smart cars or connected cars, healthcare, digital education, retail businesses, security and safety related services, and the like.) On the basis of a 5G communication technology and an IoT-related technology. A method includes determining a scheduling-related parameter for at least one user, and transmitting scheduling information indicating the scheduling-related parameter to a radio unit (RU), wherein the scheduling information includes a first section extension field including information relating to a user equipment identifier (ueID) related to the at least one user, and a second section extension field including information relating to a number of ueIDs corresponding to each user.

1500

0 (mbs)	1	2	3	4	5	6	7 (lbs)
ef	extType = 0x0y						
extLen (1 word)							
BeamGroupType+10b	numPortC (=number of scheduled layers-1)						
reserved	2nd ueID(14:8)						
2nd ueID(7:0)							
...							
reserved	(numPortC+1)-th ueID(14:8)						
(numPortC+1)-th ueID(7:0)							

ef	New exttype	
extlen (1 word)		
numUeID of 1st user		numUeID of 2nd user
...		
...		numUeID of last user
filler to ensure 4-byte boundary		

21: 2024/01973. 22: 2024/03/08. 43: 2025/04/24

51: A47K; F23G; F23J

71: CRANFIELD UNIVERSITY

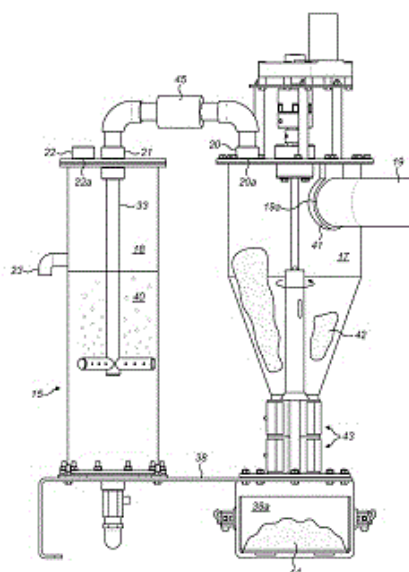
72: WILLIAMS, LEON MATTHEW

33: GB 31: 2112131.4 32: 2021-08-24

#### **54: SOLID WASTE PROCESSING APPARATUS**

00: -

A solid waste treatment module (10) configured for the pyrolysis and preferably torrefaction of biomass such as human solid waste. A liquid based emission scrubber unit (15) is coupled directly to a pyrolysis unit (16).



21: 2024/01975. 22: 2024/03/08. 43: 2025/04/24

51: C21D; C22C

71: TATA STEEL IJMUIDEN B.V.

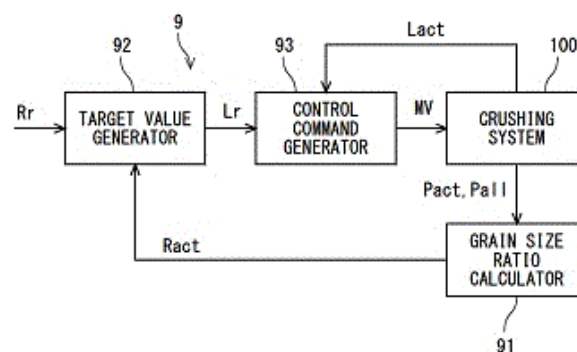
72: CAMPANIELLO, JEAN JOSEPH

33: EP 31: 21202973.0 32: 2021-10-15

**54: HYBRID HIGH STRENGTH LOW ALLOY COLD-ROLLED AND ANNEALED STEEL STRIP AND METHOD FOR PRODUCING IT**

00: -

This invention relates to a hybrid high strength low alloy cold-rolled and annealed steel strip and a method for producing said steel strip.



21: 2024/01976. 22: 2024/03/08. 43: 2025/04/24

51: B02C

71: KABUSHIKI KAISHA EARTHTECHNICA

72: KOBAYASHI, JUN, KIJIMA, TAKASHI, KAJITA, NOBUYUKI, ISHIZAWA, MOTOAKI, NAKASHIMA, KENICHI, SAKAMOTO, MORIYUKI, YAMAMOTO, KEITA

33: JP 31: 2021-132812 32: 2021-08-17

**54: CONTROLLER OF CRUSHING SYSTEM, CRUSHING SYSTEM, AND METHOD OF CONTROLLING THE SAME**

00: -

Provided is a controller of a crushing system, the crushing system including a gyratory crusher and a feeder. The controller includes processing circuitry. The processing circuitry: obtains a load index that directly or indirectly indicates a crushing load on the gyratory crusher; calculates a grain size ratio that indicates a production amount of a product as a ratio of the production amount of the product to a predetermined reference production amount, the product being obtained from objects that have been crushed by the gyratory crusher and being in a predetermined grain size range; generates a load index target value based on the obtained load index and a correlation between the load index and the grain size ratio; and generates a control command value from the load index and the load index target value.

21: 2024/01978. 22: 2024/03/08. 43: 2025/04/24

51: B65G; B02C; G01G

71: KABUSHIKI KAISHA EARTHTECHNICA

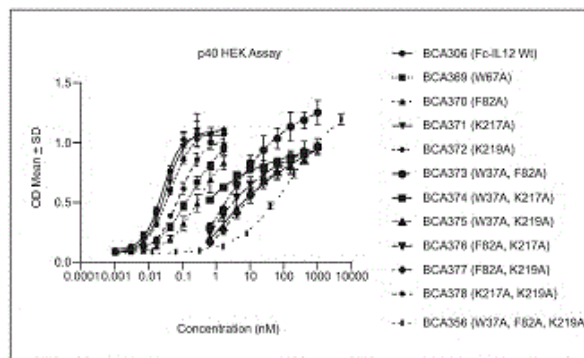
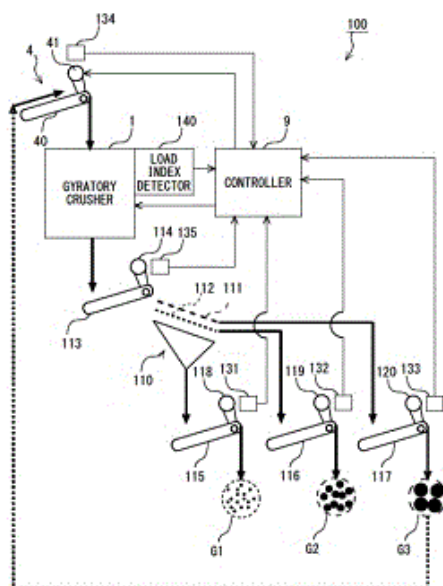
72: KOBAYASHI, JUN, KIJIMA, TAKASHI, KAJITA, NOBUYUKI, ISHIZAWA, MOTOAKI, NAKASHIMA, KENICHI, SAKAMOTO, MORIYUKI, YAMAMOTO, KEITA

33: JP 31: 2021-132813 32: 2021-08-17

**54: PRODUCTION AMOUNT DETECTOR, PRODUCTION AMOUNT DETECTION SYSTEM INCLUDING THE SAME, AND PRODUCTION AMOUNT DETECTION METHOD**

00: -

A production amount detector of the present disclosure is a production amount detector in a production apparatus that produces a predetermined product by performing a predetermined process on a raw material fed into the production apparatus. The production apparatus includes a transport conveyor that transports the produced product. The production amount detector includes: a storage that stores in advance therein a correlation between electric power supplied to an electric motor that drives the transport conveyor and a transportation amount per unit time by the transport conveyor; and a production amount calculator that obtains the electric power supplied to the electric motor and calculates, from the obtained electric power and the correlation between the electric power and the transportation amount, the transportation amount corresponding to the obtained electric power as a production amount in the production apparatus.



21: 2024/02034. 22: 2024/03/12. 43: 2025/04/24

51: C07K; A61K; C12N

71: BICARA THERAPEUTICS INC.

72: BHATNAGAR, JAYA, GOSWAMI, ARVIND VITTAL, TRIPURANA, HARISH KUMAR, NAIR, PRADIP, SUBBARAMAN, RAMAKRISHNAN MELARKODE, KRISHN, SHIV RAM, BOREDDY, SRINIVAS REDDY, NAIR, RESHMI, VARSHNEY, AVANISH K, TAN, SENG-LAI

33: US 31: 63/245,523 32: 2021-09-17

#### 54: CAIX TARGETING IL-12 FUSION PROTEINS AND METHODS OF USE THEREOF

00: -

Provided herein are IL-12p40 and IL-12p35 polypeptides and compositions (e.g., pharmaceutical compositions) comprising the same; as well as methods of making the IL-12p40 and IL-12p35 polypeptides and compositions. Further provided herein are fusion proteins (e.g., antibody fusion proteins) that comprise an IL-12p40 polypeptide (e.g., an IL-12p40 polypeptide described herein) and/or IL-12p35 polypeptide (e.g., an IL-12p35 polypeptide described herein). The IL-12p40 polypeptides, IL-12p35 polypeptides, and fusion proteins provided herein are useful in pharmaceutical compositions and methods of treating diseases (e.g., cancer).

21: 2024/02036. 22: 2024/03/12. 43: 2025/04/24  
51: E21B

71: ROODT, PETRUS HENDRIK, GRADIDGE, ROBERT CHARLES

72: ROODT, PETRUS HENDRIK

33: ZA 31: 2021/05770 32: 2021-08-13

#### 54: DRILL STEEL COUPLING, ROD AND DRILL STEEL INCLUDING SAME

00: -

This invention concerns a drill rod, a drill steel coupling for coupling drill steel rods to one another and a drill steel including such drill steel rod and coupling. The drill steel coupling includes complementary shaped connecting formations carried by ends of drill steel rods. The connecting formations are typically male and female to allow the male connecting formation to be received in the female connecting formation. Securing formations prevent relative axial movement between the rods while allowing for rotational movement. The rods are connected to and disconnected from one another through rotational movement of less than one revolution. The male connecting formation preferably has a hexagonal outer profile so that it can be connected to either a female connecting formation or directly to a drilling machine.

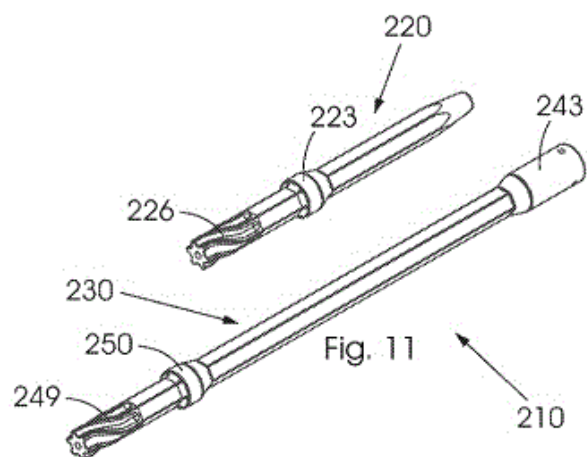


Fig. 11

21: 2024/02093. 22: 2024/03/13. 43: 2025/04/24  
 51: A01H  
 71: BEJO ZADEN B.V.  
 72: HAARSMAN, ADRIANA DORIEN, KATSCHNIG, DIANA, ZWAAN, WILLEM ARIE, DEKKER, PETER ARNOLDUS, SCHRIJVER, ALBERTUS JOHANNES MARIA

#### **54: TROPICAL ROOT-KNOT NEMATODE RESISTANT CARROT PLANT**

00: -

The present invention relates to tropical root-knot nematode resistant carrot plants comprising a first tropical root-knot nematode resistance providing genomic fragment. The present invention further relates to methods for identifying tropical root-knot nematode resistant carrot plants, methods for providing tropical root-knot nematode resistant carrot plants and means for identifying tropical root-knot nematode resistant carrot plants.

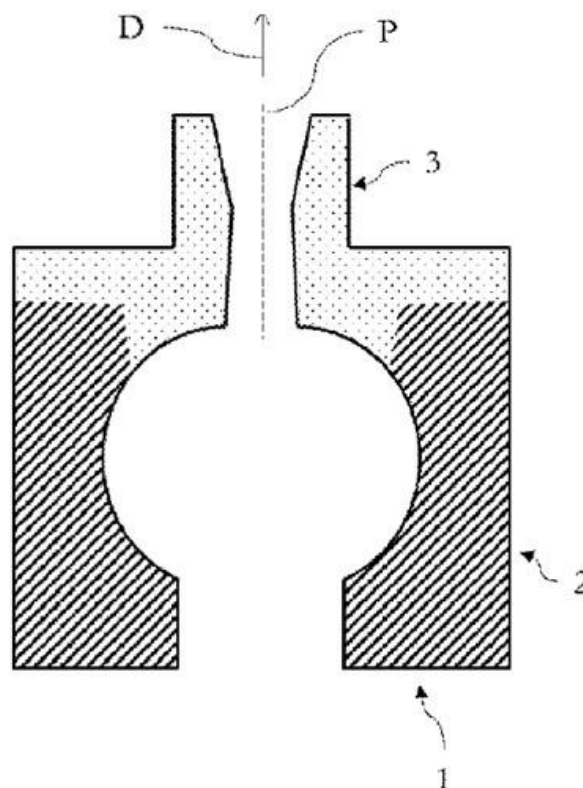
21: 2024/02148. 22: 2024/03/18. 43: 2025/05/21  
 51: C23C  
 71: ARCELORMITTAL  
 72: Vincent RUWET, Sergio PACE, Océane GILLET  
 33: IB 31: PCT/IB2021/059432 32: 2021-10-14

#### **54: VAPOUR NOZZLE FOR PVD**

00: -

The invention relates to a vapour jet coater for depositing, on a running substrate, coatings formed from metal or metal alloy, said vapour jet coater comprising successively : - a repartition chamber, configured to be connectable to an evaporation pipe, and - a vapour outlet orifice, connected to said repartition chamber and able to eject a metal alloy vapour along a main ejection plan and a main

ejection direction, comprising successively i. a converging section, ii. a diverging section.



21: 2024/02150. 22: 2024/03/18. 43: 2025/05/21  
 51: B32B; C21D; C22C; C23C  
 71: ARCELORMITTAL  
 72: Daniel CHALEIX, Véronique HEBERT, Fabrice LAFFINEUR, Vincent RUWET  
 33: IB 31: PCT/IB2021/059600 32: 2021-10-19

#### **54: SURFACE PREPARATION FOR JVD**

00: -

This patent relates to a method for depositing metallic coatings on a substrate comprising : - an annealing step, in an annealing furnace, forming on said substrate, a ferritic surface layer having a thickness from 10  $\mu\text{m}$  to 50  $\mu\text{m}$  and a microstructure comprising in surface fraction up to 10% of cumulated amount of martensite, bainite and the balance being made of ferrite, - a skin pass step, - a coating step, inside a vacuum chamber, wherein a metallic vapour is ejected towards at least a side of said substrate to form a surface layer of at least one metal.

21: 2024/02162. 22: 2024/03/18. 43: 2025/04/17  
 51: C07K C12N C12P



71: CJ CHEILJEDANG CORPORATION

72: PARK, Hye Min, SIM, Hee-jin, JUNG, Hwi-Min, LEE, Jin Nam, CHOI, Jin-Geun

33: KR 31: 10-2021-0072313 32: 2021-06-03

**54: NOVEL YhhS VARIANT AND METHOD FOR PRODUCING O-PHOSPHOSERINE, CYSTEINE, AND DERIVATE OF CYSTEINE USING SAME**

00: -

The present application relates to a novel YhhS variant and a method for producing O-phosphoserine, cysteine, and a derivative of cysteine using same.

21: 2024/02266. 22: 2024/03/20. 43: 2025/04/23

51: H01R G01R

71: NETWORK RAIL INFRASTRUCTURE LIMITED

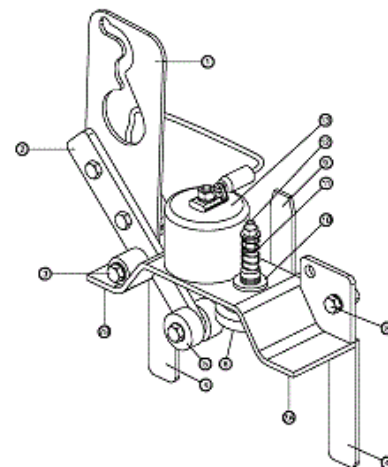
72: NEL, Louis

33: GB 31: 2203745.1 32: 2022-03-17

**54: MAGNETIC EARTH CLAMP FOR OVERHEAD LINE EQUIPMENT STRUCTURES**

00: -

An earth clamp for overhead line structures, comprising a clamp frame comprising a profile having a flat contact point at each end of the profile and a middle part at different height than each contact point at each end of the profile, at least one magnetic part arranged to the clamp frame for magnetically attaching the clamp frame against a surface, said magnetic part being situated towards the middle part of the frame profile, wherein the magnetic part is arranged to move in relation to the frame between the level of the contact points and away from the level defined by the contact points towards the middle part, to allow the earth clamp to be attached to a structure facilitating mechanical and electrical connection thereof with the overhead line structure through the magnetic part and the contact points, and comprising means to move the earth clamp frame and/or the magnetic part in relation to the overhead line structure to counteract the magnetic force exerted by the magnetic part to the overhead line structure in order to release the earth clamp from the overhead line structure. A corresponding portable earth is presented.



21: 2024/02269. 22: 2024/03/20. 43: 2025/04/23

51: G06F

71: ACTIAN CORPORATION

72: KLÄBE, Steffen, DESANTIS, Robert, P.

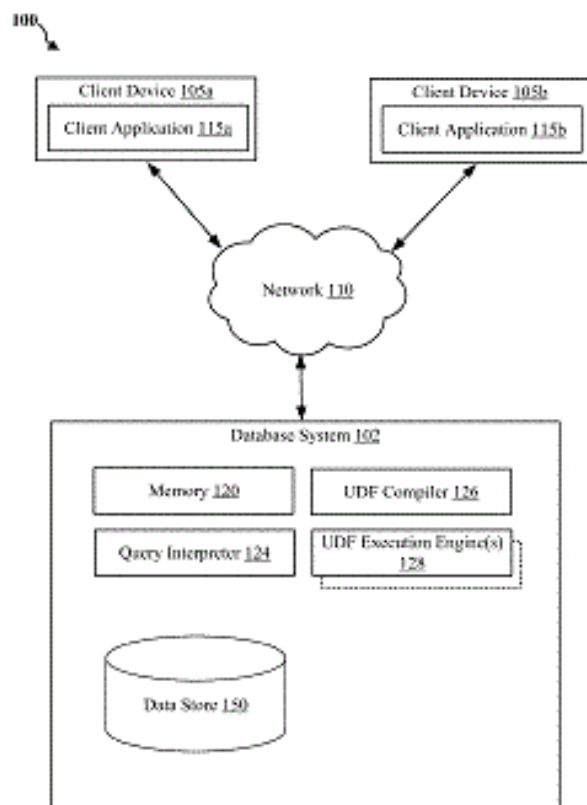
33: US 31: 63/237,429 32: 2021-08-26

33: US 31: 17/873,906 32: 2022-07-26

**54: SYSTEM AND METHOD FOR EXECUTING COMPILED USER DEFINED FUNCTIONS IN VECTORIZED DATABASES**

00: -

Aspects described herein relate to executing a compiled user defined function (UDF) in an interpreted database query engine. A database query that invokes a UDF defined in an interpreted programming language can be received, and a shared library produced by compiling the UDF can be loaded during database runtime. The UDF can be executed via the shared library during the invocation of the database query, or another database query, in the interpreted database query engine.



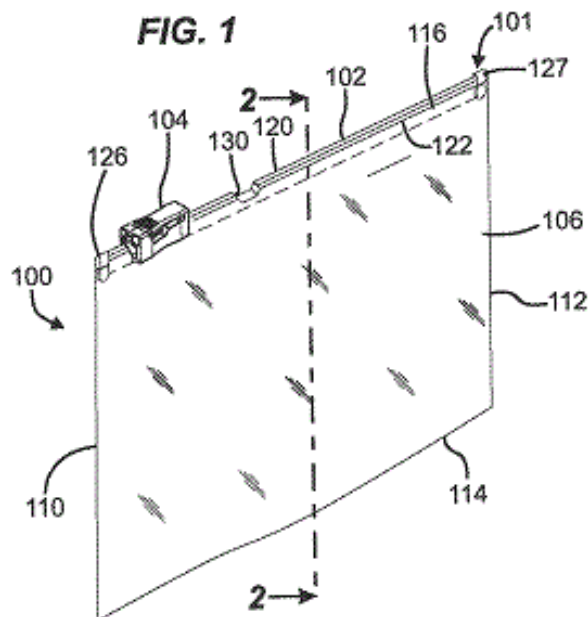
21: 2024/02471. 22: 2024/03/27. 43: 2025/04/30  
 51: C12N C07K C12P  
 71: CJ CHEILJEDANG CORPORATION  
 72: CHANG, Jin Sook, KIM, Hyo Kyung, CHOI, Sun Hyoung, LEE, Zeewon  
 33: KR 31: 10-2021-0137890 32: 2021-10-15  
**54: CORYNEBACTERIUM GENUS MICROORGANISM PRODUCING L-ARGININE, AND METHOD FOR PRODUCING L-ARGININE USING SAME**

00: -

The present application pertains to: an L-arginine-producing microorganism in which proteins containing the amino acid sequence of SEQ ID NO: 1 are attenuated; and a method for producing L-arginine using same.

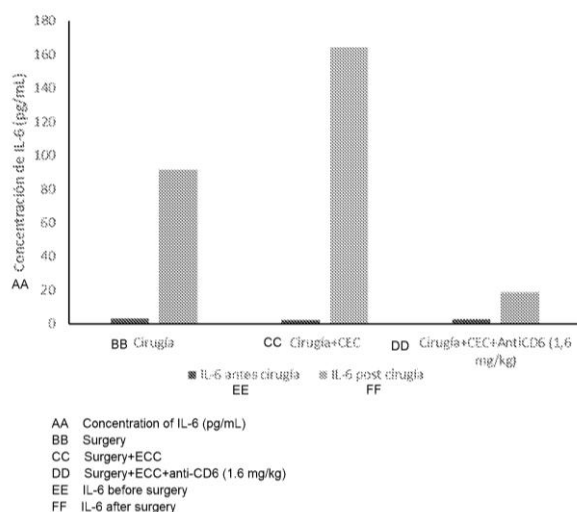
21: 2024/02472. 22: 2024/03/27. 43: 2025/04/17  
 51: B65D  
 71: REYNOLDS PRESTO PRODUCTS INC.  
 72: DERUE, Nicholas, A., THOMPSON, Gregg, WEHRLE, Richard  
 33: US 31: 17/463,990 32: 2021-09-01  
**54: CHILD RESISTANT ZIPPER CLOSURE, SLIDER, RECLOSABLE POUCH & METHODS**  
 00: -

A zipper closure includes mating first and second profiles, which releasably interlock along a parting line along the side. A slider can be used to open and close the zipper. The slider has a channel, which receives an ear on the second profile, and the ear rides through the ear-receiving channel to align engaging structure of the first and second profiles and roll them together into interlocked engagement. The slider has a splitter on a deflectable tab, which can be pressed into a notch on the zipper closure to initially separate the mating profiles, while moving the slider to direct the ear into an ear-receiving channel in the slider and deflect the ear to a side and pry open and separate the profiles.



21: 2024/02613. 22: 2024/04/04. 43: 2025/05/26  
 51: A61K; C07K; A61P  
 71: CENTRO DE INMUNOLOGIA MOLECULAR  
 72: GARCÍA VEGA, Yanelda de los Ángeles, ABDO CUZA, Anselmo Antonio, CORREA PADILLA, Jorge Miguel, ÁLVAREZ BENITO, Octavio, LEÓN MONZÓN, Kalet, SUÁREZ LÓPEZ, Juliette Maria  
 33: CU 31: 2021-0074 32: 2021-09-08  
**54: USE OF ANTI-CD6 MONOCLONAL ANTIBODIES IN THE PREVENTION OF CELLULAR AND ORGAN DAMAGE RESULTING FROM HYPER-INFLAMMATORY RESPONSE**  
 00: -  
 The present invention relates to the fields of biotechnology and medicine. In particular, it

describes the use of anti-CD6 monoclonal antibodies that specifically bind to CD6 domain 1 in the prevention of the hyper-inflammatory response that is triggered by medical procedures resulting from the passage of blood through an extracorporeal circuit. The anti-CD6 antibodies of the present invention show a reduction in the degree of hyper-inflammation through a lower concentration of IL-6, CRP and LDH; with the consequent prevention of cellular and organ damage.



21: 2024/02855. 22: 2024/04/12. 43: 2025/06/02

51: B23B; C21D; C22C; C23C

71: ARCELORMITTAL

72: Brian LIN, Venkata Sai Ananth CHALLA, Hyojin SONG, Damon PANAHI

#### 54: COLD ROLLED AND HEAT TREATED STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF

00: -

A cold rolled and heat treated steel sheet comprising of the following elements  $0.2\% \leq C \leq 0.35\%$ ;  $0.2\% \leq Mn \leq 1.2\%$ ;  $0.1\% \leq Si \leq 0.9\%$ ;  $0\% \leq Al \leq 0.1\%$ ;  $0.2\% \leq Cr \leq 0.8\%$ ;  $0.01\% \leq Nb \leq 0.1\%$ ;  $0.1\% \leq Ni \leq 0.9\%$ ;  $0.1\% \leq Mo \leq 0.9\%$ ;  $0.01\% \leq Ti \leq 0.1\%$ ;  $0\% \leq P \leq 0.02\%$ ;  $0\% \leq S \leq 0.03\%$ ;  $0\% \leq N \leq 0.09\%$ ;  $0.0001\% \leq B \leq 0.010\%$ ;  $0\% \leq V \leq 0.1\%$ ;  $0\% \leq Cu \leq 2\%$ ;  $0\% \leq Ca \leq 0.005\%$ ;  $0\% \leq Ce \leq 0.1\%$ ;  $0\% \leq Mg \leq 0.05\%$ ;  $0\% \leq Zr \leq 0.05\%$ ; the remainder composition being composed of iron and unavoidable impurities caused by processing, the microstructure of said steel comprising, by area percentage, at least 75% of tempered martensite, 0% to 10% Fresh Martensite, 3 to 20% of Ferrite and 0 to 5% Bainite.

21: 2024/03370. 22: 2024/04/30. 43: 2025/04/24

51: A61K; A61P; C07K

71: Hangzhou DAC Biotech Co., Ltd.

72: ZHAO, Robert, YANG, Qingliang, YE, Hangbo, JIA, Junxiang, ZHANG, Lingli, HUANG, Yuanyuan, LI, Wenjun, WANG, Juan, GUO, Huihui, YE, Zhicang, ZHAO, Linyao, BAI, Lu, LIU, Xiaolei

33: PCT/CN 31: 2021/128453 32: 2021-11-03

#### 54: SPECIFIC CONJUGATION FOR AN ANTIBODY-DRUG CONJUGATE

00: -

Provided herein is a process for preparing a homogeneous conjugate of an antibody or antibody-like protein via linkage of cysteine sites between heavy-light chains in the IgG antibody or antibody-like protein. Provided herein also are methods of making the conjugates in a specific manner comprising either generation of specific thiols of an antibody or antibody-like protein agent, followed by reaction with drug/linker complexes, or generation of specific thiols of an antibody or antibody-like protein agent and conjugation of a synthetic linker-drug assembly with the thiols simultaneously in one pot reaction, to provide conjugates with over 75%, in most cases more than 80% of payloads linked at the specific cysteine sites between heavy-light chains of the IgG antibody or antibody-like protein. It also relates to methods of using the homogeneous conjugate in targeted prophylaxis or treatment of cancer, infection and immunological disorders.

21: 2024/03371. 22: 2024/04/30. 43: 2025/04/24

51: A61K; A61P; C07K

71: Hangzhou DAC Biotech Co., Ltd.

72: ZHAO, Robert, YANG, Qingliang, LIU, Xiaolei, ZHANG, Lingli, HUANG, Yuanyuan, LI, Wenjun, YE, Hangbo, WANG, Juan, GUO, Huihui, ZHOU, You

#### 54: SPECIFIC CONJUGATION OF AN ANTIBODY

00: -

Provided herein is a process for preparing a homogeneous conjugate of an antibody or antibody-like protein via linkage of cysteine sites between heavy-light chains in the IgG antibody or antibody-like protein. It also relates to methods of making the conjugates in a specific manner comprising either generation of specific thiols of an antibody or antibody-like protein agent, followed by reaction with drug/linker complexes, or generation of specific thiols of an antibody or antibody-like protein agent and conjugation of a synthetic linker-drug assembly

with the thiols simultaneously in one pot reaction, to provide conjugates with over 75%, in most cases more than 80% of payloads linked at the specific cysteine sites between heavy-light chains of the IgG antibody or antibody-like protein. It also relates to methods of using the homogeneous conjugate in targeted prophylaxis or treatment of cancer, infection and immunological disorders.

21: 2024/03454. 22: 2024/05/06. 43: 2025/06/04

51: G21B

71: ARCELORMITTAL

72: Nathalie LABBE, Shu Hui HAM, Gwenaël LE

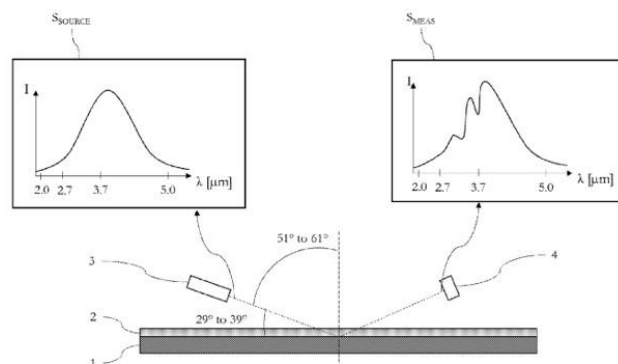
NOC, Pauline LEVERONE, Jean-Pierre LEBACQ

33: IB 31: PCT/IB2021/061501 32: 2021-12-09

#### **54: METHOD FOR MEASURING THE THICKNESS OF A VARNISH LAYER**

00: -

The invention relates to a method for estimating the thickness of a varnish coating, having a thickness from 0.5 to 5  $\mu\text{m}$ , of a moving steel substrate comprising a varnish coating comprising the steps of : i. lighting said moving coated steel substrate with an illumination source forming an incident angle from 51° to 61° with respect to the normal of said steel substrate, ii. p-polarizing the light after reflection on said moving steel substrate and measuring the intensities of the light after reflection on said moving steel substrate, iii. assessing an absorbance spectrum of said varnish coating in said wavelength range iv. assessing an area under the curve of said absorbance spectrum AMEAS v. estimating the varnish thickness using said area under the curve and a function linking a varnish thickness and an area under the curve of an absorbance spectrum of said coating.



21: 2024/03527. 22: 2024/05/08. 43: 2025/06/10

51: B01J; C08J

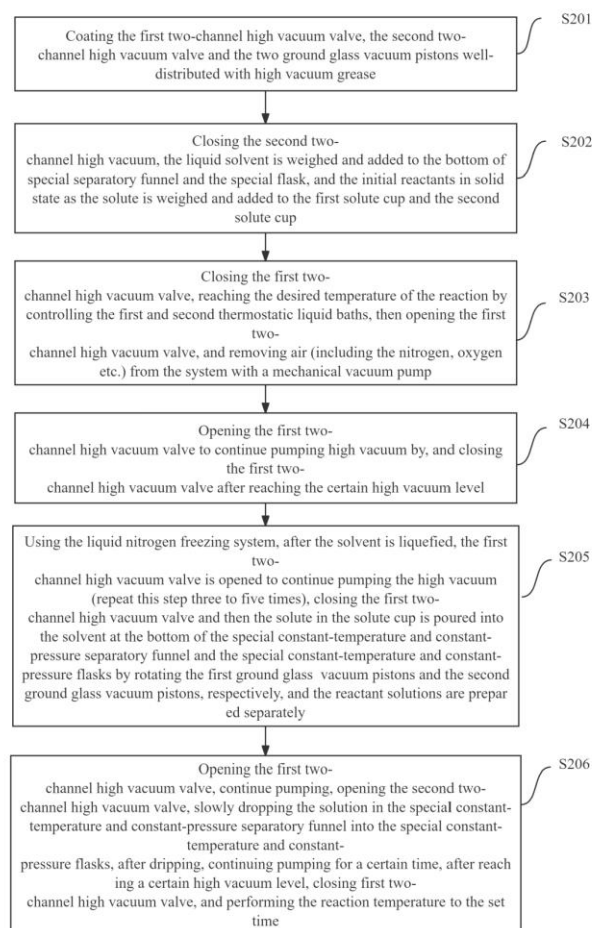
71: YANTAI UNIVERSITY

72: Baolong XU, Haiyan SUN, Weitian WANG

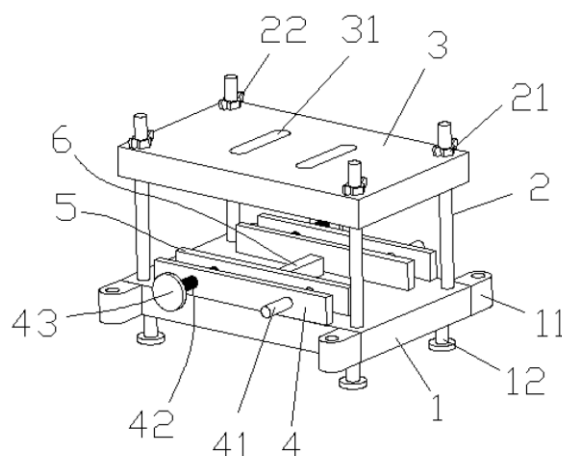
#### **54: APPARATUS AND METHOD FOR SOLUTION SYNTHESIS REACTION WITHOUT OXYGEN AND AT CONSTANT TEMPERATURE**

00: -

The present invention discloses an apparatus and method for solution synthesis reaction without oxygen and at constant temperature, belonging to the technical field of experimental device. Firstly, the oxygen in the initial reaction material and solvent is removed by a vacuum pump, by changing the temperature of the bath liquid, the initial reaction material in the liquid state is frozen into a solid state, continuing pumping, removing a small amount of oxygen remaining in the solvent or solution, after the liquid reactant becomes liquid again, the temperature of each initial material is controlled by the bath liquid in the thermostatic bath to reach a constant temperature, and the reaction liquid is configured, after deoxidation of each reaction solution, under the condition of constant pressure, all kinds of initial reaction materials are connected and performed reactions at the same temperature. The present invention not only ensures that each process of the solution synthesis reaction is performed under a condition of without oxygen, but also eliminates the adverse effects on the solution synthesis reaction due to the different temperatures between the initial reaction solutions, and it is easier to obtain high-purity target products.



prefabricated structural part is connected and fixed by the underground space connecting and fixing device. The device and the method have the following beneficial effects. When a concrete prefabricated part is pressed and fixed by the pressing plate, the concrete prefabricated part is clamped in advance by the clamping devices and then pressed and fixed by the pressing plate, the concrete prefabricated part is not prone to deviate laterally, and the relative distance of two clamping plates can be controlled, so that concrete prefabricated parts with different sizes can be used, the positions of the two clamping plates on one side of the fixed plate can be changed, and eccentric concrete prefabricated parts can be used.



21: 2024/03670. 22: 2024/05/13. 43: 2025/06/10  
 51: E02D; H01J  
 71: CHINA RAILWAY SEVENTH GROUP CO., LTD., SHENZHEN UNIVERSITY, CHINA RAILWAY SOUTH INVESTMENT GROUP CO., LTD., STECOL CORPORATION  
 72: Chengyu HONG, Xiangsheng CHEN, Junkun TAN, Aiguo YIN, Min ZHU, Jiqiang LIU, Dong SU  
**54: UNDERGROUND SPACE CONNECTING AND FIXING DEVICE AND METHOD**

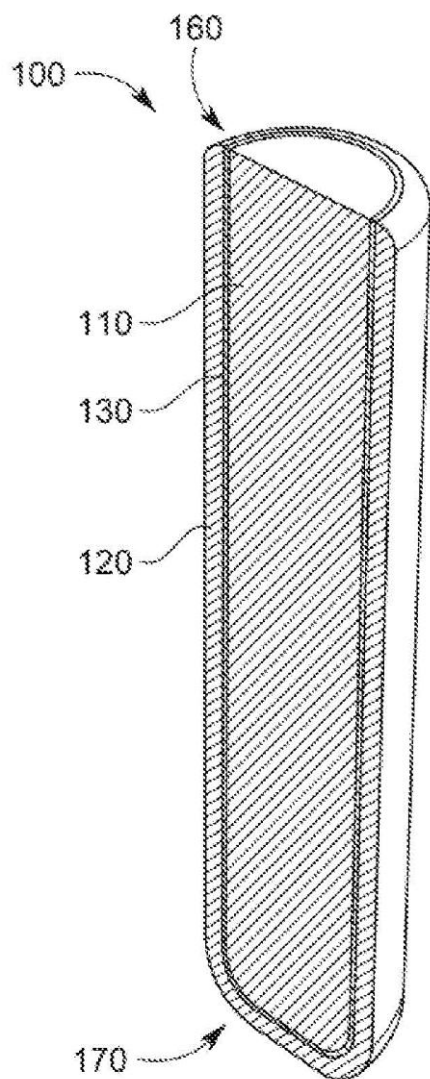
00: -  
 An underground space connecting and fixing device is provided specifically, and relates to the technical field of underground space construction. The device includes a fixed plate and a pressing plate. One side of the fixed plate is fixedly connected with a plurality of upright posts. The pressing plate slides back and forth along the upright post. One side of the fixed plate is symmetrically provided with clamping devices. A positioning device is arranged at the center of the fixed plate. An underground space connecting and fixing method is also provided. A

21: 2024/03671. 22: 2024/05/13. 43: 2025/03/27  
 51: A61K  
 71: Ruminant BioTech Corp Limited  
 72: LAY, Mark Christopher, THOMAS, Hayden Peter, GLADDEN, Neil Richard, HAYMAN, David Leslie, CORBETT, Geoffrey Earle, BHUSAL, Prabhat  
 33: NZ 31: 770786 32: 2020-12-08  
**54: IMPROVEMENTS TO DEVICES AND METHODS FOR DELIVERY OF SUBSTANCES TO ANIMALS**

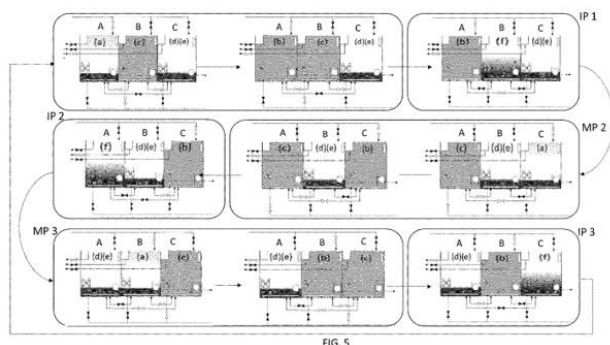
00: -  
 The invention provides a delayed release dosage form and a bolus configured for administration to an animal, wherein said dosage form and said bolus is configured to release a hydrophobic substance to the animal over a period of time. Preferably the hydrophobic substance is a haloform. Also provided is the use of the delayed release dosage form or



bolus of the invention to reduce methane production in a ruminant animal. Also provided is the method of manufacturing a bolus of the invention.



The invention relates to a process and a water treatment plant involving a continuous flow cyclic-operating water treatment plant (1) comprising a series of at least three compartments, comprising sludge, in hydraulic connection (2AB, 2AC, 2BC) with each other, wherein growing, selecting and/or maintaining aerobic granular sludge while treating water. To achieve this goal, a sequence of feast and famine conditions has been engineered. An influent is continuously receiving (4) into a first compartment of the series of at least three compartments where it is dispersed into the supernatant under anaerobic conditions without mixing with the sludge. Indeed, the water and sludge mixture are under anaerobic conditions to promote anaerobic conversion of carbon into storage polymers to create sludge particles. The accumulated water and sludge mixture are passing to the current second compartment of the series of compartments where aeration is introduced to promote microbiological respiration.



21: 2024/03725. 22: 2024/05/14. 43: 2025/06/10  
51: C02F

71: WATERLEAU GROUP NV

72: Stijn WYFFELS, Hannah STES, Ronny GERARDS

33: BE 31: BE2021/5923 32: 2021-11-26

**54: CONTINUOUS FLOW CYCLIC-OPERATING WASTEWATER TREATMENT PLANT AND PROCESS FOR GROWING, SELECTING AND MAINTAINING AEROBIC GRANULAR SLUDGE WHILE TREATING WASTEWATER**

00: -

21: 2024/03726. 22: 2024/05/14. 43: 2025/06/10  
51: B05D

71: ARCELORMITTAL

72: Fabrice FARINA, Jacky MALLEGOL, Eric SILBERBERG, Charles HANQUET, Thomas DEFIZE

33: IB 31: PCT/IB2021/061770 32: 2021-12-15

**54: METHOD FOR MANAGING COATING GLOSS ON A COIL-COATING LINE**

00: -

The invention relates to a method for managing the gloss of an organic coating formed on a moving strip on a coil-coating line, the method comprising the steps of: 1) Setting a set gloss value  $G_s$ , a set gloss range  $R_s$  and a proportionality constant  $K$  of a predefined linear mathematical relation between the temperature of the wet film before UV curing and the gloss, 2) Collecting the measure of the temperature  $T$  of the wet film in at least a width portion of the

moving strip upstream of the UV curing device and collecting the measure of the gloss  $G$ , 3) Correcting a deviation of the measured gloss  $G$  beyond  $R_s$ , this step comprising a sub-step of calculating the corrected temperature  $T_c$  to be reached by the wet film in the width portion upstream of the UV curing device according to equation:  $T_c = T + K (G - G_s)$ .

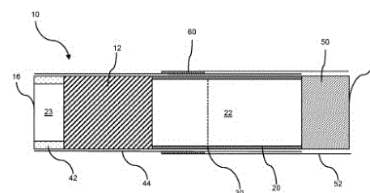


Figure 2

21: 2024/04033. 22: 2024/05/23. 43: 2025/06/05  
51: A24D; A24F  
71: PHILIP MORRIS PRODUCTS S.A.  
72: BESSANT, Michel, BINASSI, Enrico, CANAL PONSICO, Anna  
33: CN 31: PCT/CN2021/126079 32: 2021-10-25  
**54: AEROSOL-GENERATING ARTICLE WITH TAGGANT**

00: -

An aerosol-generating article (10) comprising an aerosol-generating substrate (12), a downstream section provided downstream of the aerosol-generating substrate, and a taggant (60) provided on the downstream section, wherein the upstream end of the taggant is at least 0.5 millimetres from the downstream end of the aerosol-generating substrate. An aerosol-generating system comprising the aerosol-generating article, and an aerosol-generating device (1). The aerosol-generating device comprising a cavity for receiving a portion of the aerosol-generating article, and a detector (8) capable of detecting the presence of the taggant. The detector is arranged to be substantially aligned with the taggant when the aerosol-generating article is fully inserted into the cavity.

21: 2024/04087. 22: 2024/05/24. 43: 2025/06/10  
51: C25C

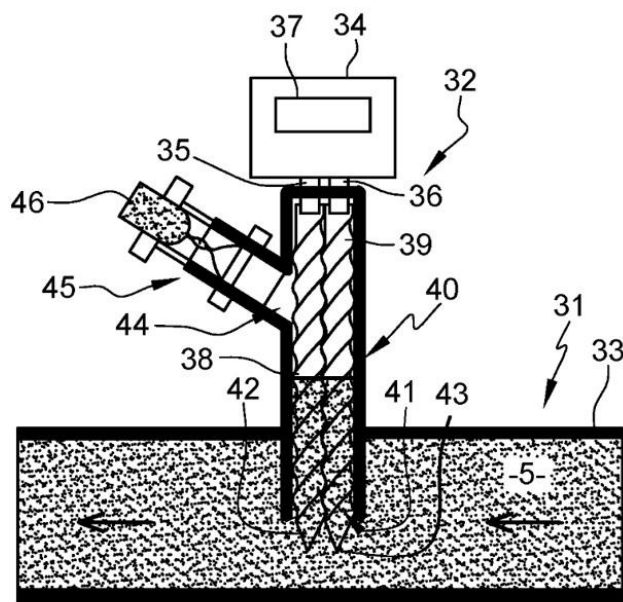
71: ARCELORMITTAL

72: Hervé LAVELAINE DE MAUBEUGE

**54: ELECTROLYSIS APPARATUS FOR THE PRODUCTION OF IRON WITH AN IMPROVED IRON OXIDE SUPPLY DEVICE**

00: -

The invention concerns an apparatus (1) for the production of iron through reduction of iron ore by an electrolysis reaction, wherein the means to supply iron ore comprises a twin-screw supplier (32) provided to discharge iron ore powder (46) into an electrolyte feed pipe (31) upstream of the electrolytic chamber (6).



21: 2024/04128. 22: 2024/05/27. 43: 2025/06/10  
51: C21B; C25C

71: ARCELORMITTAL

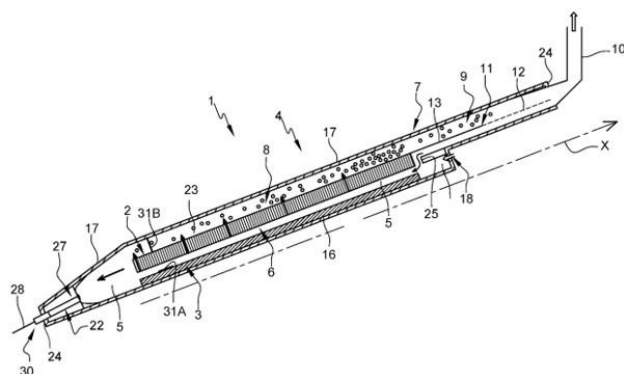
72: Hervé LAVELAINE DE MAUBEUGE

**54: APPARATUS FOR PRODUCTION OF IRON METAL BY ELECTROLYSIS**

00: -

An apparatus (1) for the production of iron metal through reduction of iron ore by an electrolysis reaction, the apparatus comprising an electrolyte

circulation device (30) including a pumping device (22) located at one extremity of the casing (4) and at least a first (31A) check valve located in the electrolyte chamber (6) and a second (31B) check valve located in the gas recovery part (8), said electrolyte circulation device (30) being designed, when actuating by an actuator (28), to aspirate the electrolyte (5) from the electrolyte chamber (6) or to pull the electrolyte (5) back into the gas recovery part (8).

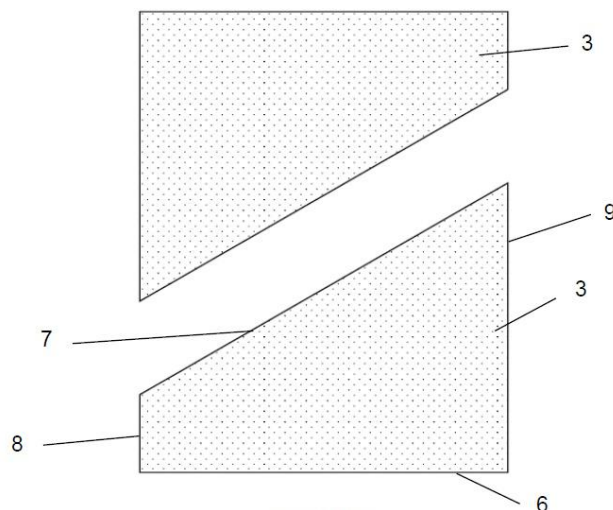


21: 2024/04189. 22: 2024/05/28. 43: 2025/05/26  
51: E04B; E04D; E04F  
71: BELGOTEX FLOORCOVERINGS (PTY) LTD  
T/A BELGOTEX FLOORS  
72: ROOKE, Gavin Alexander  
33: WO 31: PCT/IB2022/061799 32: 2022-12-06  
33: ZA 31: 2021/10178 32: 2021-12-09

#### **54: TILE AND TILING SYSTEM**

00: -

There is disclosed a tile having a right trapezoid shape including two non-parallel legs comprising a short leg and a long leg, and two parallel bases comprising a short base and long base; with the two parallel bases each extending at a right angle from the short leg, and the long leg connecting the ends of the two parallel bases distal from the short leg, with the long leg being orientated at an offset angle between but not including  $0^\circ$  and  $45^\circ$  relative to the short leg.



21: 2024/04228. 22: 2024/05/30. 43: 2025/06/10

51: B32B; C21D; C22C

71: ARCELORMITTAL

72: Xavier GARAT, Pascal LORENZINI

#### **54: LOW DENSITY HOT ROLLED STEEL, METHOD OF PRODUCTION THEREOF AND USE OF SUCH STEEL TO PRODUCE VEHICLE PARTS** 00: -

A low density hot rolled steel comprising of  $0.12\% \leq \text{carbon} \leq 0.25\%$ ,  $3\% \leq \text{manganese} \leq 10\%$ ,  $3.5\% \leq \text{aluminum} \leq 6.5\%$ ,  $0\% \leq \text{phosphorus} \leq 0.1\%$ ,  $0\% \leq \text{sulfur} \leq 0.03\%$ ,  $0\% \leq \text{nitrogen} \leq 0.1\%$ ,  $0\% \leq \text{silicon} \leq 2\%$ ,  $0.01\% \leq \text{niobium} \leq 0.03\%$ ,  $0.01\% \leq \text{titanium} \leq 0.2\%$ ,  $0\% \leq \text{molybdenum} \leq 0.5\%$ ,  $0\% \leq \text{chromium} \leq 0.6\%$ ,  $0.01\% \leq \text{copper} \leq 2.0\%$ ,  $0.01\% \leq \text{nickel} \leq 3.0\%$ ,  $0\% \leq \text{calcium} \leq 0.005\%$ ,  $0\% \leq \text{boron} \leq 0.01\%$ ,  $0\% \leq \text{Magnesium} \leq 0.005\%$ ,  $0\% \leq \text{Zirconium} \leq 0.005\%$ ,  $0\% \leq \text{Cerium} \leq 0.1\%$ , and the balance including iron and unavoidable impurities, the steel sheet having a microstructure comprising of ferrite from 55% to 80%, 15% to 50% austenite and martensite from 0% to 10% wherein the microstructure grains having less than 4GPa nano-hardness must be more than 45% and microstructure grains having nano-hardness of more than 5GPa must be less than 22%.

21: 2024/04229. 22: 2024/05/30. 43: 2025/06/10

51: C21D; C22C; C23C

71: ARCELORMITTAL

72: Xavier GARAT, Pascal LORENZINI

#### **54: LOW DENSITY HOT ROLLED STEEL, METHOD OF PRODUCTION THEREOF AND USE OF SUCH STEEL TO PRODUCE VEHICLE PARTS** 00: -

A low density hot rolled steel comprising of  $0.12\% \leq \text{carbon} \leq 0.25\%$ ,  $3\% \leq \text{manganese} \leq 10\%$ ,  $3.5\% \leq \text{aluminum} \leq 6.5\%$ ,  $0\% \leq \text{phosphorus} \leq 0.1\%$ ,  $0\% \leq$



sulfur  $\leq 0.03\%$ ,  $0\% \leq$  nitrogen  $\leq 0.1\%$ ,  $0\% \leq$  silicon  $\leq 2\%$ ,  $0.01\% \leq$  niobium  $\leq 0.03\%$ ,  $0.01\% \leq$  titanium  $\leq 0.2\%$ ,  $0\% \leq$  molybdenum  $\leq 0.5\%$ ,  $0\% \leq$  chromium  $\leq 0.6\%$ ,  $0.01\% \leq$  copper  $\leq 2.0\%$ ,  $0.01\% \leq$  nickel  $\leq 3.0\%$ ,  $0\% \leq$  calcium  $\leq 0.005\%$ ,  $0\% \leq$  boron  $\leq 0.01\%$ ,  $0\% \leq$  Magnesium  $\leq 0.005\%$ ,  $0\% \leq$  Zirconium  $\leq 0.005\%$ ,  $0\% \leq$  Cerium  $\leq 0.1\%$ , and the balance including iron and unavoidable impurities, the steel sheet having a microstructure comprising of ferrite from 60% to 80%, 10% to 35% kappa carbides (Fe,Mn)<sub>3</sub>AlC<sub>x</sub>, where x is lower than or equal to 1 and austenite from 0% to 10% wherein the microstructure grains having less than 4GPa nano-hardness must be more than 45% and microstructure grains having nano-hardness of more than 5GPa must be less than 10%.

21: 2024/04334. 22: 2024/06/03. 43: 2025/06/10

51: C21D; C22C; G16C

71: ARCELORMITTAL

72: Thomas DIEUDONNE

33: IB 31: PCT/IB2021/061904 32: 2021-12-17

#### **54: METHOD FOR EVALUATING THE HYDROGEN CONTENT IN A STEEL SHEET**

00: -

The present invention relates to a method for evaluating the hydrogen content in a steel sheet while being submitted to an annealing process, comprising the following steps: estimating the microstructure of the steel sheet according to the temperature curve, computing the solubility of the hydrogen CH, computing the volume concentration of trapped hydrogen in dislocations CT and the volume concentration of hydrogen in interstitial sites of the crystal lattice CL, calculating the hydrogen content Ctotal = CL+CT at each time step of the annealing process and outputting the hydrogen content Ctotal at each time step to a user.

21: 2024/04675. 22: 2024/06/14. 43: 2025/04/23

51: B29B; B29C; B29D

71: OLLLOW

72: LAINE, Bertrand, AZRAN, Aymeric

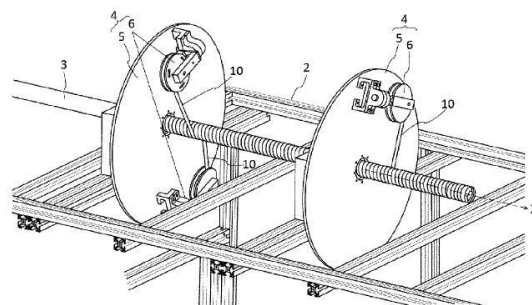
33: FR 31: FR2112160 32: 2021-11-17

#### **54: DEVICE FOR THE MANUFACTURE OF AN UNCONSOLIDATED TEXTILE ELONGATE MEMBER**

00: -

The invention relates to a device (1) for manufacturing an unconsolidated textile elongate

member (11), the device comprising a frame (2) with a longitudinal main guide (3) in a direction X, said main guide (3) being attached to the frame (2) and two modules (4) arranged in series around the guide (3) in direction X, each module (4) comprising a feed ring (5) surrounding a section of the guide (3), feed means (6) arranged on the ring (5) and capable of feeding at least one ribbon (10) to the main guide (3) at a feed rate V1, each ribbon (10) being capable of winding around the main guide (3) or onto the upper layer of ribbon (10), and means (15) for driving the ring (5) which are capable of rotating the ring (5) at a speed of rotation V2.



21: 2024/05533. 22: 2024/07/16. 43: 2025/03/31

51: A01N; C07D

71: PI Industries Ltd.

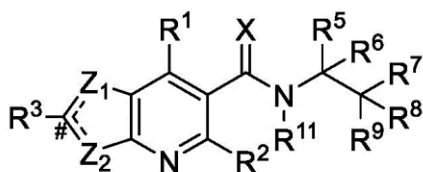
72: JAGDALE, Arun R., MAHAJAN, Vishal A., RODE, Navnath D., JENA, Lalit Kumar, YADAV, Santosh Kumar, SHARMA, Sukriti, PAREKH, Mithil, AUTKAR, Santosh Shridhar, KLAUSENER, Alexander G.M., SAXENA, Rohit

33: IN 31: 202111059075 32: 2021-12-17

#### **54: NOVEL SUBSTITUTED FUSED BICYCLIC PYRIDINE CARBOXAMIDE COMPOUNDS FOR COMBATING PHYTOPATHOGENIC FUNGI**

00: -

The present invention provides a compound formula (I), Formula (I) wherein, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, X, Z1 and Z2 are as defined in the detailed description and a process for preparing the compound of formula (I). The present invention also provides a composition and a combination comprising the novel fused bicyclic pyridine carboxamide compounds and method for combating phytopathogenic fungi using the same.



Formula (I)

21: 2024/05797. 22: 2024/07/26. 43: 2025/04/02

51: A61K; A61P; C07D

71: Hangzhou Adamerck Pharmed Inc.

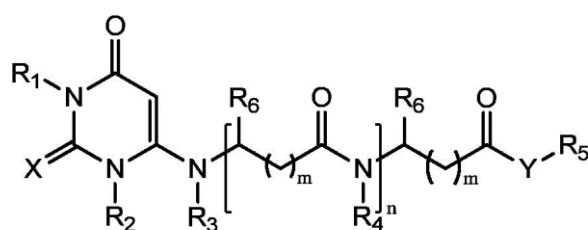
72: QI, Youmao

33: CN 31: 202111641890.0 32: 2021-12-29

**54: MULTI-SUBSTITUTED URACIL DERIVATIVE AND PREPARATION METHOD THEREFOR AND APPLICATION THEREOF**

00: -

The present invention relates to a multi-substituted uracil derivative and a preparation method therefor and an application thereof. Specifically, the compound of the present invention has a structure as shown in formula (I) in which the definitions of groups and substituents are as stated in the description. Further disclosed in the present invention is a preparation method for the compound and a use of the compound in antithrombotic, treatment of cardiovascular and cerebrovascular diseases, etc.



(I)

21: 2024/05870. 22: 2024/07/30. 43: 2025/06/10

51: A23F; A61K

71: GUANGXI BOTANICAL GARDEN OF MEDICINAL PLANTS, GUANGXI SANJIANG GOLDEN VINE AGRICULTURAL DEVELOPMENT CO., LTD

72: ZHAI, Yongjin, ZHANG, Zhanjiang, WAN, Lingyun, GUN, Di, BAI, Longhua, WEI, Shugen, FENG, Shixin, JI, Xiaowen

**54: KIND OF WORM TEA OF UNCARIA RHYNCHOPHYLLA AND ITS PREPARATION METHOD**

00: -

The present disclosure provides a kind of worm tea of *Uncaria rhynchophylla* and its preparation method, and relates to the technical field of worm tea. The preparation method of the present disclosure includes the following steps: (1) placing fresh leaves of *Uncaria rhynchophylla* on a production rack for natural fermentation; (2) using the fermented leaves of *Uncaria rhynchophylla* to naturally induce insects producing worm tea, and making the insect producing worm tea lay eggs and hatch; and (3) after the leaves of the *Uncaria rhynchophylla* are nibbled to 20~30% of the original volume, collecting digested and fermented products after nibbling, packaging after high-temperature treatment and drying, to obtain the worm tea of *Uncaria rhynchophylla*. The worm tea of *Uncaria rhynchophylla* prepared by the present disclosure has good quality.

21: 2024/05887. 22: 2024/07/30. 43: 2025/06/10

51: A63D

71: QIAO, Bing

72: QIAO, Bing

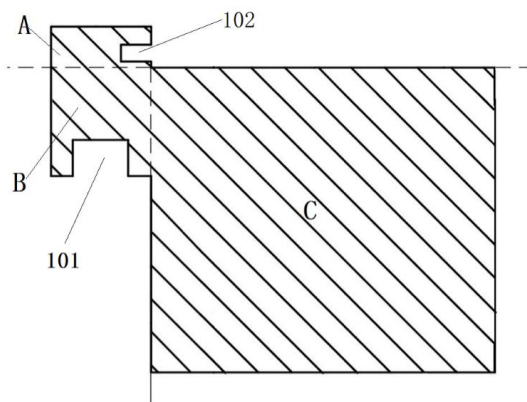
33: CN 31: 202310163636.7 32: 2023-02-24

**54: INTEGRATED CUSHION FOR POOL TABLE**

00: -

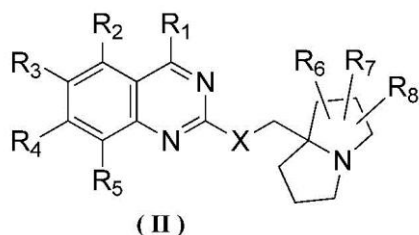
An integrated rail for a pool table, including a block A, a block B and a block C integrally formed. The integrated rail is provided along an edge of a playing field. The block B is arranged at an inner side of the block C. A bottom surface of the block B is located higher than a bottom surface of the block C in a vertical direction, such that the bottom surface of the block B is connected to an inner side of the block C to form a mounting surface fitting the edge of the playing field. A top surface of the block C and a top surface of the block B are both horizontal and at the same height. The block A is arranged on a top of the block B, and an outer end of the block A extends horizontally outward. A handrail is provided on a top of the block C. The integrated rail provided herein has advantages of uniform stress distribution, low rebound kinetic energy loss and high rebound precision, and thus can improve the accuracy in predicting the trajectory of the billiard ball after striking the rail.





21: 2024/06389. 22: 2024/08/20. 43: 2025/04/08  
 51: A61K; A61P; C07D  
 71: Usynova Pharmaceuticals Ltd.  
 72: ZHANG, Yang, WU, Wentao, GENG, Kaijun,  
 SUN, Jikui, XU, Yangyang, LI, Jian, CHEN, Shuhui  
 33: CN 31: 202210072243.0 32: 2022-01-21  
**54: BENZOPYRIMIDINE COMPOUNDS AND USE THEREOF**

00: -  
 Disclosed are a series of benzopyrimidine compounds and a use thereof, and specifically disclosed are compounds represented by formula (II) and pharmaceutically acceptable salts thereof.



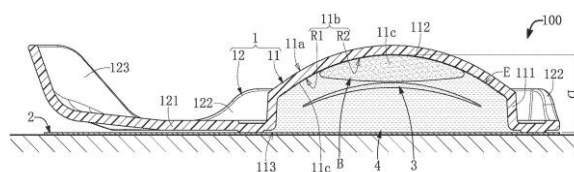
21: 2024/06414. 22: 2024/08/21. 43: 2025/03/11  
 51: B29B; B32B; B65D  
 71: RESILUX N.V.  
 72: LENAIN, Pieterjan, ANTHIERENS, Tom, DE CUYPER, Dirk  
 33: BE 31: 2022/5068 32: 2022-02-03  
**54: METHOD FOR PROCESSING DAIRY BOTTLE RECYCLATE IN A NEW PRODUCTION OF DAIRY BOTTLES (CLOSED-LOOP, BOTTLE-TO-BOTTLE) AND PRODUCT OBTAINED FROM IT**

00: -  
 The present invention provides a method for processing dairy bottle recycle in a new production of dairy bottles (closed-loop; bottle-to-bottle). The

invention also provides a multilayer plastic bottle for containing and storing dairy products, obtainable by a method according to the invention.

21: 2024/06420. 22: 2024/08/21. 43: 2025/04/09  
 51: A45C; G01M; G02C  
 71: Pegavision Corporation  
 72: HUANG, Yi-Fang, CHEN, Po-Chun  
**54: CONTACT LENS PRODUCT AS WELL AS PACKAGING CASE THEREOF AND TEST METHOD THEREFOR**

00: -  
 A contact lens product as well as a packaging case thereof and a test method therefor. The packaging case (1) comprises an accommodating recess body (11) and a piece body (12) connected to the accommodating recess body (11), a plurality of optical microstructures (11c) being formed in the inner surface (11b) of the accommodating recess body (11). Each optical microstructure (11c) has a depth-to-width ratio value of 0.01-0.1, so that the accommodating recess body (11) has a first transparency. The accommodating recess body (11) can be used for coming into contact with a preservation liquid (4) by means of at least part of the plurality of optical microstructures (11c), so that a corresponding part of the accommodating recess body (11) has a second transparency greater than the first transparency. Therefore, by forming the plurality of optical microstructures (11c) having similar depth-to-width ratio values in the inner surface (11b) of the accommodating recess body (11) to cooperate with the preservation liquid (4), the transparency of the accommodating recess body (11) can change between the first transparency and the second transparency, thus allowing selective presentation according to different conditions.

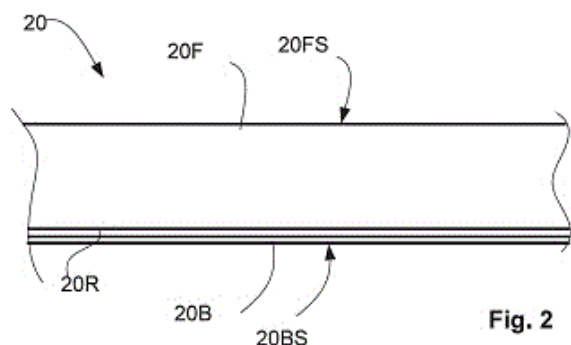


21: 2024/06710. 22: 2024/08/30. 43: 2025/04/08  
 51: D21F; B29D  
 71: VALMET TECHNOLOGIES OY  
 72: TURUNEN, JANI  
 33: FI 31: 20236016 32: 2023-09-11

**54: EXTENSIBLE BLANKET**

00: -

An extensible blanket (20), which is formed as a continuous loop and comprises a back cover (20B) with a back side (20BS), which back side (20BS) is the inside surface of the loop of the extensible blanket (20), and a front cover (20F) with a front side (20FS), which front side (20FS) is the outside surface of the loop of the extensible blanket (20) and is configured to provide an extensible layer of the extensible blanket (20), and a reinforcement layer (20R) between the back cover (20B) and the front cover (20F). At least the back cover (20B) of the extensible blanket (20) comprises an elastomeric matrix, and particles of ultra-high-molecular-weight polyethylene (UHMWPE, UHMW) or of high-density polyethylene (HDPE).

**Fig. 2**

21: 2024/06811. 22: 2024/09/04. 43: 2025/04/30  
51: B01J

71: BEIJING GUANGCHE DYNAMICS TECHNOLOGY LLC, CHINA UNIVERSITY OF PETROLEUM (EAST CHINA)

72: LIU, Ziyang, ZHENG, Chen, BAI, Peng, XU, Benjing, YAN, Zifeng

33: CN 31: 202410985509X 32: 2024-07-22

**54: DEEP DESULFURIZATION ADSORBENT AND ITS PREPARATION METHOD AND APPLICATION**

00: -

Disclosed is a deep desulfurization adsorbent and its preparation method and application, belonging to the technical field of desulfurization. The deep desulfurization adsorbent provided in the present application comprises a functional carrier and an adsorbing material loaded on the functional carrier; the raw material for preparing the adsorbing material comprises, in terms of parts by weight: 20-50 parts of active component, 2-10 parts of inorganic additives, and 1-10 parts of organic acid; wherein

the active component is a first metal salt comprising one or more metal elements of Zn, Cu, Mn and Fe. The deep desulfurization adsorbent provided in the disclosure has a high adsorption active site and a high adsorption capacity of sulfur compounds within the raw gas, which can reach less total sulfur level in the outlet of the raw gas, and the deep desulfurization adsorbent has a high sulfur capacity, which is also conducive to lowering the cost of deep desulfurization, and to promoting the industrial application of the deep desulfurization technology.

21: 2024/06897. 22: 2024/09/06. 43: 2025/03/25

51: F03B

71: Gravity Energy Pty Ltd

72: BARTOLO, Kevin Robert

33: AU 31: 2022900497 32: 2022-03-02

**54: RECIRCULATING HYDRO-PNEUMATIC IMPULSE TURBINE**

00: -

A recirculating hydro-pneumatic impulse turbine including a collector assembly including a central draft tube extending therebelow, the collector assembly including a collector plate having a generally horizontal upper surface and being configured such that the draft tube is in fluid communication with the upper surface, there also being a series of peripherally arranged drive cups about the upper surface. The turbine also includes a drive assembly about the central draft tube, the drive assembly including a fluid inlet at its lower end in fluid communication with the lower end of the draft tube, and a plurality of tangentially arranged outlet nozzles configured at its upper end. The turbine also includes a central air tube with an upper air inlet and a lower air distribution manifold, the manifold including at least one venturi outlet capable of entraining air in the fluid to assist movement of the fluid from the lower end of the drive assembly upwardly to the outlet nozzles. During use, fluid jets that form at the outlet nozzles engage with the drive cups to generate relative rotation between the outlet nozzles and the drive cups about a vertical axis, the relative rotation capable of providing useful work, with fluid subsequently flowing from the drive cups across the upper surface of the collector plate to the draft tube, down the draft tube where the fluid enters the fluid inlet of the drive assembly for entrainment with air and recirculation to the outlet nozzles.

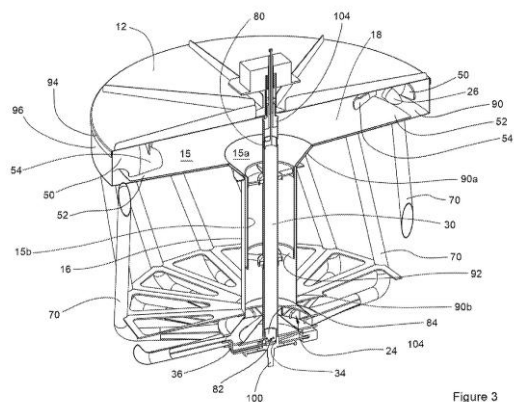


Figure 3

21: 2024/06917. 22: 2024/09/09. 43: 2025/04/25

51: C07D; A61K; A61P

71: NIHON NOHYAKU CO., LTD.

72: MIYAZAKI, YOSUKE, NAKAMURA, AKIHIRO

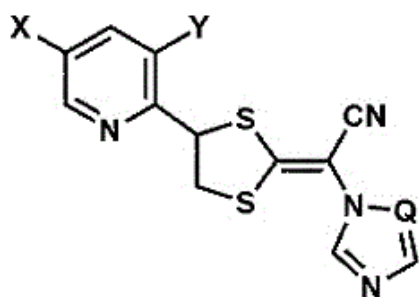
33: JP 31: 2022-190422 32: 2022-11-29

33: JP 31: 2022-043359 32: 2022-03-18

**54: AZOLE COMPOUND AND ANTIFUNGAL AGENT**

00: -

The present invention provides a compound which is used for the treatment of a fungal infection, including a topical fungal infection and a systemic fungal infection, caused by fungi belonging to the genus Trichophyton, the genus Candida, the genus Aspergillus and the like and which exhibits a superior antifungal activity. The present invention relates to an azole compound represented by general formula (I) (wherein X represents a -N(R<sup>1</sup>)CO<sub>2</sub>R<sup>2</sup> group (wherein R<sup>1</sup> represents a hydrogen atom or the like; and R<sup>2</sup> represents a C<sub>1-6</sub> alkyl group or the like), a -C(R<sup>3</sup>)=NOR<sup>4</sup> group (wherein R<sup>3</sup> represents a hydrogen atom or the like; and R<sup>4</sup> represents a C<sub>1-6</sub> alkyl group or the like) or the like; Y represents a halogen atom or the like; and Q represents CH or a nitrogen atom) or a salt thereof.



(I)

21: 2024/06943. 22: 2024/09/10. 43: 2025/03/14

51: A47F

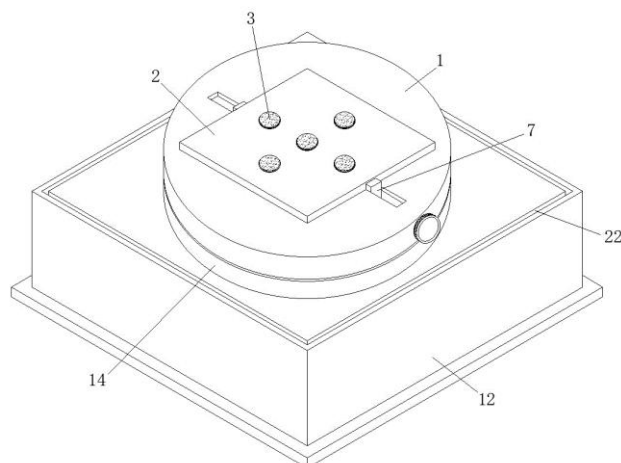
71: SHANDONG HUAYU UNIVERSITY OF TECHNOLOGY

72: Xin Wei

**54: A FIXED MECHANISM FOR ROTATING DISPLAY OF INDUSTRIAL PRODUCTS**

00: -

The invention discloses a fixed mechanism for rotating display of industrial products, belongs to the technical field of industrial product display, mainly solves the process of clamping and fixing the fixture in the prior art, shields the industrial product for display, because the industrial product is certain distance from the audience, causes the audience to clearly observe the surface condition of the industrial product, and makes the display effect of the industrial product affected, the fixed mechanism comprises a booth, the booth is rotatably arranged on the top of the supporting shell, and the top of the booth is provided with a display board, The upper surface of display board is provided with a plurality of adhesive gaskets, the booth is provided with a mounting groove, two movable seats are slidably installed in the mounting groove, two movable seats are symmetrically arranged, the surfaces of two movable seats close to each other are all fixedly connected with positioning pieces, the two sides surfaces of display board are all provided with limiting grooves, two positioning pieces can be embedded in the matching limiting grooves respectively, and the two moving seats that are close to each other press the display board make the positioning piece insert into the inside of the limiting groove.

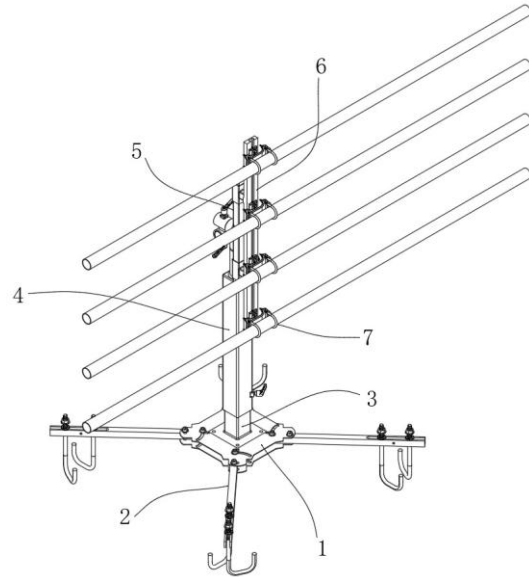


21: 2024/07091. 22: 2024/09/13. 43: 2025/06/12  
 51: E01D; E04C  
 71: NORTHEAST FORESTRY UNIVERSITY,  
 HEILONGJIANG TRANSPORTATION PLANNING  
 AND DESIGN INSTITUTE GROUP CO., LTD.,  
 HEILONGJIANG PROVINCIAL HIGHWAY  
 CONSTRUCTION CENTER  
 72: XIAO, Ziwang, LI, Wei, ZHOU, Qihong, WANG,  
 Lifeng

#### **54: SUPPORTING STRUCTURE OF BEAM-COLUMN TYPE BRACKET FOR BRIDGE CONSTRUCTION**

00: -

Disclosed is a supporting structure of a beam-column type bracket for bridge construction, including a chassis with a solid plate structure and connecting piece are arranged at four corners, fixing frames which may be detachably connected to the connecting pieces to fit with embedded parts, a support column is fixedly mounted in a middle part of the chassis and vertically fitted with the chassis, an adjustment column is sleeved on an outer wall of the support column and can slide vertically along the support column, an angle adjustment assembly is connected to the adjustment column and can switch angles and a fixing plate is mounted to the angle adjustment assembly and is internally arranged with a sliding groove. The support column, the adjustment column and the angle adjustment assembly are arranged, and the adjustment column is capable of sliding vertically relative to the support column.



21: 2024/07103. 22: 2024/09/16. 43: 2025/05/02  
 51: E04B

71: RYAN, Mark

72: RYAN, Mark, RYAN, Justin, KENEALY, Sean  
 33: ZA 31: 2022/03221 32: 2022-03-18

#### **54: PREFABRICATED BUILDING UNIT**

00: -

The invention provides a prefabricated building unit which includes a cuboid body made of a cementitious material encasing a reinforcing steel frame, and which body is sized to be moved with relative ease to locate in situ, and which is adapted with formations at top and bottom edges to engage complementary formations on another unit which is placed atop the unit when constructing a building and which formations inter-engage to prevent the one unit moving laterally relative to the other unit. The invention extends to a method of manufacturing the building unit rebate or step onto which the roof component rests and wherein an outer part of the top edge has a first inter-engaging formation.



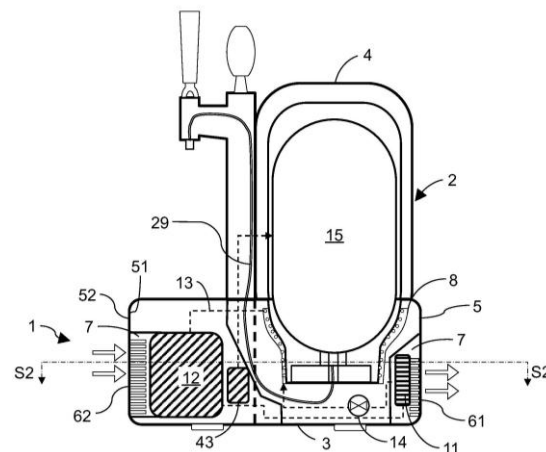
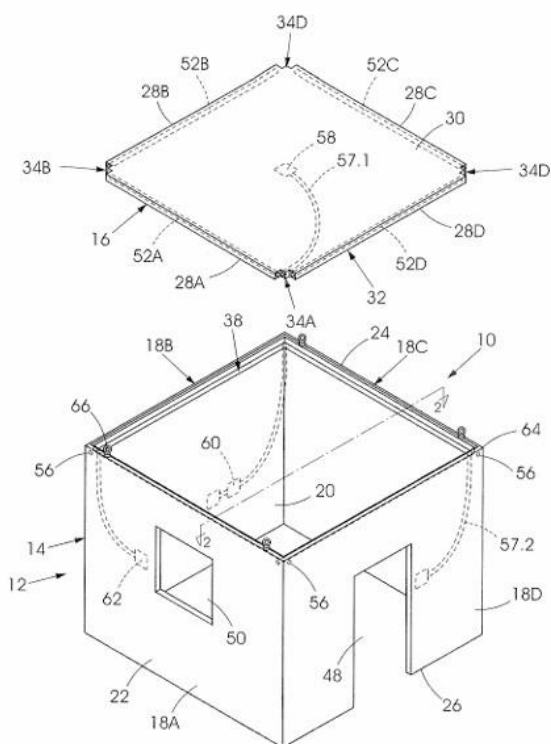


FIG. 1

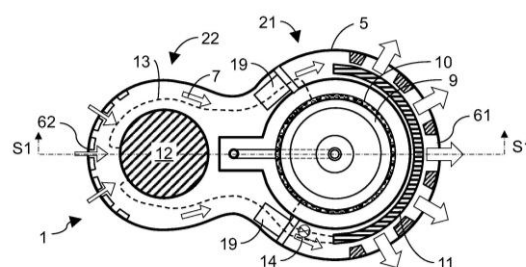


FIG. 2

21: 2024/07131. 22: 2024/09/17. 43: 2025/03/26  
51: B67D; F25D

71: Carlsberg Breweries A/S

72: LAYBOURN, Klaus

33: EP(DK) 31: 22158861.9 32: 2022-02-25

#### **54: COOLING ARRANGEMENT FOR A BEVERAGE DISPENSING SYSTEM**

00: -

A cooling arrangement (1) for a beverage dispensing system comprising a housing (2) and a pressure source (43) for applying pressure on a beverage container (15) to dispense a beverage; wherein inlet apertures (62) and outlet apertures (61) are arranged in the side wall (5) of the housing (2) for allowing airflow into the housing (2); and an air channel (7) extends between the inlet aperture (62) and the outlet aperture (61). Heat exchange means (8) are arranged for receiving heat from the beverage container (15); and a condenser (11) is arranged in the air channel (7) in thermal connection with the heat exchange means (8) for emitting heat received from the beverage container (15) to the air channel (7) and provide efficient cooling. The housing (2) may be defined horizontally by a rounded hourglass shape for a compact and fail-safe form factor.

21: 2024/07197. 22: 2024/09/20. 43: 2025/04/08  
51: A61K; A61M

71: Lyndra Therapeutics, Inc.

72: BELLINGER, Andrew, KANASTY, Rosemary, GRANT, Tyler, GARDNER, Colin

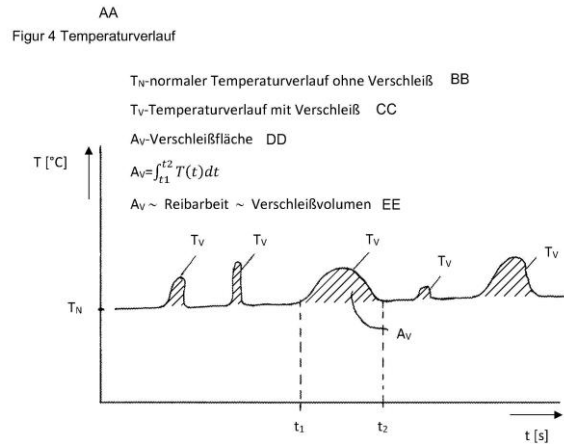
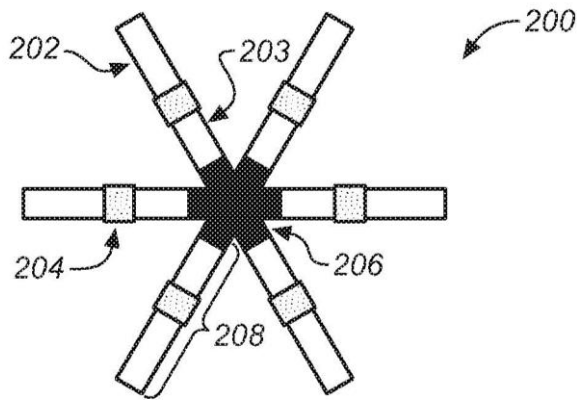
33: US 31: 62/264,811 32: 2015-12-08

#### **54: GEOMETRIC CONFIGURATIONS FOR GASTRIC RESIDENCE SYSTEMS**

00: -

The invention provides gastric residence systems with configurations and geometrical dimensions that allow for improved shelf life during prolonged storage, and optimal residence properties when the systems are deployed in the stomach of a patient.





AA Temperature profile  
BB TN normal temperature profile without wear  
CC TV temperature profile with wear  
DD AV wear surface  
EE AV " friction work " wear volume

21: 2024/07219. 22: 2024/09/20. 43: 2025/04/08

51: G01M

71: KSB SE & Co. KGaA

72: OTSCHIK, Joachim

33: DE 31: 10 2022 000 970.6 32: 2022-03-21

**54: METHOD FOR DETERMINING THE WEAR VOLUME OF A SLIDING-RING SEAL IN SINGULAR WEAR EVENTS BY MEANS OF HIGH-TEMPORAL-RESOLUTION TEMPERATURE MEASUREMENT**

00: -

The invention was developed against the background of the prior art described above, with the problem addressed by the invention being that of providing a method by which the state of wear at the point in time  $t$  of sliding rings and counter-rings in sliding-ring seals can be measured. The state of wear allows the calculation of a sealing- and process-specific wear volume, which cumulatively allows the prediction of a failure of the seal. The problem has been solved by a measuring method which measures the temperature at the sliding ring or the counter-ring with high temporal resolution. It has been found that there are typical temperature profiles (figure 4) from which the state of wear can be directly inferred. These temperature profiles differ from the normal temperature profile ( $T_N$ ) by a brief rise in the temperature  $T_V$  followed by a fall to  $T_N$ . The underlying wear surface  $A_V$  is proportional to the wear volume and to the friction work. The start of a wear event begins with galling (figure 5). Particles are torn out from the surface. The size of the particles is material-specific. They are seal-specifically broken down in the sealing gap and expelled. This ends the wear event and the temperature falls to  $T_N$ .

21: 2024/07244. 22: 2024/09/23. 43: 2025/06/10

51: C12M

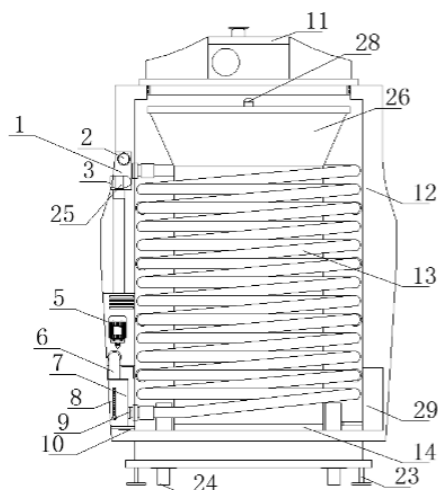
71: SHANDONG POLYTECHNIC

72: YU, Leijuan, MENG, Xianjun, ZHANG, Yingchao, LV, Yinghui, ZHANG, Daolei, YANG, Tingting

**54: INTELLIGENT FERMENTATION INTEGRATED MACHINE**

00: -

The present invention relates to the field of intelligent fermentation, in particular to an intelligent fermentation integrated machine, comprising a shell, wherein a heating tank is arranged on the shell, an electric heater is arranged at the bottom of the heating tank, an upper end of the electric heater conflicts with an inner tank with a stirring part, a heating coil is arranged on the electric heater, and the inner tank with the stirring part is penetrated and arranged in the heating coil, and two ends of the heating coil are respectively detachably connected with an infusion tube and an input tube. The invention can well ensure the sealing property of the connection, is convenient for installation and disassembly quickly, can effectively avoid leakage and eliminate waste, can also well monitor the heating situation, can effectively recycle and utilize the waste heat, improve the utilization rate of energy, and can fully realize the enzyme preparation operation.



21: 2024/07251. 22: 2024/09/23. 43: 2025/04/01  
51: C10G

71: Plastic Energy Limited

72: HARGREAVES, George, LAKE, Andrew

33: GB 31: 2202646.2 32: 2022-02-25

#### **54: A METHOD FOR THE STORAGE OR TRANSPORT OF PYROLYSIS OIL**

00: -

The present invention provides a method for the storage or transport of pyrolysis oil, the method comprising: (i) providing a holding vessel for the storage or transport of pyrolysis oil; (ii) flushing the holding vessel with an inert gas and maintaining the vessel under an inert atmosphere; (iii) providing a pyrolysis oil obtained from the pyrolysis of end-of-life plastics material; (iv) contacting the pyrolysis oil with water in a wash column, wherein the water is present in amount of at least 50wt% relative to the amount of pyrolysis oil; and (v) filling the pyrolysis oil into the holding vessel for storage or transport with a minimum time in the holding vessel of at least 24 hours.

21: 2024/07298. 22: 2024/09/25. 43: 2025/04/02  
51: B64C

71: Epazz, Inc.

72: PASSLEY, Shaun

33: US 31: 17/705,310 32: 2022-03-26

#### **54: DRONE WITH EXTENDABLE AND ROTATABLE WINGS AND MULTIPLE ACCESSORY SECURING PANEL**

00: -

A drone with extendable and rotatable wings and a multiple accessory securing panel is provided. The extendable wings help increase the lift of the drone

and reduce the air drag on the drone. The multiple accessory securing panel allows various tools and objects to be temporarily and selectively secured to the drone. The multiple accessories may be secured to the drone by a ground based rotating delivery unit. The drone may have a removable front nose and legs which receive power from a power unit.

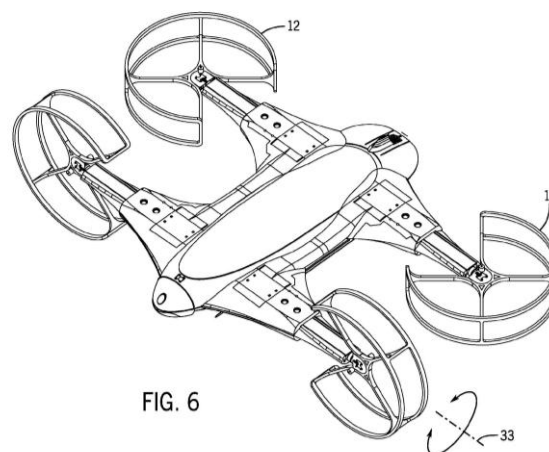


FIG. 6

21: 2024/07319. 22: 2024/09/25. 43: 2025/06/10  
51: H01Q

71: ANHUI NORMAL UNIVERSITY

72: YU, Shuo, HE, Jiajun, WANG, Chen, LIU, Xiaoming, LIU, Yu, ZHU, Yuanqing, CHEN, Shengjie, CHEN, Tao

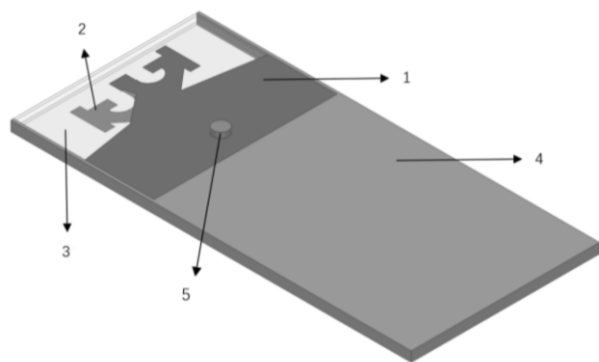
33: CN 31: 202410341615.4 32: 2024-03-25

#### **54: END-FIRE CIRCULARLY POLARIZED ANTENNA BASED ON COMPLEMENTARY DIPOLES**

00: -

The present disclosure provides an end-fire circularly polarized antenna based on complementary dipoles, and belongs to the technical fields of electronics and communications. The end-fire circularly polarized antenna based on complementary dipoles includes a magnetic dipole antenna, a patch antenna, a dielectric plate, a feed gang and a copper cell phone earth plate. Three connected side edges of the magnetic dipole antenna are of short-circuit structures, and an opening in the other side is used for radiating energy. An upper surface and a lower surface of the patch antenna are respectively connected with an upper surface and a lower surface of the magnetic dipole antenna. The dielectric plate includes an upper dielectric layer and a lower dielectric layer,

and is filled with an air dielectric. The feed gang is located on a symmetry axis of the magnetic dipole antenna, and is used for producing an excitation signal. According to the antenna, a vertical polarization component is provided by magnetic dipoles generated by pore diameter, a horizontal polarization component is provided by patches, and circularly polarized waves are realized by adjusting the size of the patch antenna and the position of feed. Moreover, the circularly polarized rotating direction of the antenna can change along with the directions of the patches.



21: 2024/07362. 22: 2024/09/27. 43: 2025/04/29  
51: E04H

71: Jinggangshan University

72: Guanjian ZANG, Shikun XIE, Huiling ZHENG, Fuxiao YIN

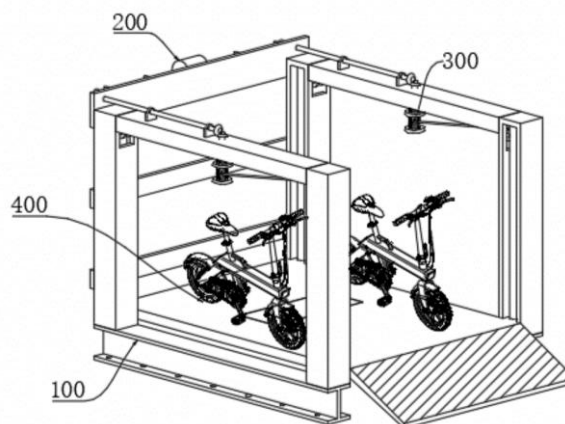
33: CN 31: 2024219880445 32: 2024-08-16

#### **54: MULTILEVEL PARKING GARAGE**

00: -

The utility model relates to the technical field of parking garages and discloses a multilevel parking garage. The garage comprises a multilevel frame, a drive mechanism, two sets of winding mechanisms, and a vehicle platform. The drive mechanism is installed at the upper end of the multilevel frame, and both winding mechanisms are rotationally connected to the upper end of the multilevel frame, being driven by the drive mechanism. Through the cooperation of the multilevel frame, the drive mechanism, the winding mechanisms, and the vehicle platform, the structure of the multilevel frame enhances the overall strength of the garage. The winding mechanisms are able to lift the vehicle platform efficiently under the action of the drive mechanism. The vehicle platform experiences uniform tension and can be smoothly lifted and

lowered under the guidance of the multilevel frame. This improves the stability of the electric bicycles during the lifting and parking process. When parked on the vehicle platform, the load distribution on the multilevel frame is relatively even, thus increasing the lifespan of the multilevel frame and enhancing the stability of parking.



21: 2024/07378. 22: 2024/09/27. 43: 2025/04/01

51: B01D; B27K; C02F; C10C

71: Arxada AG

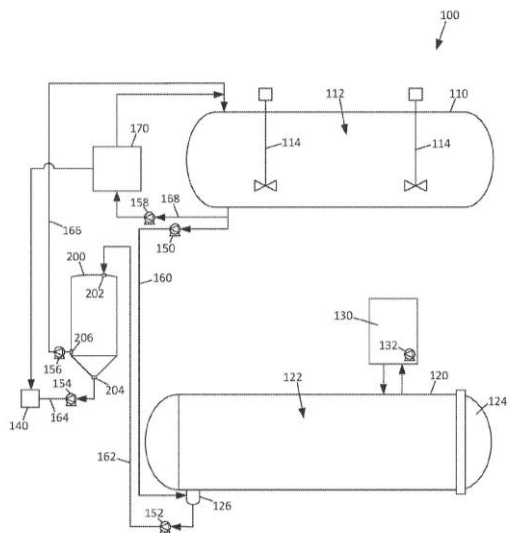
72: MYERS, Jessica, UPHILL, Stephen, GRIFFITHS, Hannah, HUGHES, Andrew, WEBSTER, Ed, NUTTALL, Jamie

33: US 31: 63/325,838 32: 2022-03-31

#### **54: WATER AND QUALITY MANAGEMENT OF OIL-BASED WOOD PRESERVATIVES**

00: -

A system for treating wood includes a water separation tank in fluid communication with a pressure tank such that a mixture of water and treatment fluid are flowable from the pressure tank to the water separation tank. The water separation tank includes a bottom wall with an outlet. The bottom wall is sloped towards the outlet. Water from the mixture of water and treatment fluid is flowable out of the water separation tank through the outlet.



Standard Ramping Cycle - No Drying Phase

Autoclave Pressure (PSIG)

Time (minutes)

Fluid Transfer into Autoclave

Fluid Transfer from Autoclave to storage

Final Scavenge / Drain back to storage

51: B27K; F26B

71: Arxada AG

72: NUTTALL, Jamie, BACON, Michael, HUGHES, Andrew, GRIFFITHS, Hannah, UPHILL, Stephen

## 54: IN-PROCESS 'DRYING' FOR OIL

00: -

In ge

method for treating a wood product. The method disclosed herein includes: i) injecting an oil-based preservative into a treatment chamber with the wood product; ii) pressurizing the treatment chamber with the wood product and the oil-based preservative in order to impregnate the wood product with the oil-based preservative; iii) releasing the pressure of the treatment chamber to atmospheric pressure; iv) performing an intermediate drying phase; v) after performing the intermediate drying phase, draining the oil-based preservative from the treatment chamber; and vi) applying a vacuum within the treatment chamber in order to remove excess preservative from surface of the impregnated wood product.

51: A61C

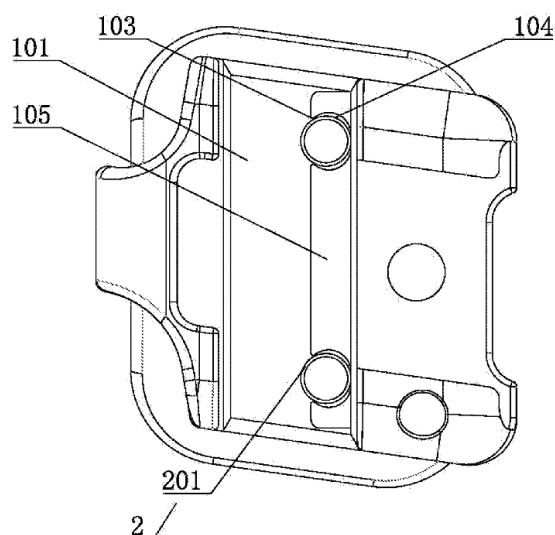
72: LV, Tao

## 54: ORTHO

## WITH CONTROLLABLE ARCHWIRE TORQUE AND SYSTEM

Prov

a controllable archwire torque and a system. The orthodontic self-ligating bracket comprises a bracket main body (1). A groove (101) is arranged in the bracket main body (1). A self-ligating cover plate (102) is arranged on the upper part of the groove (101). The orthodontic self-ligating bracket further comprises an elastic member (2). The elastic member (2) is connected to one side wall of the groove (101). The elastic member (2) and the other side wall of the groove (101) are used for arranging an archwire (3). The elastic member (2) can elastically deform under the compression of the archwire (3) to elastically act on the archwire (3) at different torsion angles. The design of the elastic member (2) enables the elastic control over the multi-angle torque of the archwire (3), which fundamentally solves the problem that the tooth root stress is too concentrated when controlling the torque of the archwire (3) at different torsion angles, so that the torque couples of the archwire (3) is gently expressed, orthodontic treatment is safer and more efficient, and an ideal torque, shaft inclination, and position more easily obtained for teeth.



21: 2024/07503. 22: 2024/10/02. 43: 2025/04/07

51: A61K; C07K; C12N

71: Omeros Corporation, University of Leicester

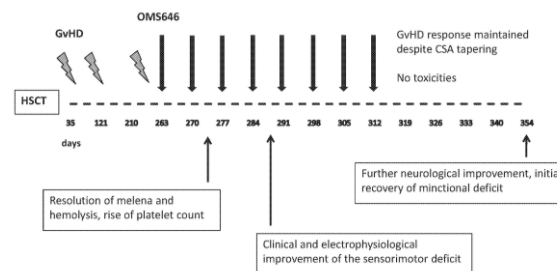
72: DEMOPULOS, Gregory A., DUDLER, Thomas, SCHWAEBLE, Hans-Wilhelm

33: US 31: 62/545,864 32: 2017-08-15

**54: METHODS FOR TREATING AND/OR PREVENTING GRAFT-VERSUS-HOST DISEASE AND/OR DIFFUSE ALVEOLAR HEMORRHAGE AND/OR VENO-OCCLUSIVE DISEASE ASSOCIATED WITH HEMATOPOIETIC STEM CELL TRANSPLANT**

00: -

In one aspect, the invention provides methods of inhibiting the effects of MASP-2-dependent complement activation in a human subject suffering from graft- versus-host disease and/or diffuse alveolar hemorrhage and/or veno-occlusive disease associated with a hematopoietic stem cell transplant. The methods comprise the step of administering, to a subject in need thereof, an amount of a MASP-2 inhibitory agent effective to inhibit MASP-2-dependent complement activation.



21: 2024/07506. 22: 2024/10/02. 43: 2025/04/07

51: C08J

71: RECYC'ELIT

72: EL MAHDI, Ayoub, MEDIMAGH, Raouf, FOURDIN, Théo

33: FR 31: FR2203148 32: 2022-04-06

33: FR 31: FR2300523 32: 2023-01-19

**54: METHOD FOR ROOM TEMPERATURE DEPOLYMERIZATION OF TEREPHTHALIC POLYESTERS TO TEREPHTHALATE ESTERS**  
00: -

The present invention relates to the field of recycling materials comprising terephthalate polyester, notably polyethylene terephthalate (PET) or polybutylene terephthalate (PBT) which are commonly used for the manufacture of single-use plastic bottles, food trays, textiles, composite material for insulation, etc. The invention also relates to a method for recycling PET to terephthalic diester and in particular to dimethyl terephthalate (DMT) in less than one hour and without a pretreatment step. Furthermore, this method does not use toxic products. It is therefore particularly advantageous from an industrial viewpoint.

21: 2024/07511. 22: 2024/10/02. 43: 2025/04/29

51: H04W

71: Huawei Technologies Co., Ltd.

72: CHENG, Bo, WANG, Jian, SUN, Defu, CHENG, Xingqing

33: CN 31: 202210211057.0 32: 2022-03-04

**54: COMMUNICATION METHOD AND APPARATUS**

00: -

Embodiments of the present application relate to the technical field of communications, and provided are a communication method and device. In the method, a first node can send first measurement configuration information to a second node (S301), the first measurement configuration information being used for indicating to measure synchronization



information of a third node in a first channel; the second node can further obtain the synchronization information (S302); the first node receives the synchronization information from the second node (S303), the synchronization information being used for indicating one or more of time synchronization information, frequency synchronization information, synchronization communication domain set information, reference signal receiving power (RSRP), reference signal receiving quality (RSRQ), signal to interference plus noise ratio (SINR), or received signal strength indicator (RSSI) of the third node. In this way, time-frequency synchronization of different nodes in a communication system can be implemented, interference between different nodes can be effectively reduced, and system communication performance can be improved.

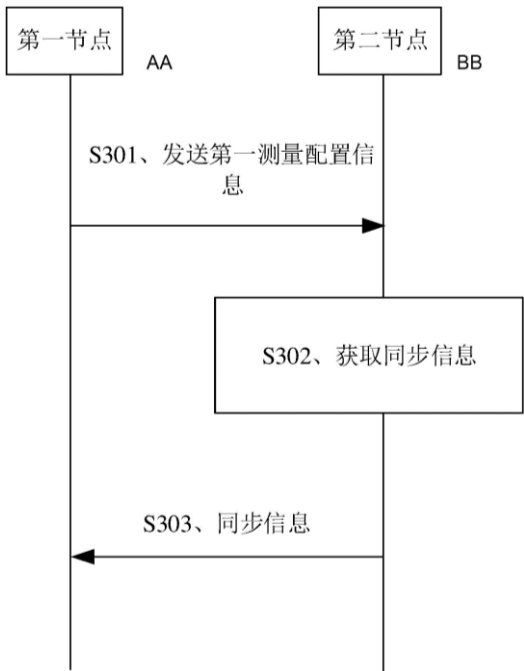


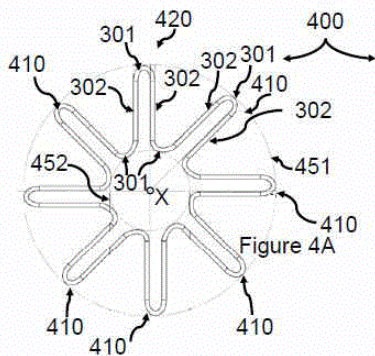
图 3

- AA First node
- BB Second node
- S301 Send first measurement configuration information
- S302 Obtain synchronization information
- S303 Synchronization information

21: 2024/07531. 22: 2024/10/03. 43: 2025/04/07  
51: A01H; A01N; C12N  
71: Syngenta Crop Protection AG

72: POLGE, Nicholas D., CARTER, Jared, DINWIDDIE, Jay Austin  
33: US 31: 63/346,066 32: 2022-05-26  
**54: MAIZE POLLEN STORAGE AND CARRIERS**  
00: -  
Maize pollen is notoriously fragile and susceptible to degradation unless adequately stored. Unlike some tree pollen, which can be quite hardy and capable of successful fertilization for months or years after it is shed, maize pollen remains viable for mere hours after shedding before it begins to degrade. Described here is an invention for storing maize pollen where the pollen is collected and stored in a refrigerated, but not frozen, environment with a breathable bander. Pollen stored as described herein may remain viable for up to twelve days, or two weeks, or longer. Adding a carrier compound can extend viability of the pollen.

21: 2024/07548. 22: 2024/10/04. 43: 2025/04/07  
51: H02K  
71: ETA Green Power Limited  
72: BOWMAN, Liam, COLLINGS, Henry  
33: GB 31: 2200661.3 32: 2022-01-19  
**54: A METHOD OF MANUFACTURING A STATOR FOR A SLOTLESS ELECTRIC MOTOR**  
00: -  
The present disclosure is directed to slotless electric motor, in particular, to a method of manufacturing a stator for a slotless electric motor. An aspect of the disclosure provides a method of manufacturing a stator for a slotless electric motor, the method comprising: disposing a conductor in the shape of an annular cylinder; bonding a plurality of bonded lengths of the conductor, wherein the plurality of bonded lengths are separated by non-bonded lengths; folding the conductor to provide a plurality of petals repeated along the conductor, wherein each petal comprises a pair of bonded lengths connected by a non-bonded length; rotating each petal about a point on the second circle to align in parallel the bonded lengths of all of the petals to thereby provide a stator comprising a cylindrically-shaped conductor wherein the bonded lengths are equidistantly disposed around and from a central longitudinal axis of the cylindrically-shaped conductor.

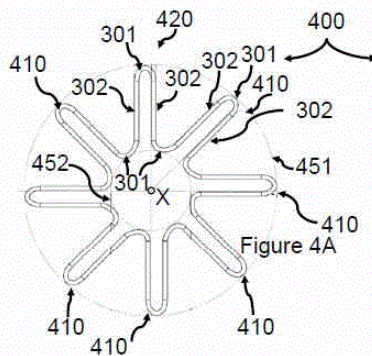


71: ETA Green Power Limited

33: GB 31: 2200661.3 32: 2022-01-19

00: -

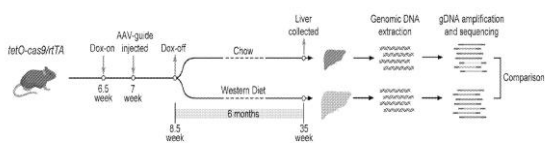
The present disclosure is directed to slotless electric motor, in particular, to a method of manufacturing a stator for a slotless electric motor. An aspect of the disclosure provides a method of manufacturing a stator for a slotless electric motor, the method comprising: disposing a conductor in the shape of an annular cylinder; bonding a plurality of bonded lengths of the conductor, wherein the plurality of bonded lengths are separated by non-bonded lengths; folding the conductor to provide a plurality of petals repeated along the conductor, wherein each petal comprises a pair of bonded lengths connected by a non-bonded length; rotating each petal about a point on the second circle to align in parallel the bonded lengths of all of the petals to thereby provide a stator comprising a cylindrically-shaped conductor wherein the bonded lengths are equidistantly disposed around and from a central longitudinal axis of the cylindrically-shaped conductor.



72: ZHU, Hao, WANG, Zixi, LI, Lin

00: -

Disclosed herein are compositions comprising siRNAs capable of downregulating Cell Death-Inducing DFF45-like Effector Protein B (CIDEB) gene expression or a variant thereof. Also disclosed herein are methods of using such compositions in the treatment of a liver disease or injury, such as fatty liver disease (FLD), non-alcoholic fatty liver disease (NAFLD) or non-alcoholic steatohepatitis (NASH).



71: Richard Douglas Chadwick

33: ZA 31: 2022/03906 32: 2022-04-06

00: -

Cooker that is operated by two ways, by electric heating element and a gas burner, which are placed below the cooking container. The cooker includes a container for housing a combustible material, outer

shell and inner shell, a cooking zone, thermal insulation disposed in the void between the walls of the outer shell and the walls of the inner container and an additional lid shaped to fit the inner cooking container.

21: 2024/07589. 22: 2024/10/07. 43: 2025/04/14

51: A61K; A61P; C07D; C12N; C12Q

71: Shionogi & Co., Ltd.

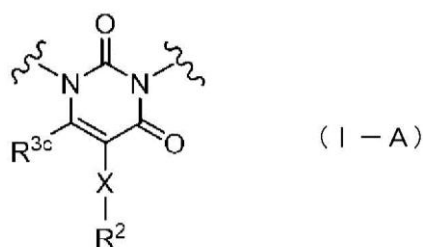
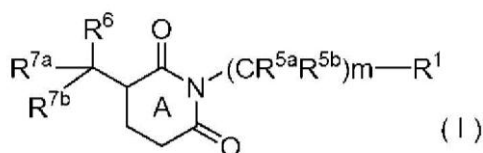
72: SATO, Jun, SHIBAYAMA, Hiromitsu, HIRAI, Keiichiro, UNOH, Yuto, UEHARA, Shota, YONEZAWA, Shuji, KURAHASHI, Kana, KOJIMA, Eiichi

33: JP 31: 2022-064593 32: 2022-04-08

#### 54: URACIL DERIVATIVE HAVING VIRAL GROWTH INHIBITORY ACTIVITY AND PHARMACEUTICAL COMPOSITION CONTAINING SAME

00: -

The present invention provides a compound showing coronavirus 3CL protease inhibitory activity or a pharmaceutically acceptable salt thereof, and a pharmaceutical composition containing the same. A compound represented by formula (I) [in the formula: ring A is a ring represented by formula (I-A) (wherein X is a single bond, etc., R<sup>2</sup> is a substituted or unsubstituted aromatic carbocyclic group, etc., and R<sup>3c</sup> is a substituted or unsubstituted aromatic carbocyclic group, etc.); R<sup>1</sup> is a substituted or unsubstituted aromatic heterocyclic group; m is 0, etc.; R<sup>5a</sup> and R<sup>5b</sup> are independently a hydrogen atom, etc.; R<sup>6</sup> is a hydrogen atom, etc.; R<sup>7a</sup> and R<sup>7b</sup> are independently a hydrogen atom, etc.; or a pharmaceutically acceptable salt thereof.



21: 2024/07596. 22: 2024/10/07. 43: 2025/04/14

51: A61K; A61P

71: Amgen Inc.

72: BELMONTES, Brian, CHAN, Edward Lau Yue, HUGHES, Paul, SLEMMONS, Katherine, SUN, Jan

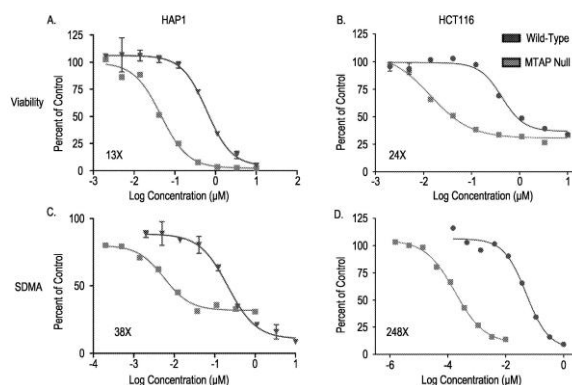
33: US 31: 63/329,010 32: 2022-04-08

#### 54: CANCER TREATMENTS USING MTA-COOPERATIVE PRMT5 INHIBITORS

00: -

Described herein are methods of treating cancer in a patient comprising administering a PRMT5 inhibitor. Also provided are methods of treating cancer in a

patient comprising administering a PRMT5 inhibitor and a standard of care therapy.



21: 2024/07631. 22: 2024/10/08. 43: 2025/04/14

51: B66C; F03D

71: CLS WIND LLC

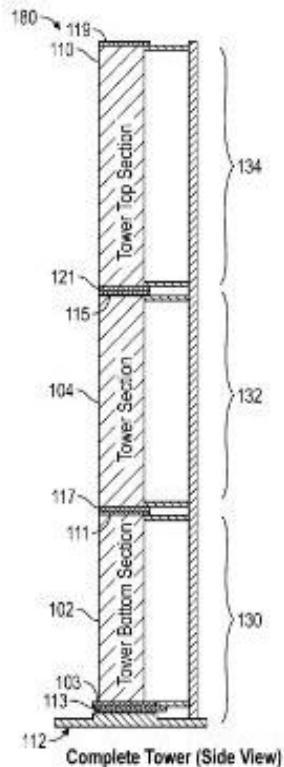
72: GARCIA, Andres C., JOHNSON, Kent A.

33: US 31: 63/329,537 32: 2022-04-11

#### 54: WIND TURBINE TOWER DETACHABLE SELF ERECTING SYSTEM FOR ALL WIND TURBINE COMPONENTS

00: -

A tower assembly system can include a self-climbing platform that can carry a load to a determined height, which once attained, can place the load into position. A method for assembling a wind turbine can involve placing a first tower section in an upright position on a tower base and using an elevator assembly platform attached to the first tower section to elevate, position and connect subsequent tower sections until the subsequent tower sections are located directly above the first tower section in a vertical tower assembly. The elevator assembly platform can perform vertical displacement operations and lateral displacement operations with respect to one or more components of the wind turbine, such as, for example, the first and subsequent tower sections, nacelle, blades, etc.

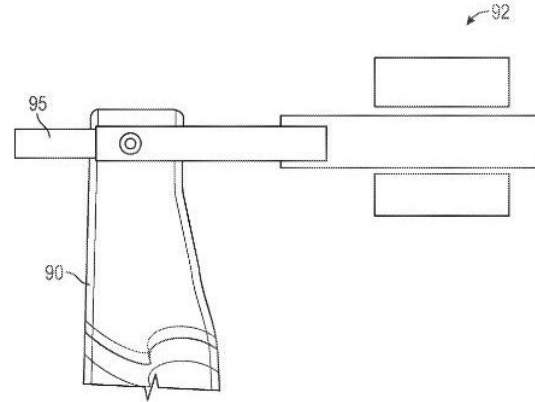


21: 2024/07632. 22: 2024/10/08. 43: 2025/04/14  
 51: B66C; F03D  
 71: CLS WIND LLC  
 72: GARCIA, Andres C., JOHNSON, Kent A.  
 33: US 31: 63/329,538 32: 2022-04-11

**54: WIND TURBINE BLADE ASSEMBLY DEVICE FOR EASY INSTALLATION AND REMOVAL IN VERTICAL POSITION**

00: -

Methods and systems for assembling a wind turbine blade for a wind turbine, can involve performing a vertical displacement of a blade holder elevator during assembly or disassembly of a wind turbine. The vertical displacement can be performed by a hard connection or a flexible connection.



21: 2024/07641. 22: 2024/10/09. 43: 2025/04/14

51: E05G

71: INTEGRATED CONVOY PROTECTION (PTY) LTD.

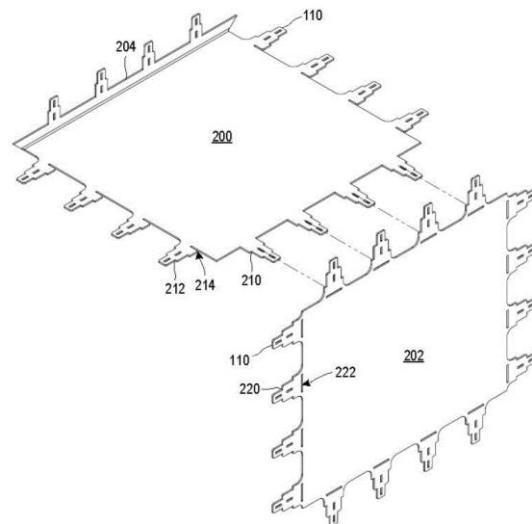
72: ERWEE, Hermanus Philippus

33: ZA 31: 2023/08688 32: 2023-09-12

**54: A Blast-Resistant Safe**

00: -

A blast-resistant safe includes a plurality of layers, comprising at least an outer layer and an inner layer provided inwardly of the outer layer. A plurality of spacer members are configured to space the layers apart such that a void is defined between the layers, wherein the void is predominantly empty or hollow, other than accommodating the spacer members. The layers may comprise a plurality of interconnected panels.



21: 2024/07672. 22: 2024/10/09. 43: 2025/04/14

51: G01V

71: Reflection Marine Norge AS  
 72: Terje Leslie MOSTUE, Alexander MATROSOV, Gunnar HERØ, Erik Heggem BROKSTAD, Lucas Martinus Joseph GEURTS, Vidar Anders HUSOM  
 33: NO 31: 20220403 32: 2022-04-01

#### **54: A SEISMIC NODE AND A METHOD FOR PRODUCING A SEISMIC NODE**

00: -

Described herein is a seismic node, comprising: at least one seismic sensor; a pressure resistant structure having a first wall, a second wall, and one or more supporting elements extending between the first and second walls to define one or more cavities for containing pressure sensitive components; and a separate waterproof sealing skin surrounding the pressure resistant structure and the at least one seismic sensor. Also described herein is a method for producing a seismic node.

21: 2024/07678. 22: 2024/10/10. 43: 2025/04/29  
 51: G06Q

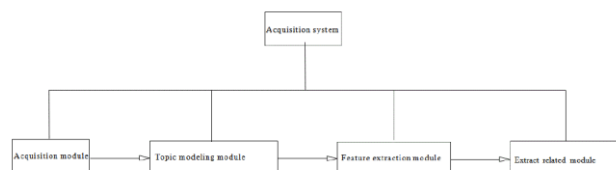
71: Tongling University  
 72: Hou Maowen, Wang Weiyun

#### **54: A POLICY DATA INFORMATION COLLECTION SYSTEM FOR INTERNET DATABASE**

00: -

The present invention relates to the field of policy information collection technology, and specifically to a policy data information collection system for an Internet database, including a collection system, wherein the collection system includes a collection module, a topic modeling module, a feature extraction module, and an extraction association module connected in sequence, wherein the collection module is connected to the topic modeling module, and is used for policy information collection and processing the collected information, wherein the topic modeling module is connected to the feature extraction module, and is used for keyword extraction of the processed information, and wherein the feature extraction module is connected to the extraction association module, and is used for in-depth analysis and extraction of the mined feature information. The present invention improves the efficiency of policy document data processing, extracts high-quality data from policy documents and mines and extends interpretations in the process of collecting information, saves a lot of time, and provides valuable information and insights to

decision makers, which will help them better grasp the development trend of industrial policies and make wise and effective decisions.



21: 2024/07686. 22: 2024/10/10. 43: 2025/04/14  
 51: C22B

71: Institute of Process Engineering, Chinese Academy of Sciences  
 72: LI, Huiquan, WANG, Chenye, HU, Wenbin, WANG, Xingrui

#### **54: METHOD FOR OXIDATIVE LEACHING OF VANADIUM AND CHROMIUM BY USING ULTRASONIC EXTERNAL FIELD COMBINED WITH MICROBUBBLES**

00: -

The present application discloses a method for oxidative leaching of vanadium and chromium by using ultrasonic external field combined with microbubbles, the method comprises following steps: vanadium slag is ground and screened to obtain reaction material; the reaction material is mixed with alkaline solution to obtain reaction slurry; the reaction slurry is stirred and oxidized gas is injected under an action of ultrasound to do a leaching reaction. After the leaching reaction, leaching solution is filtered to obtain a high concentration of vanadium-chromium alkali leaching solution. The present application does not need to be roasted at high temperature, and the leaching reaction of vanadium and chromium can be completed at low temperature. The energy consumption is greatly reduced, the cost is saved, and the single-stage leaching rate of the vanadium and chromium is high.

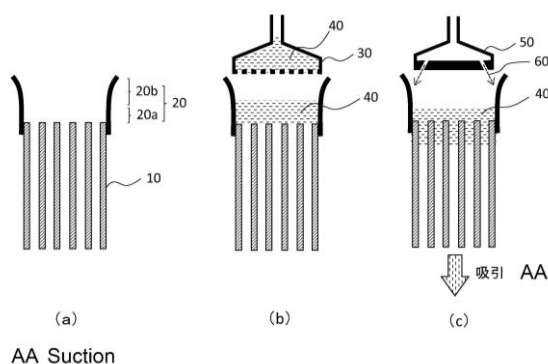
21: 2024/07696. 22: 2024/10/10. 43: 2025/04/14  
 51: B01D; B01J

71: Cataler Corporation  
 72: KURATA, Yasuyoshi, ATSUMI, Ken  
 33: JP 31: 2022-072659 32: 2022-04-26

00: -



A method for manufacturing an exhaust gas purification catalyst device, the method including: (A) disposing a substrate such that open ends on one side of a plurality of cell flow paths face upward and such that open ends on the other side face downward, installing a coating liquid retention tool having a retention wall at the upper-end section of the substrate, and forming a coating liquid retention part; (B) supplying a coating liquid for forming a catalyst coat layer to the coating liquid retention part; (C) reducing the pressure within the cell flow paths to below the pressure of the coating liquid retention part, thereby coating partition walls of the substrate with the coating liquid for forming a catalyst coat layer; (D) spraying the inner side of the retention wall of the coating liquid retention tool with compressed air from above; and (E) firing the substrate coated with the coating liquid for forming a catalyst coat layer, the step (C) and the step (D) being performed simultaneously.



21: 2024/07702. 22: 2024/10/11. 43: 2025/04/29  
51: G06F

71: Liaoning Institute of Science and Technology  
72: Shi Chunyang, Wang Yikun, Huang Zhidong,  
Tao Peilin, Zhang Lei

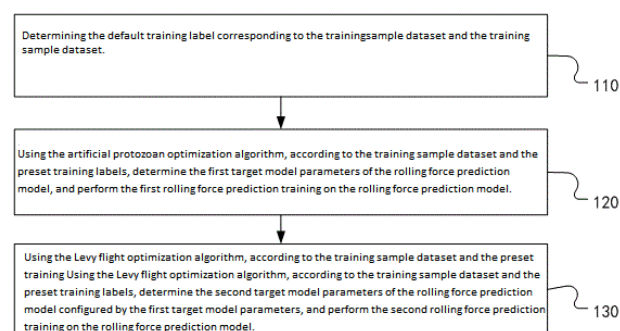
33: CN 31: 202410883232X 32: 2024-07-02

#### 54: A TRAINING METHOD, PREDICTION METHOD, AND DEVICE FOR ROLLING FORCE PREDICTION MODEL

00: -

This disclosure provides a training method, prediction method, and device for rolling force prediction model, relating to the field of cold rolling technology. The method includes: determining training sample data and corresponding preset training labels for the training sample data; utilizing an artificial protozoa optimization algorithm to

determine first target model parameters for the rolling force prediction model based on the training sample data and preset training labels, and conducting first rolling force prediction training on the rolling force prediction model; utilizing a Lévy flight optimization algorithm to determine second target model parameters for the rolling force prediction model configured with the first target model parameters based on the training sample data and preset training labels, and conducting second rolling force prediction training on the rolling force prediction model. This process optimizes the model parameters of the rolling force prediction model multiple times, improving the learning ability and generalization of the rolling force prediction model, thereby enhancing the prediction accuracy and prediction efficiency of the rolling force prediction model.



21: 2024/07747. 22: 2024/10/14. 43: 2025/05/06

51: A61H

71: Anhui University of Chinese Medicine, Institute of Health and Medicine, Hefei Comprehensive National Science Center

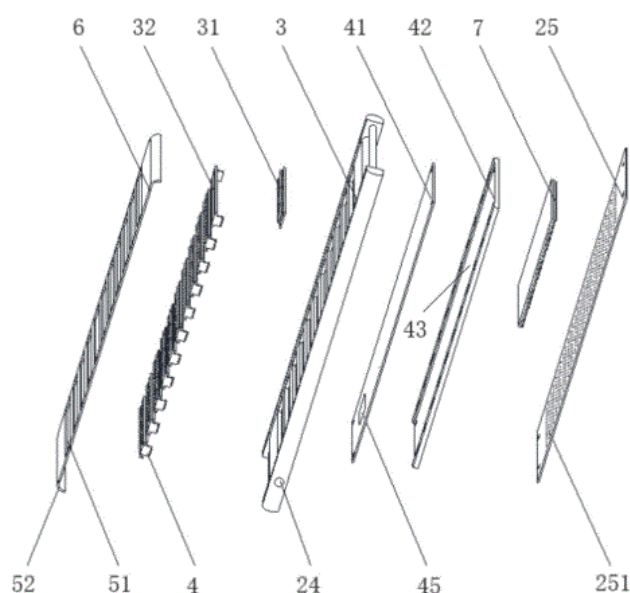
72: Shengbing WU, Kun WANG, Haiyan ZUO, Tongtong LIU, Xinyi ZHENG, Shuai CUI, Meiqi ZHOU, Nenggui XU

#### 54: INFRARED MOXIBUSTION THERAPY DEVICE

00: -

The present invention belongs to the technical field of physiotherapy device, in particular to an infrared moxibustion therapy device, including a device body and a fixing belt, the fixing belt is used to fix the device body on a human body, the device body includes a body, a lamp strip module and a circuit module; the lamp strip module and the circuit module are arranged on both sides of the device body respectively, the first side of the body is provided with a cavity, and the second side of the body is provided with multiple lamp grooves, the

lamp strip module includes multiple sets of LED lamp strips, and the lamp grooves are matched with the LED lamp strips, the LED lamp strips are arranged in the lamp grooves, the circuit modules are arranged in the cavity, and the circuit modules are electrically connected to multiple sets of LED lamp strips. The present invention uses a modular design, an independent lamp bead strip design, and a ventilation and heat dissipation design to effectively solve the problems of poor heat dissipation effect, inconvenient cleaning and waste caused by replacing all device when device parts are damaged in the wearable infrared physiotherapy device in the existing technology.



21: 2024/07753. 22: 2024/10/14. 43: 2025/04/16  
51: A61K  
71: NAIDOO, Ashley, PILLAY, Lushen, NAIDOO, Rajendra  
72: NAIDOO, Ashley, PILLAY, Lushen, NAIDOO, Rajendra, DAYA, Roheet  
33: ZA 31: 2024/04254 32: 2024-05-31

#### **54: A SKINCARE COMPOSITION**

00: -

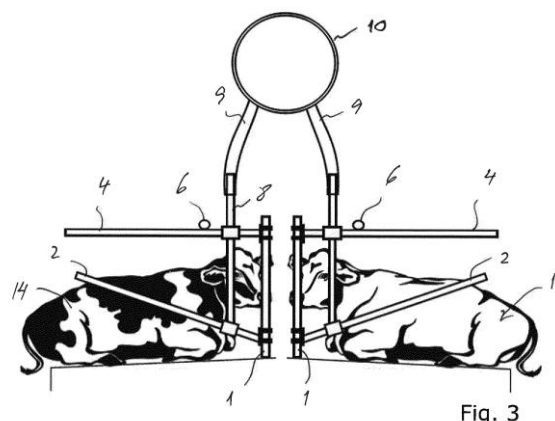
A skincare composition which includes Bacillus ferment filtrate extract as postbiotic agent

21: 2024/07804. 22: 2024/10/15. 43: 2025/05/19  
51: A01K  
71: COW-WELFARE A/S  
72: WOLLESEN, Tommy  
33: EP 31: 22169902.8 32: 2022-04-26

#### **54: A LIVESTOCK STALL DIVERTER SYSTEM**

00: -

The present invention concerns a livestock stall diverter system for a free stall stable and a method of providing air conditioning for animals in a free stall stable, said system comprising a plurality of stall dividers arranged in one or more rows comprising at least one vertical support member and at least one diverter member extending away from the support member, wherein the at least one diverter member is provided a tubular member with a plurality of air apertures, and that said tubular member is connected to an air supply.



21: 2024/07817. 22: 2024/10/15. 43: 2025/04/22  
51: A01H; C07K; C12N  
71: Syngenta Crop Protection AG  
72: BORTIRI, Esteban, KELLIHER, Timothy  
33: US 31: 63/343,657 32: 2022-05-19

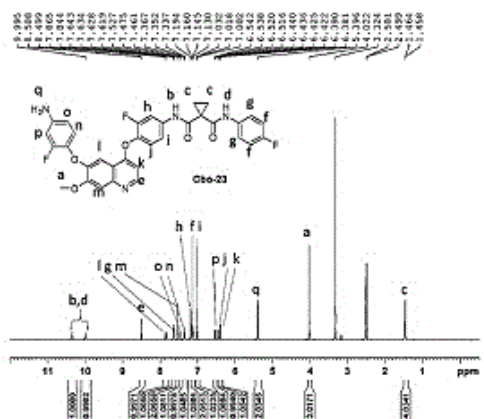
#### **54: CONFERRING CYTOPLASMIC MALE STERILITY**

00: -

Provided herein are methods for conferring cytoplasmic male sterility (CMS) on a plant line. The methods include obtaining a first plant comprising a CMS cytoplasm that is also a haploid inducer (CHIP) and crossing it with a second plant that comprises a desired nuclear genome (DIP). The CHIP also comprises a cenH3 mutation and may contain an anthocyanin marker and a restorer factor. The method further comprises generating progeny from said cross. The progeny produced from the cross of the method is haploid and comprises the CMS cytoplasm of the CHIP as well as the desired nuclear genome of the DIP. The progeny further lacks any anthocyanin marker or restorer factor.

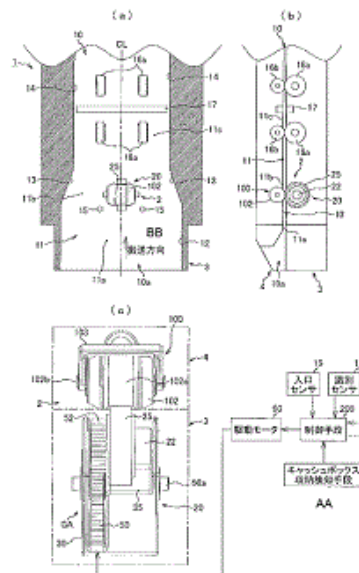
21: 2024/07830. 22: 2024/10/16. 43: 2025/04/22  
 51: A61K; A61P; C07D  
 71: GREAT NOVEL THERAPEUTICS BIOTECH & MEDICALS CORPORATION  
 72: CHEN, JIA-SHIONG, YANG, MU-HSUAN, CHOU, CHENG-HAN, WU, YI-HONG, CHU, SZ-HAO, CHAO, YE-SU, CHEN, CHIA-NAN  
 33: US 31: 63/590,975 32: 2023-10-17  
**54: TYROSINE KINASES INHIBITORS AND USES THEREOF**

00: -  
 The present disclosure generally relates to novel multiple target inhibitor of tyrosine kinases (TKs) which can suppress angiogenesis, metastasis, oncogenesis, and/or immune regulation activities by inhibiting TKs and have very potent immunomodulatory activity. The present disclosure also relates to the tyrosine kinase inhibitors, alone or in combination with HDAC inhibitor, for use in a method of treatment of cancers, in particular in cancer immunotherapy, by regulating the tumor microenvironment, including reducing tumor hypoxia, reducing lactic acid accumulation, activating CTL, inhibiting the number and activity of immunosuppressive cells, finally obtaining superior anti-cancer benefits and/or producing lasting immune memory.



21: 2024/07835. 22: 2024/10/16. 43: 2025/04/23  
 51: B65H  
 71: JAPAN CASH MACHINE CO., LTD.  
 72: HARAGUCHI, Kohei  
 33: JP 31: 2022-046947 32: 2022-03-23  
**54: FRICTION CONVEYANCE DEVICE AND PAPER SHEET CONVEYANCE DEVICE**  
 00: -

Provided are a friction conveyance device and a paper sheet conveyance device capable of correcting paper sheets, which are inserted from various positions and angles, to a normal conveying state while continuously conveying, without causing deformation due to contact with side walls, etc. A drive-side unit 20 comprises: a drive roller 25 that rotates about a shaft part 22; a rocking arm 30 comprising the shaft part 22 at one part thereof and the other part supported by a rocking shaft 50a so as to change the distance from a driven roller 102 by rocking a drive roller to change a conveyance grip; and an elastic biasing member 40 that elastically biases the drive roller toward the driven roller via the swing arm.



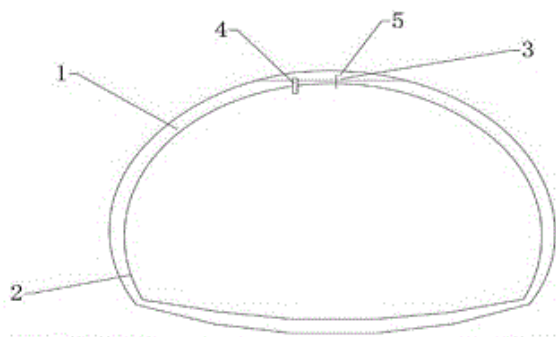
21: 2024/07872. 22: 2024/10/17. 43: 2025/04/23  
 51: C04B; E21D  
 71: CHINA RAILWAY TUNNEL GROUP ROAD & BRIDGE ENGINEERING CO., LTD., CHINA RAILWAY TUNNEL GROUP CO., LTD., CHINA RAILWAY TUNNEL GROUP BEIJING CTG CONSTRUCTION CO., LTD., CHONGQING JIAOTONG UNIVERSITY, CHINA RAILWAY TUNNEL BUREAU GROUP JILIN ENGINEERING CO., LTD., CHINA RAILWAY INVESTMENT GROUP CO., LTD.  
 72: DIAO, GUOJUN, SUN, LIANG, PANG, MINGQING, LI, ZHIZHONG, JIANG, WEI, TIAN, HAIYANG, ZANG, BAOLI, ZHANG, QIANJIN, QIAO, YONGWEI, LIU, SHI, LI, YANG, SUN, HE, YAO, JIANDONG, XIAO, HONGJIA, SHAO, LIYANG,

TAO, QIQUAN, PENG, YAXIONG, WEI,  
LIANGWEN, ZHANG, HUAPENG, QIN, XIN  
33: CN 31: 202311793930.2 32: 2023-12-25

**54: COMPENSATED CONCRETE LINING OF  
TUNNEL FOR PREVENTING ARCH CAVITIES  
AND APPLICATION PROCESS THEREOF**

00: -

The present disclosure discloses A compensated concrete lining for preventing arch cavities of tunnel, including following components in parts by weight: 0.48 to 0.52 part of water, 0.98 to 1.05 parts of reclaimed sand of waste concrete, 0.55 to 0.65 part of cement, 0.38 to 0.42 part of fly ash, 0.1 to 0.15 part of silica fume, 0.008 to 0.009 part of water reducing agent and 0.008 to 0.009 part of expansion admixture, as well as PVA fiber of 1volume% to 1.05volume% of paste. According to the compensated concrete lining for preventing the arch cavities of the tunnel and the process of the compensated concrete lining, the grouted concrete material is improved, and a secondary grouting is carried out, such that cavities generated after lining grouting may be effectively filled, and no cavity is formed at the top of a lining, thereby reducing the possibility of tunnel diseases caused by the cavities.



21: 2024/07941. 22: 2024/10/21. 43: 2025/04/24

51: A61K; A61P; C07F

71: AstraZeneca AB

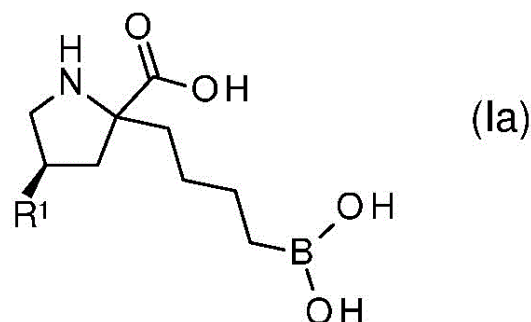
72: MLYNARSKI, Scott Nathan, GREBE, Tyler,  
KAWATKAR, Sameer, FINLAY, Maurice Raymond  
Verschoyle, SIMPSON, Iain, WANG, Jianyan,  
COOK, Steve, WU, Dedong

33: US 31: 62/631,659 32: 2018-02-17

**54: ARGINASE INHIBITORS AND METHODS OF  
USE THEREOF**

00: -

Disclosed are compounds of formula (Ia) or a pharmaceutically acceptable salt thereof, pharmaceutical compositions comprising compounds of formula (Ia) and methods of using the same for treating cancer or a respiratory inflammatory disease and inhibiting arginase, wherein  $R^1$  is  $-NHR^{1a}$ ;  $R^{1a}$  is  $-H$  or  $-C(O)CH(R^{1b})NHR^{1c}$ ; and  $R^{1b}$  is selected from  $-H$ ,  $-(C_1-C_4)$  alkyl and  $CH_2OR^{1d}$  and  $R^{1c}$  is  $-H$ ; or  $R^{1b}$  and  $R^{1c}$ , together with the atom to which they are attached, form a 5-membered heterocyclic ring; and  $R^{1d}$  is  $H$  or  $-CH_3$ .



21: 2024/07950. 22: 2024/10/21. 43: 2025/05/06

51: C06B

71: ENAEX SERVICIOS SA, ENAEX SA

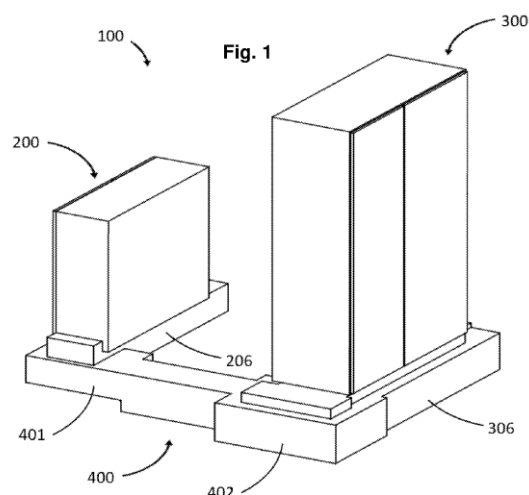
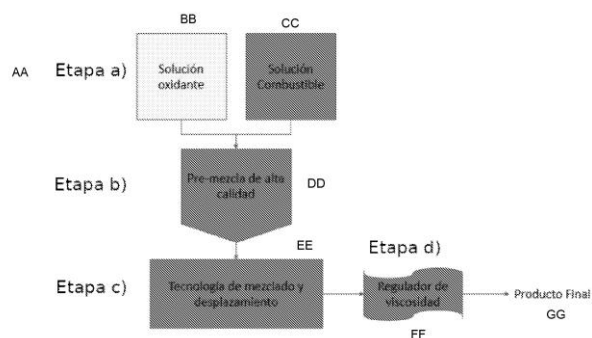
72: CONTRERAS OTEY, Jose Antonio, NUÑEZ  
CAMUS, Eduardo Antonio

**54: NEW TECHNOLOGY FOR MANUFACTURING  
LOW VISCOSITY EMULSIONS**

00: -

The present invention discloses an explosive emulsion comprising an oxidising solution, comprising: i) ammonium nitrate; ii) water; and a combustible solution comprising: iii) surfactants; and iv) fuel oil. The invention further discloses a method for manufacturing said emulsion, comprising the steps of: a) mixing an oxidising solution with a combustible solution; b) mixing in a high quality pre-mix mixer; c) mixing and displacement technology; d) adjusting viscosity. The explosive emulsion disclosed can be used in the mining industry, civil engineering, and/or underwater explosions.





21: 2024/07955. 22: 2024/10/21. 43: 2025/04/24

51: B01J; C22B

71: LANXESS Deutschland GmbH

72: NEUFEIND, Stefan, STEINHILBER, Dirk, KRALIK, Joachim, MAKROPOULOS, Pavlos

33: EP(DE) 31: 22163466.0 32: 2022-03-22

#### 54: METHOD FOR THE ELUTION OF ALUMINUM IONS AND/OR ZINC IONS

00: -

The present invention relates to a method for the elution of aluminum ions and/or zinc ions of polymers containing aminomethylphosphonic acid groups.

21: 2024/07972. 22: 2024/10/22. 43: 2025/04/29

51: E21D; F42D

71: ENAEX SERVICIOS SA

72: RUIZ HERNÁNDEZ, Marco Antonio, BARRIGA MELGAREJO, Jonhatan Octavio, MIRANDA LORCA, Rodrigo Andrés, LARA MARRO, Gloria del Pilar

#### 54: DEVICE AND METHOD FOR ROBOTISED PRIMING

00: -

The present invention relates to a robotised priming device and to an associated method, which increase safety during priming and reduce the possibility of accidental detonation.

21: 2024/07983. 22: 2024/10/22. 43: 2025/04/29

51: A61K; A61P; C07K; C12N

71: Biotheus Inc.

72: WU, Fan, MIAO, Xiaoniu, LUO, Yi, WANG, Ping, ZHAO, Zhenting

33: CN 31: 202210345737.1 32: 2022-04-02

#### 54: ANTIBODY AGAINST C-MET AND USE THEREOF

00: -

The present application relates to an antibody capable of specifically binding to c-Met or an antigen-binding fragment thereof, and an immunoconjugate, a pharmaceutical composition and a kit comprising same. The present application also relates to use of the antibody or the antigen-binding fragment thereof in the preparation of the kit or a drug. The antibody has a relatively high affinity for cells expressing or overexpressing c-Met, and also has some thermal stability. Moreover, the antibody can inhibit the HGF-c-Met signal pathway, thereby causing cancer cells to undergo apoptosis and thus inhibiting the proliferation of cancer cells. The antibody has great potential for application in targeted therapy for tumors.

21: 2024/07999. 22: 2024/10/23. 43: 2025/04/29

51: H01F

71: Zhengzhou KBT Transformer Co., Ltd.

72: Wen Huang, Feng Wu, Guoyu Fu

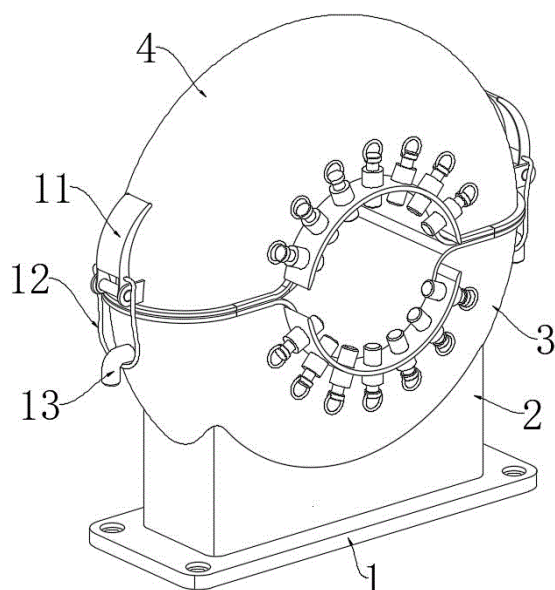
#### 54: SPLIT-CORE CURRENT TRANSFORMER

00: -

The present invention relates to the technical field of current transformers, and discloses a split-core



current transformer, including a base and a mounting seat fixed on the base, where a lower housing is mounted on the mounting seat, an upper housing is mounted on the lower housing, a magnetic conductive sheet is respectively mounted on both ends of the lower housing and both ends of the upper housing, an arc-shaped plate is mounted on both sides of the lower housing and the upper housing respectively, and a plurality of clamping assemblies for clamping a cable are mounted on the arc-shaped plate. By arranging the arc-shaped plate respectively on both sides of the lower housing and the upper housing, and arranging the plurality of clamping assemblies on the arc-shaped plate, the cable can press a plurality of clamping rods during mounting thereof, so that the clamping rods can move into an adjusting cylinder and press a compression spring when subjected to a compression force, so that a variety of cables with different thicknesses can be used, avoiding the phenomenon that the current transformer is not firmly fixed due to too thin cables, or the situation that the magnetic conductive sheets of the upper housing and the lower housing are in uneven contact due to too thick cables.



21: 2024/08004. 22: 2024/10/23. 43: 2025/06/10  
51: G01N; G06F  
71: TECHNOLOGY CENTRE OF DALIAN CUSTOMS

72: XUE, Weifeng, WANG, Qi, YANG, Aifu, BIAN, Haitao, QIAO, Xianliang, CAI, Xiyun

**54: NON-TARGETED SCREENING METHOD FOR SUBSTANCES IN CATEGORIES OF PHARMACEUTICAL AND PERSONAL CARE PRODUCTS (PPCPs) IN BEEF MUSCLE**

00: -

The present invention relates to the technical field of pollutants screening, and in particular, to a non-targeted screening method for substances in categories of pharmaceutical and personal care products (PPCPs) in beef muscle. The non-targeted screening method of the present invention includes the following steps: minced beef, polyethylene glycol, a PPCPs standard-methanol solution, a ciprofloxacin-d8 methanol solution and a formic acid-acetonitrile aqueous solution were mixed, extracted and dried to obtain an extract; then a sample to be analyzed was obtained by mixing the extract with a methanol-formic acid aqueous solution; and PPCPs and ciprofloxacin-d8 in the sample to be analyzed were detected and analyzed to obtain marker compounds, and a specific type of the marker compound was finally determined. The non-targeted screening method of the present invention can accurately, quickly and comprehensively screen and identify PPCPs in animal-derived foods.

21: 2024/08009. 22: 2024/10/23. 43: 2025/04/30

51: C12N C12P

71: CJ CHEILJEDANG CORPORATION

72: KIM, Ju Eun, KIM, Ye-Eun, LEE, Jaemin

33: KR 31: 10-2022-0038130 32: 2022-03-28

**54: O-ACETYL HOMOSERINE-PRODUCING MICROORGANISM AND METHOD FOR PRODUCING O-ACETYL HOMOSERINE OR L-METHIONINE USING SAME**

00: -

The present application relates to: a microorganism with attenuated GNAT family N-acetyltransferase protein activity; a method for producing O-acetyl homoserine and L-methionine using same; a composition for producing O-acetyl homoserine comprising the microorganism; and use of the microorganism for producing O-acetyl homoserine or L-methionine.

21: 2024/08012. 22: 2024/10/23. 43: 2025/04/30

51: C12N C12P C12R

71: CJ CHEILJEDANG CORPORATION

72: KIM, Ju Eun, CHEONG, Ki Yong, LEE, Jaemin, KIM, Ye-Eun

33: KR 31: 10-2022-0038131 32: 2022-03-28

**54: O-ACETYL HOMOSERINE-PRODUCING MICROORGANISM AND METHOD FOR PRODUCING O-ACETYL HOMOSERINE OR L-METHIONINE USING SAME**

00: -

The present application relates to: a microorganism with attenuated SIRT-type deacetylase protein activity; a method for producing O-acetyl homoserine and L-methionine using same; a composition for producing O-acetyl homoserine comprising the microorganism; and use of the microorganism for producing O-acetyl homoserine or L-methionine.

21: 2024/08030. 22: 2024/10/23. 43: 2025/04/30

51: A61K; C07D; A61P

71: DANATLAS PHARMACEUTICALS CO., LTD.

72: ZHOU, Wenlai, ZHUO, Jincong, YAN, Dan, YU, Zhangqi, ZHANG, Yao

33: CN 31: PCT/CN2022/000075 32: 2022-04-28

33: CN 31: PCT/CN2022/131223 32: 2022-11-10

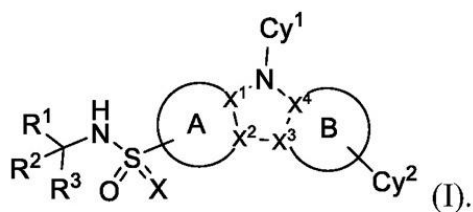
33: CN 31: PCT/CN2022/135765 32: 2022-12-01

33: CN 31: PCT/CN2023/089128 32: 2023-04-19

**54: TRICYCLIC HETEROCYCLIC DERIVATIVES, COMPOSITIONS AND USES THEREOF**

00: -

The disclosure relates to tricyclic heterocyclic derivatives as shown in Formula (I), to pharmaceutical compositions comprising them, to a process for their preparation, and their use as therapeutic agents.



21: 2024/08036. 22: 2024/10/24. 43: 2025/05/26

51: B65G

71: Tangshan University

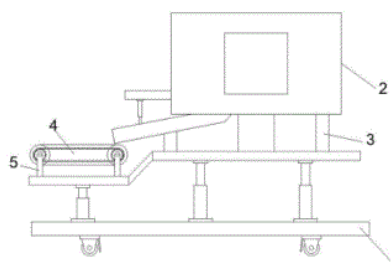
72: LI, Jing, MA, Zhuang, SUN, Xiuwei, ZHAO, Jing, LIU, Jian, DI, Jingyu

**54: ALUMINUM ALLOY MATERIAL CONTINUOUS CONVEYING APPARATUS**

00: -

The present invention discloses an aluminum alloy material continuous conveying apparatus, including

a workbench mechanism. A blanking mechanism and a conveying mechanism are provided on an upper end of the workbench mechanism, and a single material leakage hole is arranged on the bottom of the blanking mechanism. An extension plate is provided on an outer wall of the blanking mechanism, and the extension plate includes an extension fixing plate and an extension sliding plate. A speed adjusting mechanism is fixedly provided on a lower end of an adjusting oil cylinder, the speed adjusting mechanism includes a speed adjusting support plate, a speed adjusting motor is installed on the speed adjusting support plate, a speed adjusting rotary rod is installed on an output shaft of the speed adjusting motor, and a speed adjusting baffle is fixedly provided on the speed adjusting rotary rod.



21: 2024/08037. 22: 2024/10/24. 43: 2025/05/26

51: G01N

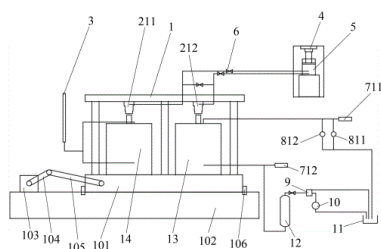
71: North China University of Water Resources and Electric Power, CCTEG Xi'an Research Institute (Group) Co. Ltd., Key Laboratory of Xinjiang Coal Resources Green Mining (Xinjiang Institute of Engineering), Ministry of Education, Xinjiang Engineering Research Center of Green Intelligent Coal Mining, Xinjiang Institute of Engineering

**54: DYNAMIC CLOSED SEEPAGE SIMULATION TEST APPARATUS FOR FISSURES OF MINING-FRACTURED ROCK MASSES**

00: -

The present invention discloses a dynamic closed seepage simulation test apparatus for fissures of mining-fractured rock masses, relating to the technical field of fissure research, and including a first tank, a second tank, a first camera, a second camera, and a third camera. The first tank and the second tank are each provided with a sample; a driver drives a crank and a connecting rod to rotate, so as to drive a movable table to reciprocate left and right; the first camera is provided on a side of the

first tank, the second camera is provided on a side of the second tank, the third camera is provided on a side of a measuring tube, and the first camera, the second camera, and the third camera are communicatively connected to an image processor. The present invention can realize the synchronous simulation test of fissure aperture and seepage quantity.



21: 2024/08039. 22: 2024/10/24. 43: 2025/05/26  
51: G01L

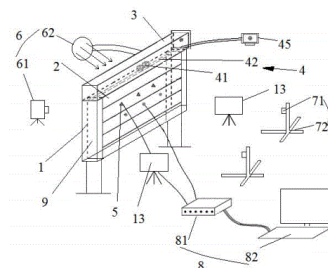
71: Key Laboratory of Xinjiang Coal Resources Green Mining (Xinjiang Institute of Engineering), Ministry of Education, North China University of Water Resources and Electric Power, Xinjiang Engineering Research Center of Green Intelligent Coal Mining, Xinjiang Institute of Engineering, CCTEG Xi'an Research Institute (Group) Co. Ltd. 72: WANG, Wenxue, DONG, Jinyu, ZHENG, Kaidan, JIANG, Tong, WANG, Siwei, ZHANG, Xin, LIANG, Yankun, CHANG, Jian, WANG, Hai

#### **54: ROCK-SOIL BODY DEFORMATION TEST APPARATUS UNDER VEHICLE LOAD ACTION**

00: -

The present invention discloses a rock-soil body deformation test apparatus under vehicle load action, including a frame, a top loading chamber, a load loading assembly, monitoring components, a temperature control component, image acquisition assemblies, and a central control assembly. The inside of the frame is configured for laying model materials; the top loading chamber is configured for pressurizing the top of the frame; the load loading assembly includes a loading truck and rails provided on the bottom inside the top loading chamber; the monitoring components are configured for monitoring stress-strain information; the temperature control component can control and monitor the temperature of the model materials; driving members of the image acquisition assemblies are connected to image acquisition members, and the image acquisition members are configured for acquiring

image information of the model materials; the central control assembly is communicatively connected to the monitoring components and the image acquisition members.



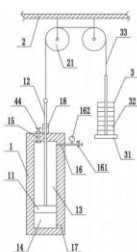
21: 2024/08040. 22: 2024/10/24. 43: 2025/05/26  
51: G01N

71: Key Laboratory of Xinjiang Coal Resources Green Mining (Xinjiang Institute of Engineering), Ministry of Education, North China University of Water Resources and Electric Power, Xinjiang Engineering Research Center of Green Intelligent Coal Mining, Xinjiang Institute of Engineering, CCTEG Xi'an Research Institute (Group) Co. Ltd. 72: HU, Dongqiang, WANG, Wenxue, LI, Tianhui, DONG, Jinyu, WANG, Hai, WANG, Siwei, NIE, Tianyu

#### **54: PRESSURE STABILIZING DEVICE**

00: -

Disclosed is a pressure stabilizing device, including a pressure stabilizing piston cylinder, a reaction frame, and a liquid supply tank. A pressure stabilizing piston is provided inside the pressure stabilizing piston cylinder. The space above the pressure stabilizing piston forms a liquid supply chamber, and the space below the pressure stabilizing piston forms a pressure balance chamber. A pressure stabilizing piston rod is fixedly connected to the pressure stabilizing piston. The pressure stabilizing piston cylinder is formed with a water addition port, a water outlet, and a ventilation port. A pulley block is provided on the reaction frame. A counterweight structure is fixedly connected to one end of a connecting rope, and the other end of the connecting rope is fixedly connected with the pressure stabilizing piston rod. A pressure stabilizing structure capable of controlling a discharge pressure of the liquid supply tank is provided within the liquid supply tank.



21: 2024/08045. 22: 2024/10/24. 43: 2025/06/12  
51: A61B

71: THE FIRST AFFILIATED HOSPITAL OF  
ZHENGZHOU UNIVERSITY

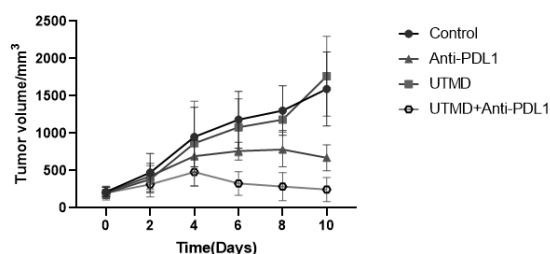
72: LIU, Lin, LI, Na, ZHANG, Yan, SUN, Zhenqiang,  
ZHANG, Zhuangli, LIN, Weiwei, PENG, Youmei, LI,  
Jianbo, YANG, Yang, WANG, Xiuxia, GUO, Yizhen,  
TUO, Baojing

33: CN 31: 2024111092759 32: 2024-08-13

**54: NANO ULTRASOUND CONTRAST AGENT  
(UCA) FOR ENHANCING IMMUNOTHERAPY AND  
PREPARATION METHOD AND APPLICATION  
THEREOF**

00: -

The present invention belongs to the technical field of ultrasound molecular imaging and biomedical engineering, in particular to a nano ultrasound contrast agent (UCA) for enhancing immunotherapy and a preparation method and an application thereof. The nano UCA for enhancing immunotherapy is provided by the present invention, and a new type of ultrasonic nanovesicles is formed by using a special composition of nanocarriers loaded onto protein drugs for blocking immune checkpoints, which not only has high biosafety, a small and uniform particle size and long-term circulation in vivo, but also has a good imaging effect, good penetration, strong targeting and a high drug utilization rate in a tumor extravascular field.



21: 2024/08049. 22: 2024/10/24. 43: 2025/05/13  
51: B01D

71: OCP SA, UNIVERSITE MOHAMMED VI  
POLYTECHNIQUE

72: HASSOUNE, Hicham, LACHEHAB, Adil,  
BENHIDA, Rachid, DHIBA, Driss, BOULIF, Rachid  
33: FR 31: 2202678 32: 2022-03-25

**54: PROCESS FOR ABSORBING CARBON  
DIOXYDE BY PHOSPHOGYPSUM**

00: -

The invention relates to a process for absorbing carbon dioxide by phosphogypsum, comprising a step of injecting carbon dioxide into a reaction medium comprising an alkaline solution, the pH of which is between 7.5 and 9, and phosphogypsum, and the formation of calcium carbonate, characterized in that the alkaline solution is seawater.

21: 2024/08051. 22: 2024/10/24. 43: 2025/05/06  
51: A61B

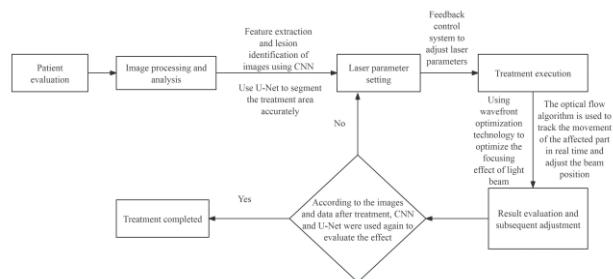
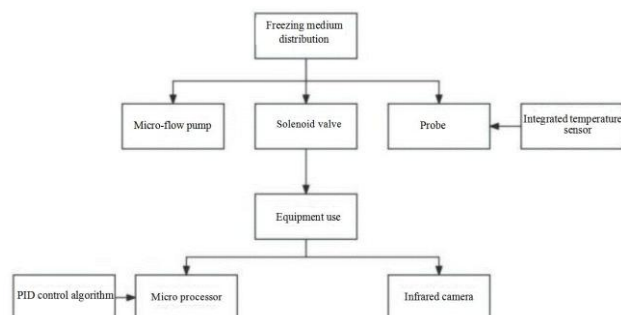
71: The Second Affiliated Hospital of Guangzhou  
Medical University

72: Huiyong Chen, Feng Xiong, Jiawen Yin, Qing Qi

**54: OPTIMIZATION METHOD OF LOCAL MICRO-  
SCALE CONTROLLED COOLING**

00: -

The invention relates to an optimization method of local micro-scale controlled cooling, belonging to the field of biomedical engineering. This method realizes the accurate cooling of the treatment area by precisely controlling the release of the frozen medium. The micro-flow pump and electromagnetic control valve are used to accurately adjust the flow rate and speed of the frozen medium, and the temperature sensor built in the probe is used to monitor the temperature of the treatment area in real time. The method also includes a control algorithm based on proportional-integral-differential (PID), which dynamically adjusts the release of the frozen medium according to the real-time temperature data to maintain the target treatment temperature. In addition, the method carries out non-contact temperature monitoring on the treatment area through an infrared camera, and records the data in the treatment process to optimize the treatment effect. This technology provides a safe and accurate local cryotherapy method, which is suitable for medical treatment of skin lesions, muscle injuries and inflammation.



21: 2024/08052. 22: 2024/10/24. 43: 2025/05/06

51: A61N

71: The Second Affiliated Hospital of Guangzhou Medical University

72: Huiyong Chen, Jiawen Yin, Feng Xiong, Wenlin Yang

#### 54: METHOD OF HE-NE LASER THERAPY BASED ON SELF-ADAPTIVE BEAM FOCUSING AND APPLICATION THEREOF

00: -

The invention discloses a method and application of He-Ne laser therapy based on self-adaptive beam focusing, which belongs to the technical field of medical lasers and realizes self-adaptive beam focusing optimization of He-Ne laser therapy. The process includes: patient evaluation, obtaining images and data of the treatment area; Image processing and analysis, using convolutional neural network (CNN) and U-Net algorithm for feature extraction and lesion segmentation; The wavefront optimizes the laser parameter setting, and the laser parameter is adjusted by the feedback control system; treatment execution, using wavefront optimization and optical flow algorithm to track and adjust the beam in real time; Results evaluation and adjustment, using CNN and U-Net to evaluate the treatment effect again, and adjusting the laser parameters to repeat the treatment if necessary; after the treatment is completed, the final evaluation of the patient's treatment results. This method improves the accuracy, effect and safety of treatment, and at the same time increases patient satisfaction.

21: 2024/08110. 22: 2024/10/28. 43: 2025/04/30

51: B04C B08B

71: TRIBE TECHNOLOGY PTY LTD

72: GARDINER, Greg, GORIJALA, Sirish, KAPFER, Michael

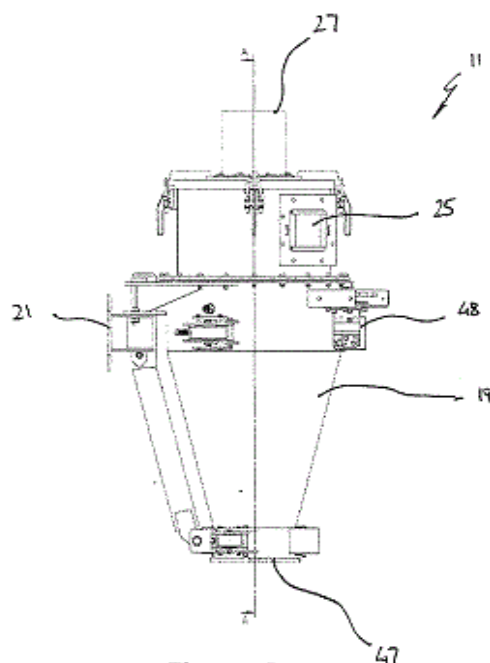
33: AU 31: 2022900877 32: 2022-04-04

#### 54: A SAMPLING APPARATUS AND A CYCLONE

00: -

The present invention provides a sampling apparatus (13) for use in extracting a sample from cuttings which are delivered to the sample apparatus (13) entrained in a gaseous stream. The apparatus (13) comprises a separation means to separate the cuttings from the gaseous stream and a sampling assembly (17) adapted to receive the cuttings from the separation means to allow samples to be taken therefrom. The separation means comprises a cyclone (11) to which the cuttings entrained in a gaseous stream is delivered. The cyclone (11) has an outlet (47) through which the cuttings pass from the cyclone, and a vent (27) through which the gaseous stream passes. The cyclone comprising an inner rotating body (33) wherein the body (33) is cleaned as it rotates.



**Figure 3**

21: 2024/08111. 22: 2024/10/28. 43: 2025/04/30

51: C11C F23D F23Q

71: AEXION INC.

72: RIGA, John, S.

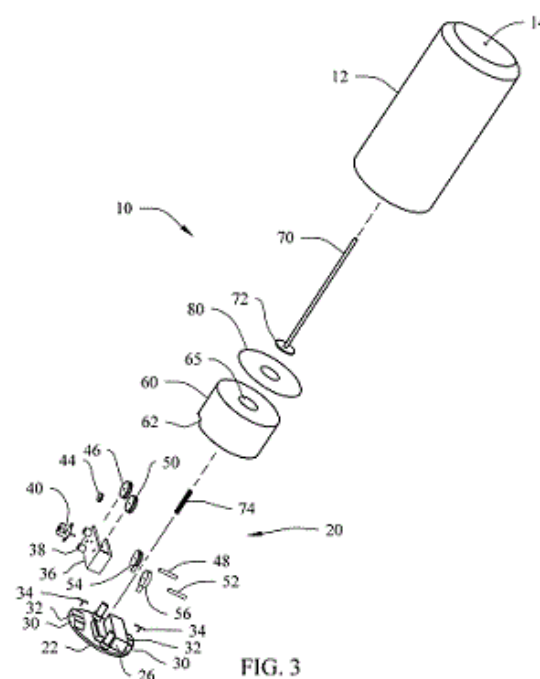
33: US 31: 63/325,194 32: 2022-03-30

33: US 31: 18/186,620 32: 2023-03-20

**54: FLAME OUT CANDLE SYSTEM AND METHOD**

00: -

A flame out candle system and method for automatically retracting and extinguishing a wick flame. The system includes a candle, a wick, and a puck assembly. The candle includes a bore to receive the wick, and a cavity to receive the puck assembly. The puck assembly can include a motor driven power screw or spur gears associated with spaced apart pinion gears. The puck assembly is removable from the candle for reuse in another candle. A wick engaging member can be operatively associated with the power screw for linear movement that is transferred to the wick. The pinion gears can be engageable with a rack gear positioned therebetween so rotation of the pinion gears translates into linear motion of the wick. A computer system can be utilized to control the motor based on a time signal, an activation signal, a sensor signal or any wireless signal.

**FIG. 3**

21: 2024/08121. 22: 2024/10/28. 43: 2025/04/30

51: A61K; C07K; A61P

71: AKESO BIOPHARMA, INC

72: XIA, YU, WANG, ZHONGMIN, LI, BAIYONG

33: CN 31: 202210473874.3 32: 2022-04-29

**54: ANTI-HUMAN IL-4RA ANTIBODY AND APPLICATION THEREOF**

00: -

The present invention relates to an anti-human interleukin-4 receptor A antibody, a pharmaceutical composition thereof or a kit, and an application thereof in the treatment of eosinophilic esophagitis.

21: 2024/08147. 22: 2024/10/29. 43: 2025/04/30

51: G07C; H04N; G06Q

71: MARTIN, Todd

72: MARTIN, Todd

33: US 31: 63/325,055 32: 2022-03-29

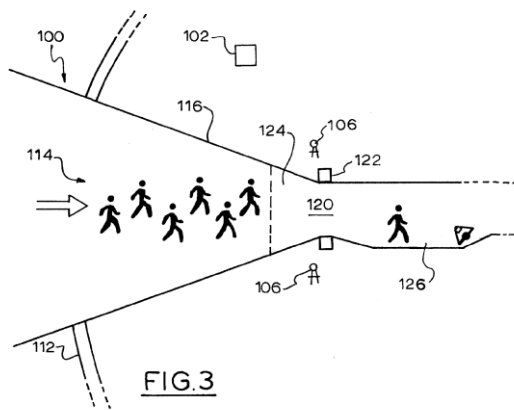
33: US 31: 17/727,862 32: 2022-04-25

**54: COMBINED TICKETLESS FLOW-THRU FACIAL RECOGNITION FOR MASS PARTICIPATION EVENT ENTRY AND ITEM FULFILLMENT**

00: -

A ticketless system and method for mass attendee event venue entry and item delivery system for facilitating expeditious and controlled entry of an influx of people to the event without overwhelming event venue employees or resources. A series of

pass-through images of group of people is taken by a camera (106) as the group moves through a photo zone (124). The at least one of the images is compared using facial recognition technology with a stored profile image of a person from the group to identify the person and confirm authorized entry into the event without the need for the person to present a ticket or pass for the particular event. The same entry image may be used to effectuate multiple determinations, including one or more a security determination, and procurement and delivery of any item pre-selected by the person directly to the person's allocated seating.



21: 2024/08148. 22: 2024/10/29. 43: 2025/04/30  
51: G01N

71: GEM RECOVERY SYSTEMS LIMITED,  
FRAUNHOFER-GESELLSCHAFT ZUR  
FÖRDERUNG DER ANGEWANDTEN  
FORSCHUNG E.V.  
72: SPENCER, Roy, George, Stamford,  
FIRSCHING, Markus, ENNEN, Alexander,  
LEISNER, Johannes

33: AU 31: 2022900894 32: 2022-04-05

#### **54: METHOD FOR DIAMOND DETECTION**

00: -

The present invention relates to a method for the identification of diamond in a host material, the method comprising the steps of: directing an x-ray beam at the host material; detecting x-rays passed through the host material at two or more separate energy spectra to acquire x-ray attenuation data at each energy spectra; processing the x-ray attenuation data to determine a set of physical properties of the host material at each energy spectra; and combining the set of physical properties

to identify the presence of diamond in the host material.

21: 2024/08175. 22: 2024/10/29. 43: 2025/04/30  
51: B60J

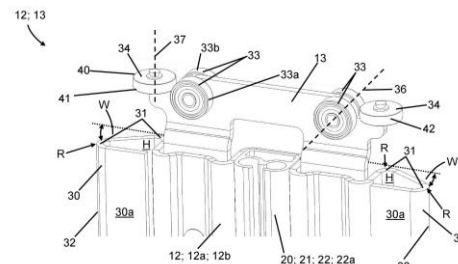
71: EUROPEAN TRAILER SYSTEMS GMBH  
72: Markus LEUKERS, Roger REMMEL, Volker BIESENBRUCK

33: DE 31: 10 2022 110 436.2 32: 2022-04-28

#### **54: OPENABLE CURTAINSIDER SYSTEM**

00: -

The invention relates to an openable curtainsider system for an utility vehicle, such as a truck, a semitrailer, a transport vehicle, a trailer, a container, a railroad wagon or the like, comprising at least one sliding stanchion (12) with a stanchion suspension device (13), which is displaceable along a first chamber of a longitudinal beam supported against a loading platform, and at least one tarpaulin which at least partially closes a lateral opening of the utility vehicle and which is suspended via tarpaulin suspension devices that are displaceable along a second chamber of the longitudinal beam, wherein the stanchion suspension device (13) comprises at least two twin load-bearing rollers (33). An openable curtainsider system and a sliding stanchion for an utility vehicle, with which a side tarpaulin of the utility vehicle can be opened and closed easily and reliably and which is inexpensive to produce, is created by the stanchion suspension device (13) comprising a guide roller (34) outside each of the twin load-bearing rollers (33) in a direction of travel, wherein said twin load-bearing rollers (33) and said guide rollers (34) are arranged in the first chamber. (Fig. 9)



21: 2024/08238. 22: 2024/10/31. 43: 2025/05/02  
51: B44C

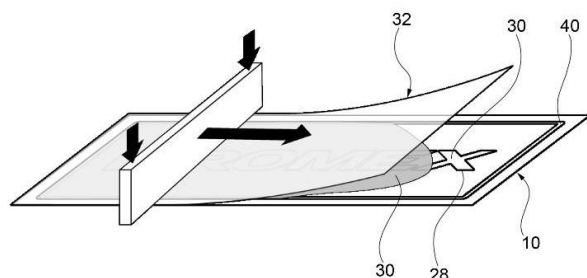
71: DEMAK S.R.L.  
72: Maurizio GASTALDI, Alberto MENOZZI

33: IT 31: 102024000011062 32: 2024-05-16

**54: METHOD FOR PRODUCING DECORATIVE ELEMENTS**

00: -

The present invention relates to a method for producing one or more decorative elements, comprising the steps of: thermoforming a multi-layer film (10) comprising a first transparent protective layer (12), a second decorative layer (14) containing at least one pigment, and a third support layer (16) of thermoformable plastic material, so as to form at least one recess (28) in said film (10), characterized in that it thus also forms, in said film (10), at least one perimetral collection channel (40) of the recess (28); pouring into said at least one recess (28) a hardening polymer (30) that adheres to the third layer (16) of the film (10); characterized in that when the hardening polymer (30) is still in a fluid state, applying to the third layer (16) of the film (10) a covering sheet (32), wherein said covering sheet (32) is of the adhesive or double-sided type or a removable semi-rigid protective film; wherein said application step performed by exerting upon the covering sheet (32) pressure that is both perpendicular and tangential to the film (10); wherein if by applying said both perpendicular and tangential pressure to the film (10) at least part of the hardening polymer (30) flows out of at least one recess (28), it is pushed by the aforementioned pressure and flows inside the at least one perimetral collection channel (40); leaving the polymer (30), previously poured and enclosed between the third layer (16) of the film (10) and the covering sheet (32), to harden through a hardening process and cutting the film (10) around the said at least one recess (28), thus obtaining a stratified decorative element comprising a portion of said film (10), a layer of polymer (30) and a portion of the sheet (32).



51: G06F

71: Kunming Prospecting Design Institute Of China Nonferrous Metals Industry Co.,Ltd, Central South University

72: Weixun YONG, Jian ZHOU, Yingui QIU, Ju MA, Kun DU, Rui BAO, Zhida LI, Su WANG, Shuai HUANG, Yuxin CHEN, Jie KANG, Zhenyuan XIE

33: CN 31: 2023115194511 32: 2023-11-15

**54: METHOD FOR DETERMINING ROCK MASS SHEAR STRENGTH BASED ON INTEGRATED LINEAR FOREST AND WHILE-DRILLING PARAMETERS**

00: -

A method for determining the shear strength of rock masses based on integrated linear forests and drilling parameters involves generating an original drilling information database for engineering rock masses by combining various drilling parameters and core mechanical parameters. The method improves the Grey Wolf Optimizer (GWO) using a random walk strategy, constructing an RWGWO algorithm with enhanced search capabilities, and builds an integrated linear forest model based on the bagging ensemble principle of linear tree models. By combining the integrated linear forest model with the improved RWGWO algorithm, a rock shear strength acquisition model based on drilling parameters is obtained. The method involves selecting the optimal hybrid model, inputting drilling test data into the RWGWO-ELRF evaluation model, and obtaining predicted values for internal friction angle and cohesion for the corresponding cases. The results include comparison charts for predicted internal friction angles and cohesion values. Additionally, interpretability analysis is conducted on the final RWGWO-ELRF evaluation model. This method enables the rapid and effective determination of rock mechanical parameters based on digital drilling.

21: 2024/08240. 22: 2024/10/31. 43: 2025/05/02

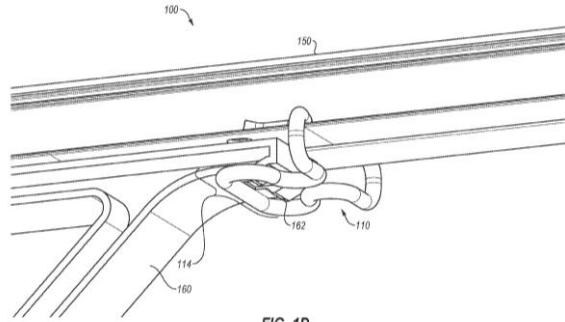
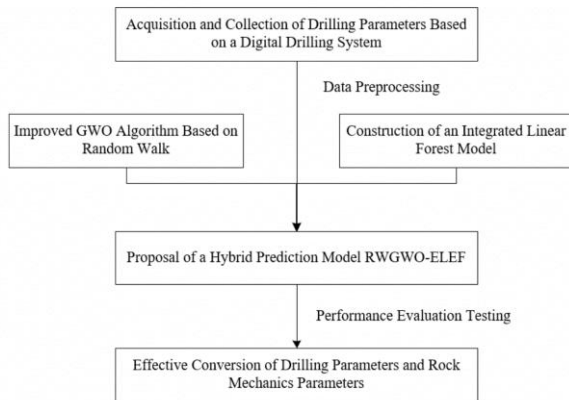


FIG. 10

21: 2024/08244. 22: 2024/10/31. 43: 2025/05/02  
51: A45F; A63B

71: DECATHLON

72: SHAIKH, Abid Shabbir, RAJAGOPAL, Sajan, SREEDHARAN, Sharath

33: FR 31: 2311879 32: 2023-10-31

#### **54: BAG TRANSFORMABLE INTO A GAMING STUMP**

00: -

The invention relates to a bag formed of two structural panels, respectively front and rear, having first means of reversible association in a configuration forming between them a shell delimiting an interior carrying compartment, the rear panel having two parts, respectively upper and lower, which are connected by a foldable hinge arranged to allow the relative arrangement of said parts between an aligned position for forming the shell and an inclined position, the upper part and the front panel having second means for reversible association in a configuration in which the parts are held in an inclined position with the front panel in the erect position, the inclined lower part being arranged to be able to be placed on a support in order to transform the bag into a front panel which is erected in a stable manner on said support.

21: 2024/08243. 22: 2024/10/31. 43: 2025/03/27

51: F24S; H02S

71: Array Technologies, Inc.

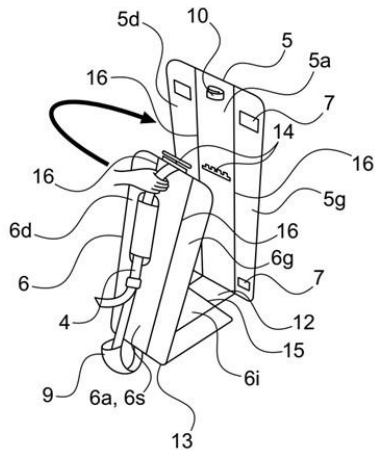
72: DE FRESART, Benjamin C.

33: US 31: 63/078,177 32: 2020-09-14

#### **54: SPRING CLIP FOR PHOTOVOLTAIC MODULE MOUNTING**

00: -

A module mounting system may include a photovoltaic (PV) module frame including a mounting rail. The module mounting system may include a spring clip with a PV module frame interfacing element and a clip interfacing element. The spring clip may apply spring force via deformation to lock the PV module frame and a clip together. A second embodiment of the spring clip may include an upper component having one or more arms and a lower component having a central loop configured to rotate relative to each other and interface with the PV module frame or the mounting rail. A second embodiment of the module mounting system may include screwless clips including outer walls and inner walls coupled together as a continuous sheet of material. The screwless clips may couple to a respective mounting flange and a respective frame flange to lock the mounting purlin and the PV module frame together.



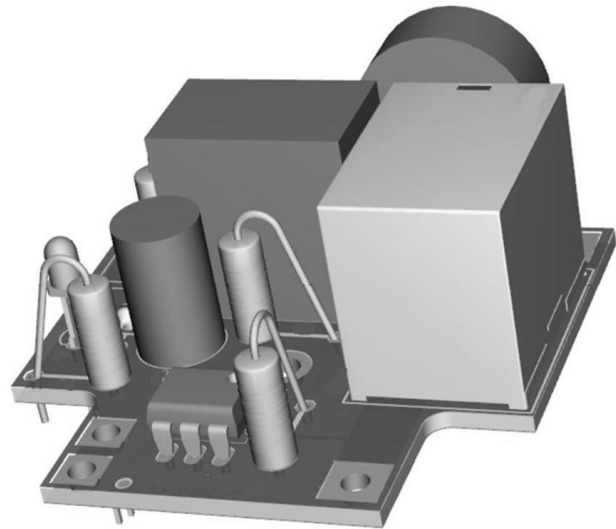
21: 2024/08245. 22: 2024/10/31. 43: 2025/05/02  
51: H02B; H02H

71: LHA SYSTEMS (PTY) LTD

72: ROSSOUW, Louis Hendrik Albertus, MALAN, Christo Hugo, VAN DEVENTER, Martin Albert  
33: ZA 31: 2023/07554 32: 2023-07-31

**54: ELECTRICAL ADAPTER AND METHOD**  
00: -

Electrical adapter and method for linking an appliance to a power supply. A relay configured to be in a first state when the electrical power supply doesn't supply power during an outage, switching to a second state when the electrical power supply does supply power. A current sensor circuit configured to clamp the relay once the electrical power supply comes back on after the outage if the appliance is switched on at that time, to retain the relay in its first state and preventing the second state thereof for a period, providing a feed current to the electrical appliance while the electrical appliance remains switched on. After the period, the current sensor circuit ends the clamping once a user deactivates the electrical appliance, causing the relay to be switched back to its second state if the electrical power supply supplies power again.



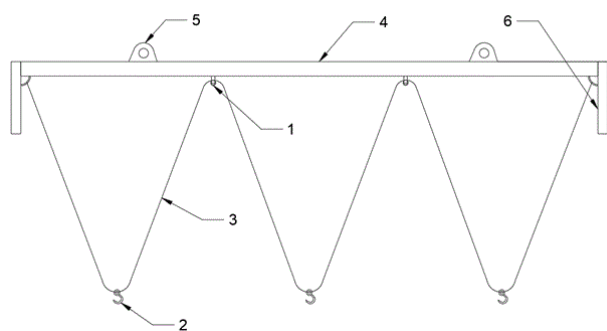
21: 2024/08278. 22: 2024/11/01. 43: 2025/05/07  
51: F16B

71: CCCC Road & Bridge Construction Co., Ltd., CCCC Urban Construction (Sichuan) Co., Ltd.  
72: DENG, Zewei, ZHENG, Yi, DENG, Chuanwei, DENG, Zeshuai, LI, Qian, LI, Yuguang, PAN, Wei, CHEN, Zhen, WU, Dandan  
33: CN 31: 2024102574432 32: 2024-03-07

**54: SELF-LEVELING DEVICE AND METHOD FOR INSTALLING A COMPOSITE PLATE**  
00: -

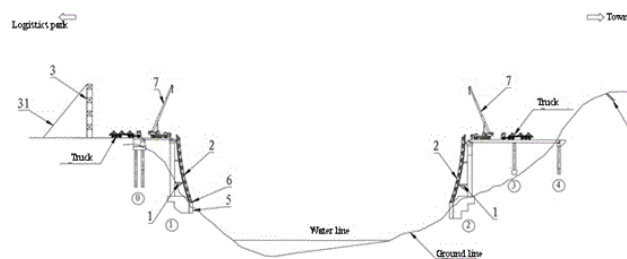
The present application discloses a self-leveling device and method for installing a composite plate. The device includes a steel pipe rack, a plurality of fixed pulleys, a plurality of hooks, and a steel wire rope. A plurality of fixed pulleys are respectively installed under the cross bars on both sides of the steel pipe rack. One end of the steel wire rope is connected to the cross bar, and the other end alternately passes through a plurality of hooks and fixed pulleys in sequence, and the end is fixedly connected to the other end of the cross bar. Four lifting rings are symmetrically arranged on the steel pipe rack. Technical effects and advantages of the present application: The composite plate lifting device of the present application realizes self-leveling during the lifting process through the fixed pulley group and the dead weight of the composite plate, which reduces the manpower input during installation and is more efficient. In addition, the device has strong adaptability and can adapt to composite plates of different sizes.



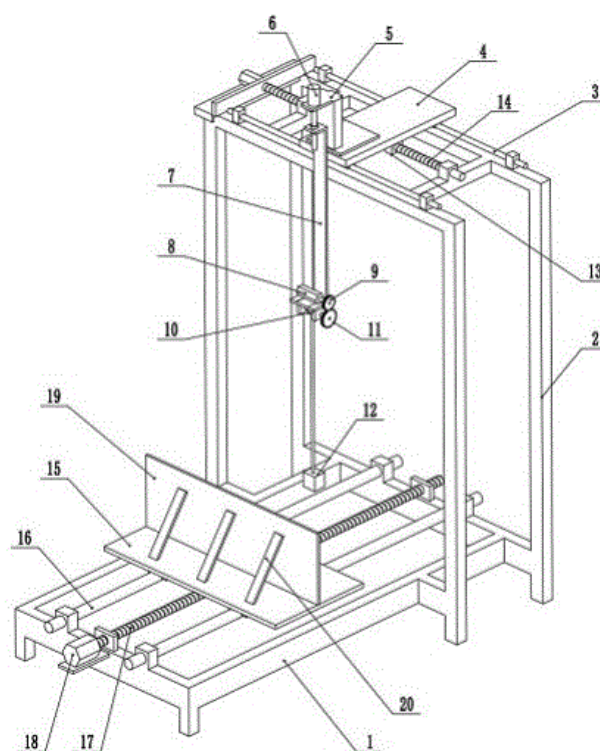
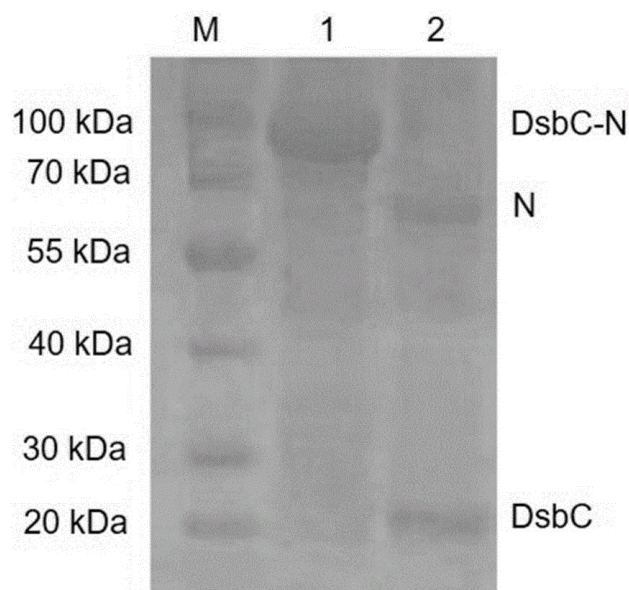


21: 2024/08279. 22: 2024/11/01. 43: 2025/05/07  
 51: E01D  
 71: CCCC Road & Bridge Construction Co., Ltd.,  
 CCCC Urban Construction (Sichuan) Co., Ltd.  
 72: LI, Guoming, LU, Guannan, WANG, Chaosheng,  
 JIANG, Delin, ZHENG, Yi, MENG, Junnan, YU,  
 Guoyu, LI, Qian, WANG, Jiajun, YU, Jinbei, LIU,  
 Han, GAO, Yong, DANG, Tiehu  
 33: CN 31: 2023115591145 32: 2023-11-22  
**54: VERTICAL ROTATION CONSTRUCTION  
 METHOD OF STEEL ARCH FRAME OF  
 REINFORCED CONCRETE ARCH BRIDGE**  
 00: -

The present invention discloses a vertical rotation construction method of steel arch frame of reinforced concrete arch bridge; according to the method, the steel arch frame is divided into four sections; two sections of steel arch frames are assembled on both banks respectively; and vertical rotating hinges which can rotate around the arch feet are installed at arch supports at both ends. After each section is assembled, the steel arch frames are vertically rotated through jacks and back ropes; after the steel arch frames on both sides are vertically turned to the design positions, they will be closed, and the arch axis will be re-measured. After the re-inspection, the reinforced concrete arch ring will be constructed. The steel arch frames are assembled in sections first, and then vertically rotated by jacks and buckle cables, which can reduce aerial work, reduce construction safety risks, reduce the requirements for lifting equipment, effectively improve the assembling efficiency and welding quality of the steel arch frames on site, and shorten the construction period.



21: 2024/08287. 22: 2024/11/01. 43: 2025/05/07  
 51: C12Q  
 71: SHANGHAI VETERINARY RESEARCH  
 INSTITUTE, CAAS (Chinese Animal Health and  
 Epidemiology Center Shanghai Branch)  
 72: CHEN, Hongjun, LIU, Jingyi, LIU, Yingnan, SUN,  
 Zhuyun, SUN, Tong  
 33: CN 31: 202410788017.1 32: 2024-06-18  
**54: KIT FOR DETECTING NIPAH VIRUS  
 NUCLEOPROTEIN ANTIBODY AND  
 APPLICATION THEREOF**  
 00: -  
 A kit includes an enzyme-labeled plate for indirect  
 ELISA detection, each well of which is coated with  
 200 ng of Nipah virus N protein, as well as porcine  
 Nipah virus N protein-positive serum, porcine Nipah  
 virus N protein-negative serum, sample diluent,  
 enzyme-labeled antibody, washing solution, TMB  
 substrate solution and stop solution, etc. The kit of  
 the present invention is used for the detection of  
 porcine Nipah virus, and its operation is simple and  
 suitable for large-scale serological screening. When  
 the OD450 of the serum to be tested is greater than  
 0.267, the test result of the porcine Nipah virus N  
 protein antibody in the serum to be tested is judged  
 to be positive; when the OD450 of the serum to be  
 tested is less than or equal to 0.267, the test result  
 of the porcine Nipah virus N protein antibody in the  
 serum to be tested is judged to be negative.



21: 2024/08292. 22: 2024/11/01. 43: 2025/05/07  
51: G01N

71: WANDA GROUP CO., LTD., SHANDONG  
WANDA CHEMICAL CO., LTD.

72: GUO, Lingxiao, XIE, Fengming, SHANG, Jiyong,  
QIN, Zengliang, LI, Zhikang, YAN, Zengfeng,  
ZHANG, Qianqian, BA, Wenyuan, WANG, Haichuan,  
LIU, Shuifeng, LI, Xuezhi

33: CN 31: 202210395852.X 32: 2022-04-15

#### 54: PENDULUM IMPACT TESTING MACHINE

00: -

The present invention discloses a pendulum impact testing machine, comprising a base; one side of the base is provided with elevated frames; pendulum sliding shafts are arranged above the elevated frame; a pendulum sliding plate is slidably installed on the pendulum sliding shafts; an outer end of the pendulum sliding plate is provided with a cylinder frame; an upper end of the cylinder frame is provided with a cylinder; a lower end of the cylinder is provided with a vertical sliding plate; an lower end of the vertical sliding plate is provided with a rotating shaft; and the rotating shaft is provided with a pendulum. Compared with the prior art, the present invention has the advantages of simple structure, full-automatic control without manual operation, adjustable direction, position and height, and wide application range.

21: 2024/08314. 22: 2024/11/04. 43: 2025/05/07  
51: C12Q

71: SHANGHAI VETERINARY RESEARCH  
INSTITUTE, CAAS (Chinese Animal Health and  
Epidemiology Center Shanghai Branch)

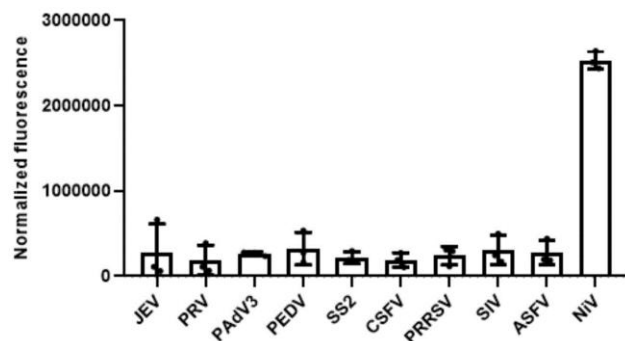
72: CHEN, Hongjun, LIU, Jingyi, LIU, Yingnan,  
CHEN, Zongyan, LI, Tao, SUN, Zhuyun, SUN, Tong  
33: CN 31: 202410231154.5 32: 2024-02-29

#### 54: COMPOSITION FOR ISOTHERMAL AMPLIFICATION DETECTION OF NIPAH VIRUS, METHOD AND KIT THEREOF

00: -

A nucleic acid composition is suitable for detecting Nipah virus by isothermal amplification. The Nipah virus is amplified by RT-LAMP with primers, and after the reaction, probes, guide DNA and PfAgo protease are added. The primer amplified Nipah virus by RT-LAMP, and after the reaction, probe, guide DNA and PfAgo protease were added to it. PfAgo protease cleaves the RT-LAMP amplification product for the first time under the action of the guiding DNA to obtain the cleavage product, and then PfAgo protease cleaves the probe for the second time under the action of the cleavage product to generate specific fluorescence. Using the primer probe combination of the invention, Nipah virus can be detected efficiently, specifically and

sensitively, and the problem of non-specific amplification of RT-LAMP can be avoided.



21: 2024/08317. 22: 2024/11/04. 43: 2025/05/07

51: G02B

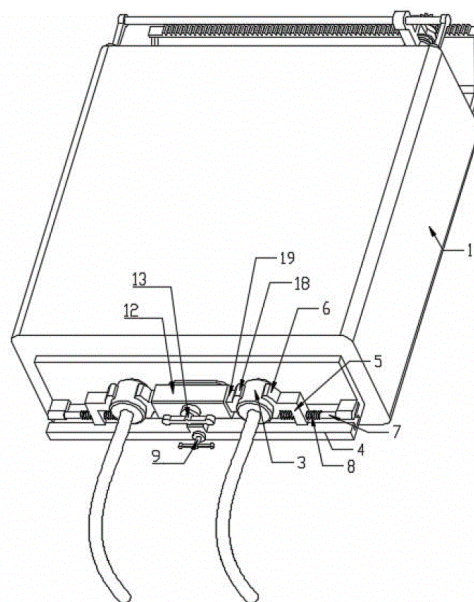
71: Zhaoqing University

72: Wang Lin

#### 54: AN INTEGRATED MICROWAVE PHOTONIC DEVICE PACKAGING SHELL AND ITS USAGE METHOD

00: -

An integrated microwave photonic device packaging shell and its usage method. The front end of the shell is fixedly equipped with a positioning seat, with a fixed box mounted above the positioning seat. Two first clamping rods are symmetrically set to slide on the positioning seat, while a first rotating shaft is mounted at the center of the positioning seat. The first rotating shaft symmetrically supports two first screws with reverse thread structures. By rotating the first drive shaft, the two first clamping plates can engage the docking socket, and by rotating the second drive shaft, the two second clamping plates contact the second drive shaft. At this point, the first and second clamping plates provide a clamping effect on the docking socket on the docking plug, securing the connection between the two components. This design offers high mechanical reliability, ensuring the docking plug and socket remain firmly connected under conditions of high mechanical vibration, enhancing overall stability.



21: 2024/08328. 22: 2024/11/04. 43: 2025/05/07

51: C08L

71: SHANDONG WANDA CHEMICAL CO., LTD., SHANDONG HUAYOU WANDA CHEMICAL CO., LTD., WANDA GROUP CO., LTD.

72: XIE, Fengming, SHANG, Huatai, LIU, Yongfeng, GONG, Fei, GUO, Lingxiao, LI, Zhikang, GOU, Xiufeng, REN, Mengmeng

33: CN 31: 202310390937.3 32: 2023-04-13

#### 54: ACS ALLOY AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The present invention relates to the technical field of engineering plastics, and more particularly to an ACS alloy and preparation method and application thereof. The present invention blends and extrudes SAN resin and chlorinated polyethylene (CPE) to form ACS alloys, and the compatibilizer used is ABS high-rubber powder with a core-shell structure, which can increase the compatibility of SAN and chlorinated polyethylene (CPE), and also improve the impact properties of ACS alloys. A nano hydrotalcite is used as a heat stabilizer. Since layered double hydroxide (LDHS) is an alkali magnesium-aluminum carbonate layered compound that is porous, it improves the thermal stability of ACS alloys, causing little damage to the mechanical properties of ACS alloys, facilitating the stability of ACS alloys in terms of electrical properties, and improving the flame retardancy of ACS alloys. This results in ACS alloys with excellent mechanical

performance, weather resistance, flame retardant properties, and excellent electrical properties.

21: 2024/08329. 22: 2024/11/04. 43: 2025/05/07  
51: C08F

71: SHANDONG WANDA CHEMICAL CO., LTD.,  
SHANDONG HUAYOU WANDA CHEMICAL CO.,  
LTD., WANDA GROUP CO., LTD.

72: XIE, Fengming, SHANG, Huatai, LIU, Yongfeng,  
GONG, Fei, GUO, Lingxiao, LI, Zhikang, GOU,  
Xiufeng, REN, Mengmeng

33: CN 31: 202310388854.0 32: 2023-04-13

#### **54: ASA RESIN AND PREPARATION METHOD THEREOF**

00: -

The present invention belongs to the technical field of polymer materials, and particularly relates to an ASA resin and a preparation method thereof. The preparation raw materials of the ASA resin provided by the present invention comprise a main material, an initiator and a molecular weight regulator; the main material comprises the following components in percentage by mass: 6-30% of acrylic rubber, 10-40% of ASA polymerization solvent, 30 to 55 percent of styrene, 10-25% of acrylonitrile; the mass of the initiator is 0.01-0.1% of the total mass of the acrylic rubber, styrene and acrylonitrile; and the mass of the molecular weight regulator is 0.01-0.8% of the total mass of the acrylic rubber, styrene and acrylonitrile. The ASA resin provided by the present invention has excellent coloring performance and weather ability; the bulk polymerization method is adopted to prepare the ASA resin, so that the problem that emulsion polymerization of ASA generates a large amount of wastewater is solved, and zero emission is realized.

21: 2024/08330. 22: 2024/11/04. 43: 2025/05/07  
51: C08F

71: SHANDONG WANDA CHEMICAL CO., LTD.

72: XIE, Fengming, GUO, Lingxiao, SHANG, Huatai,  
LI, Dongbo, GONG, Fei, LIU, Yongfeng, LI, Zhikang,  
BA, Wenyuan

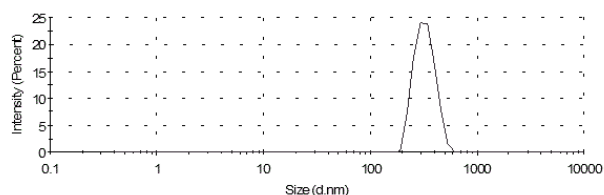
33: CN 31: 202211636068.X 32: 2022-12-20

#### **54: METHOD FOR SYNTHESIZING LARGE-PARTICLE POLYBUTADIENE LATEX**

00: -

The present application relates to the technical field of polymer material preparation, and provides a method for synthesizing large-particle-size

polybutadiene latex. In the present application, butadiene and a chain transfer agent are added to a reaction solution in batches to carry out polymerization reaction, and the polybutadiene obtained in the previous reaction can be used as a seed for the next polymerization reaction, thereby realizing multi-step seed polymerization; the method provided by the present application is simple to operate, has a short reaction time, and the particle size distribution of the obtained polybutadiene latex is narrow; at the same time, the present application can also control the particle size of the obtained polybutadiene latex by controlling the number of reactions, and when the total amount of butadiene and the chain transfer agent is the same, the more the number of reactions, the larger the particle size of the obtained polybutadiene latex. In addition, the polybutadiene latex obtained by the synthesis method provided by the present application has a low solid content, which is conducive to the control of the reaction.



21: 2024/08347. 22: 2024/11/05. 43: 2025/05/12  
51: H01P

71: Zhaoqing University

72: Wang Lin

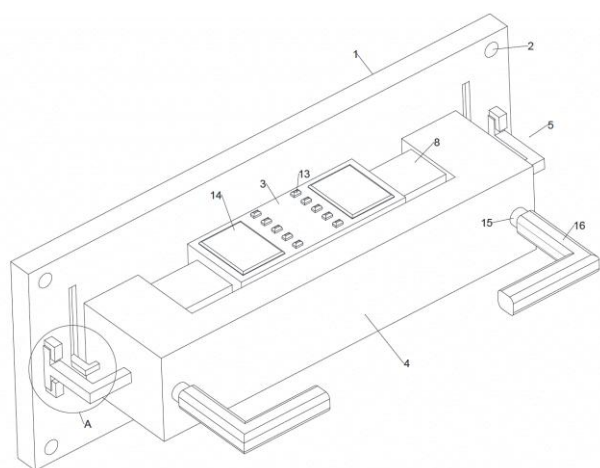
#### **54: A MICROWAVE PHOTONIC FILTER WITH A HEAT DISSIPATION FUNCTION**

00: -

The present invention relates to the field of microwave photonic filter technology, specifically to a microwave photonic filter with a heat dissipation function. The microwave photonic filter includes a mounting plate, mounting holes, a main body, a cooling frame, and a connecting mechanism. The mounting holes are formed on the mounting plate, with multiple holes provided. The main body is placed on the mounting plate, and the cooling frame is connected to the main body via the connecting mechanism. The connecting mechanism includes a groove, a spring, a block, a clamping block, a limiting block, a slideway, and a sliding block. The groove is formed on the cooling frame, with one end of the

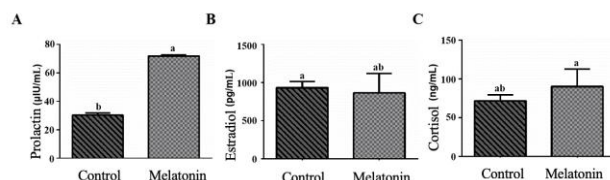


spring connected to the inner wall of the groove and the other end connected to one end of the block. The other end of the block extends out of the groove and makes contact with the side of the main body. One end of the clamping block is connected to the side of the main body, while the limiting block is set on the mounting plate. The other end of the clamping block makes contact with the limiting block. This invention provides a microwave photonic filter with a heat dissipation function, addressing the issue of inconvenient disassembly of current devices.



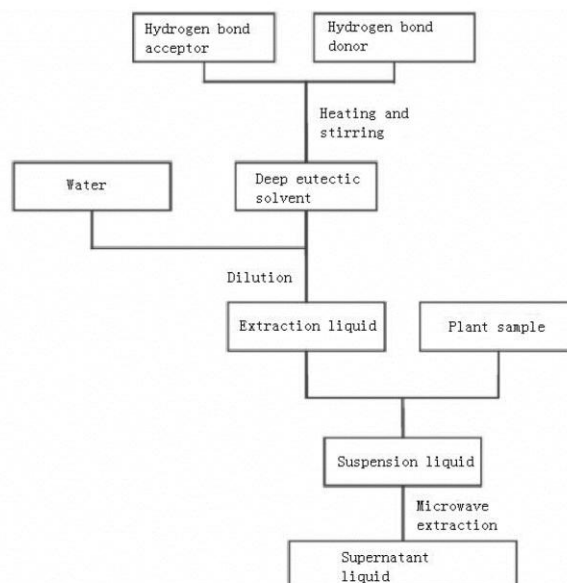
21: 2024/08353. 22: 2024/11/05. 43: 2025/05/08  
51: A01K; A61K  
71: CHINA AGRICULTURAL UNIVERSITY  
72: LIU, Guoshi, WANG, Likai, LI, Guangdong  
33: CN 31: 202210481256.3 32: 2022-05-05  
**54: METHOD FOR IMPROVING ANTI-OXIDATION AND NUTRIENT TRANSPORT CAPABILITIES OF PLACENTAL TISSUES OF FEMALE LIVESTOCK**  
00: -

A method for improving the anti-oxidation and/or nutrient transport capabilities of placental tissues of female livestock, which comprises treating female livestock in a late stage of pregnancy using melatonin. Animal experiments prove that using melatonin for treating sows in a late stage of pregnancy can improve the concentration of melatonin in the peripheral blood and colostrum of the sows, and anti-oxidation and nutrition transport capabilities of placental tissues are also improved. The method is simple, effective, and highly feasible.



21: 2024/08376. 22: 2024/11/06. 43: 2025/05/16  
51: A61K  
71: Henan University of Urban Construction  
72: Fan Yanru, Gao Hongbin, Han Chaowei, Jiang Xinyue, Gu Tingting, Ren Yahui, Zheng Mengmeng  
33: CN 31: 2024114430757 32: 2024-10-16  
**54: A CORNELIAN CHERRY EXTRACT, ITS PREPARATION METHOD, AND ITS APPLICATION IN FRUIT PRESERVATION.**

00: -  
This invention belongs to the field of preservatives, specifically relating to a cornelian cherry extract and its preparation method, as well as its application in fruit preservation. This invention extracts the effective components from the seeds of cornelian cherries using a low eutectic solvent, resulting in a fruit preservative. The main components of this preservative are biological ingredients, making it cost-effective, safe, and non-toxic, suitable for widespread application in preserving various types of fruits.



21: 2024/08377. 22: 2024/11/06. 43: 2025/05/26  
51: A61K  
71: HaiNan Normal University  
72: WEI Li, TIAN Meng, YU Xiaomei, WU Chenhao

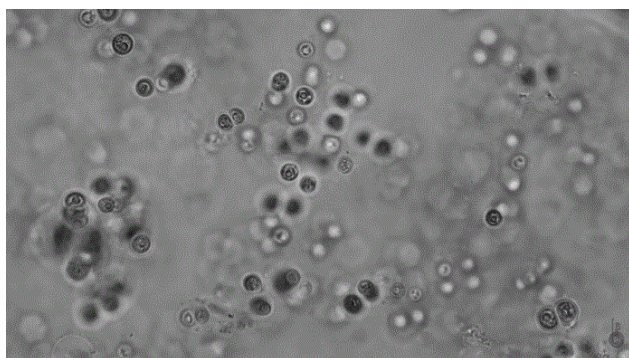


#### 54: PREPARATION METHOD OF PHYCOERYTHRIN AND RED ALGAE ACTIVE PEPTIDE AND APPLICATION THEREOF IN PREPARING FACIAL MASK

00: -

The invention relates to the field of marine red algae cosmetics, in particular to a preparation method of phycoerythrin and red algae active peptide and an application thereof in preparing the facial mask.

According to the invention, phycoerythrin is prepared from red algae, and then the red algae active peptide is prepared; and the obtained phycoerythrin and the red algae active peptide have obvious antioxidant activity, and can be used for preparing daily chemical products such as facial masks.



21: 2024/08398. 22: 2024/11/06. 43: 2025/05/12

51: C22B

71: PANGANG GROUP VANADIUM & TITANIUM RESOURCES CO., LTD.

72: WU, Feng, ZHANG, Xinxia, LI, Caixia, ZHAO, Yingping, WEI, Linsen, WANG, Chao, WANG, Ying, LIU, Xuewen, CHANG, Zhi, YOU, Benyin, QI, Zigang, ZHAO, REN, Xiaoming

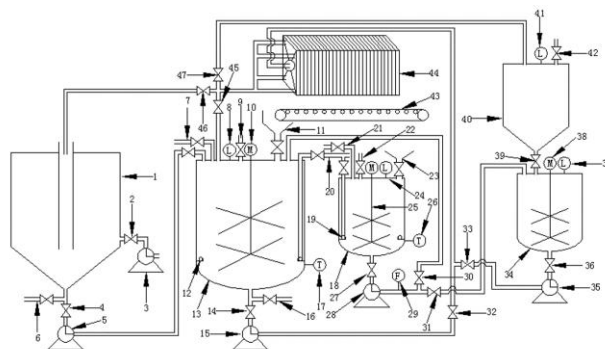
33: CN 31: 202310742911.0 32: 2023-06-21

#### 54: SYSTEM AND METHOD FOR RECOVERING VANADIUM FROM A CHROMIUM REMOVAL UNDERFLOW OF SODIUM VANADIUM SOLUTION

00: -

The present invention relates to a system for recovering vanadium from a chromium removal underflow of sodium vanadium solution, which comprises: a settling tank with a lower side and a bottom respectively connected with a first pump and a second pump; a vanadium removal tank with a top connected to the second pump and a bottom connected to a third pump, wherein a first stirrer and a first steam loop pipe is installed inside the vanadium removal tank; a slurry making tank with a

top provided with a feeding port and a bottom connected to a fourth pump, wherein a second stirrer and a second steam loop pipe is installed inside the slurry making tank, and the fourth pump is connected to the top of the vanadium removal tank through a first branch pipeline; a diluting tank with a top connected to a second branch pipeline and a bottom connected to a fifth pump, wherein a third stirrer is installed inside the diluting tank; a buffer tank with a bottom communicated with the top of the diluting tank; and a plate frame provided with an inlet and an outlet, wherein the third pump and the fifth pump are respectively connected to the inlet, and a cross-shaped pipeline is formed at a pipeline connected with the outlet and is respectively communicated with the corresponding tops of the vanadium removal tank, the settling tank and the diluting tank. In addition, the present invention also relates to a corresponding method. The solution of the present invention can reduce vanadium loss and production cost.



21: 2024/08399. 22: 2024/11/06. 43: 2025/05/09

51: F24D

71: POWEROPTIMAL (PTY) LTD

72: GOEDHART, Andrew Peregrin

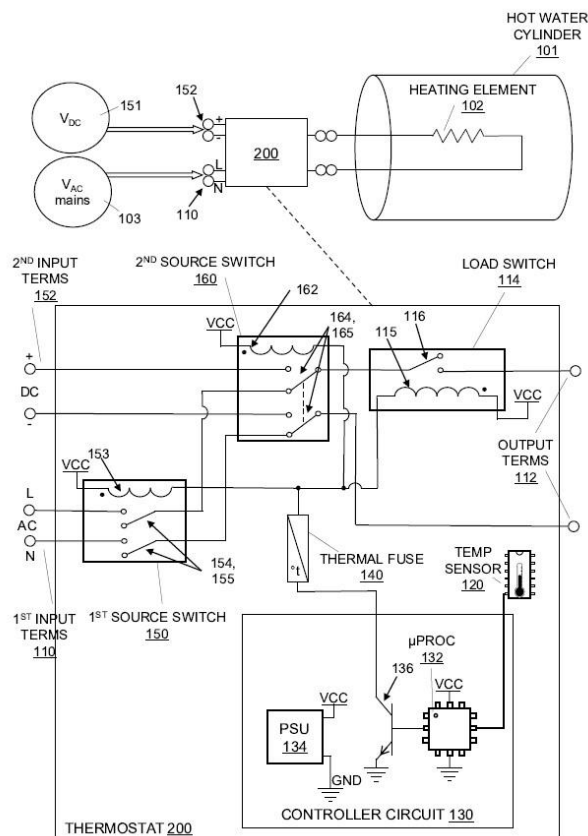
33: GB 31: 2206504.9 32: 2022-05-04

#### 54: THERMOSTAT FOR A HOT WATER CYLINDER

00: -

A thermostat (100, 200, 300) is disclosed having input terminals (110, 152) and an output terminal (112). A load switch (114) for selectively connecting the input terminals to the output terminal is provided and comprises an electromagnetic relay configured to interrupt electrical connection between the input and output terminal when a coil (115) of the load switch is de-energized. The thermostat includes a temperature sensor (120), and a controller circuit

(130) arranged to derive a temperature from the sensor. The controller circuit (130) is configured to selectively energize the coil (115) of the load switch (114) based on the temperature value to connect the input and output terminal. A thermal fuse (140) is provided and arranged to irreversibly de-energize the load switch coil (114) when the thermal fuse (140) is subjected to a temperature above a threshold to disconnect the input and output terminal.



21: 2024/08416. 22: 2024/11/06. 43: 2025/05/12

51: C08F; C08L; C22B

71: SNF GROUP

72: FAVERO, Cédric, ZAKOSEK, Gilles, BOURSIER, Thomas

33: FR 31: 2204967 32: 2022-05-24

#### **54: BINDER COMPOSITION FOR IRON ORE AGGLOMERATION**

00: -

This invention relates to a binder composition for the manufacture of iron ore pellets containing: a) at least two organic binding agents LO in the form of solid particles, which are at least: - a water-soluble anionic polymer P1 with a weight average molecular

weight between 500 and 200,000 daltons, and, - a water-soluble anionic polymer P2 with a weight average molecular weight greater than 500,000 daltons; and; b) at least one inorganic binding agent LI in the form of solid particles, the solid particles of the binding agents LO having a number median size of more than 500 micrometers, the particles of the binding agent LI have a number median size of less than one-third of the number median size of the solid particles of the binding agents LO.

21: 2024/08419. 22: 2024/11/06. 43: 2025/05/30

51: G06K

71: UNIVERSITY OF SANYA

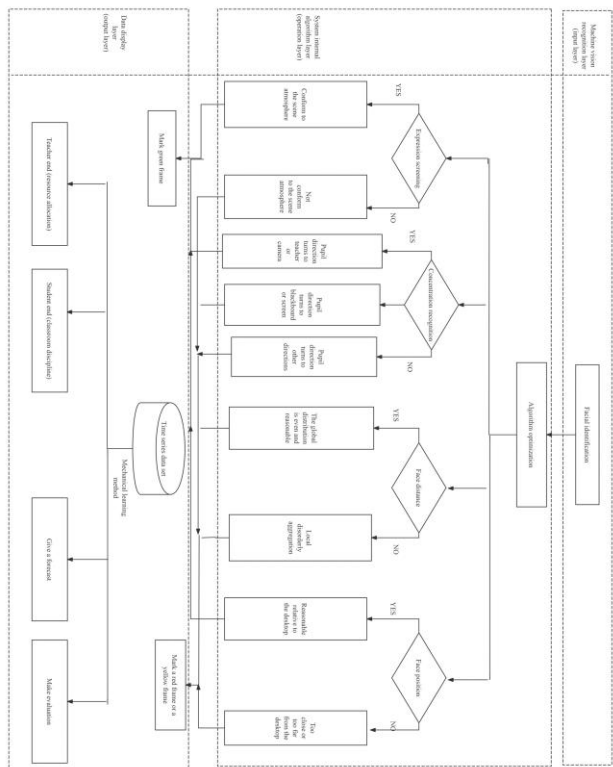
72: Wenbo Lv, Jinfang Li, Jiacheng Lv, Yingbo Lv

33: CN 31: 2024101746075 32: 2024-02-07

#### **54: IDENTIFICATION AND EVALUATION SYSTEM OF PEOPLE'S CONCENTRATION BASED ON MACHINE VISION**

00: -

The invention discloses an identification and evaluation system of people's concentration based on machine vision, which belongs to the fields of computer vision and human-computer interaction in the field of artificial intelligence. In an assembly activity, the state of the audience and the audience is an important link to feed back the assembly effect, but there is no accurate scoring standard, so it is called a fuzzy link. Taking the ways of gathering, speaking and meeting as examples, the evaluation system designed in this paper innovatively discriminates the behavior of the listener (audience) from four dimensions. They are expression screening, concentration recognition, face distance monitoring and face position monitoring. The real-time state of listener (audience) can be evaluated by fuzzy algorithm, and a particle swarm fuzzy algorithm scheme is put forward, which breaks through the restriction of black and white in state discrimination, establishes membership function to define fuzzy areas, judges the degree of difference between minority behaviors and most behaviors, and gives different color box marks.



21: 2024/08425. 22: 2024/11/07. 43: 2025/05/12  
51: G06F

71: Anna Valerevna Chernyaeva

72: Maksim Andreevich Chernyaev

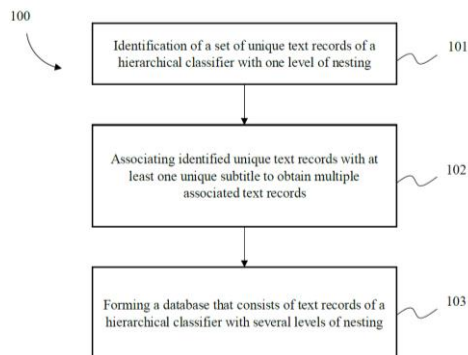
33: RU 31: 2024128764 32: 2024-09-27

#### 54: METHOD FOR CREATING A DATABASE OF TEXT RECORDS OF A HIERARCHICAL CLASSIFIER WITH SEVERAL LEVELS OF NESTING

00: -

The present technical solution relates to the field of digital technologies, in particular to the methods of forming databases of text records of a hierarchical classifier with several levels of nesting. The technical result is the automation of the formation of a list of goods and services and an increase in the accuracy of the formation of a list of goods and services through the use of hierarchical relationships using the sign of connectivity of records. In a preferred embodiment claimed a method is claimed to be executed by the processor of a computer device for forming a database of text records of a hierarchical classifier with several levels of nesting, containing the following steps: identify a set of unique text records of a hierarchical classifier with one level of nesting, and each unique text entry is associated with a unique title; Each unique title contains a list

consisting of at least many unique subheadings; associate the mentioned identified unique text entries with one of the mentioned unique subheadings to obtain a plurality of associated text entries; a database of text records of a hierarchical classifier with several levels of nesting is formed, containing at least a set of the mentioned associated text records, with each of which at least one first sign of connectivity is associated, and each first sign of connectivity corresponds to one of the mentioned subheadings and the sign of connectivity is a unique identifier of one of the mentioned subheadings.



21: 2024/08435. 22: 2024/11/07. 43: 2025/05/12  
51: G06F

71: Anna Valerevna Chernyaeva

72: Maksim Andreevich Chernyaev

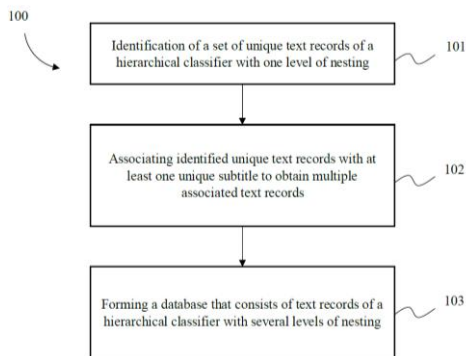
33: RU 31: 2024128782 32: 2024-09-27

#### 54: A DEVICE FOR GENERATING A LIST OF TEXT RECORDS USING A DATABASE OF TEXT RECORDS OF A HIERARCHICAL CLASSIFIER WITH SEVERAL LEVELS OF NESTING

00: -

The present technical solution relates to the field of digital technologies, in particular to the methods of forming databases of text records of a hierarchical classifier with several levels of nesting. The technical result is the automation of the formation of a list of goods and services and an increase in the accuracy of the formation of a list of goods and services through the use of hierarchical relationships using the sign of connectivity of records. In a preferred embodiment claimed a device for generating a list of text entries, wherein device contains at least one processor that programmed for executing the following steps: forming request to a database of the text records of a hierarchical classifier with several levels of nesting, and the database contains at least

a set of the associated text records, wherein each of the associated text records associated with at least one first sign of connectivity, and each first sign of connectivity corresponds to one of the subheadings, and each unique text record is associated with a unique title, wherein each unique title contains a list consisting of at least plurality of the unique subheadings; and the unique text records are associated in the database with one of the mentioned unique subheadings to obtain a set of associated text records; extracting multiple associated text records from the database; forming a list from the extracted text records, wherein the text records are written in the list using a delimiter.



21: 2024/08437. 22: 2024/11/07. 43: 2025/05/13  
51: G01S

71: Prof.K.Raja Rajeswari, Prof. M. Uttara Kumari

72: Prof.K.Raja Rajeswari, Prof. M. Uttara Kumari

33: IN 31: 202441015207 32: 2024-02-29

#### **54: EXTENDED POLYPHASE (E-P4) CODE FOR HIGH PERFORMANCE MODERN RADAR SYSTEMS**

00: -

The present invention discloses the "Extended Polyphase (E-P4) Code," a novel advancement in radar technology optimized for modern radar systems. The E-P4 code exhibits superior characteristics, including low side lobes and enhanced Doppler Tolerance, addressing trade-offs between radiated energy and resolution in pulse radar systems. Performance metrics such as Peak Side Lobe Ratio (PSLR) and Integrated Side Lobe Ratio (ISLR) demonstrate remarkable improvements, with over -30 dB enhancement for code lengths up to N=100. Designed for application in pulse compression radars, search radars, and Omni Direction Low Probability Intercept (OLPI) radars, the

E-P4 code offers a versatile and efficient solution, revolutionizing radar performance and reliability in high clutter environments.

21: 2024/08444. 22: 2024/11/07. 43: 2025/05/26

51: H04B

71: China University of Petroleum (East China)

72: Xiaotian Du

#### **54: A METHOD FOR CORRECTING NODE LOCATION ERRORS IN UNDERWATER ACOUSTIC SENSOR NETWORKS COMBINED WITH SOUND VELOCITY INVERSION**

00: -

The invention discloses a method for correcting the node positioning error of underwater acoustic sensor network combined with sound velocity inversion, which relates in particular to the technical field of sound velocity inversion, including deploying a sound source point at a fixed position and an underwater acoustic sensor node, collecting the sound velocity data emitted by the sound source point, and using the sound velocity field inversion algorithm to construct a sound velocity field model. Real-time sound velocity data at different underwater acoustic sensor nodes are collected to obtain sound velocity characteristic information at different underwater acoustic sensor nodes and water characteristic information at different underwater acoustic sensor nodes. The sound velocity characteristic information and water characteristic information are comprehensively analyzed to evaluate the location accuracy of the sound velocity field model for underwater acoustic sensor nodes. The accuracy result of quantized underwater acoustic sensor nodes is compared with the pre-set threshold, and the invention is helpful to improve the accuracy of underwater acoustic wave propagation and the accuracy of underwater acoustic sensor network node positioning, and evaluate the accuracy of sound velocity field model for underwater acoustic sensor nodes positioning.



Sound source points and underwater acoustic sensor nodes at fixed locations are deployed. The underwater acoustic sensor nodes collect the sound velocity data emitted by the sound source points, and use the sound velocity field inversion algorithm to construct the sound velocity field model through the sound velocity data at different underwater acoustic sensor nodes

Real-time sound velocity data at different underwater acoustic sensor nodes are collected to obtain sound velocity characteristics information at different underwater acoustic sensor nodes and water characteristics information at different underwater acoustic sensor nodes

The sound velocity and water characteristics are analyzed comprehensively to evaluate the accuracy of the acoustic sensor node location by the sound velocity field model

The results of quantized underwater acoustic sensor node positioning accuracy are compared with the pre-set threshold, and error signals are generated when there is a large error in positioning accuracy

operation without needing to stop for rest, thus improving the efficiency of the crack propagation test on the beam specimen. Additionally, compared to using an exciter, the vibration motors are less prone to damage from long-term operation, reducing the chances of test failure. This design enhances test efficiency while reducing the risk of damage, making it a robust solution for conducting long-duration crack propagation tests.

21: 2024/08521. 22: 2024/11/11. 43: 2025/05/30  
51: A01G

71: Shandong Institute of Pomology

72: WEI Shuwei, CHEN Qiming, DONG Xiaochang

**54: CULTIVATION METHOD OF U-SHAPED HIGH RIDGING AND COVERING WIDE ROWS AND DENSE PLANTS IN SALINE-ALKALI LAND**

00: -

The invention belongs to the technical field of soil improvement, in particular to a cultivation method of U-shaped high ridging and covering wide rows and dense plants in saline-alkali land, which includes following steps: S1, soil planning: after comprehensive evaluation of the soil, a qualified site is selected as a planting area, and the surrounding land is planned; S2, soil improvement: fertilizing the soil in the planting area and planting green manure, and incorporating the green manure into the soil in autumn; S3, soil arrangement: leveling the improved soil in the planting area, then ridging with a ridger, and building a bird and hail prevention net; the top end of the ridge body is provided with a groove body, the groove body is arranged along the length direction of the ridge body and is U-shaped; S4, fruit tree planting: selecting high-quality fruit trees, planting them in the grooves before germination in spring, and watering them with fresh water after planting; S5. post-planting management: intelligent information management and control equipment is used to ensure that fruit trees can be watered and fertilized in time after planting.

21: 2024/08468. 22: 2024/11/08. 43: 2025/05/14  
51: G01N

71: Shaoguan University

72: Long Hui, Luo Huan, Huang Changzheng, Li Jin, Chen Mingtao, Mao Guisheng

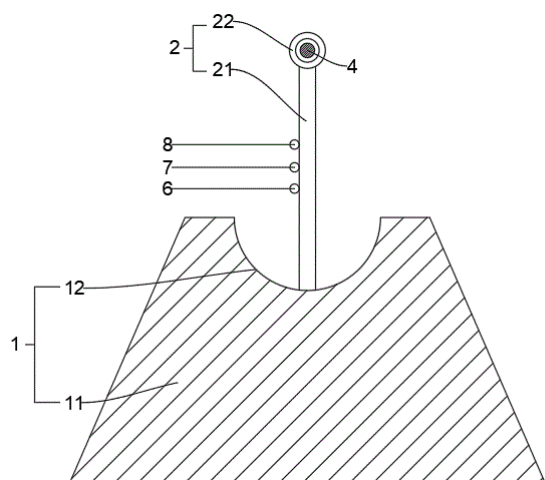
33: CN 31: 202410739950X 32: 2024-06-07

**54: A CANTILEVER BEAM SPECIMEN CRACK PROPAGATION DEVICE AND ITS METHOD**

00: -

This invention relates to a cantilever beam specimen crack propagation testing device and method. It includes a base, cantilever beam specimen, specimen fixture, two vibration motors, two leaf springs, leaf spring support seats, and a signal acquisition and analysis system. The fixed end of the cantilever beam specimen is mounted on the specimen fixture. The upper motor seat and the lower motor seat are installed opposite each other on the upper and lower sides of the free end of the cantilever beam specimen. Two vibration motors are installed on the upper and lower motor seats, respectively. Since the two vibration motors are installed opposite each other above and below the cantilever beam specimen, when the two motors rotate simultaneously and in the same direction, the excitation forces generated by their eccentric blocks cancel each other out in the horizontal direction, while they add together to produce a resultant force in the vertical direction. This forces the beam specimen to perform approximately linear reciprocating excitation in the vertical direction. The vibration motors are capable of continuous long-term





21: 2024/08526. 22: 2024/11/11. 43: 2025/05/30  
51: G01N

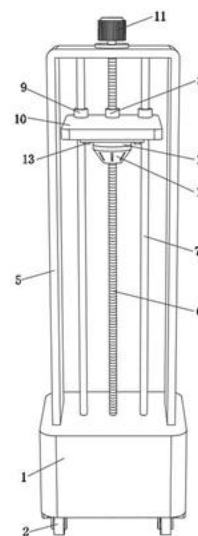
71: SUZHOU UNIVERSITY

72: XU Xu, SHEN Shuhao, QIN Wenbo, ZHANG Zhiwei, GAO Yalan, LI Songzhou

#### 54: METAL OXIDE SEMICONDUCTOR GAS SENSOR

00: -

The invention discloses a metal oxide semiconductor gas sensor, belonging to the technical field of gas detection, aiming at the problem that the sensor cannot accurately reflect the actual gas concentration in the surrounding environment when fixed installation at a height position, including a base; the bottom of the base is fixed connected with a plurality of pulleys, and both sides of the base are provided with grooves near the bottom. The two grooves are provided with positioning mechanisms; the top of the base is fixed connected with a convex frame. According to the invention, the servo motor is arranged to drive the first threaded rod to rotate, and under the cooperation of the ball nut seat and the guide sleeve, the supporting plate drives the gas sensor body to adjust its height, and the gas sensor body can be placed in the area with the highest gas concentration by adjusting its installation height, so that the sensitivity and response speed of the sensor to the target gas are improved, the sensor can maintain good performance in different environments and application scenarios, and the efficiency and reliability of gas monitoring are improved.



21: 2024/08528. 22: 2024/11/11. 43: 2025/05/30  
51: A61B

71: Cancer Hospital Chinese Academy of Medical Sciences

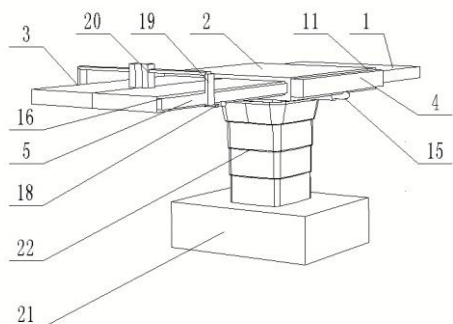
72: ZHAO Liming, ZHENG Zhaoxu

#### 54: AUXILIARY DEVICE FOR COLORECTAL SURGERY

00: -

The invention belongs to the technical field of medical devices, and provides an auxiliary device for colorectal surgery, which comprises a body, wherein a control mechanism is arranged in the body; an electric bed body is fixedly connected to the body; the electric bed body is divided into a head placing plate, an upper limb placing plate and two leg placing plates; the body is fixedly connected with the upper limb placing plate; the head placing plate, the upper limb placing plate and the two leg placing plates are respectively electrically connected with the control mechanism; the upper limb placing plate is fixedly connected to the bottom of the head placing plate; the head placing plate is internally provided with a power assembly; the upper limb placing plate is slidably connected with symmetrically arranged first extension plates; the power assembly is drivingly connected with two first extension plates; the bottom end of the upper limb placing plate is hinged with two leg placing plates; the leg placing plates are slidably connected with second extension plates. The invention can be suitable for patients with various physiques, improve the comfort of patients in the operation process,

provide convenience for doctors and improve the operation efficiency of doctors.



21: 2024/08540. 22: 2024/11/11. 43: 2025/05/20  
51: C03C

71: Jiangsu Huaou Glass Co., Ltd.

72: CHEN, Ruzhu, CHEN, Hua

33: CN 31: 202410603431.0 32: 2024-05-15

#### **54: ACID AND ALKALI RESISTANT GLASS AND PREPARATION METHOD THEREOF**

00: -

The present invention provides an acid and alkali resistant glass and a preparation method thereof. 4,4'-diaminobenzanilide is first added to xylene, mixed evenly, then glass fibers and composite glass powder are continuously added, stirred at room temperature, then hexafluorodianhydride is added, heated and stirred for reaction to obtain modified polyamic acid slurry, then a catalyst is added, imidized and post-treated to obtain modified polyimide; then the modified polyimide is ultrasonically dispersed in N,N-dimethylformamide, and subjected to vacuum defoaming treatment. The glass product obtained by the present invention has excellent acid and alkali resistance, expanding an application range of glass.

21: 2024/08559. 22: 2024/11/11. 43: 2025/05/30  
51: B65B

71: DONGGUAN PINEAPPLE PROTECTION CO., LTD.

72: Shengjie ZHOU

33: CN 31: 202221161313.1 32: 2022-05-13

33: CN 31: 202221177877.4 32: 2022-05-16

33: CN 31: 202221551563.6 32: 2022-06-20

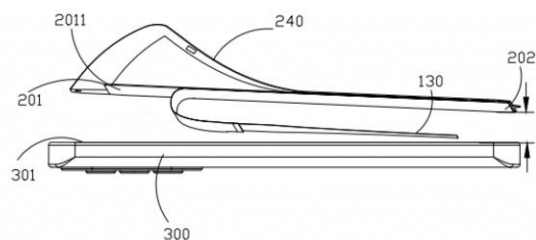
33: CN 31: 202221697522.8 32: 2022-07-01

33: CN 31: 202221697145.8 32: 2022-07-01

#### **54: FILM AND FILM PASTING ASSEMBLY**

00: -

The present utility model relates to the technical field of film, in particular to a film and a film pasting assembly. The film comprises a protective film and a release film layer, wherein the protective film is used for being attached to the screen of an electronic product, and the release film layer is attached to the protective film; the release film layer is an electrostatic layer, which separates the release film layer from the protective film; static electricity exists on the side where the release film layer is attached to the protective film to absorb dust on the screen; and the release film layer is set as an electrostatic layer, which can be charged with static electricity when the release film layer and the protective film are separated, so that the dust on the screen of the electronic product can be well absorbed by static electricity.



21: 2024/08570. 22: 2024/11/12. 43: 2025/05/20  
51: G06F

71: Jiangsu Vocational Institute of Architectural Technology

72: Xiang JI, Guohua TIAN, Dong WANG, Deping JIANG

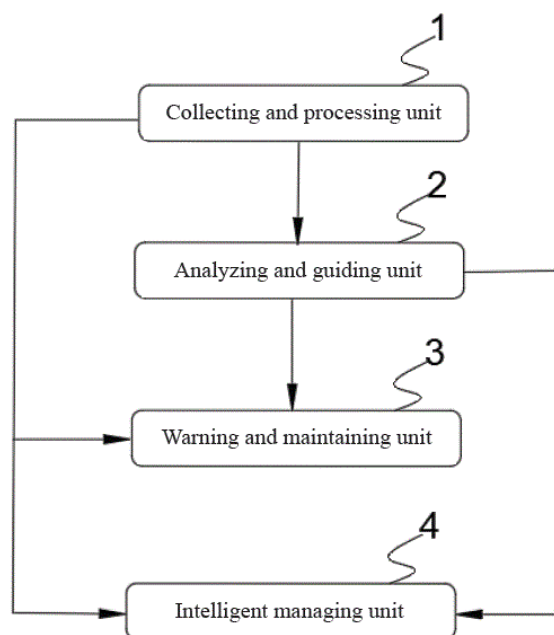
33: CN 31: 202411388461.0 32: 2024-09-30

#### **54: INTELLIGENT CITY RENEWAL DESIGN SYSTEM AND METHOD**

00: -

The present disclosure relates to a field of city design technologies, and more particularly, to an intelligent city renewal design system and method. The system includes a collecting and processing unit, an analyzing and classifying unit, a warning and maintaining unit and an intelligent managing unit. The intelligent managing unit is configured to receive data collected, data preprocessed and data analyzed, and make intelligent decisions on the data collected, the data preprocessed and the data analyzed. The intelligent decisions according to the present disclosure may improve a recreation environment of shopping mall tourists, schedule garbage collection time according to the intelligent

decisions, alleviate garbage bin overflow and odor problems, and create a cleaner, tidier and more hygienic environment in the shopping mall; and meanwhile, the intelligent decisions may further provide convenient garbage collection and disposal services, and provide tourists with a more convenient and comfortable recreation environment.



21: 2024/08571. 22: 2024/11/12. 43: 2025/05/20

51: G01N

71: Shihezi University

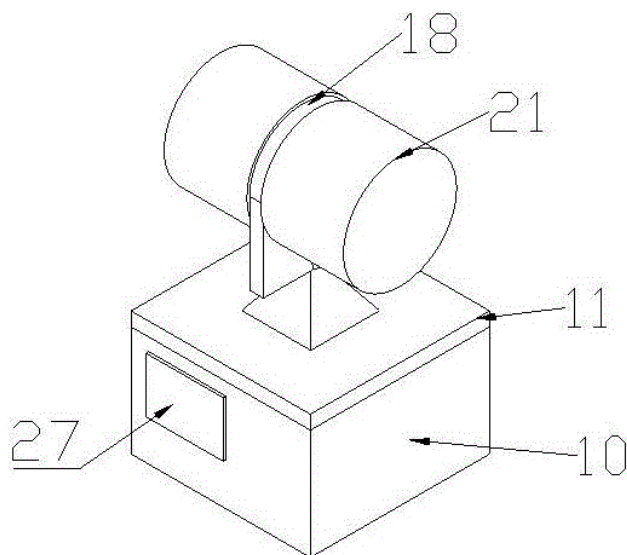
72: Wenjuan CHEN, Qinglin LI, Guang YANG, Pengrui FENG, Xuanbing LUO, Yucong YIN, Xiaofei YANG, Meixue ZHANG, Jianlin ZHU, Shuailong YU

#### **54: TEST DEVICE AND METHOD FOR MEASURING WATER VAPOR MIGRATION IN UNSATURATED SOIL**

00: -

The invention provides a test device and method for measuring the water vapor migration in unsaturated soil, it belongs to the technical field of the test instrument, including a base, a reading unit, a measuring unit, a water absorption unit, and two lifting units, the base is a hollow cavity body, and the top of the base is provided with an upper cover plate; the reading unit includes a sensor groove, a flexible film pressure sensor, a rubber gasket and a sealing plug, the sensor groove is set on the inner wall of the base, the sensor groove is equipped with an internal thread, the flexible film pressure sensor is

embedded in the sensor groove, one end of the rubber gasket fits the top of the flexible film pressure sensor, and the other end of the rubber gasket fits the sealing plug. The invention can ensure the tightness of the test device when reading, avoid the influence of the external environment on the accuracy of reading, and improve the convenience of soil sample installation and replacement, which is convenient for experimental operation, and can also easily control the spacing between soil samples.



21: 2024/08572. 22: 2024/11/12. 43: 2025/05/30

51: E04H

71: China State Construction Third Engineering Bureau Second Construction and Installation Co., Ltd.

72: MING Jie, HE Xiao, CAI Chunliang, REN Zhen, ZHANG Feng

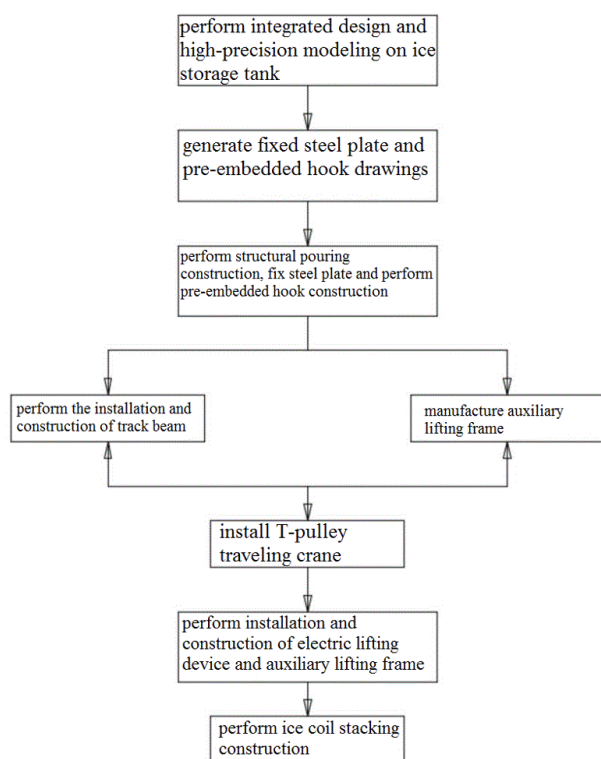
33: CN 31: 202410219609.1 32: 2024-02-28

#### **54: ICE COIL TRACK TYPE STACKING CONSTRUCTION METHOD FOR LARGE ICE STORAGE TANK**

00: -

An ice coil track type stacking construction method for a large ice storage tank is provided and includes: performing BIM modeling according to size specifications of an ice storage tank; according to BIM modeling, determining the best parameter requirements of each device in ice coil stacking construction, and generating the corresponding parts processing and installation drawings; after the track beam is constructed, connecting the auxiliary lifting frame to the electric lifting device, and connecting the electric lifting device to the track of the track

beam through a T-shaped I-steel pulley; then performing the stacking of the first ice coil device respectively until the final stacking construction is completed. The disclosure can be applied to the standardized ice storage installation construction flow of large ice storage tanks, has high reproducibility and portability, has industrial production conditions, greatly reduces the risk of damage of ice coils during transportation and installation, eliminates the problems of improper manual operation and high labor intensity of manual operation as much as possible, and improves the construction efficiency to the maximum extent, thus being most suitable for the stacking of large ice coil equipment in a limited space.



21: 2024/08573. 22: 2024/11/12. 43: 2025/05/30  
51: F24F

71: China State Construction Third Engineering Bureau Second Construction Engineering Co., Ltd., China State Construction Third Engineering Bureau Second Construction and Installation Co., Ltd.

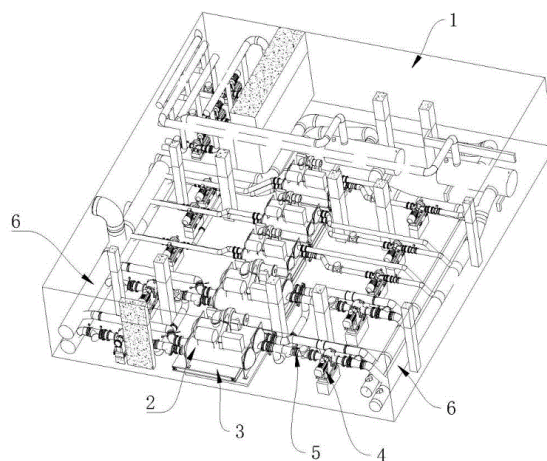
72: JIAO Shuangfeng, ZHANG Qinglin, ZHAO Xiao, YAO Wei, DENG Yahong, WU Xuezhi, MOU Xuan, YANG Rui, PAN Guoqing

33: CN 31: 202410424188.6 32: 2024-04-10

#### 54: PORTABLE ENERGY EFFICIENCY DETECTION AND ANALYSIS SYSTEM FOR REFRIGERATION MACHINE ROOM

00: -

The disclosure belongs to the technical field of refrigerators, in particular to an anti-seismic hidden type high-efficiency refrigerator room, which includes a refrigerator room, refrigerators, installation bases, water pumps, straight through pipes, main water pipes, an escalator, a maintenance platform and connecting assemblies. Each of the refrigerators is fixedly installed on a ground of the refrigerator room through corresponding one of the installation bases, and the water pumps are fixedly installed on the ground of the refrigerator room, and a plurality of the refrigerators and the water pumps are both arranged, and each the refrigerators is connected with corresponding one of the water pump through corresponding one of straight through pipes, and each of the water pumps is fixedly connected with corresponding one of the main water pipes through a transfer pipe, the main water pipes are installed in the refrigerator room on the ground, both sides of each of the refrigerators are connected with the water pumps, and each of the water pumps is communicated with corresponding one of the main water pipes installed on the ground through the transfer pipe. Through the cooperation of the above devices, the anti-seismic effect of the refrigerator room at the core of super high-rise buildings in earthquake high-intensity area can be improved



21: 2024/08574. 22: 2024/11/12. 43: 2025/05/20  
51: F21L; G06F; G09G; H04R; H04W  
71: SMARTPOINT LIMITED LIABILITY COMPANY

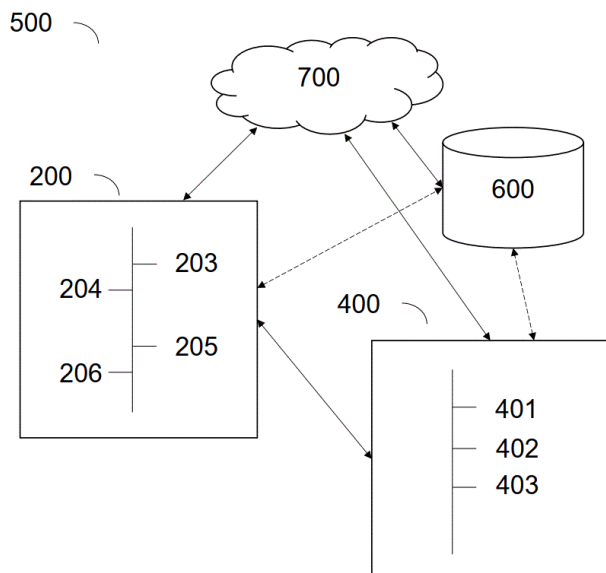
72: MOSALOVA Tatiana Nikolaevna,  
KRAVCHENKO Artem Aleksandrovich

33: RU 31: 2024129101 32: 2024-09-30

**54: LIGHTING DEVICE PLACED ON A VERTICAL SURFACE AND CONTROLLED BY MEANS OF A BRACKET**

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. A lighting device placed on a vertical surface and controlled by means of a bracket is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08575. 22: 2024/11/12. 43: 2025/05/20

51: A61K

71: Qingdao Hospital of Traditional Chinese Medicine (Qingdao Haici Hospital, Qingdao Institute of Rehabilitation Medicine)

72: JIANG, Ting

**54: CHINESE MEDICINAL COMPOSITION FOR PROMOTING BLOOD CIRCULATION AND REMOVING BLOOD STASIS AND APPLICATION**

**IN INTERVENING IN ATHEROSCLEROSIS THEREOF**

00: -

The present invention provides a Chinese medicinal composition for promoting blood circulation and removing blood stasis, the Chinese medicinal composition includes the following raw materials: Salvia miltiorrhiza Bunge, Ligusticum sinense 'Chuanxiong', peach kernel, Carthamus tinctorius L., Paeoniae Rubra Radix, Panax notoginseng (Burkill) F. H. Chen ex C. H. Chow, Leonurus japonicus Houtt., Angelica sinensis (Oliv.) Diels, Typha angustifolia L. and Trogopteri Faeces. Through a synergistic effect of Salvia miltiorrhiza Bunge, Ligusticum sinense 'Chuanxiong', peach kernel, Carthamus tinctorius L., etc., the Chinese medicinal composition may effectively promote blood circulation and remove blood stasis, increase arterial blood flow, improve the function of vascular endothelial cells, and provide better blood supply for patients with atherosclerosis. At the same time, various components in the composition jointly play a role in regulating blood lipids, reducing low-density lipoprotein cholesterol (LDL-C) levels, and delaying a progression of atherosclerosis.

21: 2024/08578. 22: 2024/11/12. 43: 2025/05/20

51: B29B; D06M

71: TIANJIN ZHONGDAO TECHNOLOGY CO., LTD.

72: Junjiang XIAO, Yanhui LI, Congcong YOU, Guanglei HE, Aoyun JIA, Kun DING

**54: METHOD AND APPLICATION FOR PREPARING FILM FROM WASTE TEXTILES**

00: -

This invention provides a method and application for preparing a film from waste textiles, mainly involving the field of waste textile recycling, and the problem of efficiently and quickly dissolving and recycling cellulose from waste cotton textiles to prepare a cellulose film. This invention focuses on solving an efficient dissolution process cellulose from waste cotton textiles with low-cost raw materials, environmentally friendly solvents, and a simple process, and then preparing it into a film. The implementation is: recycled cotton textiles → Cutting → High-temperature moist heat disinfection and sterilization → Washing → Drying → Crushing → Activation → Washing and → Moistening → Preliminary dissolution → Stirring → Complete



dissolution → De-bubbling → Uniform gel solution → Film making. The physical and chemical properties of the prepared waste cotton textile cellulose are stable.

21: 2024/08579. 22: 2024/11/12. 43: 2025/05/21  
51: B29B; C08J; D01F

71: LAIAOKENI (BEIJING) TECHNOLOGY DEVELOPMENT CO., LTD.

72: Junjiang XIAO, Yanhui LI, Congcong YOU, Guanglei HE, Aoyun JIA, Kun DING

**54: METHOD FOR PREPARING BIOMASS FIBRE BASED ON WASTE COTTON TEXTILES AND APPLICATION**

00: -

This invention provides a method for preparing biomass fibers from waste cotton textiles and its application, which involves the field of recycling and reuse of waste textiles. It specifically addresses the problem of efficient and rapid dissolution of cellulose from waste cotton textiles to prepare a gel solution and then to prepare biomass fibers. The specific implementation steps are as follows: waste cotton textiles → cutting into pieces → high-temperature moist heat disinfection and sterilization → washing with water → drying → crushing → activation → washing and drying → swelling → preliminary dissolution → stirring → complete dissolution → degassing → uniform gel solution → preparing biomass fibers.

21: 2024/08580. 22: 2024/11/12. 43: 2025/05/21  
51: A01G; A01H; C02F

71: JIANGXI ACADEMY OF FORESTRY

72: REN, Qiong, ZHOU, Liyin, YUAN, Jihong, MIAO, Lujun, SUN, Zhiyong, WAN, Fang

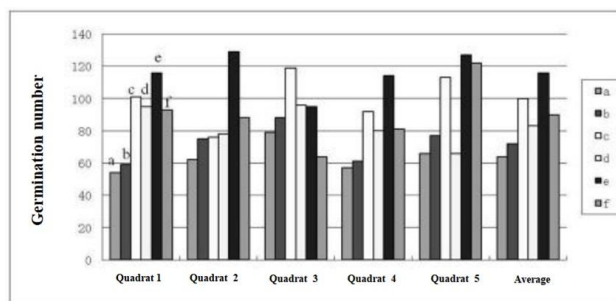
**54: METHOD FOR RESTORING DEGRADED WETLAND AT TAIL OF RESERVOIR BASED ON PHRAGMITES AUSTRALIS VEGETATION**

00: -

The present invention provides a method for restoring a degraded wetland at the tail of a reservoir based on *Phragmites australis* vegetation. The method achieves the effect of fast, controllable, ecological, and environmentally friendly for restoring the degraded wetland at the tail of the reservoir through the advantages of seed propagation and asexual propagation of above-ground stalks.

According to the present invention, focusing on a propagation method of *Phragmites australis* seeds is

improved, so that germination of seeds is not affected by environmental factors (such as hydrological fluctuations and soil burial depth), and high and stable germination effects are obtained. In addition, a method of asexual reproduction of above-ground stalks is improved to promote rapid growth of the *Phragmites australis* vegetation in the degraded wetland at the tail of the reservoir.



21: 2024/08581. 22: 2024/11/12. 43: 2025/05/21  
51: C08J; C08L

71: LAIAOKENI (BEIJING) TECHNOLOGY DEVELOPMENT CO., LTD.

72: ZHANG, Yikang, XIAO, Junjiang, HE, Guanglei, YOU, Congcong, ZHANG, Yifei, LI, Yanhui, HE, Ting

**54: PREPARATION PROCESS AND APPLICATION OF REGENERATED CELLULOSE FILM BASED ON NMMO METHOD**

00: -

The present invention provides a method for preparing waste polyester/cotton regenerated cellulose film using NMMO solvent method. The method includes the following steps: (1) mixing waste polyester/cotton pulp with DMSO/NMMO mixed solvent, antioxidant, and sodium citrate to form a uniform mixed system; (2) Swelling and dissolving the mixed system to obtain fiber gel solution; (3) Regenerated cellulose film is produced through filtration, defoaming, and membrane laying treatment. The NMMO solvent method for regenerating cellulose film from waste polyester cotton textiles and its preparation method provided by the present invention can not only effectively recover cellulose resources from waste polyester cotton textiles, but also prepare high-quality regenerated cellulose film, which has important environmental and economic value.

21: 2024/08582. 22: 2024/11/12. 43: 2025/05/21  
51: D01G; C08B

71: LAIAOKENI (BEIJING) TECHNOLOGY DEVELOPMENT CO., LTD.

72: XIAO, Junjiang, HE, Guanglei, YOU, Congcong, DING, Kun, LI, Yanhui, ZHANG, Yikang, HE, Ting

**54: METHOD FOR PREPARING BIOMASS FIBRES BASED ON WASTE COTTON TEXTILES**

00: -

This invention provides a method for preparing biomass fibers from waste cotton textiles. The invention relates to the field of chemical textile new materials specifically to a method for preparing biomass fibers from waste cotton textiles. The invention provides a high-value recycling process for waste cotton textiles, which includes the following steps taking waste cotton cellulose, cotton pulp, wood pulp, reed pulp, etc., mixing them evenly after crushing, and then treating the crushed pulp with immersion,, and crushing to obtain alkali cellulose; the alkali cellulose is then aged and sulfonated to obtain cellulose sulfonate; the cellul sulfonate is dissolved, filtered, and degassed to obtain spinning dope; the regenerated cellulose dope is spun to obtain biomass fibers. The biomass fibers prepared waste cotton textiles using the method of this invention have good physical and chemical properties.

21: 2024/08586. 22: 2024/11/12. 43: 2025/05/30  
51: A01B; E21B

71: Land Consolidation and Rehabilitation Center, Ministry of Natural Resources

72: JU, Zhengshan, CHEN, Kun, GENG, Guanjie

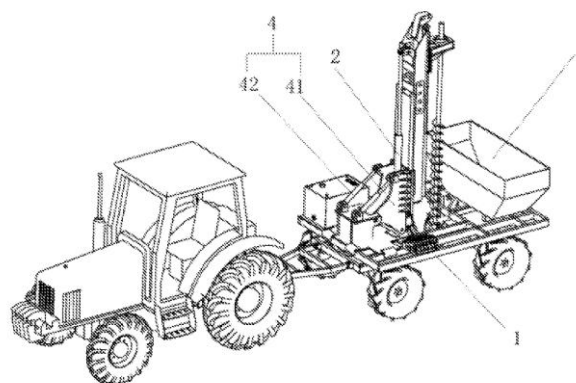
33: CN 31: 202210389639.8 32: 2022-04-14

**54: SALINE-ALKALI LAND IMPROVEMENT APPARATUS**

00: -

A saline-alkali land improvement apparatus, relating to the technical field of saline-alkali land treatment, comprising a frame (1), a drilling apparatus (2), and a sand filling apparatus (3). Both the drilling apparatus (2) and the sand filling apparatus (3) are arranged on the frame (1), the drilling apparatus (2) is used for drilling holes in the ground, and the sand filling apparatus (3) is used for filling the holes with sand. By configuring the drilling apparatus (2) and the sand filling apparatus (3) to respectively perform drilling and sand filling, a soil surface can be directly connected to a deep soil layer, and by performing salt leaching on saline-alkali land, the physical structure of soil of the saline-alkali land can be

significantly improved, and the total salt content of the saline-alkali land can be reduced, thereby improving the quality of cultivated land. Moreover, the saline-alkali land improvement apparatus is low in cost, convenient, efficient, and beneficial to large-scale popularization.



21: 2024/08610. 22: 2024/11/13. 43: 2025/05/21  
51: A47G

71: MOSALOVA Tatiana Nikolaevna

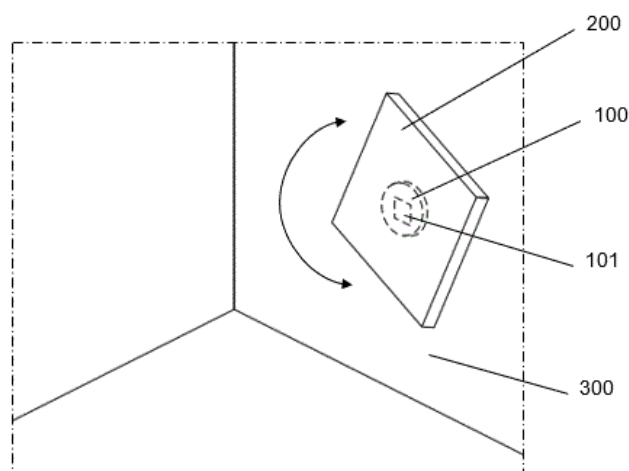
72: MOSALOVA Tatiana Nikolaevna

33: RU 31: 2024128065 32: 2024-09-23

**54: BRACKET WITH FERROMAGNETIC ELEMENT FOR A PRODUCT OR DEVICE PLACED ON A VERTICAL SURFACE**

00: -

The proposed invention relates to household items, more specifically to brackets for placing a product or device on a vertical surface, and can be used in everyday life. A bracket with ferromagnetic element for a product or device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the product or device placed on it, while ensuring the usual reliability of placing the product or device on a vertical surface. Another technical result is the expansion of the arsenal of technical means - brackets for products and devices.



21: 2024/08611. 22: 2024/11/13. 43: 2025/05/21  
51: A47G

71: MOSALOVA Tatiana Nikolaevna

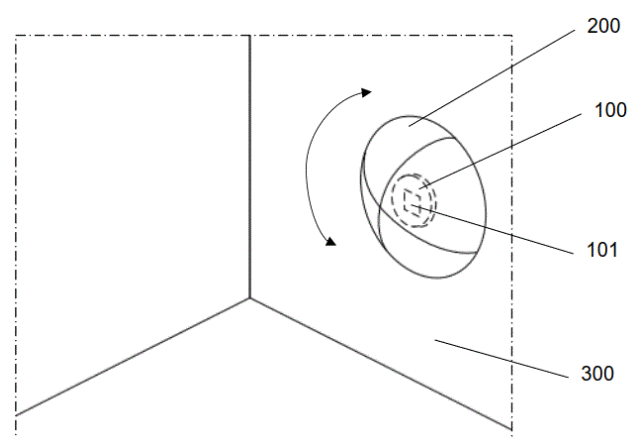
72: MOSALOVA Tatiana Nikolaevna

33: RU 31: 2024128075 32: 2024-09-23

**54: A SET COMPRISING A PRODUCT OR A DEVICE PLACED ON A VERTICAL SURFACE WITH A BASE WITH MAGNETIC OR FERROMAGNETIC ELEMENT AND A BRACKET WITH MAGNETIC OR FERROMAGNETIC ELEMENT FOR IT**

00: -

The proposed invention relates to household items, more specifically to brackets for placing a product or device on a vertical surface, and can be used in everyday life. A set comprising a product or a device placed on a vertical surface with a base with magnetic or ferromagnetic element and a bracket with magnetic or ferromagnetic element for it is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the product or device placed on it, while ensuring the usual reliability of placing the product or device on a vertical surface. Another technical result is the expansion of the arsenal of technical means - brackets for products and devices.



21: 2024/08612. 22: 2024/11/13. 43: 2025/05/21

51: A47G

71: MOSALOVA Tatiana Nikolaevna

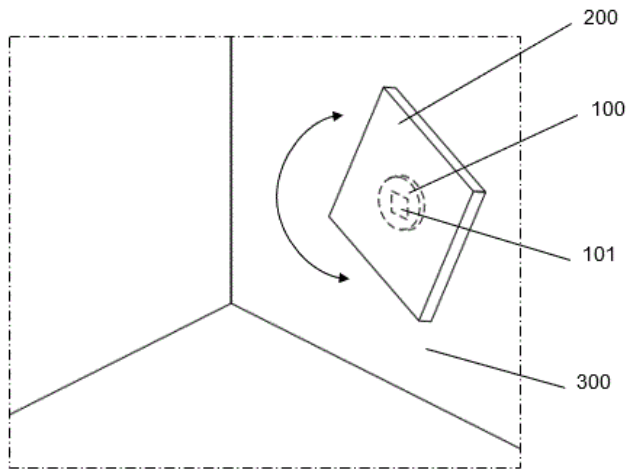
72: MOSALOVA Tatiana Nikolaevna

33: RU 31: 2024128071 32: 2024-09-23

**54: A SET COMPRISING A SCRATCHING POST TO BE PLACED ON A VERTICAL SURFACE WITH A MAGNETIC ELEMENT AND A BRACKET FOR IT**

00: -

The proposed invention relates to household items, more specifically to brackets for placing a product or device on a vertical surface, and can be used in everyday life. A set comprising a scratching post to be placed on a vertical surface with a magnetic element and a bracket for it is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the product or device placed on it, while ensuring the usual reliability of placing the product or device on a vertical surface. Another technical result is the expansion of the arsenal of technical means - brackets for products and devices.



21: 2024/08613. 22: 2024/11/13. 43: 2025/05/21

51: A47C; A47D; G06F

71: LACUNA LIMITED LIABILITY COMPANY

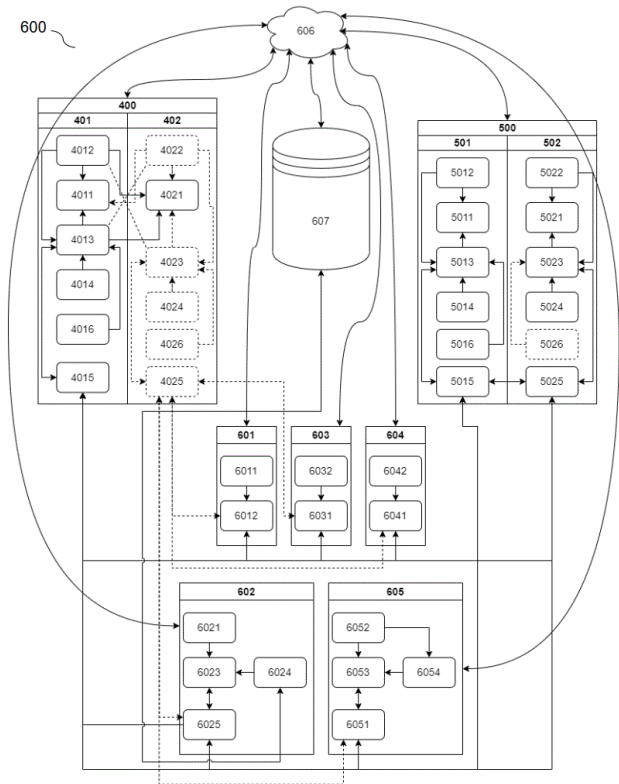
72: MOSALOVA Tatiana Nikolaevna,  
KRAVCHENKO Artem Aleksandrovich

33: RU 31: 2024129111 32: 2024-09-30

**54: EXTERNAL CONTROL DEVICE FOR A  
DEVICE FOR ACTUATING A PENDULUM  
MECHANISM**

00: -

The proposed invention relates to the furniture industry and can be used to control rocking devices, such as beds and chairs with pendulum mechanisms. An external control device for a device for actuating a pendulum mechanism is proposed. The technical result achieved when implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogs and thus ensuring universality, that is, the possibility of installation on both transverse pendulum mechanisms and longitudinal pendulum mechanisms, as well as the possibility of simple operation with both transverse pendulum mechanisms and longitudinal pendulum mechanisms, as well as ensuring ease of installation and operation, as well as increasing the accuracy of pendulum mechanism control.



21: 2024/08614. 22: 2024/11/13. 43: 2025/05/21

51: A47G

71: MOSALOVA Tatiana Nikolaevna

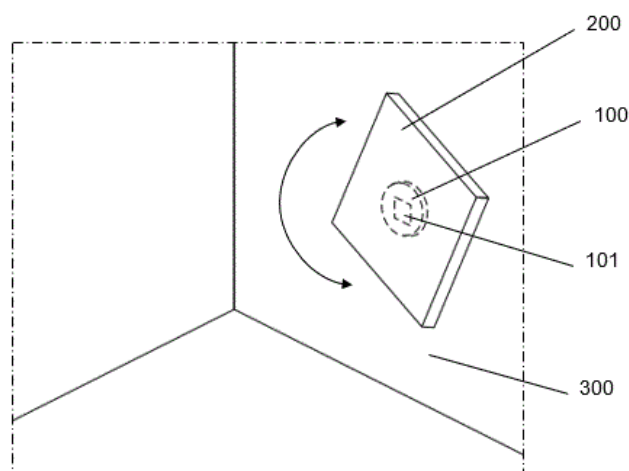
72: MOSALOVA Tatiana Nikolaevna

33: RU 31: 2024128064 32: 2024-09-23

**54: BRACKET FOR A PRODUCT OR DEVICE  
PLACED ON A VERTICAL SURFACE**

00: -

The proposed invention relates to household items, more specifically to brackets for placing a product or device on a vertical surface, and can be used in everyday life. A bracket for a product or device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the product or device placed on it, while ensuring the usual reliability of placing the product or device on a vertical surface. Another technical result is the expansion of the arsenal of technical means - brackets for products and devices.



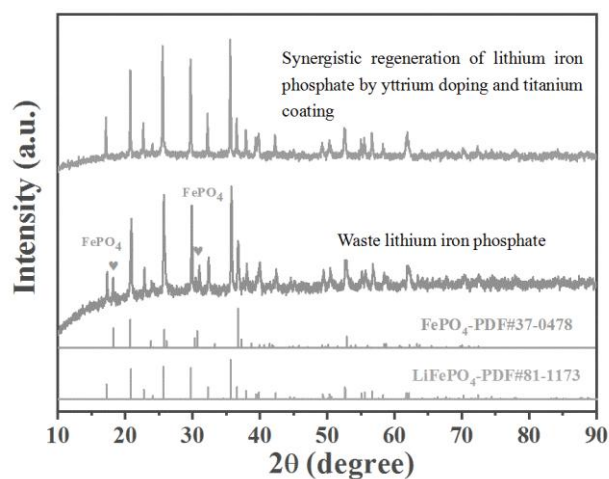
21: 2024/08615. 22: 2024/11/13. 43: 2025/05/30  
51: C01B

71: Kunming University of Science and Technology  
72: DONG Peng, LI Yuyun, MENG Qi, XING Yubo, LI Changjiang

**54: DOPED REGENERATED WASTE LITHIUM IRON PHOSPHATE ANODE MATERIAL AND PREPARATION METHOD THEREOF**

00: -

The invention relates to the technical field of lithium battery anode materials, in particular to a doped regenerated waste lithium iron phosphate anode material and preparation method thereof. S1: disassembling and separating the waste lithium ion battery after deep discharge to obtain waste lithium iron phosphate anode powder. S2: pretreating lithium iron phosphate anode powder; S3: weighing the precursor obtained by pretreatment according to the molar ratio of lithium source, iron source, yttrium source and phosphorus source of 1.03: 1-x: x: 1.07, adding titanium source with the total weight ratio of 35%, and transferring to a plasma ball mill for plasma ball milling; S4, placing the doped and coated lithium iron phosphate anode material in a tube furnace for two-stage roasting to obtain the regenerated lithium iron phosphate anode material. According to the invention, active sites are manufactured on waste lithium iron phosphate materials by using plasma ball milling, so that yttrium doping and titanium coating are more uniform, and a conductive network structure of  $\text{Li}_{1.4}\text{Y}_{0.4}\text{Ti}_{1.6}(\text{PO}_4)_3$  is formed, so that the lithium ion transmission rate between particles is accelerated, and the structural stability and conductivity of the materials are improved.



21: 2024/08616. 22: 2024/11/13. 43: 2025/05/22  
51: G02B

71: Tangshan University

72: SHI, Huimin, HOU, Xihuan, WANG, Chao, WU, Junjun, WANG, Lixia, REN, Limian, MEN, Xinyu

**54: HOLLOW-CORE ANTI-RESONANT FIBER NARROWBAND POLARIZATION FILTER**

00: -

The present invention relates to a hollow-core anti-resonant fiber narrowband polarization filter. The fiber structure includes a core, an inner cladding and an outer cladding, where the core is filled with air. The inner cladding is a single-layer nested composite structure, is composed of two non-nested elliptical tubes, four circular tubes and two nested elliptical tubes. The two nested elliptical tubes of the inner cladding are distributed in an X-axis direction, and the inner layer of the inner nested tube is plated with a gold film having a certain thickness. The outer cladding is made of silicon dioxide with a high refractive index. When the core mode and the SPP mode satisfy the phase matching condition, they undergo resonance coupling, that is, the surface plasmon polariton resonance effect, which has good narrowband polarization filtering at the 1550nm and can achieve single polarization transmission in the communication band.



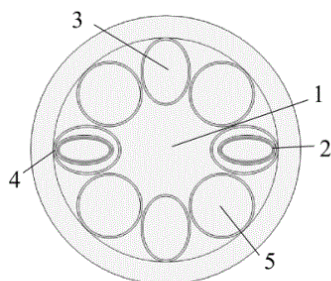
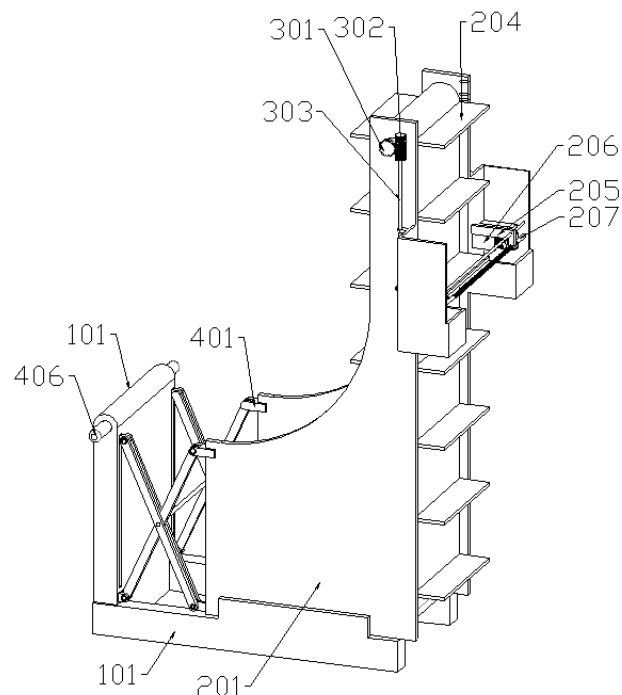


FIG. 1

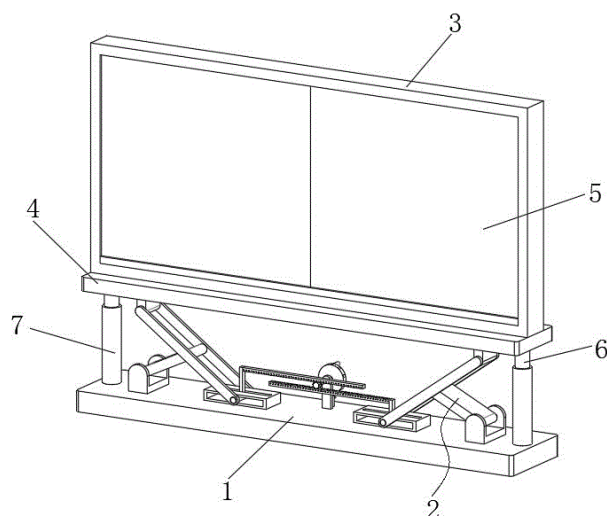
21: 2024/08617. 22: 2024/11/13. 43: 2025/05/22  
51: B08B  
71: CHONGQING ELECTRIC POWER COLLEGE  
72: Xianbing Xiang  
**54: WATER TROUGH CLEANING DEVICE AND  
CLEANING METHOD THEREFOR**  
00: -

The present invention discloses a water trough cleaning device and a cleaning method therefor. The water trough cleaning device includes a sliding table, rollers, a conveyor belt, scrapers, a sliding plate, a second scraper, and lead screws. The sliding table is slidably connected to a rack, upper and lower sides of the sliding table are rotatably connected to the rollers, respectively, two rollers cooperate with each other and are in transmission connection with the conveyor belt, a plurality of scrapers are fixedly connected to the conveyor belt, one end of the sliding plate is slidably connected to the sliding table, the second scraper is slidably connected inside the sliding plate, a spring is fixedly connected between the sliding plate and the second scraper to push the second scraper to be tightly attached to the scrapers, the sliding plate is in threaded connection with the lead screws, the lead screws are rotatably connected to the sliding table, and the rollers are connected to a cleaning assembly. According to the present invention, moss in a water trough can be quickly scraped.



21: 2024/08619. 22: 2024/11/13. 43: 2025/05/22  
51: G09F  
71: Henan University of Urban Construction  
72: Xiaoming Li, Liyuan Qu  
**54: A NEW URBANIZATION PUBLICITY AND  
DISPLAY BOARD**  
00: -

The invention provides a new urbanization publicity and display board, which relates to the technical field of publicity and display board, including a base and a display cabinet. The upper surface of the base is provided with a moving mechanism, the moving mechanism comprises two fixing blocks and a supporting rod, the inner wall of the two fixing blocks are glided connected with a sliding rod i, and the outer surface of the two sliding rods i is fixed with a connecting rod. The top ends of the two connecting rods are fixed connected with a rack, the outer surfaces of the two sliding rods i are rotated connected with a relative driving plate, and a supporting plate is hinged between the two driving plates. Through the coordination between the base, the mobile mechanism and the display cabinet, the new urbanization publicity and display organization can adjust the height of the display cabinet through the mobile mechanism when people need to clean the glass observation window, so that people can easily clean the glass observation window at the height.



21: 2024/08622. 22: 2024/11/13. 43: 2025/05/20

51: G06T

71: CHONGQING TOP-TECH INFORMATION CO., LTD., CHONGQING EXPRESSWAY GROUP CO., LTD.

72: XIANG, Guanghua, WANG, Shisen, LI, Linfeng, LIU, Zhen, CHEN, Xingzhou, DU, Sheng, LAI, Xin, YIN, Zelong, LI, Yangyang, HUANG, Qin, RAN, Xiaohua, HUANG, Dao

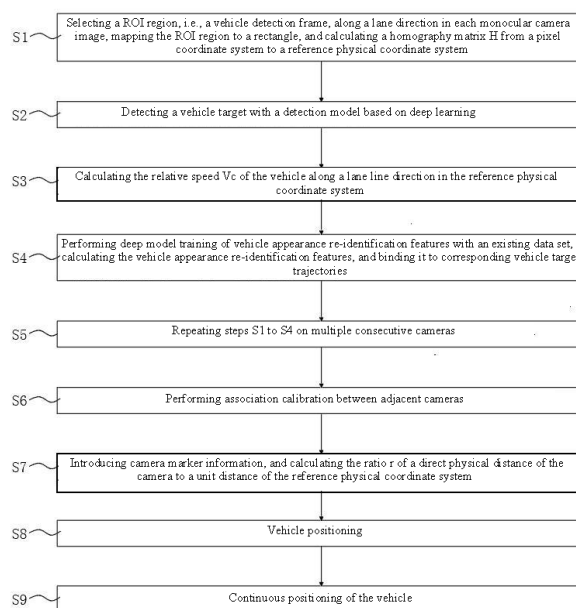
33: CN 31: 202410420870.8 32: 2024-04-09

#### 54: VEHICLE SPEED PREDICTION AND CONTINUOUS POSITIONING METHOD BASED ON VISION

00: -

The present invention discloses a vehicle speed prediction and continuous positioning method based on vision. In each monocular camera image, a ROI region, i.e., a vehicle detection frame, is selected along a lane direction, the ROI region is mapped to a rectangle, and a homography matrix  $H$  from a pixel coordinate system to a reference physical coordinate system is calculated. Then, a deep learning model is used to realize vehicle target detection under a single camera, and a vehicle target is transformed from a pixel position to a relative physical position, and a Kalman filter is applied to perform target tracking under a single camera. The relative physical speed of the vehicle is calculated by tracking, and association calibration is performed between multiple cameras, so as to determine the position correspondence of the vehicle under different cameras. Camera markers are introduced to calculate the proportional relationship between the relative position and the absolute position, thereby

realizing positioning of the physical position of the vehicle.



21: 2024/08634. 22: 2024/11/13. 43: 2025/05/22

51: A61K

71: THE POPULATION COUNCIL, INC., THE UNITED STATES OF AMERICA, AS REP'D BY SECY., DEPT OF HEALTH AND HUMAN SERVICES

72: BLITHE, Diana L., LEE, Min S., SITRUK-WARE, Regine

33: US 31: 63/339,563 32: 2022-05-09

#### 54: PROGESTIN/TESTOSTERONE TRANSDERMAL GEL

00: -

The present disclosure relates to a specific combination of a progestin and testosterone in a transdermal composition and usage thereof in a method for ensuring male contraception with more efficacy and less side effects.

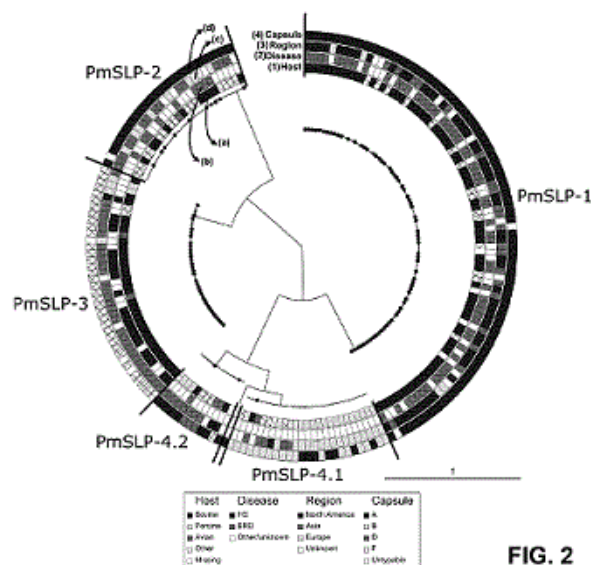
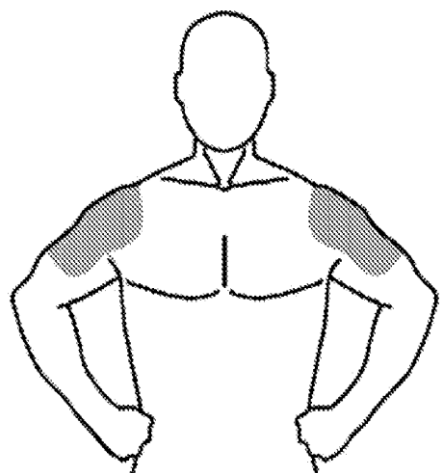


FIG. 2

21: 2024/08636. 22: 2024/11/13. 43: 2025/04/15

51: C12N A61K A61P C07K C12P

71: ENGINEERED ANTIGENS INC.

72: MORAES, Trevor, SCHRYVERS, Anthony, Bernard, FEGAN, Jamie, ISLAM, Epshita, GRAY-OWEN, Scott, FRANDOLOSO, Rafael

33: US 31: 63/332,966 32: 2022-04-20

#### 54: VETERINARY VACCINES AND METHODS FOR THE TREATMENT OF PASTEURELLA MULTOCIDA INFECTIONS IN FOOD PRODUCTION ANIMALS

00: -

Disclosed are novel veterinary vaccine compositions comprising a *P. multocida* PmSLP protein or an immunogenically equivalent portion thereof. The vaccine compositions may be used to ameliorate, treat or prevent pathogenic infections of food production animals, such as bovine and porcine animals, caused by *Pasteurella multocida*. Related methods and uses are also disclosed.

21: 2024/08644. 22: 2024/11/13. 43: 2025/05/20

51: F22B; F22D

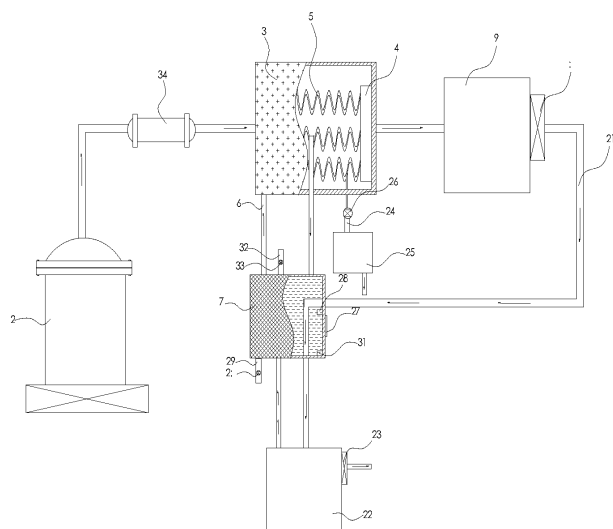
71: LISHUI JINGZHE TECHNOLOGY CO., LTD

72: DING, Junqiang, TU, Aixiang, DING, Yi, DING, Yi

#### 54: WASTE HEAT RECOVERY DEVICE FOR ENERGY-SAVING GAS BOILER

00: -

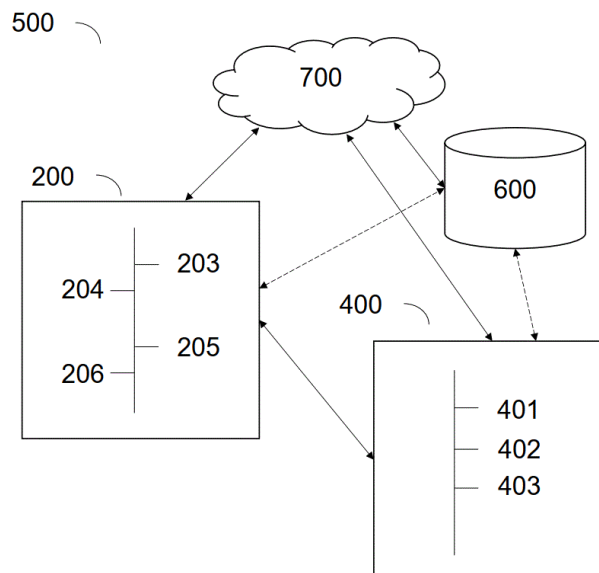
The utility model relates to a waste heat recovery device for an energy-saving gas boiler, comprising the gas boiler and a recovery tank arranged on one side of the gas boiler, and further comprising water vapor tanks arranged opposite and having built-in chambers, a heat conducting pipe I, a heat conducting pipe II, a liquid storage tank, and a liquid delivery member. The water vapor tanks are all arranged on an inner wall of the recovery tank, one end of the chamber is communicated with an exhaust port of the gas boiler by a pipe, the heat conducting pipe I is arranged between the two water vapor tanks, and the liquid storage tank is arranged on one side of the water vapor tank. A part of heat in water vapor is conducted into liquid and recovered by the liquid, which can reduce the loss of the part of heat in the water vapor and further improve heat utilization.



21: 2024/08648. 22: 2024/11/14. 43: 2025/05/22  
 51: F21L; G06F; G09G; H04R; H04W  
 71: SMARTPOINT LIMITED LIABILITY COMPANY  
 72: MOSALOVA Tatiana Nikolaevna,  
 KRAVCHENKO Artem Aleksandrovich  
 33: RU 31: 2024129098 32: 2024-09-30  
**54: METHOD FOR CONTROL OF AN  
 ELECTRONIC DEVICE PLACED ON A VERTICAL  
 SURFACE**

00: -

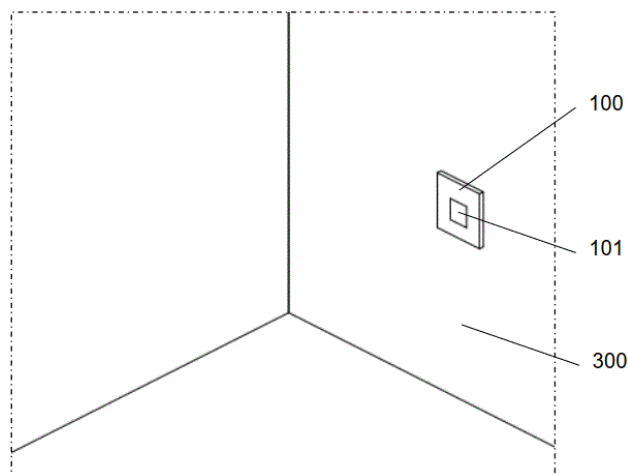
The proposed invention relates to the field of computer engineering and can be used to control electronic devices. A method for control of an electronic device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08649. 22: 2024/11/14. 43: 2025/05/27  
 51: F21L; G06F; G09G; H04R; H04W  
 71: SMARTPOINT LIMITED LIABILITY COMPANY  
 72: MOSALOVA Tatiana Nikolaevna,  
 KRAVCHENKO Artem Aleksandrovich  
 33: RU 31: 2024129097 32: 2024-09-30  
**54: BRACKET FOR AN ELECTRONIC DEVICE  
 PLACED ON A VERTICAL SURFACE**

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. A bracket for an electronic device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08650. 22: 2024/11/14. 43: 2025/05/27  
51: A23C

71: NORTHWEST A&F UNIVERSITY, Fuping County Inspection and Testing Center (Shaanxi Goat Milk Product Quality Supervision and Inspection Center)

72: GE Wupeng, SONG Yuxuan, GAO Qinyi, ZHANG Yan, FU Shangchen, ZHANG Jing, WANG Shuangshuang, LIU Mengjia, HU Qisheng

#### **54: FERMENTED GANODERMA SHEEP MILK YOGURT AND PREPARATION METHOD THEREOF**

00: -

The invention discloses a fermented ganoderma sheep milk yogurt and preparation method thereof, belonging to the technical field of dairy product processing, the fermented ganoderma sheep milk yogurt includes 80-100 parts of sheep milk, 0.05-0.2 parts of wall-broken ganoderma spore powder, 2-5 parts of microbial starter and 5-10 parts of sucrose by weight. The fermented ganoderma sheep milk yogurt has reasonable formula design, balanced nutrition, simple preparation method, multiple advantages such as nutritional components and functional characteristics of sheep milk and ganoderma, probiotic health care and the like, and has the effects of enhancing immunity, lowering cholesterol, promoting gastrointestinal digestion, maintaining intestinal flora balance, nutrition health care and the like. The product of the invention has higher hardness and consistency than that of ordinary yogurt, the taste of it is more delicate, mellow and smooth, and has no mutton smell like the goat milk yogurt, it has a good light brown color, a harmonious flavor, moderate sweetness and sourness, uniform texture, good fermentation flavor,

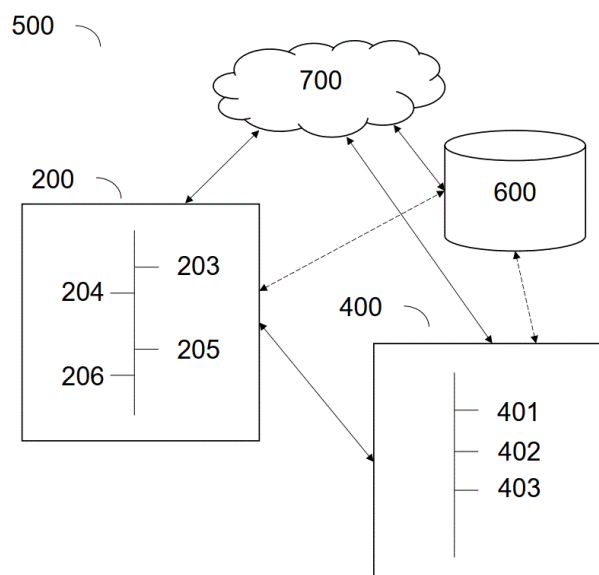
high feasibility and easy popularization and implementation.

21: 2024/08651. 22: 2024/11/14. 43: 2025/05/27  
51: F21L; G06F; G09G; H04R; H04W  
71: SMARTPOINT LIMITED LIABILITY COMPANY  
72: MOSALOVA Tatiana Nikolaevna, KRAVCHENKO Artem Aleksandrovich  
33: RU 31: 2024129104 32: 2024-09-30

#### **54: METHOD FOR CONTROL OF AN ACOUSTIC DEVICE PLACED ON A VERTICAL SURFACE**

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. A method for control of an acoustic device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08652. 22: 2024/11/14. 43: 2025/05/27  
51: F21L; G06F; G09G; H04R; H04W  
71: SMARTPOINT LIMITED LIABILITY COMPANY

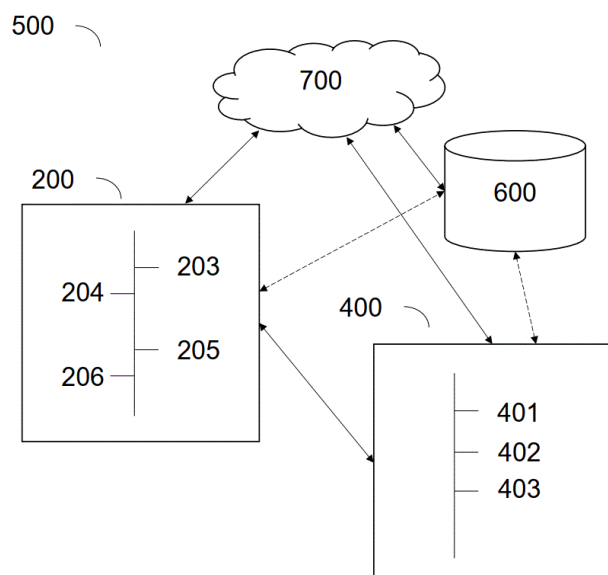


72: MOSALOVA Tatiana Nikolaevna,  
KRAVCHENKO Artem Aleksandrovich  
33: RU 31: 2024129105 32: 2024-09-30

**54: METHOD FOR CONTROL OF A LIGHTING  
DEVICE PLACED ON A VERTICAL SURFACE**

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. An method for control of a lighting device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08653. 22: 2024/11/14. 43: 2025/05/27

51: G01C

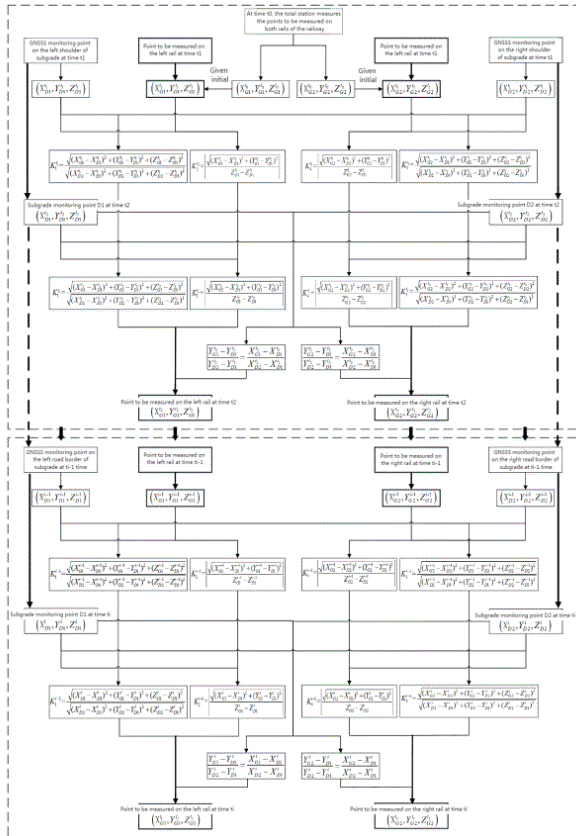
71: China Railway Xi'an Survey, Design and  
Research Institute Co., Ltd, of CREC, Xi'an  
University of Technology, Xi'an University of  
Architecture and Technology

72: Chaoneng BAI, Yaojiang LIU, Hao LIU, Rongjin  
LI, Zhenrong Zhao, Rongjian LI, Guobing WANG,  
Zhu LIANG

**54: METHOD FOR CALCULATING THE THREE-  
DIMENSIONAL COORDINATES OF THE RAILS  
TO BE MEASURED ON THE LEFT AND RIGHT  
SIDES OF THE RAILWAY UNDER THE SAME  
MILEAGE BY UTILIZING THE THREE-  
DIMENSIONAL COORDINATES OF THE  
SHOULDER DEFORMATION MONITORING  
POINTS AT THE LEFT AND RIGHT ENDS OF THE  
ROADBED**

00: -

The invention relates to the technical field of railway deformation monitoring, and discloses the calculation method of calculating the three-dimensional coordinates of the rail to be measured based on the three-dimensional coordinates of the railway subgrade deformation monitoring point, including the application of a total station to obtain the three-dimensional coordinates of the rail to be measured point pair at the reference time; Based on the three-dimensional coordinates of the subgrade monitoring point pair and the rail point pair to be measured at the same time, the first coefficient and the second coefficient are calculated. The three-dimensional coordinates of the subgrade monitoring point pair of the new monitoring period were obtained by GNSS equipment. Based on the theory of the same plumb plane and small deformation, the plane linear equation of the subgrade monitoring point pair and the rail point pair to be measured is constructed. Based on the three-dimensional coordinates of the subgrade monitoring point pair, the plane linear equation and the first coefficient and the second coefficient, the three-dimensional coordinates of the rail point pair to be measured in the new monitoring period are jointly solved. Therefore, this method realizes continuous, dynamic and non-contact monitoring of railway rail surface deformation by repeating this process periodically, effectively avoiding the need to install monitoring equipment on the rail, thereby ensuring the stable operation and safety of the railway system.



21: 2024/08654. 22: 2024/11/14. 43: 2025/05/27  
51: G01N

71: SUZHOU UNIVERSITY

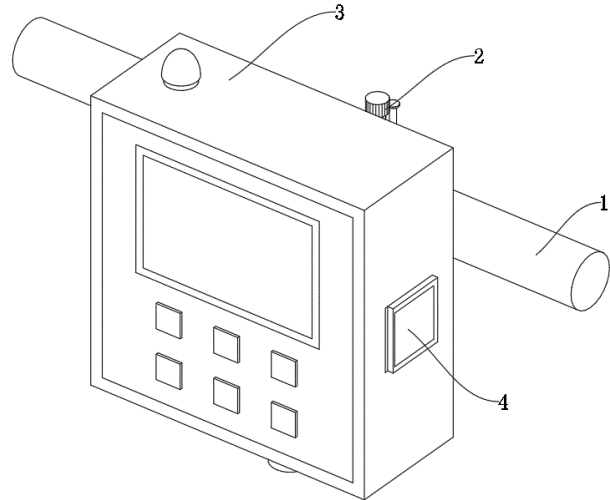
72: XU Xu, QIN Wenbo, SHEN Shuhao, ZHANG Zhiwei, LI Songzhou, WANG Mengyu, TANG Jiakang

#### 54: OXIDE SEMICONDUCTOR-BASED GAS DETECTION DEVICE

00: -

The invention discloses an oxide semiconductor-based gas detection device, which belongs to the technical field of gas detection. Aiming at the problems that fixing by bolts and nuts is cumbersome and laborious, which affects the installation efficiency and needs to set a structure for radiating the detection device, the gas detection device comprises a pipeline, a fixing mechanism, an outer shell, a heat dissipation mechanism, a semiconductor sensor body and a temperature sensor, wherein the fixing mechanism is arranged outside the pipeline, the outer shell is arranged outside the pipeline through the fixing mechanism, the heat dissipation mechanisms are arranged at both sides of the outer shell, the semiconductor sensor body is arranged inside the pipeline, and the

temperature sensor is fixedly arranged inside the pipeline. According to the invention, through the arranged fixing mechanism, the outer shell can be quickly installed outside pipelines with different sizes, and the assembly and disassembly can be completed without the help of external tools, so that time and labor are saved, and the application range and installation efficiency of the device are improved.



21: 2024/08655. 22: 2024/11/14. 43: 2025/05/27  
51: G06Q

71: WUXI CENTER FOR DISEASE CONTROL AND PREVENTION

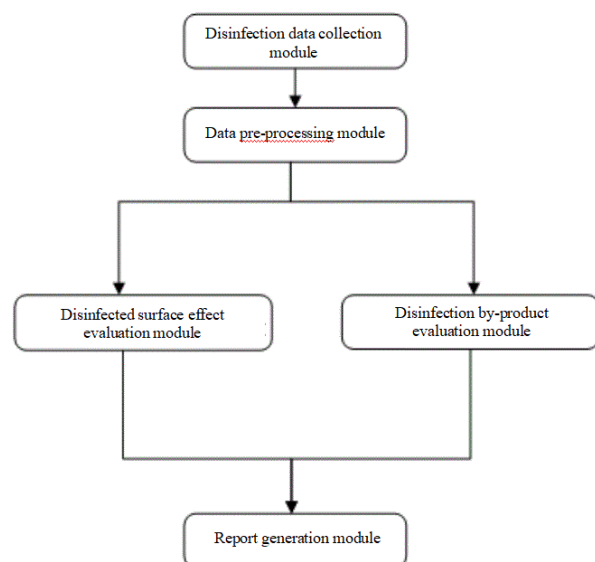
72: Yingqi You, Xiaofeng Chen, Xun Zhu, Weijie Zhou

#### 54: MACHINE LEARNING-BASED MEDICAL DEVICE DISINFECTION MONITORING SYSTEM

00: -

A machine learning-based medical device disinfection monitoring system, belonging to the technical field of disinfection management, comprises a disinfection data collection module, a data pre-processing module, a disinfected surface effect evaluation module, a disinfection by-product evaluation module, and a report generation module. The invention adopts a visual transformer network for medical device disinfection surface effect evaluation, effectively models the spatial information of a surface of the medical device, and simultaneously extracts multi-scale features so as to more accurately assess the disinfection effect, and provides an efficient and accurate solution for the evaluation of the disinfection effect of the medical

device; the invention adopts a super learner that combines extra tree, random forest, and gradient boosting model for the evaluation of disinfection by-products, which is able to make full use of the advantages of multiple algorithms, and improve the accuracy and reliability of assessing disinfection by-products; the invention adopts the method of integrating the surface effect evaluation of disinfection images and the by-product prediction of disinfection data for bidirectional disinfection monitoring, which improves the overall usability and application scope of the system.



21: 2024/08656. 22: 2024/11/14. 43: 2025/05/27  
51: A61H

71: The Affiliated Hospital to Changchun University of Chinese Medicine (Jilin Provincial Hospital of Traditional Chinese Medicine)

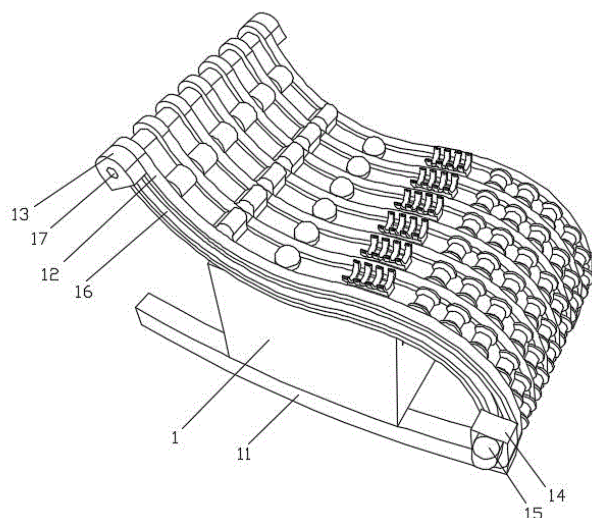
72: Tingting Pang, Yufeng Wang, Li Dong, Jiangchun Zhang, Ailin Li, Na Zhang, Jiayue Xu, Dongze Wu, Mingjun Jiang

#### 54: A MATRIX-STYLE FULL-BODY RECLINING MASSAGER

00: -

The present invention discloses a matrix-style full-body reclining massager, relating to the technical field of massagers. It includes a base, with several support frames fixedly installed on top of the base, which are evenly distributed. A conveyor belt is jointly arranged within the inner walls of the support frames, and massage units are set on the surface of the conveyor belt. The surfaces of the two outermost support frames are each fixedly equipped with a first

bearing seat and a second bearing seat. A driven shaft is rotatably installed between the two first bearing seats, and a rotating shaft is rotatably installed between the two second bearing seats. The driven shaft and rotating shaft are connected through the conveyor belt. This arrangement enables periodic movement of the massage units, achieving an automatic massage effect for the user, eliminating the need for manual operation of the massager. The process is more labor-saving, allowing the user to comfortably lie on the massage platform and enjoy the massage, effectively enhancing the user experience and improving the massage effect.



21: 2024/08658. 22: 2024/11/14. 43: 2025/05/27  
51: F21L; G06F; G09G; H04R; H04W

71: SMARTPOINT LIMITED LIABILITY COMPANY

72: MOSALOVA Tatiana Nikolaevna, KRAVCHENKO Artem Aleksandrovich

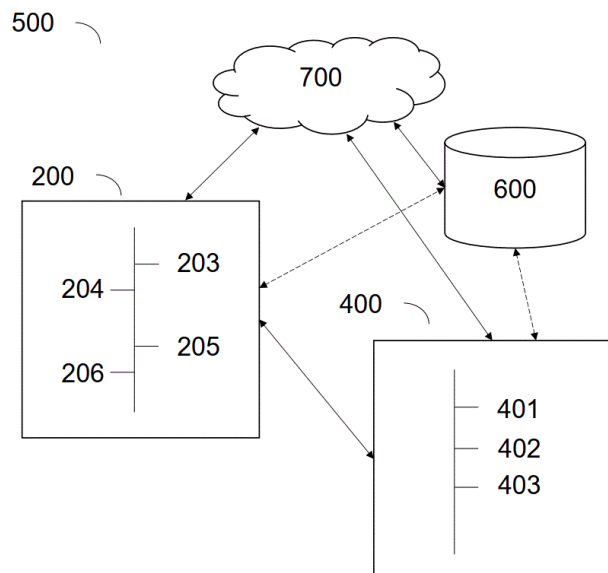
33: RU 31: 2024129102 32: 2024-09-30

#### 54: IOT DEVICE PLACED ON A VERTICAL SURFACE AND CONTROLLED BY MEANS OF A BRACKET

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. An IoT device placed on a vertical surface and controlled by means of a bracket is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and

the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08659. 22: 2024/11/14. 43: 2025/05/30

51: A61H; G06F

71: LIMITED LIABILITY COMPANY "SPEKTRIA"

72: MONAKU Vitalii Georgievich

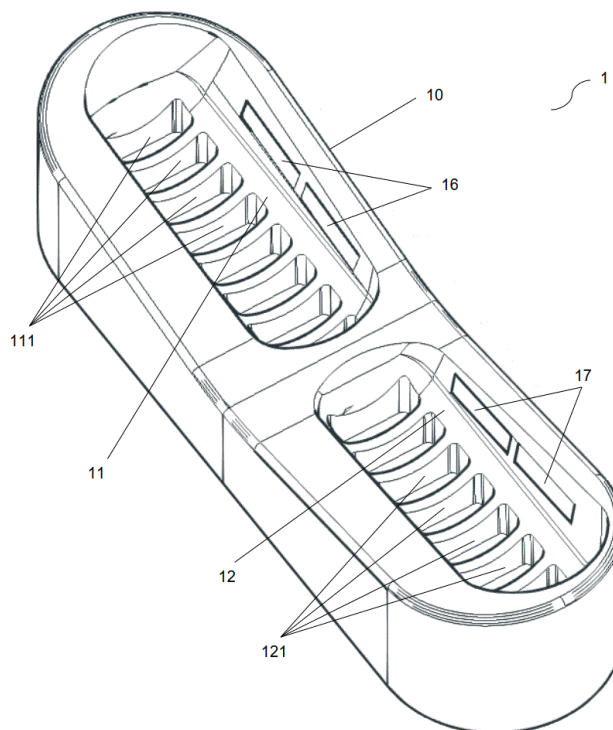
33: RU 31: 2024129562 32: 2024-10-02

**54: MESSAGE DEVICE WITH AN INTERMEDIATE ELEMENT WITH CONTROLLED MOVABLE MESSAGE MODULE**

00: -

The proposed technical solution relates to medical and/or sports equipment, in particular to means intended for performing body massage. A massage device with an intermediate element with a controlled movable massage module is proposed. The technical result achieved by implementing the claimed invention, in addition to implementing its purpose, is the elimination of the shortcomings of the closest analogue and thus increasing the efficiency of using the massage device, expanding the functional capabilities of the massage device and providing the ability to control the angle of inclination of the massage element directly during operation and/or providing the ability to automatically change

the angle of inclination of the massage element directly during operation.



21: 2024/08660. 22: 2024/11/14. 43: 2025/05/28

51: F21L; G06F; G09G; H04R; H04W

71: SMARTPOINT LIMITED LIABILITY COMPANY

72: MOSALOVA Tatiana Nikolaevna,

KRAVCHENKO Artem Aleksandrovich

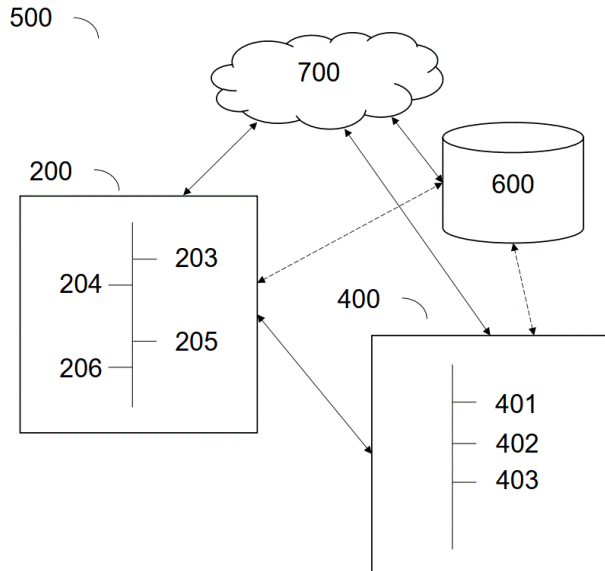
33: RU 31: 2024129103 32: 2024-09-30

**54: IMAGE OUTPUT DEVICE PLACED ON A VERTICAL SURFACE AND CONTROLLED BY MEANS OF A BRACKET**

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. An image output device placed on a vertical surface and controlled by means of a bracket is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is also ensuring precise

positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.



21: 2024/08672. 22: 2024/11/14. 43: 2025/05/28

51: B60B; B60C

71: TELEFLOW SAS

72: PLANCHET, Enguerrand

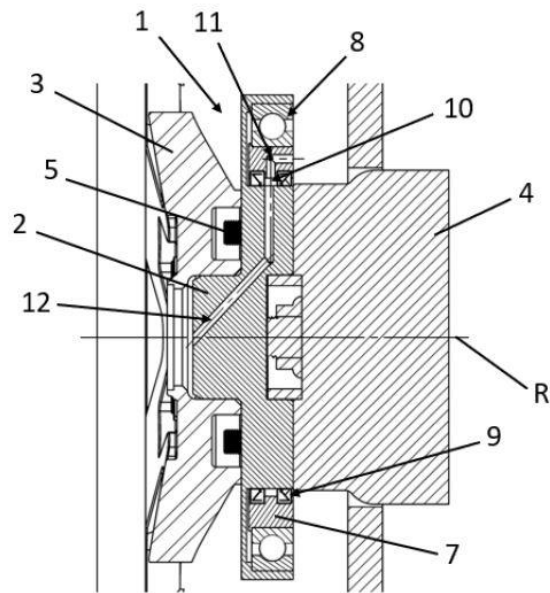
33: FR 31: 2205460 32: 2022-06-07

**54: TRACK WIDENER FOR INFLATING/DEFLATING TYRES OF A VEHICLE**

00: -

The invention relates to a track widener (1) comprising: - a movable part (2) capable of being attached between a first component (3) and at least one second component (4), both of which can rotate about an axis of rotation (R) of a fitted assembly of a vehicle, the movable part (2) having an axis of rotation (R) intended to be coaxial with the axis of rotation (R) of the fitted assembly, - a static part (7) capable of being connected to at least one immovable element of the vehicle, - a guide system (8) for guiding the rotational movement between the movable part (2) and the static part (7). According to the invention, the track widener further comprises: - an airtightness system (9) defining a chamber (10) between the movable part (2) and the static part (7), - at least one main fluid pipe (11) provided in the static part (7) and opening into the chamber (10) on one side and to the outside of the track widener (1) on the other side, - at least one secondary fluid pipe (12) provided in the movable part (2) and opening

into the chamber (10) on one side and to the outside of the widener on the other side.



21: 2024/08680. 22: 2024/11/14. 43: 2025/05/28

51: C21C; F27B; F27D

71: MOMEK TAPPINGMATE AS

72: JOHANSEN, Alexander, RISØY, Bjørn Audun

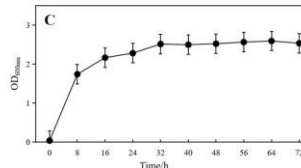
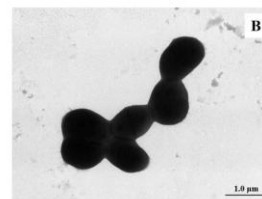
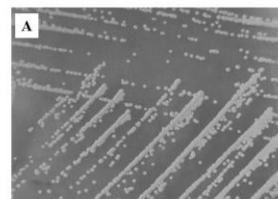
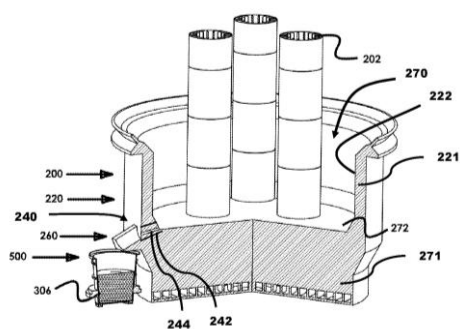
33: NO 31: 20220600 32: 2022-05-20

**54: ROBOTIC TAPPING SYSTEM FOR ELECTRIC ARC FURNACE**

00: -

A system and method for robotic tapping of rotating furnaces is provided. The present invention achieves the above-described objective by a robot that uses a coarse positioning system to align roughly with the tap hole and a fine positioning system using optical alignment for fine positioning before operating a tool for opening, maintaining or plugging the tap hole.





抗生素	结果	抗生素	结果 D
青霉素	-	庆大霉素	-
氯霉素	-	头孢曲松	+
卡那霉素	-	万古霉素	+
红霉素	-	万古霉素	-
庆大霉素	+	头孢拉定	-
头孢唑啉	-	丁胺卡那	-
四环素	-	注: +: 有药性; -: 无药性	

21: 2024/08683. 22: 2024/11/15. 43: 2025/06/10

51: C12N

71: Yancheng Teachers University

72: YAO, Li, JIA, Yan, WEN, Yue, XUE, Fei, NI, Haiyan

33: CN 31: 202311530463.4 32: 2023-11-16

**54: DIPHENYL ETHER HERBICIDE DEGRADING BACTERIUM OFF-3, MICROBIAL INOCULUM AND ENZYME PREPARATION DERIVED THEREFROM, AND APPLICATIONS**

00: -

The present invention relates to the field of microbial remediation of environmental pollution, and particularly discloses a diphenyl ether herbicide degrading bacterium OFF-3, a microbial inoculum and an enzyme preparation derived therefrom, and applications. The diphenyl ether herbicide degrading bacterium OFF-3 provided by the present invention is preserved in the China General Microbiological Culture Collection Center on July 25th, 2023, with preservation number of CGMCC NO.28014 and the classification name of *Micrococcus luteus*. The OFF-3 provided by the present invention can effectively degrade oxyfluorfen, and the microbial inoculum and the enzyme preparation prepared by the strain can degrade the residual oxyfluorfen in soil by 60% or above in a short time, such that the problem of the harm of the oxyfluorfen to the soil, water and other environments can be solved to a certain extent.

21: 2024/08685. 22: 2024/11/15. 43: 2025/05/28

51: A61F

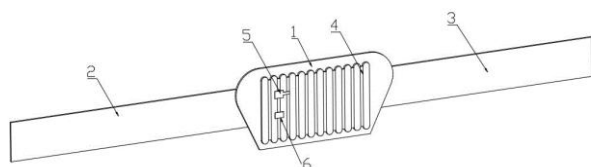
71: SHOUGUANG HOSPITAL OF T.C.M

72: Baoyong Lv, Jianquan Yu, Xiaoxiang Hou

**54: DEVICE FOR PRESSURE BANDAGING AFTER GREAT SAPHENOUS VEIN STRIPPING SURGERY**

00: -

A device for pressure bandaging after great saphenous vein stripping surgery, comprising a bandage; a first fixing bandage and a second fixing bandage are symmetrically connected at both ends of the bandage; wherein a pressure-increasing component is provided on the bandage; a pressure sensor and a temperature sensor are provided on an inner wall of the pressure-increasing component, the pressure-increasing component comprises multiple elliptical air bag bands and multiple rectangular air bag bands, and the elliptical air bag bands and the rectangular air bag bands are connected and provided in an alternating manner; an inflation port is provided on the pressure-increasing component, and the inflation port is used for connecting an external inflation pump. It can apply pressure to the pressure-increasing component as needed during use, that is, to apply pressure to multiple elliptical airbag bands and multiple rectangular airbag bands through the inflation port to achieve the wrapping effect; among them, the pressure sensor can detect the pressure on the patient's affected area in real time, keeping the patient's wound dressing position in a comfortable state, and also observing the magnitude of pressure on the patient's dressing area in real time.



21: 2024/08686. 22: 2024/11/15. 43: 2025/05/28

51: A61M

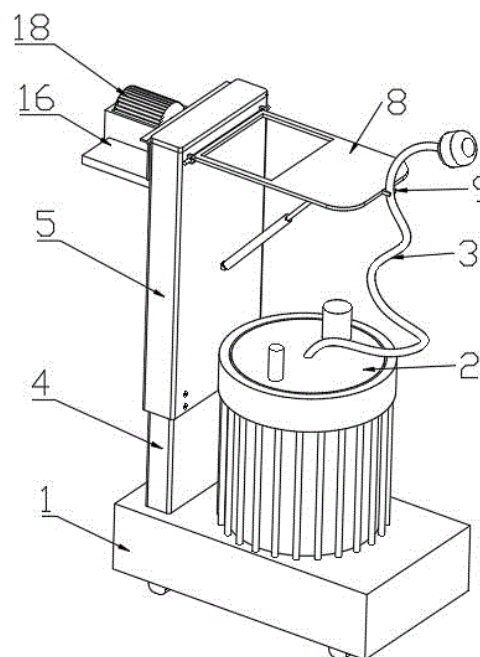
71: Yichang Central People's Hospital (First Clinical Medical College of Three Gorges University, Central People's Hospital Affiliated to Three Gorges University)

72: Mi Zhang

#### **54: LUNG CLEARING AND SPUTUM REMOVAL DEVICE FOR RESPIRATORY MEDICINE**

00: -

A lung clearing and sputum removal device for respiratory medicine, comprising a support base and a sputum suction device; the sputum suction device is placed on the support base, and a sputum suction pipeline is provided on the sputum suction device; wherein an automatic lifting device is provided on a side of the support base, and the automatic lifting device comprises a first support part, a second support part, an adjusting screw rod, a sliding component and a driving motor; the second support part is sleeved on a top outer side of the first support part, the output end of the driving motor is connected to the adjusting screw rod through a gear component; the sliding component is cooperatively connected to the adjusting screw rod; the bottom end of the adjusting screw rod is rotatably connected to the bottom end of the first support part; the side of the sliding component is fixedly provided on an inner side wall of the second support part. The invention adopts an adjustable angle support plate to support and fix the sputum suction tube; the angle of the suction tube can be adjusted as needed during use, freeing the hands of medical staff and providing convenience for medical staff.



21: 2024/08688. 22: 2024/11/15. 43: 2025/05/26

51: G01G

71: Aleksey Gennadevich Pridorozhnyi

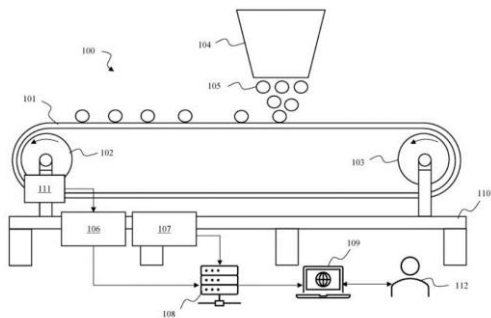
72: Aleksey Gennadevich Pridorozhnyi

33: RU 31: 2024115209 32: 2024-06-04

#### **54: METHOD AND DEVICE FOR AUTOMATED MASS OF THE WEIGHT CALCULATION TRANSPORTED BY A CONVEYOR**

00: -

Invention relates to weighing equipment, in particular to means and methods of measuring weight of cargo transported by belt conveyor. Method comprises steps of: a) obtaining data of measuring the traction force generated by the drive motor of the belt conveyor; b) obtaining conveyor belt acceleration data, c) performing the obtained data processing at steps a)-b), during which the accelerating traction force causing the accelerated movement of the conveyor belt is determined; determining belt acceleration caused by accelerating traction force; weight of cargo on conveyor belt is determined with allowance for moving weight of conveyor. Results of calculations obtained at step c) are recorded in computer memory and/or transmitted to external device. Device realizes operation according to stages of methods.



21: 2024/08689. 22: 2024/11/15. 43: 2025/05/30

51: B65D

71: Aleksey Gennadevich Pridorozhnyi

72: Pridorozhnyi Aleksey Gennadevich

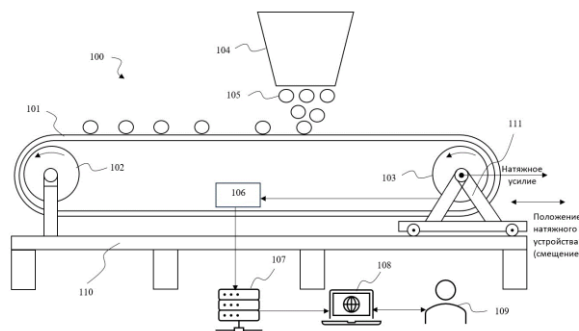
33: RU 31: 2024119958 32: 2024-07-16

**54: A METHOD AND SYSTEM FOR AUTOMATED DETERMINATION OF THE OCCURRENCE OF AN ABNORMAL SOURCE OF CONCENTRATED RESISTANCE TO THE MOVEMENT OF A CONVEYOR BELT BY TENSION**

00: -

The present technical solution relates to the field of computer technology, in particular, to a method and system for automated determination of the occurrence of an abnormal source of concentrated resistance to the movement of a conveyor belt, using the analysis of tension force measurements on a tensioning device of a conveyor belt. The technical result is an increase in the accuracy of determining the abnormal source of concentrated resistance to the movement of the conveyor belt as a result of an emergency jamming of a foreign ore-collecting object or a piece of ore in the belt, leading to damage to the belt, in particular a longitudinal cut (gust) of the conveyor belt. In a preferred embodiment of the invention, a method is proposed for determining the occurrence of an abnormal source of concentrated resistance to the movement of a conveyor belt, performed using a computing device connected to at least one device for measuring the magnitude of the tensioning force on a tensioning device of a belt conveyor, while the method contains steps in which: data are obtained for measuring the magnitude of the tensioning force on a tensioning device of a belt conveyor from at least one tension force measuring device; using a computing device, the measurements obtained in step a) are processed, during which they are compared with at least one reference value of the

tensioning force on the tensioning device of the conveyor belt and / or with at least one reference pattern of the tensioning force on the tensioning device of the conveyor belt; the occurrence of an abnormal source of concentrated resistance to the movement of the conveyor belt is determined if, in step b), a deviation of the measurement data of the tension force on the belt conveyor tensioner is detected from at least one reference value of the tension force on the belt conveyor tensioner and/or compliance with at least one reference pattern of tension force on the belt conveyor tensioner, indicating the occurrence of an abnormal source of concentrated resistance to the movement of the conveyor belt, and/or deviations from one or more reference patterns of tension force on the tensioner of the conveyor belt, corresponding to the trouble-free operation of the conveyor belt; record data on the detected abnormal source of concentrated resistance to the movement of the conveyor belt in the memory of the computing device and/or transmit them to an external device.



21: 2024/08690. 22: 2024/11/15. 43: 2025/05/30

51: B65G

71: Aleksey Gennadevich Pridorozhnyi

72: Aleksey Gennadevich Pridorozhnyi

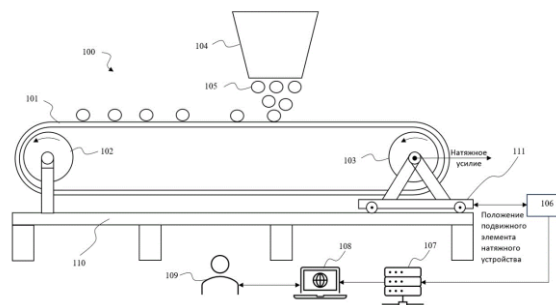
33: RU 31: 2024123408 32: 2024-08-14

**54: A METHOD AND SYSTEM FOR AUTOMATED DETERMINATION OF THE OCCURRENCE OF AN ABNORMAL SOURCE OF CONCENTRATED RESISTANCE TO THE MOVEMENT OF A CONVEYOR BELT USING AN OFFSET**

00: -

The present technical solution relates to the field of computer technology, in particular, to a method and system for automated determination of the occurrence of an abnormal source of concentrated resistance to the movement of a conveyor belt, using

the analysis of measurements of the position of a movable element of a tensioning device of a conveyor belt. The technical result is an increase in the accuracy of determining the abnormal source of concentrated resistance to the movement of the conveyor belt as a result of an emergency jamming of a foreign ore-collecting object or a piece of ore in the belt, leading to damage to the belt, in particular a longitudinal cut (gust) of the conveyor belt. In a preferred embodiment of the invention, a method is proposed for determining the occurrence of an abnormal source of concentrated resistance to the movement of a conveyor belt, performed using a computing device connected to at least one device for measuring the position of a movable element of a belt conveyor tensioner, while the method contains steps in which: data are obtained for measuring the position of a movable element of a belt conveyor tensioner from at least one position measuring device; processing of the obtained measurements is performed using a computing device, during which they are compared with at least one reference value of the position of the movable element of the belt conveyor tensioner and / or with at least one reference pattern of the position of the movable element of the belt conveyor tensioner; the occurrence of an abnormal source of concentrated resistance to the movement of the conveyor belt is determined if the measurement data of the position of the movable element of the belt conveyor tensioner is detected from at least one reference value of the position of the movable element of the belt conveyor tensioner and/or compliance with at least one reference pattern of the position values of the movable element of the belt conveyor tensioner, indicating the occurrence of an abnormal source of concentrated resistance to the movement of the conveyor belt, and/or a deviation from the reference patterns of the position values of the movable element of the tensioner of the conveyor belt, corresponding to the trouble-free operation of the conveyor belt; data on the identified abnormal source of concentrated resistance to the movement of the conveyor belt is recorded in the memory of the computing device and/ or transmitted to an external device.



21: 2024/08692. 22: 2024/11/15. 43: 2025/05/28

51: A01G

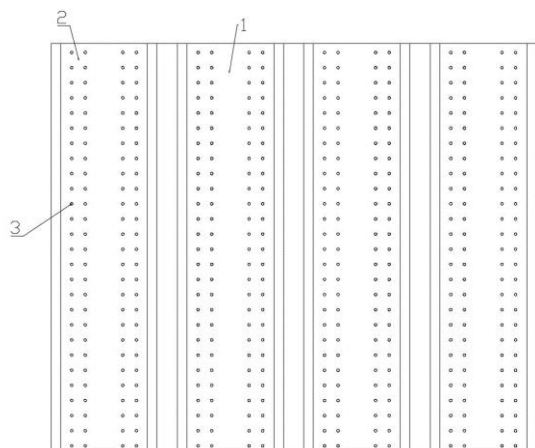
71: Xingfu Zhao

72: Qi Zhao, Xingfu Zhao

# **54: LARGE RIDGE TILLAGE METHOD FOR CORN PLANTING**

00: -

A large ridge tillage method for corn planting, includes land preparation, application of base fertilizer, watering, sowing, intertillage and topdressing, and pest and disease control, wherein on the basis of land preparation and leveling, ridges are made mechanically, and large ridges are made at an equal distance with a width of 190cm~ 200cm, the height of the ridge body of the large ridge is 22cm~28cm, the width of the ridge platform of the large ridge is 152cm~158cm, two planting areas are formed on both sides of the ridge platform, each planting area is provided with two rows of planting holes, the row spacing between the two rows of planting holes is 31cm~ 34cm, the hole spacing is 25cm~ 30cm, the distance between adjacent planting holes from the two planting areas is 58cm~ 62cm, the two rows of planting holes within the planting area on the ridge platform divide the planting area into three equal parts, when creating the large ridges with equal widths, specially formulated corn fertilizer is applied simultaneously, corn seeds are sown when the soil is completely thawed, the soil temperature at the tillage layer, which is 5~ 10cm below the surface, reaches 5°C.



21: 2024/08693. 22: 2024/11/15. 43: 2025/05/30  
51: B65G

71: Aleksey Gennadevich Pridorozhnyi

72: Aleksey Gennadevich Pridorozhnyi

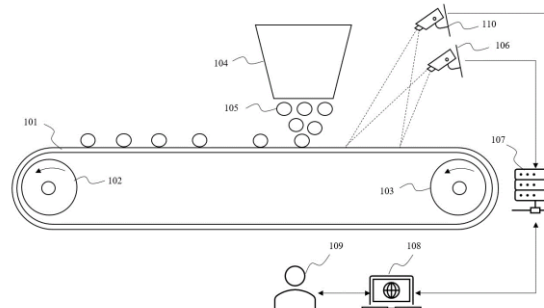
33: RU 31: 2024119657 32: 2024-07-12

**54: A METHOD AND SYSTEM FOR AUTOMATED DETERMINATION OF AN ABNORMAL SOURCE OF CONCENTRATED RESISTANCE TO THE MOVEMENT OF A CONVEYOR BELT BY TEMPERATURE DISTRIBUTION**

00: -

The present technical solution relates to the field of computer technology, in particular, to the method and system of automated monitoring of the conveyor belt condition. The technical result is to determine the presence of an abnormal source of concentrated resistance to the movement of the conveyor belt by analyzing the temperature distribution on the thermogram. The technical result is achieved by implementing a method for automated determination of an anomalous source of concentrated resistance to the movement of a conveyor belt, performed using a computing device connected to at least one infrared camera, and containing steps in which: a sequence of frames is obtained from at least one infrared camera positioned in such a way as to obtain thermal images of the surface of the conveyor belt tapes; a temperature distribution is obtained for thermograms obtained from thermal image frames of the conveyor belt surface; processing of the obtained thermal image frames is performed, during which the temperature distribution for the thermogram of the obtained thermal image frame of the conveyor belt surface is compared with at least one reference temperature distribution or a specified reference value of at least one temperature distribution parameter; the presence of an abnormal

source of concentrated resistance to the movement of the conveyor belt is determined if the value of one or more temperature distribution parameters is different from the specified reference value for one or more temperature distribution parameters and/or the temperature distribution on the thermogram is different from one or more reference temperature distributions corresponding to the operation of the conveyor belt in normal mode, or corresponds to at least one reference temperature distribution, indicating the occurrence of an abnormal source of concentrated resistance to the movement of the conveyor belt; data on detected abnormal sources of concentrated resistance to the movement of the conveyor belt are recorded in the memory of the computing device and/or transmitted to an external device.



21: 2024/08694. 22: 2024/11/15. 43: 2025/05/28  
51: E21D

71: Kunming University of Science and Technology  
72: Yanhui Guo, Mingda Yang, Zewen Zhang, Bingqing Ma, Xiaobing Fu, Guobao Li, Jinhui Sun, Hui Li, Chun Zhu, Hanhua Xu, Wanbo Zheng, Jun Wang, Wei Bi

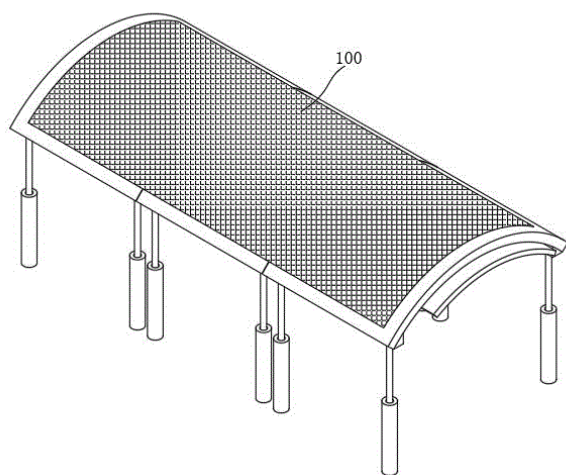
**54: A ROADWAY SUPPORT STRUCTURE AND ITS CONSTRUCTION METHOD**

00: -

The present application provides a roadway support structure and its construction method, including a support mechanism. The support mechanism comprises an adjustable support component and a protective component located at the top end of the support component. The support component and the protective component are detachably connected, and an inflatable component is embedded in the upper surface of the protective component. The support component can be adjusted in length and height according to the height and shape of the



roadway, and the inflatable component can closely fit the uneven structure at the top of the roadway when inflated. This application relates to the technical field of roadway support. The roadway support structure includes an adjustable support component and a protective component connected to the support component, with an inflatable component embedded in the upper surface of the protective component. During use, the protective component makes direct contact with the top of the roadway, and when the inflatable component is inflated, it can closely fit the uneven structure at the top of the roadway, thereby ensuring that the support structure adheres closely to the top of the roadway, effectively preventing collapse issues.



21: 2024/08713. 22: 2024/11/15. 43: 2025/05/28

51: A61K; C07H

71: MEDXCELL SA

72: PASSEMARD, Solène, GERBER, Sandrine,

NOVERRAZ, François, ROBIN, Baptiste

33: EP 31: 22173849.5 32: 2022-05-17

**54: TREHALOSE-BASED SURFACTANTS**

00: -

Provided herein are compounds that function as surfactants and/or excipients, methods of producing such compounds, methods of using such compounds and compositions comprising such compounds preferably in combination with one or more additional agents or therapies.

21: 2024/08716. 22: 2024/11/15. 43: 2025/05/20

51: A61H

71: The First Affiliated Hospital of Henan University of CM

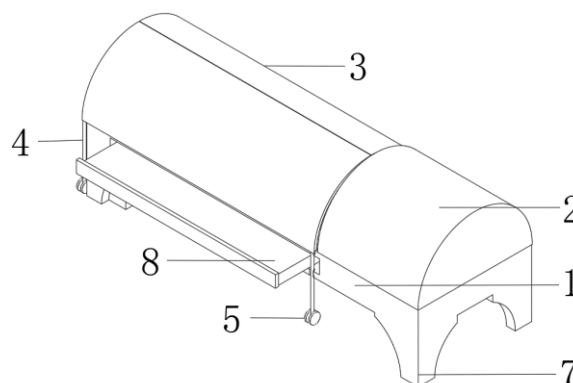
72: Ge Beibei, Zhang Zhaoyang, Ma Chao

33: CN 31: 202311573506.7 32: 2023-11-23

**54: MERIDIAN MASSAGE DEVICE**

00: -

The present invention relates to the technical fields of meridian massage devices, and provides a meridian massage device. The device includes a meridian massage bed, a head sealing cover and meridian massage covers. A horizontal adjusting mechanism is arranged at the exterior of the meridian massage bed. The horizontal adjusting mechanism includes on-off motors, a opening and shutting notch, a bottom gear, a transmission belt and a controlling gear. T-shaped guiding rails are fixedly connected to the exterior of the meridian massage bed, a supporting base is fixedly connected to bottoms of the supporting columns, and a reciprocating mechanism is arranged at an exterior of the supporting base. The reciprocating mechanism includes a reciprocating motor, a main driving gear, a middle bearing gear, a reciprocating half gear, and a transmission gear. A reciprocating movable frame is movably connected to the exterior of the supporting base, and the reciprocating movable frame is symmetrically disposed with reciprocating tooth rows. Through the above structure, the present invention enables a massage roller to reciprocate within a range, ensure comprehensive massage within the range, avoiding manual opening and closing of a cabin body, and nursing patients in the cabin body through a fumigation plate at a bottom of the cabin body and the like.



21: 2024/08727. 22: 2024/11/18. 43: 2025/05/28

51: F03D

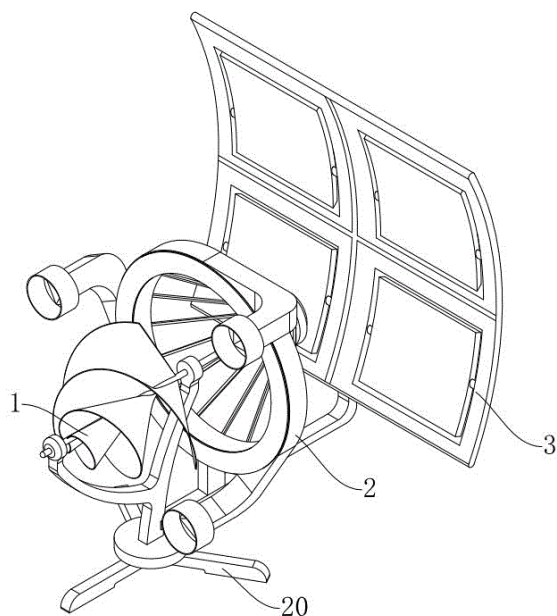
71: Chunlei Xu

72: Chunlei Xu

**54: WIND POWER GENERATION DEVICE WITH AUTOMATIC AIRFLOW BOOSTING**

00: -

The invention discloses a wind power generation device with automatic airflow boosting, comprising a rose-shaped wind power generation mechanism, a boost limiting device and a wind direction regulator, wherein the base of the rose-shaped wind power generation mechanism is installed on the ground, the boost limiting device is connected to the rose-shaped wind power generation mechanism, and the wind direction regulator is fixedly connected to the rose-shaped wind power generation mechanism. The invention belongs to the technical field of wind power generation, and in particular relates to a wind power generation device with automatic airflow boosting. The overall equipment of the invention is small, and can use the surrounding air for wind power generation, while promoting the boost of the central wind power generation equipment.



21: 2024/08728. 22: 2024/11/18. 43: 2025/05/28

51: H05K

71: SKVORTSOVA Tatiana Viktorovna

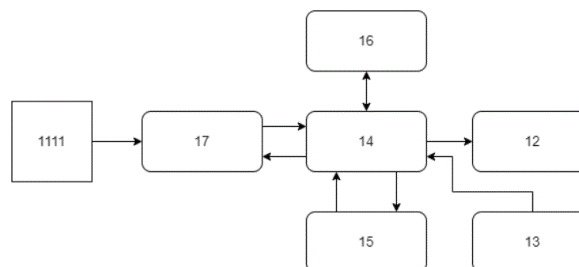
72: SKVORTSOVA Tatiana Viktorovna, LYALYUK Dmitry Mikhailovich

33: RU 31: 2024131436 32: 2024-10-18

**54: METHOD FOR CONTROLLING SOLDERED JOINTS ON A BOARD USING A DEVICE WITH A TRANSMITTER**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A method for controlling the soldered connection on the board using a device with a transmitter is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08729. 22: 2024/11/18. 43: 2025/05/28

51: G01R

71: SKVORTSOVA Tatiana Viktorovna

72: SKVORTSOVA Tatiana Viktorovna, LYALYUK Dmitry Mikhailovich

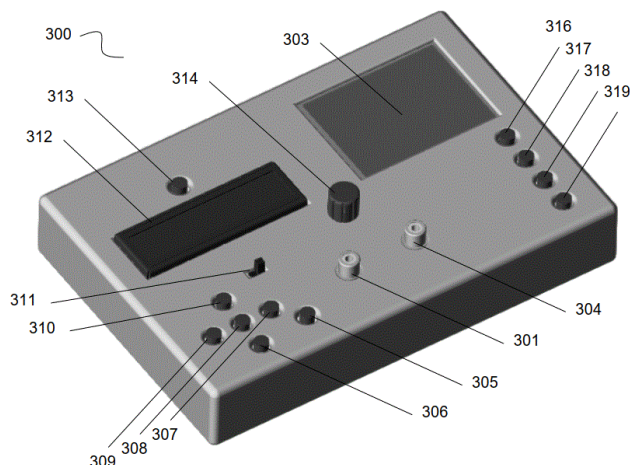
33: RU 31: 2024131438 32: 2024-10-18

**54: DEVICE FOR GENERATING AND/OR MEASURING A SIGNAL**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A device for generating and/or measuring a signal is proposed. The technical result achieved with the claimed technical

solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08730. 22: 2024/11/18. 43: 2025/05/28

51: G01R

71: SKVORTSOVA Tatiana Viktorovna

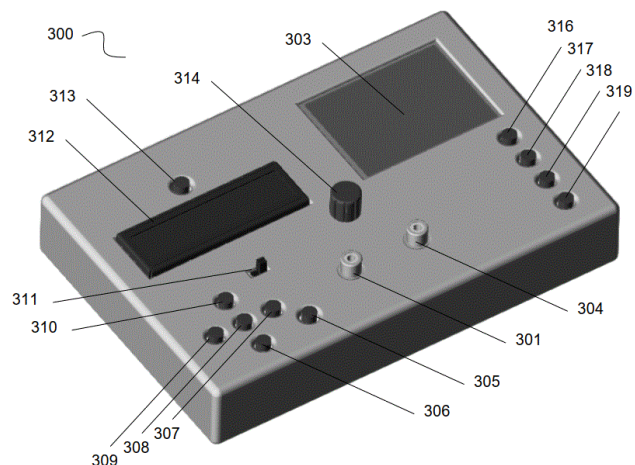
72: SKVORTSOVA Tatiana Viktorovna, LYALYUK Dmitry Mikhailovich

33: RU 31: 2024131439 32: 2024-10-18

#### **54: METHOD FOR MEASURING SIGNALS**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A method for measuring signals is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08731. 22: 2024/11/18. 43: 2025/05/28

51: G01R

71: SKVORTSOVA Tatiana Viktorovna

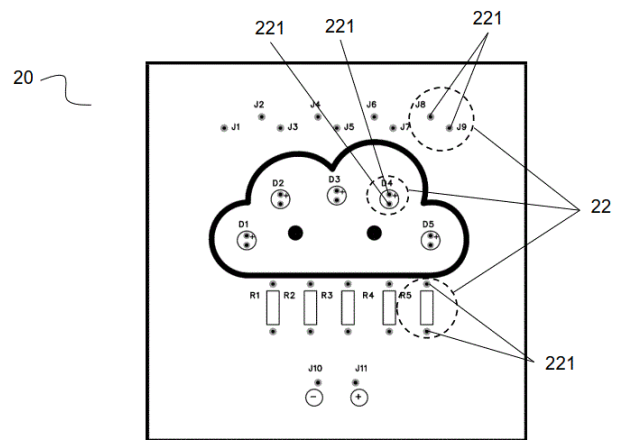
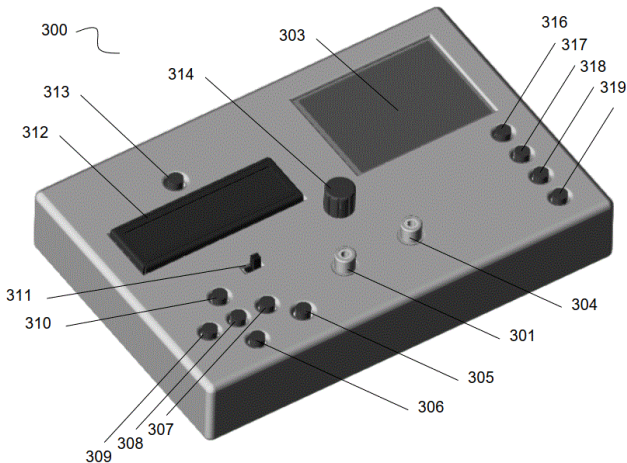
72: SKVORTSOVA Tatiana Viktorovna, LYALYUK Dmitry Mikhailovich

33: RU 31: 2024131440 32: 2024-10-18

#### **54: KIT FOR MEASURING SIGNALS**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A kit for measuring signals is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



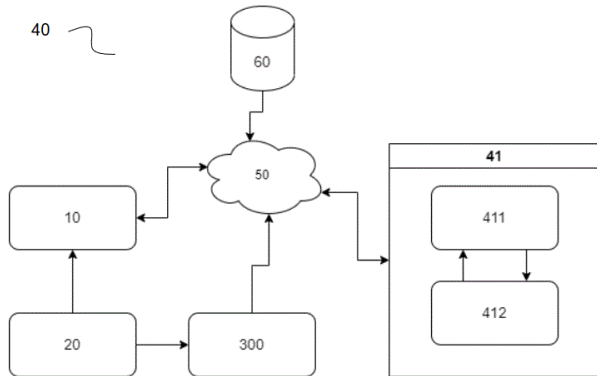
21: 2024/08732. 22: 2024/11/18. 43: 2025/05/28  
 51: H05K  
 71: SKVORTSOVA Tatiana Viktorovna  
 72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
 Dmitriy Mikhailovich  
 33: RU 31: 2024131432 32: 2024-10-18  
**54: KIT FOR CONTROLLING SOLDERED JOINTS  
 ON A BOARD**

00: -  
 The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A set for controlling the soldered connection on the board is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.

21: 2024/08733. 22: 2024/11/18. 43: 2025/05/28  
 51: H05K  
 71: SKVORTSOVA Tatiana Viktorovna  
 72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
 Dmitriy Mikhailovich  
 33: RU 31: 2024131433 32: 2024-10-18  
**54: SYSTEM FOR CONTROLLING SOLDERED  
 JOINTS ON A BOARD**

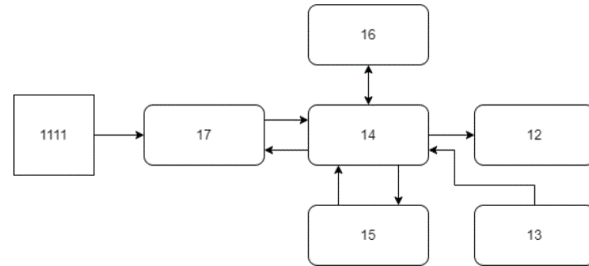
00: -  
 The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A system for controlling the soldered connection on the board is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.





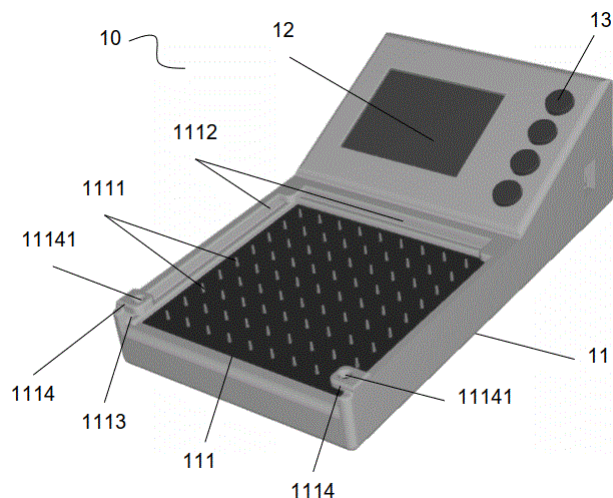
21: 2024/08734. 22: 2024/11/18. 43: 2025/05/28  
 51: H05K  
 71: SKVORTSOVA Tatiana Viktorovna  
 72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
 Dmitriy Mikhailovich  
 33: RU 31: 2024131434 32: 2024-10-18  
**54: MACHINE READABLE MEDIUM FOR A  
 DEVICE FOR CONTROLLING SOLDERED JOINTS  
 ON A BOARD**

00: -  
 The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A machine readable medium for a device for controlling the soldered connection on the board is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08735. 22: 2024/11/18. 43: 2025/05/28  
 51: H05K  
 71: SKVORTSOVA Tatiana Viktorovna  
 72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
 Dmitriy Mikhailovich  
 33: RU 31: 2024131430 32: 2024-10-18  
**54: DEVICE FOR CONTROLLING SOLDERED  
 JOINTS ON A BOARD**

00: -  
 The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A device for controlling the soldered connection on the board is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.





21: 2024/08736. 22: 2024/11/18. 43: 2025/05/28  
51: H05K

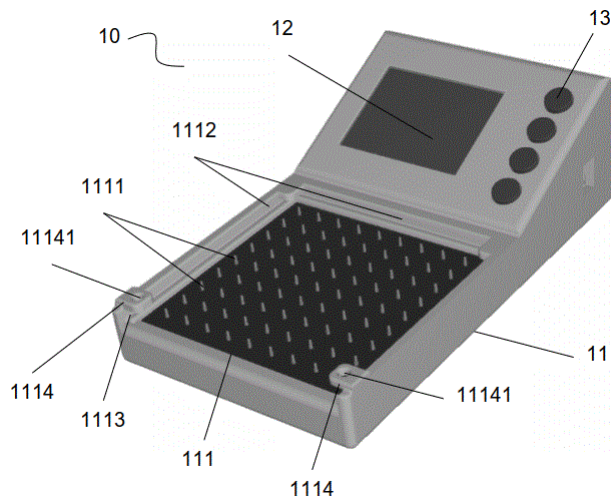
71: SKVORTSOVA Tatiana Viktorovna  
72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
Dmitriy Mikhailovich

33: RU 31: 2024131431 32: 2024-10-18

#### **54: METHOD FOR CONTROLLING SOLDERED JOINTS ON A BOARD**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A method for controlling the soldered connection on the board is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08737. 22: 2024/11/18. 43: 2025/05/28  
51: H05K

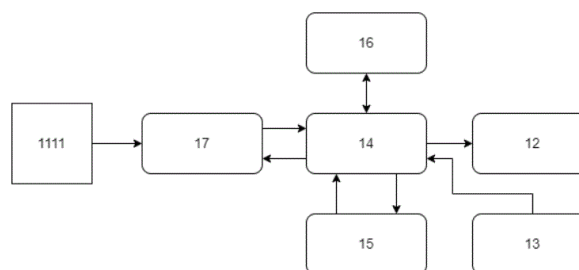
71: SKVORTSOVA Tatiana Viktorovna  
72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
Dmitriy Mikhailovich

33: RU 31: 2024131435 32: 2024-10-18

#### **54: DEVICE FOR CONTROLLING SOLDERED JOINTS ON A BOARD WITH A TRANSMITTER**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A device for controlling the soldered connection on the board with a transmitter is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08738. 22: 2024/11/18. 43: 2025/05/28  
51: H05K

71: SKVORTSOVA Tatiana Viktorovna  
72: SKVORTSOVA Tatiana Viktorovna, LYALYUK  
Dmitriy Mikhailovich

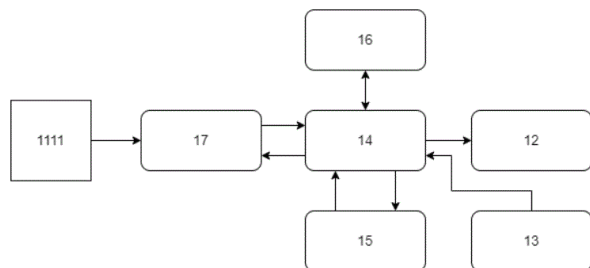
33: RU 31: 2024131437 32: 2024-10-18

#### **54: MACHINE READABLE MEDIUM FOR A DEVICE FOR CONTROLLING SOLDERED JOINTS ON A BOARD WITH A TRANSMITTER**

00: -

The technical solution relates to the field of control of printed circuit (printed circuit boards) assembly and can be used to control the correctness of the soldered connection on the board, as well as in training an untrained user in soldering. There is a need to provide easy-to-learn soldering kits and for studying soldered connections using various electronic components. A machine readable medium for a device for controlling the soldered connection on the board with a transmitter is proposed. The technical result achieved with the claimed technical solution, in addition to the implementation of the product and/or the method of its use, is a simplification of the design and ensuring ergonomics

and ease of use for an untrained user, such as, for example, but not limited to, a child.



21: 2024/08739. 22: 2024/11/18. 43: 2025/05/28  
51: B62J

71: VOLKOV Artem Maksimovich

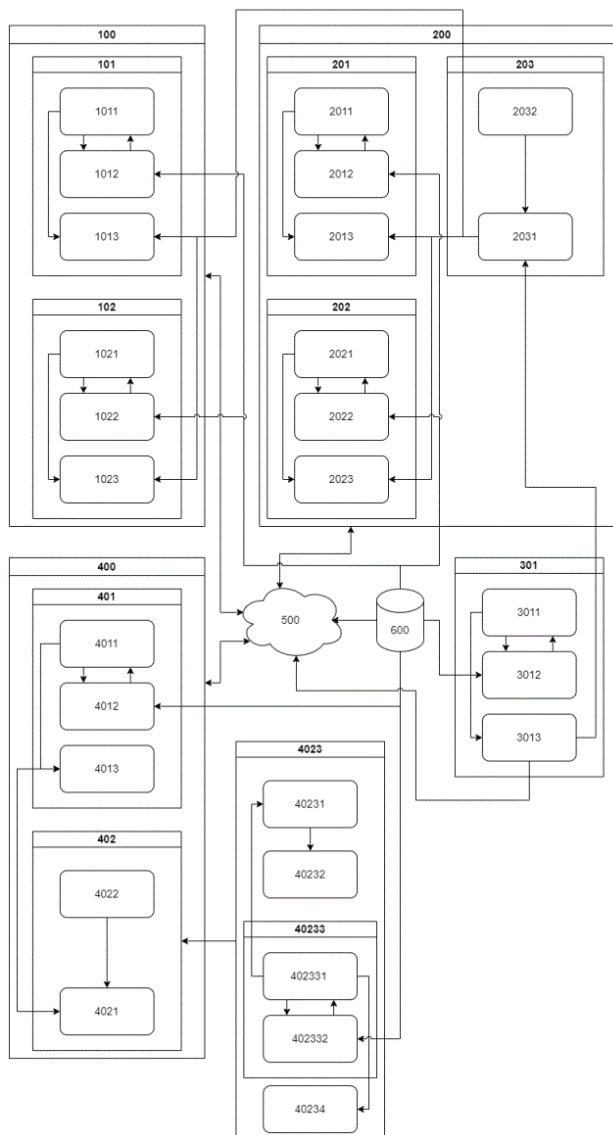
72: VOLKOV Artem Maksimovich

33: RU 31: 2024130475 32: 2024-10-10

#### **54: METHOD FOR TRAINING A MACHINE LEARNING MODEL**

00: -

The technical solution relates to the field of transport, in particular, to auxiliary devices and methods for collecting data for machine learning using vehicles, such as, for example, personal mobility devices (PMD). A method for training a machine learning model is proposed. There is a need to speed up the preparation of data suitable for machine learning and thus reduce the time it takes to prepare machine learning models trained on big data. The technical result achieved by implementing the claimed technical solution, in addition to the implementation of the product and/or method for its intended purpose, is an increase in the speed of preparing data suitable for machine learning, including an increase in the speed of preparing big data that can be used for machine learning. In some aspects, another technical result achieved is also an increase in road safety.



21: 2024/08740. 22: 2024/11/18. 43: 2025/05/28  
51: B62J

71: VOLKOV Artem Maksimovich

72: VOLKOV Artem Maksimovich

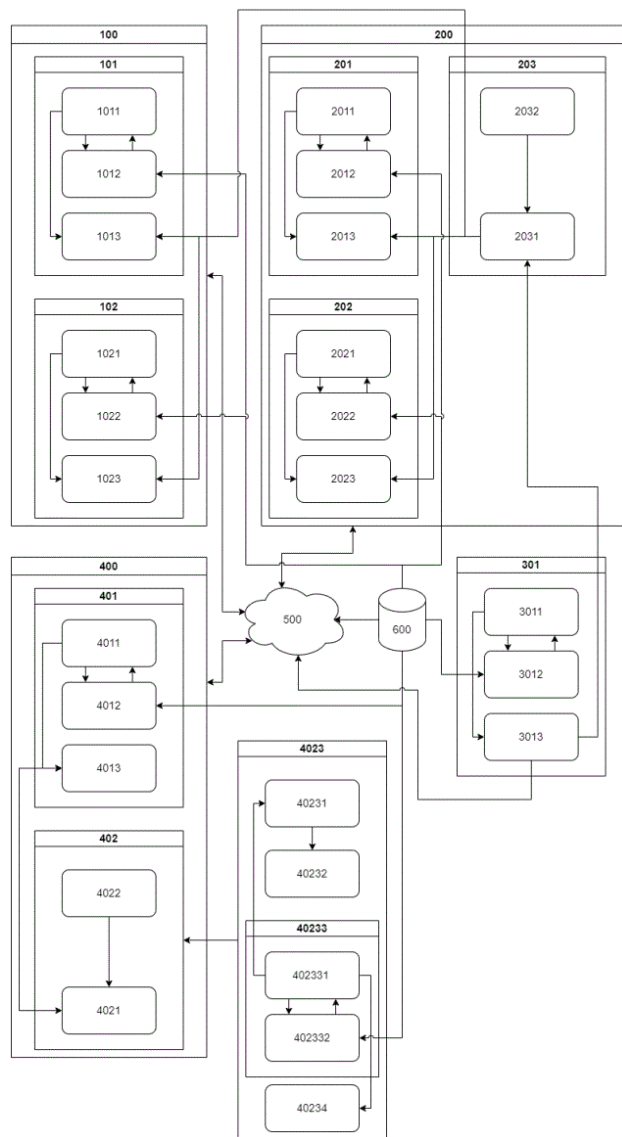
33: RU 31: 2024130479 32: 2024-10-10

#### **54: METHOD FOR DETERMINING PERMISSIBLE SPEED OF A VEHICLE**

00: -

The technical solution relates to the field of transport, in particular, to auxiliary devices and methods for collecting data for machine learning using vehicles, such as, for example, personal mobility devices (PMD). A method for determining a permissible speed of a vehicle is proposed. There is a need to speed up the preparation of data suitable for machine learning and thus reduce the time it takes to prepare machine learning models trained on

big data. The technical result achieved by implementing the claimed technical solution, in addition to the implementation of the product and/or method for its intended purpose, is an increase in the speed of preparing data suitable for machine learning, including an increase in the speed of preparing big data that can be used for machine learning. In some aspects, another technical result achieved is also an increase in road safety.



21: 2024/08742. 22: 2024/11/18. 43: 2025/05/28  
51: C05F  
71: HEILONGJIANG GREEN FOOD SCIENCE RESEARCH INSTITUTE, NORTHEAST AGRICULTURAL UNIVERSITY

72: LI, Fenglan, HE, Fumeng, FENG, Xu, WANG, Xuan, LI, Xiaozhong, TIAN, Miao, WANG, Xue, LIU, Dan

**54: MICROBIAL PREPARATION FOR PROMOTING ORYZA SATIVA ROOTING AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The present invention discloses a solid-state composite microbial inoculum for improving saline-alkali land as well as a preparation method and an application thereof. The main components of the solid-state composite microbial inoculum of the present invention include composite microorganisms and porous substances. Each of the raw materials in parts by weight includes 10-20 parts of the composite microorganisms and 80-90 parts of the porous substances. According to the present invention, the solid-state composite microbial inoculum is applied in combination with chemical fertilizer. When the chemical fertilizer is applied to crops planted in the saline-alkali land, the solid-state composite microbial inoculum is mixed with the chemical fertilizer evenly, and then applied to soil. An application rate of the solid-state composite microbial inoculum is 30-75 kg/hm<sup>2</sup> each time.

21: 2024/08743. 22: 2024/11/18. 43: 2025/05/28  
51: A01C; A01N; C12N

71: HEILONGJIANG GREEN FOOD SCIENCE RESEARCH INSTITUTE, NORTHEAST AGRICULTURAL UNIVERSITY

72: LI, Fenglan, WANG, Linlin, WANG, Xue, LI, Xiaozhong, HE, Fumeng, TIAN, Miao, LIU, Dan, FENG, Xu, FENG, Yanzhong, YUAN, Qiang, XU, Yongqing

**54: FISH PROTEIN FOLIAR BIO-ORGANIC FERTILIZER AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The present invention discloses a fish protein foliar bio-organic fertilizer as well as a preparation method and an application thereof. The main components of the fish protein foliar bio-organic fertilizer of the present invention include cooked fish meat, potassium dihydrogen phosphate, urea, compound probiotics and clean water. Each of the raw materials in parts by weight includes 5-25 parts of the cooked fish meat, 2-10 parts of the potassium dihydrogen phosphate, 2-5 parts of the urea, 5-60 parts of the compound probiotics and 750-1000

parts of the clean water. According to the present invention, bio-organic fertilizers sprayed on the foliage of crops may promote crop growth and improve crop yield.

21: 2024/08744. 22: 2024/11/18. 43: 2025/05/20  
51: E21B

71: Beijing Research Institute of Chemical Engineering and Metallurgy

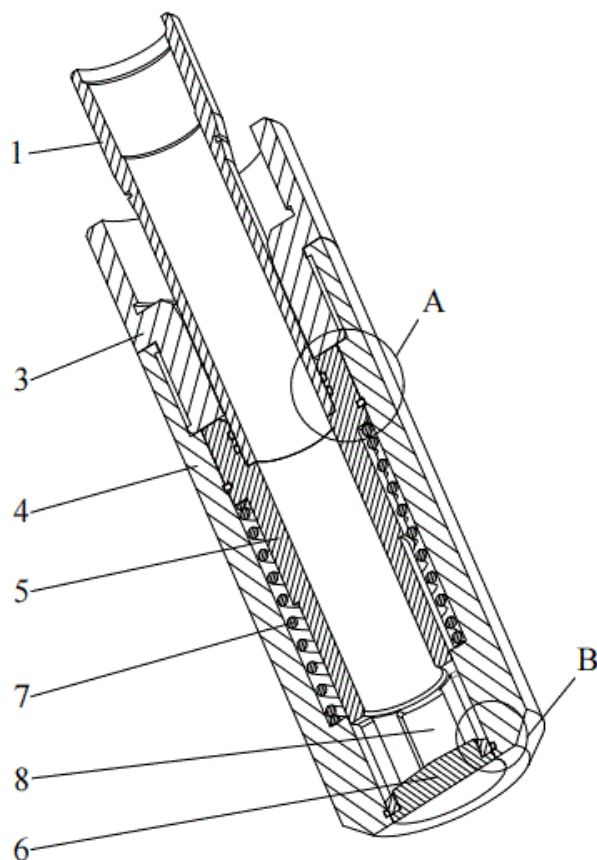
72: YUAN, Yuan, YANG, Lizhi, LI, Zhaokun, LI, Hongxing, ZHAO, Longhao, HE, Ke, LI, Xinghao, YANG, Rui

33: CN 31: 202410973606.7 32: 2024-07-19

#### **54: REVERSE GRAVEL PACKING APPARATUS AND METHOD**

00: -

Disclosed is a reverse gravel packing apparatus and method, including a gravel packing pipe plug and a gravel packing valve, where the gravel packing valve comprises a gravel packing valve adapter, a main valve body, a one-way valve, a plug, and an elastic member; the plug is connected to a lower end of the one-way valve and blocks a lower end port thereof; the one-way valve is slidably arranged in the main valve body; the elastic member is sleeved on the outside of the one-way valve and is located in the main valve body; the gravel packing valve adapter is connected to an upper end of the main valve body, and the two are in communication with each other internally.



21: 2024/08745. 22: 2024/11/18. 43: 2025/05/20  
51: G01N

71: Shanghai Zhongqiao Vocational And Technical University

72: Qin Xiaopei, Wu Youzhi, Shu Junxia, Wei Mengyue, Han Shuai

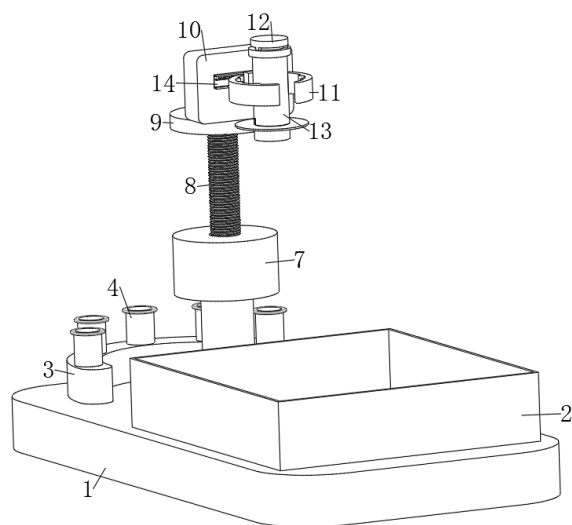
33: CN 31: 202311542062.0 32: 2023-11-20

#### **54: SAMPLING DEVICE FOR NON-SOLID FOOD**

00: -

The present invention relates to the technical field of food sampling, and in particular to a sampling device for non-solid food, including a sampling base. An interior of the sampling base is fixedly connected to a first motor, an exterior of the first motor is fixedly connected to a first gear, an exterior of the first gear is meshed and connected to an eighth gear, an exterior of the eighth gear is fixedly connected to a transmission mechanism. In the present invention, when the device is in use, a connecting block may be controlled to move downwards only through the transmission mechanism, thereby sampling the sample inside sampling box, avoiding manual sampling by personnel and contact with the sample, thus preventing the impact on the test results of the

sample. Moreover, by controlling the opening and closing of fixing clamps, the installation and disassembly efficiency of a sampling housing may also be effectively improved, which is highly efficient and convenient. Before sampling, the homogenizing fan blades in the sample box may also be controlled to rotate, enabling the food to be tested in the sampling box to be mixed evenly.



21: 2024/08746. 22: 2024/11/18. 43: 2025/05/20  
51: A46B

71: The First Affiliated Hospital of Xinxiang Medical University, Jiaozuo Second People's Hospital (The First Affiliated Hospital of Henan Polytechnic University)

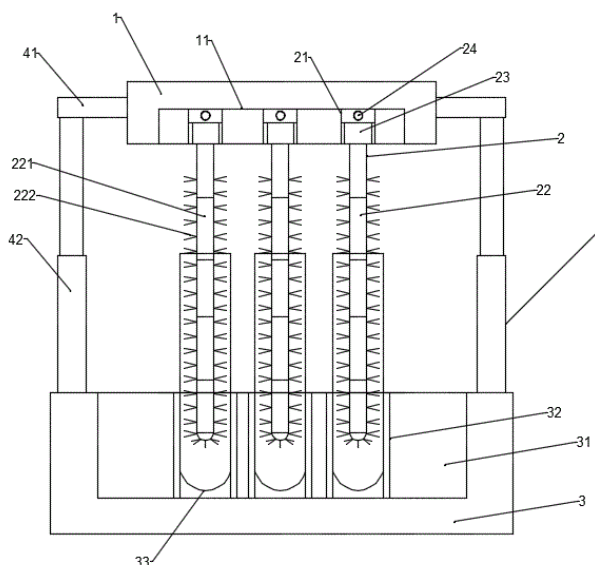
72: Mao Xiaona, Mu Yingying, Xu Liuyang, Wang Xiaoyin, Liu Yi

#### **54: MULTI-HEAD ELECTRIC TEST TUBE BRUSH CAPABLE OF ADJUSTING DISTANCE BETWEEN BRUSHES**

00: -

The present invention relates to the technical field of experimental auxiliary appliances, and in particular to a multi-head electric test tube brush capable of adjusting a distance between brushes. The present invention includes the following. A bottom of the supporting block is disposed with a through groove I. A plurality of groups of cleaning mechanisms uniformly arranged in the through grooves I. One of the cleaning mechanisms includes a slider clamped in the through groove I and slidably connected to the through groove I. A test tube brush is arranged at a bottom of the slider, and a driving part I is embedded in the slider. An output end of the driving part I is

connected with a test tube brush, and the driving part I is configured to drive the test tube brush to rotate. The present invention has advantages that not only can the test tubes be cleaned by electric rotation, but a plurality of the test tubes can also be cleaned at one time, which greatly improves the efficiency of test tube cleaning as a whole, saves time and is effortless. The sliders of the device can slide in the through groove I, the distance between the test tube brushes can be adjusted according to different specifications of the test tubes, and an application range is larger.



21: 2024/08747. 22: 2024/11/18. 43: 2025/05/20  
51: A61H

71: Anhui Vocational and Technical College

72: Wang Xiaoyun, Liang Li

33: CN 31: 202410492469.5 32: 2024-04-23

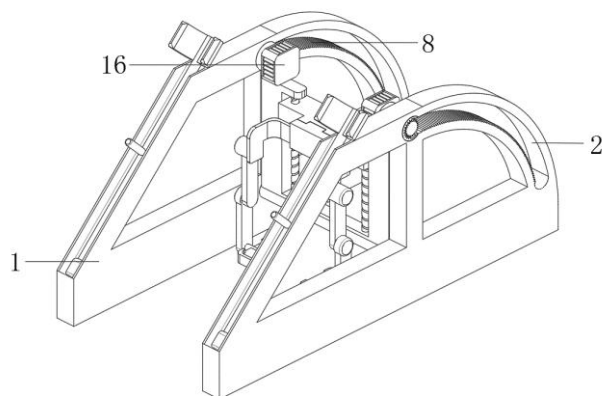
#### **54: EXOSKELETON REHABILITATION ROBOT FOR REHABILITATION ENGINEERING AND USING METHOD THEREFOR**

00: -

The present invention provides an exoskeleton rehabilitation robot for rehabilitation engineering and a using method therefor. Main body frames, an adjustment plate, a structural bin and hip protection frames are included. The main body frames and the adjustment plate are combined together to form an auxiliary wearing mechanism; the auxiliary wearing mechanism includes adjustment arc grooves disposed at exteriors of the main body frames, semi-toothed rings movably connected to interiors of the adjustment arc grooves, a middle adjustment shaft



fixedly connected to the exteriors of the main body frames, and adjustment motors fixedly connected to an exterior of the adjustment plate; the structural bin and the hip protection frames are combined together to form an auxiliary connection mechanism; the auxiliary connection mechanism includes a connector fixedly connected to an exterior of the structural bin, an external connector fixedly connected to exteriors of the hip protection frames, a height-adjustment motor fixedly connected to an interior of the connector and a connecting motor fixedly connected to an interior of the external connector; and an exoskeleton prosthesis is fixedly connected to the exterior of the hip protection frame. The present invention has the advantages of being able to change a body position state, facilitating patients to board the device, and being able to facilitate patients' needs to perform autonomous training or on-device training.



21: 2024/08748. 22: 2024/11/18. 43: 2025/05/21  
51: A01G

71: Zhejiang Normal University

72: ZHU, Pingyang, SONG, Jiabao, FENG, Weice, WANG, Xinpeng, CHEN, Huihui, YAO, Xiaoming, CHI, Yongqing, XU, Hongxing

#### **54: ECOLOGICAL REGULATION SYSTEM FOR RICE PESTS**

00: -

The present invention belongs to the technical field of biological control of crop pests, and in particular to an ecological regulation system for rice pests. The ecological regulation system for rice pests provided by the present invention provides nutrient sources and shelter places for arthropod natural enemies, regulates arthropod natural enemies in rice fields, improves population quantity of parasitic and

predatory natural enemies, prolongs longevity of natural enemies, and enhances the harm control ability of the natural enemies, controlling population density of pests in seedling stage and tillering stage, and performing ecological regulation on rice field pests.

21: 2024/08749. 22: 2024/11/18. 43: 2025/05/20  
51: A23B; A23L

71: LANZHOU UNIVERSITY

72: Ying ZHANG, Zhenchuang TANG, Mingqing ZHANG, Diyan WU, Runtong CHEN, Tian QIU, Shu LUO, Qi ZHAO, Ruochen WANG

#### **54: THE INVENTION OF A FRUIT AND VEGETABLE PRESERVATIVE AND THE PREPARATION METHOD**

00: -

The invention relates to a fruit and vegetable preservation agent and a preparation method thereof, belonging to the technical field of fruit and vegetable preservation. The invention provides a fruit and vegetable fresh-keeping agent, which comprises the following components: *Lactobacillus delbrueckii* bacterial solution, pomelo peel extract and apple peel extract; the volume ratio of the three components is 2-4: 1-2: 1-2. The fruit and vegetable preservative prepared according to the method of the invention can reduce the nutritional loss of fruits and vegetables in the storage process, and can prevent their spoiling and deterioration, prolong the fresh-keeping time of fruits and vegetables, and has low cost.

21: 2024/08750. 22: 2024/11/18. 43: 2025/05/20  
51: C02F; C12N

71: LANZHOU UNIVERSITY

72: Ying ZHANG, Runtong CHEN, Diyan WU, Mingqing ZHANG, Xiao MA, Tian QIU, Shu LUO, Zhenchuang TANG, Ruochen WANG

#### **54: THE INVENTION OF A MIXED BACTERIAL SOLUTION AND THE PREPARATION METHOD AND ITS APPLICATION**

00: -

This invention is related to the field of fresh-keeping technology of fruits and vegetables, in particular to a mixed bacterial solution and a preparation method and its application. The invention provides a mixed bacterial solution comprising fermentation broth of *Leuconostoc lactis*, *Bacillus velezensis* and *Bacillus amyloliquefaciens*; the volume ratio of the three

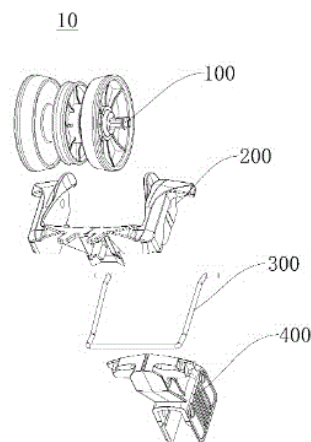
bacteria in the presented fermentation broth is 1:0.5-1.5:1-3. The mixed bacterial agent of the invention can effectively keep fruits and vegetables fresh with low cost.

21: 2024/08752. 22: 2024/11/18. 43: 2025/05/28  
51: B07C; B65G  
71: REEMOON TECHNOLOGY CO., LTD.  
72: ZHU, Er, ZHU, Yi  
33: CN 31: 202222434355.4 32: 2022-09-14

#### **54: FRUIT AND VEGETABLE SORTING AND CONVEYING DEVICE AND FRUIT AND VEGETABLE SORTING APPARATUS**

00: -

A fruit and vegetable sorting and conveying device (10) and a fruit and vegetable sorting apparatus, which relate to the technical field of fruit and vegetable apparatuses. The fruit and vegetable sorting and conveying device (10) comprises a roller assembly (100), a bracket (200) and a base (400). The roller assembly (100) is arranged on the bracket (200), the bracket (200) is movably connected to the base (400), the bracket (200) and the roller assembly (100) are jointly configured to bear fruit and vegetable, and the roller assembly (100) is further configured to roll the fruit and vegetable. The bracket (200) comprises a support portion (220) and two mounting arms (210), wherein two ends of the support portion (220) are respectively connected to the two mounting arms (210), and the roller assembly (100) is arranged between the two mounting arms (210). Each mounting arm (210) is provided with an avoidance step (212) to allow a strip brush (60) to extend thereinto, so that the distance between an end portion of the strip brush (60) and the axis of the roller assembly (100) is effectively reduced, thereby effectively reducing the distance between the strip brush (60) and the roller assembly (100) in a vertical direction. Therefore, fruit and vegetable can be effectively prevented from being stuck in gaps, thereby ensuring that the fruit and vegetable sorting and conveying device (10) stably conveys the fruit and vegetable, preventing the fruit and vegetable from being damaged due to falling, and ensuring that a sorting procedure of the fruit and vegetable is smooth.



21: 2024/08757. 22: 2024/11/18. 43: 2025/05/28  
51: H04N

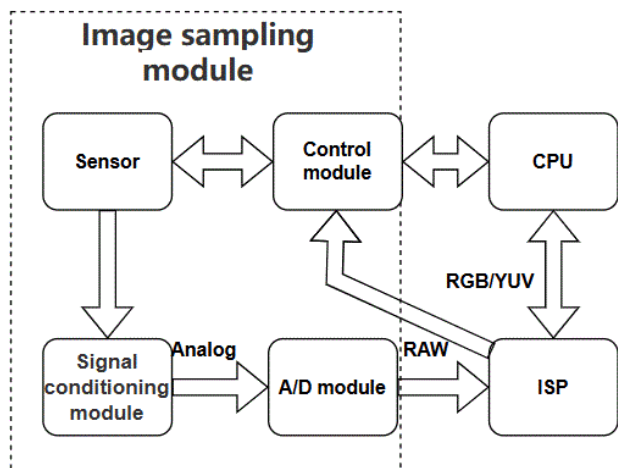
71: ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY

72: Zhang Pingjuan, Wang Hongyu, Feng Yichao, Guo Shijun

#### **54: AN IMAGE PROCESSING OPTIMIZATION DEVICE BASED ON RISC-V SOC**

00: -

The present invention discloses an image processing optimization device based on RISC-V SOC, comprising an image sampling module, an ISP chip image processing unit, and a processor. The image sampling module comprises an image sensor, a signal conditioning module, an analog-to-digital conversion module, and an image sensor control module. The input terminal of the signal conditioning module is used to receive analog electrical signals collected by the image sensor, and the output terminal of the signal conditioning module is connected to the ISP chip image processing unit through the analog-to-digital conversion module; the image sensor control module is used to receive control signals from the ISP chip image processing unit and processor to adjust the image sensor; the signal conditioning module includes sequentially connected signal amplifiers, differential converters, and denoising output devices. The input terminal of the signal amplifier is connected to the output terminal of the image sensor, and the output terminal of the denoising output device is connected to the input terminal of the analog-to-digital conversion module. The present invention can achieve efficient processing of image signals and improve system stability.



21: 2024/08769. 22: 2024/11/18. 43: 2025/05/22  
51: C12N

71: CHINA AGRICULTURAL UNIVERSITY

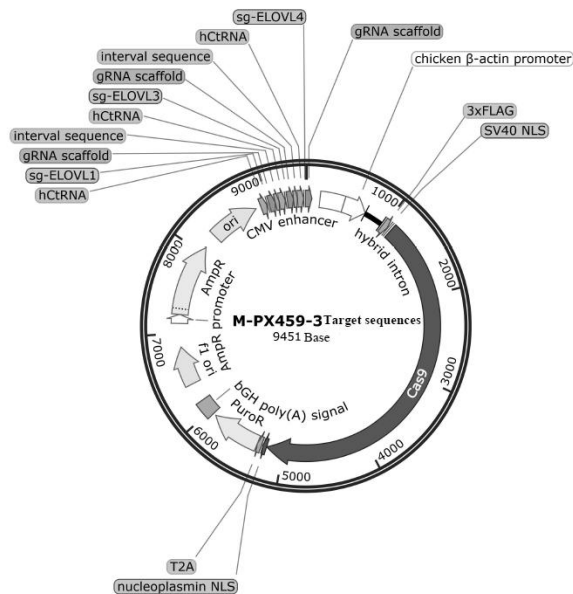
72: HOU, Zhuocheng, SUN, Dandan

33: CN 31: 202311819843.X 32: 2023-12-27

## 54: MULTIPLEX GENE EDITING METHOD BASED ON CRISPR/CAS9

00: -

The present application provides a multiplex gene editing method based on CRISPR/Cas9, using a multiplex gene editing plasmid M-PX459, and replacing a hU6 promoter with a plurality of hCtRNAs that has a nucleotide sequence of SEQ ID NO.1 on the basis of plasmid PX459 to form the multiplex gene editing plasmid M-PX459. In the present application, through replacing the original hU6 promoter with hCtRNA, M-PX459 may increase the number of target sequences within a limited plasmid length range to achieve the purpose of multiplex gene editing; and compared with PX459 plasmid for single gene knockout, it not only has the editing ability of multiplex gene, but also has the same editing efficiency.



21: 2024/08773, 22: 2024/11/19, 43: 2025/05/28

51: G06F

71: LIMITED LIABILITY COMPANY "ADDON"

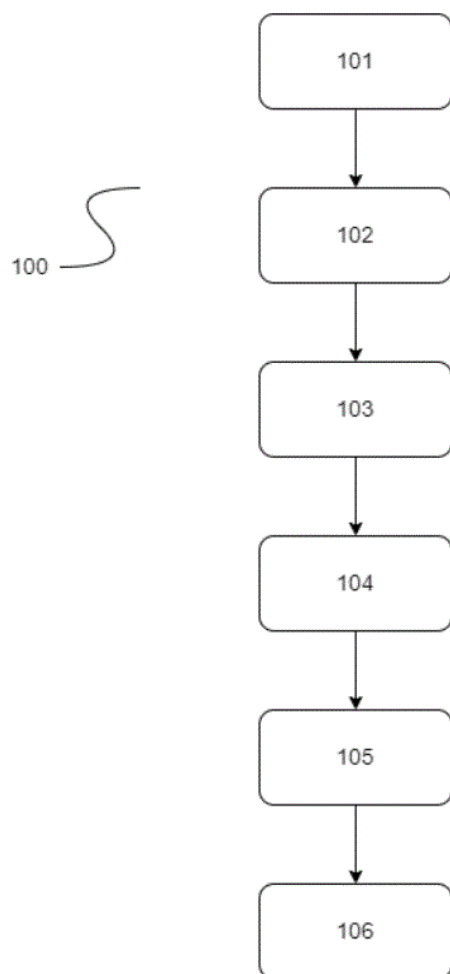
72: VETROV Dmitriy Viktorovich, POPOV Sergey  
Alekseevich, GIRIN Ivan Andreevich, BUROV Kirill  
Vitalievich

33: RU 31: 2024131168 32: 2024-10-17

#### 54: METHOD FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE WITH ADJUSTING PLAYBACK

00: -

The technical solution relates to the field of information technology, more specifically, to methods and techniques for creating extended reality (XR) scenes. There is a need to ensure the ability to create reliable and stable XR applications that allow for stable and reliable generation of an XR scene regardless of the operating system of the mobile user device. A method for generating an XR scene using web environment of a mobile user device with adjusting a playback is proposed. The technical result achieved by implementing the claimed technical solution, in addition to implementing the product and/or method for its intended purpose, is to ensure the reliability and stability of generating an XR scene using the web environment of a mobile user device. In some other aspects, the technical result achieved by implementing the claimed technical solution is also an increase in the stability of the XR scene.



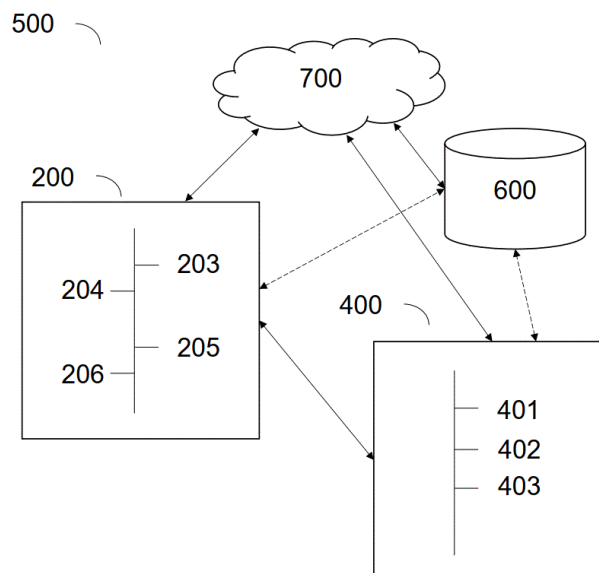
21: 2024/08774. 22: 2024/11/19. 43: 2025/05/28  
 51: F21L; G06F; G09G; H04R; H04W  
 71: SMARTPOINT LIMITED LIABILITY COMPANY  
 72: MOSALOVA Tatiana Nikolaevna,  
 KRAVCHENKO Artem Aleksandrovich  
 33: RU 31: 2024129107 32: 2024-09-30

#### **54: METHOD FOR CONTROL OF AN IOT DEVICE PLACED ON A VERTICAL SURFACE**

00: -

The proposed invention relates to the field of computer engineering and can be used to control electronic devices. A method for control of an IoT device placed on a vertical surface is proposed. The technical result achieved by implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogues and thus ensuring the rapid disconnection of the bracket and the device placed on it, while ensuring the usual reliability of placing the device on a vertical surface. Another technical result achieved by implementing the

claimed invention, in addition to the invention realizing its purpose, is also ensuring precise positioning of the device in space and ensuring a rapid change of its operating mode and/or settings.

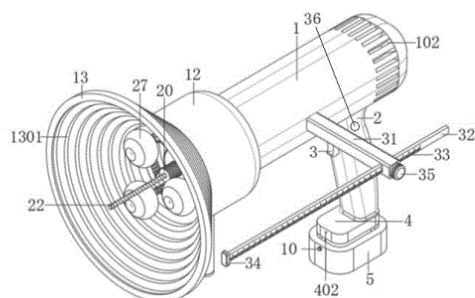


21: 2024/08775. 22: 2024/11/19. 43: 2025/05/28  
 51: B28D  
 71: Tongling Polytechnic  
 72: WANG, Wenjing

#### **54: WALL DRILLING MACHINE FOR BUILDING DECORATION**

00: -

Disclosed is a wall drilling machine for building decoration, including a body, motor brackets and a sealing bearing, wherein a grip is arranged at the right bottom end of the body, a start button and an extraction button are arranged on the grip, a base is fixedly connected to the bottom end of the grip, a battery component is connected to the bottom end of the base, a mounting chamber is arranged inside the body, a mounting cover is fixedly connected to the outer wall at the left end of the body, a funnel-shaped rubber dust hood is clamped at the left end of the mounting cover, and dust collection tanks are arranged in the inner wall of the funnel-shaped rubber dust hood. According to the present invention, the decoration operation is facilitated, and the dust can be collected and removed well.



21: 2024/08776. 22: 2024/11/19. 43: 2025/05/28

51: A61H

71: Huainan Normal University

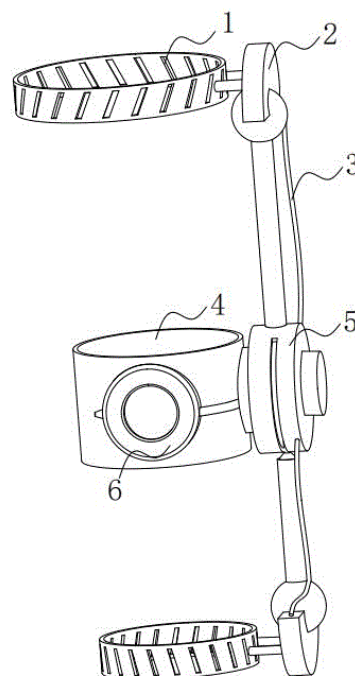
72: Chao Zhang, Wei Xiang, Hui Lv, Jingjing Wang

33: CN 31: 202311599980.7 32: 2023-11-24

#### **54: AN INTELLIGENT ELDERLY CARE WEARABLE DEVICE**

00: -

The present invention relates to the technical field of wearable devices, specifically to a wearable device for intelligent elderly care, comprising a strap, an air guide tube, a knee fixture, and a protective air cushion. An air guide tube is installed on one side of the strap, with the knee fixture positioned beneath the strap and the protective air cushion mounted on the outer surface of the knee fixture. The device also includes an inflation mechanism and a rotation mechanism. The inflation mechanism is mounted on one side of the strap, while the rotation mechanism is installed on the side of the knee fixture. Inside the inflation mechanism, a swing rod drives a sliding block to swing within a certain angle range, causing the adjustment lever to continuously transport air to the check assembly. The control block and reset spring work together to enable unidirectional airflow. In the rotation mechanism, a damping block and rotating ring press against each other to create damping, reducing knee joint wear. This design significantly reduces joint wear around the knees during elderly people's walking process, thus protecting their health.



21: 2024/08777. 22: 2024/11/19. 43: 2025/05/28

51: A23L

71: Beijing Technology And Business University, Anqiu Linfu Food Co., Ltd., Jinan Fruit Research Institute, All China Federation of Supply and Marketing Cooperatives

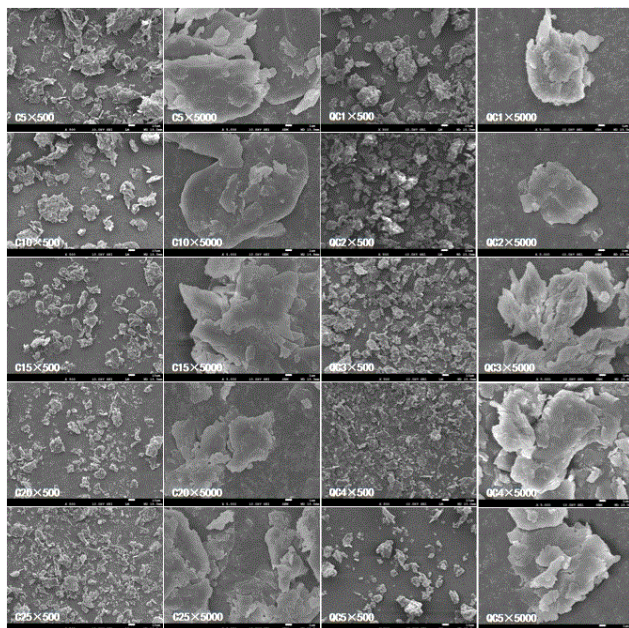
72: Ming Zhang, Yuyu Zhang, Maoyu Wu, Chao Ma, Li Liang, Chongdui Wang, Qi Fan, Li Wang, Peng Li  
33: CN 31: 202411482562.4 32: 2024-10-23

#### **54: A METHOD FOR MODIFYING DIETARY FIBER POWDER OF GINGER PEEL RESIDUE FOR INCREASING ITS SOLUBLE DIETARY FIBER CONTENT**

00: -

The invention belongs to the technical field of ginger peel residue processing, in particular relates to a method for modifying dietary fiber powder of ginger peel residue for increasing its soluble dietary fiber content. The method of the invention is to prepare soluble dietary fiber powder by coupling steam blasting and ultra-fine grinding technology with ginger peel residue as raw material. The prepared dietary fiber powder of ginger peel residue not only has a high content of soluble dietary fiber, but also shows better performance than before modification in terms of water holding capacity, expansion force, filling and compression molding performance, and oil adsorption capacity.





21: 2024/08778. 22: 2024/11/19. 43: 2025/05/30

51: G09B

71: JIANGXI UNIVERSITY OF SCIENCE AND TECHNOLOGY, CHINA UNIVERSITY OF MINING AND TECHNOLOGY, ZHONG-CHU-GUO-NENG(BEIJING)TECHNOLOGY CO., LTD., ZHONGKE NANJING FUTURE ENERGY SYSTEM RESEARCH INSTITUTE

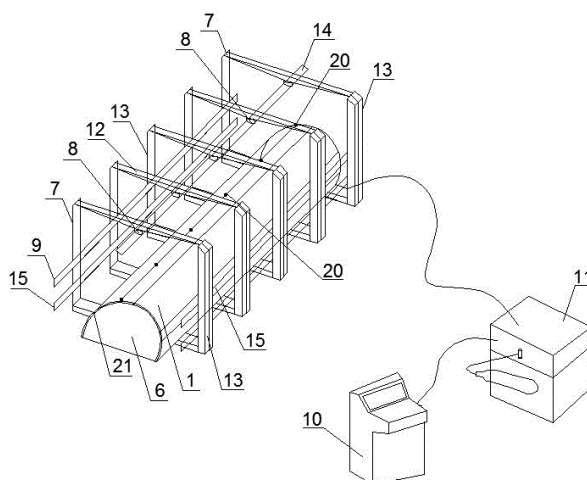
72: HUANG Zhen, WU Yun, HU Lihua, ZHANG Kai, WANG Yingchao, ZHANG Xuehui, DING Jie, GAO Afei

#### **54: DEVICE FOR SIMULATING OPERATION OF COMPRESSED AIRENERGY STORAGE SYSTEM IN MINE**

00: -

The invention relates to a model device for simulating operation of a compressed air energy storage system in an abandoned mine. The gas storage chamber structure comprises a glass fiber reinforced plastic sealing layer, a sliding layer, a precast segment concrete lining layer and a surrounding rock layer; two ends of the gas storage chamber in the length direction are sealed enclosures respectively. By setting stress loading system, confining pressure loading monitoring system, stress and strain monitoring system, displacement monitoring system, temperature and humidity monitoring system, in-hole imaging system and external compressed air machine, the real-time collection and analysis of the pressure, generated strain, displacement, temperature and humidity parameters of the model are realized respectively. At

the same time, Through the two dynamic processes of energy storage and energy release under different similar materials, inflation and deflation pressures, temperature and humidity changes, lining types and circulating inflation and deflation, the real simulation of the dynamic change process of compressed air energy storage in abandoned mines is realized, which provides data and theoretical basis for the experimental study of composite structure of gas storage chambers.



21: 2024/08779. 22: 2024/11/19. 43: 2025/05/28

51: G01T

71: Shanghai Tenth People's Hospital

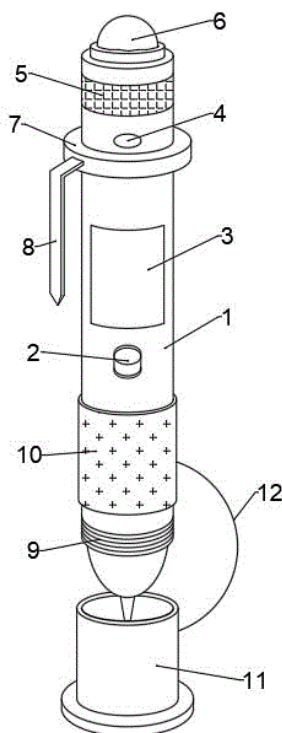
72: Wanwan Yi, Zhongwei Lv, Hengwei Fan, Lei Hu, Haidong Cai

#### **54: A RADIATION WARNING PEN FOR NUCLEAR MEDICINE MEDICAL PERSONNEL TO PROTECT RADIOACTIVE SUBSTANCES**

00: -

The invention discloses a radiation warning pen for nuclear medicine medical personnel to protect radioactive substances, comprising the pen body, a switch module, a display module, an indicator module, an alarm module and a ray detection module. The bottom of the pen body is connected with a covering cap through a threaded slot, and the top of the pen body is provided with a ray detection module. The switch module, display module, indicator module and alarm module are installed at the front end of the pen body near the ray detection module, the pen body external fixed set has a fixing sleeve, the fixing sleeve is located between the display module and the indicator module, the fixing sleeve surface is fixed with a clamping fastener; This

pen integrates the functions of X-ray detection, warning and writing, which is convenient for nuclear medicine medical staff to use at any time in their work, without carrying multiple devices, and improves work efficiency.



21: 2024/08783. 22: 2024/11/19. 43: 2025/05/30

51: F25B

71: SHIHEZI UNIVERSITY

72: Reaihan E, Cuizhong Chen, Qiugang Wang, Yucheng Ren, Junfeng Li, Shengbao Liu, Mingju Lan, Jing Li, Yu Jiang

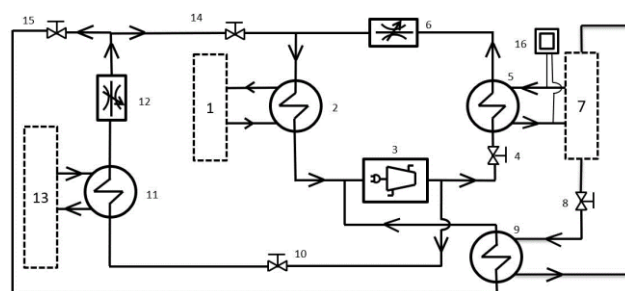
33: CN 31: 202410369449.9 32: 2024-03-28

#### **54: A TEMPERATURE CONTROL SYSTEM AND METHOD FOR A PLANT FACTORY BASED ON WASTE HEAT RECOVERY**

00: -

The application relates to the field of waste heat recovery, discloses a temperature control system and method for a plant factory based on waste heat recovery, including at least one heat supply area for providing heat source and at least one plant factory, the heat supply area is connected to the evaporator I, the evaporator I is provided with a refrigerant to absorb the waste heat of the heat supply area, the evaporator I outlet is connected with a compressor. The outlet of the compressor is connected to the condenser I, the outlet of the condenser I is

connected to the evaporator I to realize the circulation of the refrigerant, and the outlet of the condenser I is connected to the heating pipeline of the plant factory. This application is aimed at the problem that the stable waste heat of the data center is greatly wasted, while the winter heating and summer cooling of the plant factory are still consuming a lot of energy. The waste heat of the data center can be recovered in the winter for the heating of the plant factory, and the heat in the plant factory and the waste heat of the data center can be absorbed in the summer to supply the surrounding buildings.



21: 2024/08784. 22: 2024/11/19. 43: 2025/05/28

51: B65D

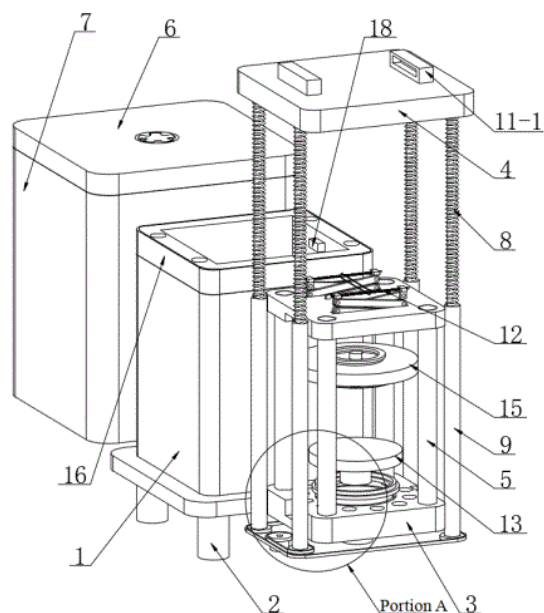
71: Guangzhou Medical University

72: Wandan Huang, Feiyu Chen, Jianjun Liu, Mengjia Liu, Kun Kong, Yuan Yang

#### **54: DEVICE FOR STORING HUMAN ANATOMY SPECIMEN CONVENIENT FOR ADJUSTMENT AND VIEWING**

00: -

A device for storing a human anatomy specimen convenient for adjustment and viewing is provided. Connecting rods are respectively fixed at four corners of an upper surface of a placing plate; and upper ends of the connecting rods are all fixed on a lower surface of a cover plate. A transparent shield is fixed on a lower side of a mounting plate, the transparent shield is sheathed outside a placing box. Upper ends of lead screws are all fixed on the lower surface of the cover plate, outer sides of the push screws are all sheathed with inner threaded tubes, each of the inner threaded tubes is rotationally connected into the placing box via a bearing. A drive motor is embedded in a bottom wall of the placing box.

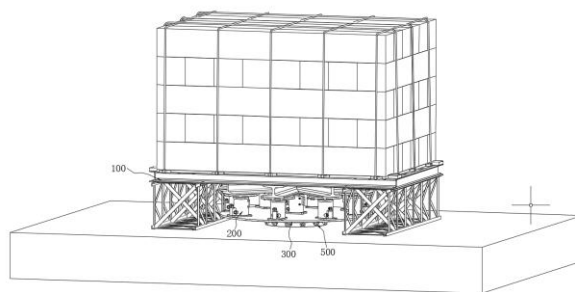


21: 2024/08787. 22: 2024/11/19. 43: 2025/05/28  
51: E02D  
71: NO.2 ENGINEERING LTD OF FHEC, CCCC,  
CHINA FIRST HIGHWAY ENGINEERING CO., LTD.  
72: HUANG, Yongliang, WANG, Yifei, YANG, Yang,  
BAO, Shichun, XIAO, Wenhui, XIANG, Tianyu, QU,  
Qiang, YIN, Jiankun, YU, Yifan  
33: CN 31: 202410695489.2 32: 2024-05-31  
**54: SINGLE-PILE VERTICAL STATIC LOAD TEST  
DEVICE**

00: -

The present disclosure relates to the technical field of single-pile static load devices, and particularly relates to a single-pile vertical static load test device. The single-pile vertical static load test device includes a counterforce platform, a pressure-applying mechanism arranged below the counterforce platform, a pressure-bearing mechanism arranged below the pressure-applying mechanism, a plurality of first tilt sensors, a second tilt sensor, a dynamometer, and a controller. The counterforce platform includes a load-bearing platform and a support pier arranged at a bottom of the load-bearing platform. The pressure-applying mechanism includes a first pressure component and at least three second pressure components. The first pressure component includes a first lifting member and a first contact plate. The single-pile static load test device achieves dynamic control of a posture of the load-bearing platform through the cooperation of the pressure-applying mechanism, the pressure-

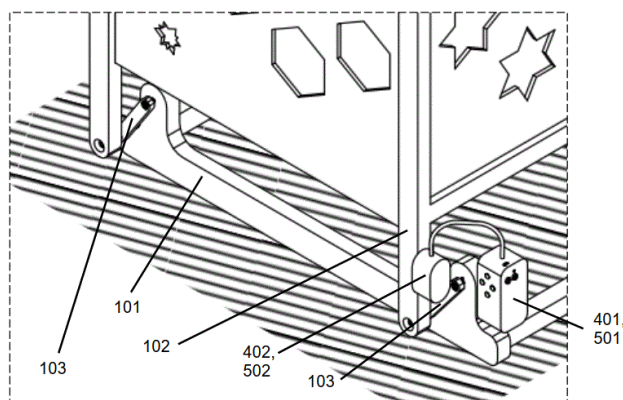
bearing mechanism, the first tilt sensor, the second tilt sensor, an arc-surfaced groove, and an arc-surfaced structure, so that the top plane of the load-bearing platform can always be kept horizontal through adaptive adjustment, enhancing the stability of the device and solving the problem of tilting of the load-bearing platform caused by the eccentric placement of the counterforce load or local settlement of the support pier.



21: 2024/08799. 22: 2024/11/20. 43: 2025/05/28  
51: A47C; A47D; G06F  
71: LACUNA LIMITED LIABILITY COMPANY  
72: MOSALOVA Tatiana Nikolaevna,  
KRAVCHENKO Artem Aleksandrovich  
33: RU 31: 2024129120 32: 2024-09-30  
**54: METHOD FOR ACTUATING A PENDULUM  
MECHANISM**

00: -

The proposed invention relates to the furniture industry and can be used to control rocking devices, such as beds and chairs with pendulum mechanisms. A method for actuating a pendulum mechanism is proposed. The technical result achieved when implementing the claimed invention, in addition to the invention realizing its purpose, is the elimination of the disadvantages of analogs and thus ensuring universality, that is, the possibility of installation on both transverse pendulum mechanisms and longitudinal pendulum mechanisms, as well as the possibility of simple operation with both transverse pendulum mechanisms and longitudinal pendulum mechanisms, as well as ensuring ease of installation and operation, as well as increasing the accuracy of pendulum mechanism control.



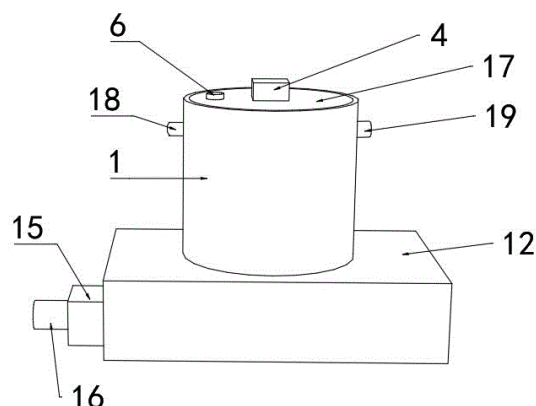
21: 2024/08800. 22: 2024/11/20. 43: 2025/05/30  
51: C02F

71: Xingzhi College Zhejiang Normal University  
72: LI Xiaozhong

#### 54: COPPER-CONTAINING HEAVY METAL WASTEWATER TREATMENT DEVICE

00: -

The invention relates to the technical field of sewage treatment, and discloses a copper-containing heavy metal wastewater treatment device. The stirring assembly is rotatably installed in the sedimentation box, and comprises a rotating shaft and stirring rods, wherein the stirring rods are distributed on the rotating shaft, and the rotating shaft is rotatably connected with the sedimentation box; the cleaning assembly is installed in that sedimentation box, and comprises a spray head and a cleaning brush, wherein the spray head is positioned at the top of the sedimentation box, and the cleaning brush is fixedly installed on the stirring rod; a filter box, which is located at the bottom of the sedimentation box, is provided with a first opening, and a sealing piece is arranged in the filter box, and the sealing piece is used for sealing the first opening during the stirring process. By arranging the cleaning assembly in the sedimentation box, the stirring rod and the inner wall of the sedimentation box can be cleaned, and the sedimentation effect of heavy metal ions can be ensured.



21: 2024/08801. 22: 2024/11/20. 43: 2025/05/30  
51: B27K

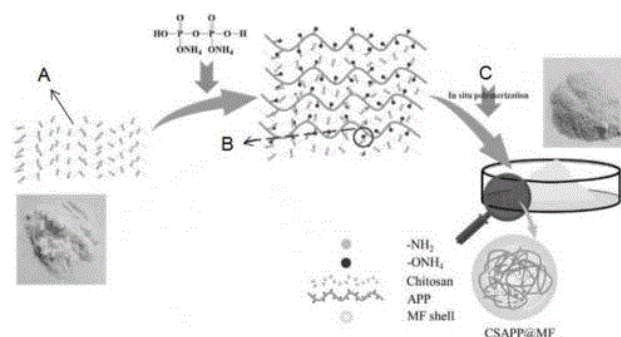
71: Hubei University

72: Fang-Chang Tsai, BAO Hongyu, HUANG Zhe, RUAN Bo, WU Jin, LI Shenghua, MA Ning, JIANG Tao

#### 54: CHITOSAN-BASED INTUMESCENT FLAME RETARDANT AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention discloses a chitosan-based intumescent flame retardant and a preparation method and an application thereof, including chitosan microencapsulated ammonium polyphosphate and modified urea melamine formaldehyde resin coated on the surface of the chitosan microencapsulated ammonium polyphosphate. The flame retardant is environmentally friendly, high in stability and good in flame retardant performance.



21: 2024/08802. 22: 2024/11/20. 43: 2025/05/30  
51: B23K

71: SOUTHWEST UNIVERSITY

72: BIAN Jiayi, GAO Ziye, WU Zhengmao, LIN Xiaodong, DENG Tao, XIA Guangqiong, TANG Xi, XIONG Tao

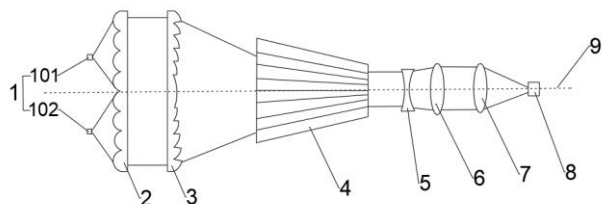
33: CN 31: 2024222353391 32: 2024-09-10



**54: ADAPTIVE BEAM FOCUSING DEVICE**

00: -

The invention relates to the technical field of optics, and discloses an adaptive beam focusing device, including an aspheric microlens array, where the central axis of the aspheric microlens array coincides with an optical axis, and the aspheric microlens array is used for receiving non-parallel beams emitted by a light source; a Fresnel lens, where the Fresnel lens is located on the right side of the aspheric microlens array and aligned with the center of the aspheric microlens array and used for receiving parallel beams transmitted by the aspheric microlens array; a tapered fiber, where the tapered fiber is located at the right side of the Fresnel lens and aligned with the center of the Fresnel lens, and used for receiving the beam transmitted by the Fresnel lens; and a set of lens assembly, where the set of lens assembly is located at the right side of the tapered fiber and aligned with the center of the tapered fiber, and is used for receiving the beam output by the tapered fiber and transmitting and focusing the beam on a photodetector. The aspheric microlens array, the Fresnel lens, the tapered fiber, and the set of lens assembly are used to collect and focus the beams with large divergence angles and deviating from the optical axis into the photodetector.



21: 2024/08803. 22: 2024/11/20. 43: 2025/03/27

51: A61K; A61P; C07H

71: Brij Biosciences, Inc.

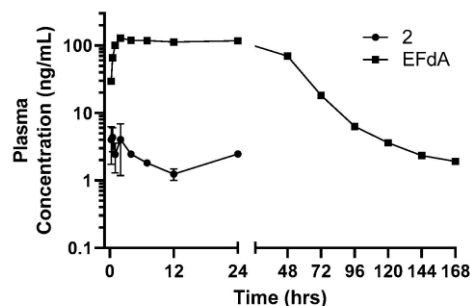
72: XU, Lianhong

33: US 31: 63/141,450 32: 2021-01-25

**54: ADENOSINE DERIVATIVE AND PHARMACEUTICAL COMPOSITION COMPRISING THE SAME**

00: -

Disclosed herein are adenosine derivative prodrugs and compositions thereof that can be used for the treatment of HIV infection or RNA virus infection.



21: 2024/08807. 22: 2024/11/20. 43: 2025/05/28

51: G01N

71: INSTITUTE OF PASTORAL HYDRAULIC RESEARCH, MWR(IPHR)

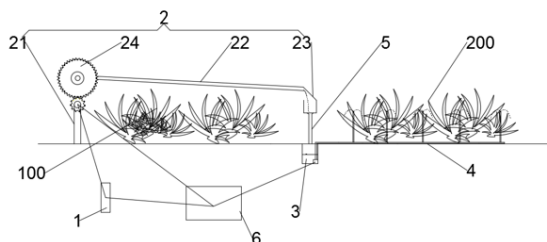
72: GAO, Tianming, LIU, Wei, REN, Meili, ZHAO, Huixia, TAO, Rongdong, MIAO, Henglu, YAO, Zhenyu, ZHAO, Tianqi, LIU, Xinyu, CHEN, Yuxin, ZHOU, Xu

33: CN 31: 202422057767X 32: 2024-08-23

**54: SELF-STARTING RAIN INCREASING AND DECREASING DEVICE**

00: -

The invention discloses a self-starting device for increasing and decreasing rain, used in field test equipment. It comprises a rain gauge, controller, rain collection barrel, and mechanisms for rain decreasing and increasing. The rain decreasing assembly includes a support and a rain shelter shed with two positions: in the first position, the shed flips outside the rain decreasing area to avoid environmental interference; in the second, it flips over the area to shelter rain, enabling rain reduction and collection. A driving mechanism moves the shed between positions. Collected rainwater is transferred to the rain increasing area for tests.



21: 2024/08808. 22: 2024/11/20. 43: 2025/05/28

51: G06E

71: JOSHI, Suvana, MANTRI, Shamlia Tushar, SHENDKAR, Bhagyashree Dinesh, KADAM, Pooja Abhijeet, SUTAR, Shiv Havgirao

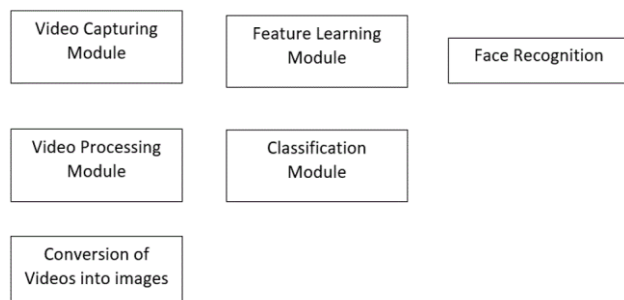


72: JOSHI, Suvarna, MANTRI, Shamla Tushar, SHENDKAR, Bhagyashree Dinesh, KADAM, Pooja Abhijeet, SUTAR, Shiv Havgirao

#### **54: FACIAL RECOGNITION BASED REAL TIME LITTER SURVEILLANCE SYSTEM**

00: -

The present invention is related to facial recognition based real time litter surveillance system. a facial recognition based real time litter surveillance system cleanliness of city streets has an important impact on city environment and public health. Conventional street cleaning methods involve street sweepers going to many spots and manually confirming if the street needs to clean. However, this method takes a substantial amount of manual operations for detection and assessment of street's cleanliness which leads to a high cost for cities. In most public places of the country, garbage bins are not kept, and where they are kept, they are not cleared for several days. In such a situation, the whole place is filled with dirt. People too do not have any shame or regret to make it dirty by spitting or spreading garbage anywhere. The absence of strict law against those who litter has stood in the way of cleanliness in the country.



21: 2024/08809. 22: 2024/11/20. 43: 2025/05/28  
51: G06F  
71: LIMITED LIABILITY COMPANY "ADDON"  
72: VETROV Dmitry Viktorovich, POPOV Sergey Alekseevich, GIRIN Ivan Andreevich, BUROV Kirill Vitalievich

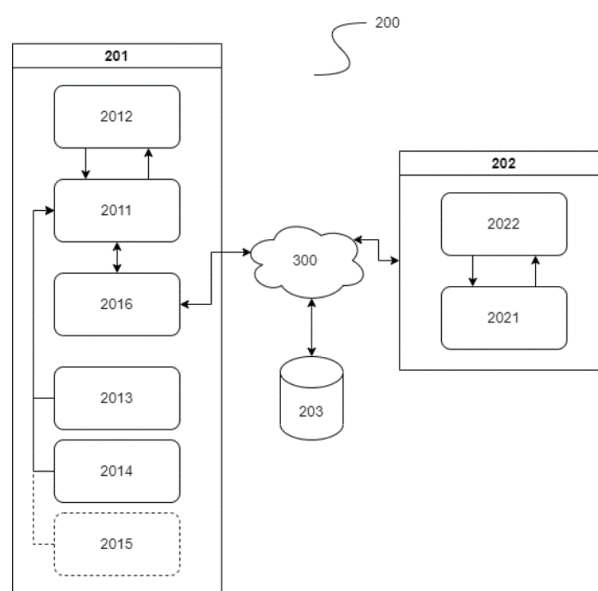
33: RU 31: 2024131165 32: 2024-10-17

#### **54: MOBILE USER DEVICE FOR GENERATING XR SCENE USING WEB ENVIRONMENT**

00: -

The technical solution relates to the field of information technology, more specifically, to methods and techniques for creating extended reality (XR) scenes. There is a need to ensure the ability to create reliable and stable XR applications

that allow for stable and reliable generation of an XR scene regardless of the operating system of the mobile user device. A mobile user device for generating XR scene using web environment of is proposed. The technical result achieved by implementing the claimed technical solution, in addition to implementing the product and/or method for its intended purpose, is to ensure the reliability and stability of generating an XR scene using the web environment of a mobile user device. In some other aspects, the technical result achieved by implementing the claimed technical solution is also an increase in the stability of the XR scene.



21: 2024/08810. 22: 2024/11/20. 43: 2025/05/29  
51: G06F

71: LIMITED LIABILITY COMPANY "ADDON"

72: VETROV Dmitry Viktorovich, POPOV Sergey Alekseevich, GIRIN Ivan Andreevich, BUROV Kirill Vitalievich

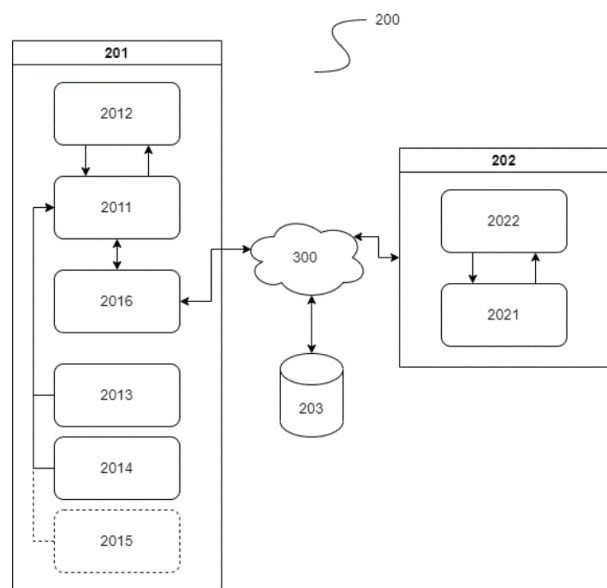
33: RU 31: 2024131166 32: 2024-10-17

#### **54: SYSTEM FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE**

00: -

The technical solution relates to the field of information technology, more specifically, to methods and techniques for creating extended reality (XR) scenes. There is a need to ensure the ability to create reliable and stable XR applications that allow for stable and reliable generation of an XR scene regardless of the operating system of the mobile user device. A system for generating XR

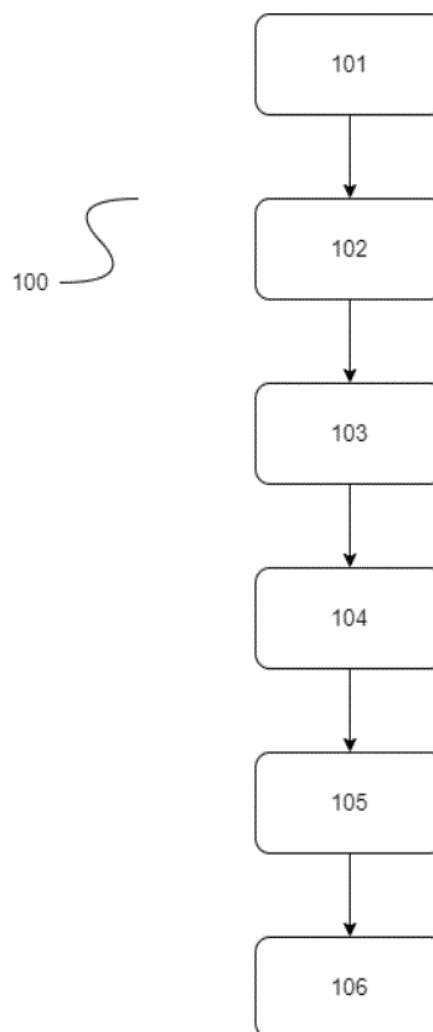
scene using web environment of mobile user device is proposed. The technical result achieved by implementing the claimed technical solution, in addition to implementing the product and/or method for its intended purpose, is to ensure the reliability and stability of generating an XR scene using the web environment of a mobile user device. In some other aspects, the technical result achieved by implementing the claimed technical solution is also an increase in the stability of the XR scene.



21: 2024/08811. 22: 2024/11/20. 43: 2025/05/29  
 51: G06F  
 71: LIMITED LIABILITY COMPANY "ADDON"  
 72: VETROV Dmitriy Viktorovich, POPOV Sergey Alekseevich, GIRIN Ivan Andreevich, BUROV Kirill Vitalievich  
 33: RU 31: 2024131164 32: 2024-10-17  
**54: METHOD FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE**  
 00: -

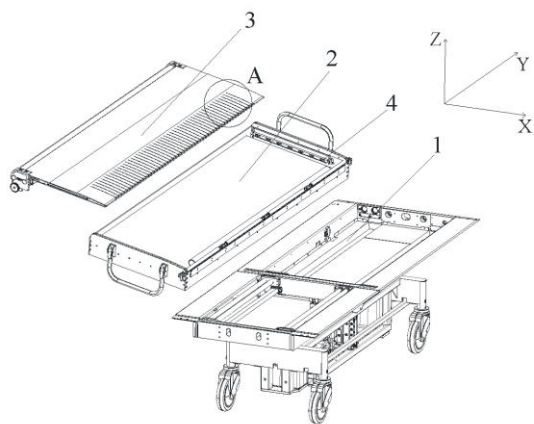
The technical solution relates to the field of information technology, more specifically, to methods and techniques for creating extended reality (XR) scenes. There is a need to ensure the ability to create reliable and stable XR applications that allow for stable and reliable generation of an XR scene regardless of the operating system of the mobile user device. A method for generating an XR scene using web environment of a mobile user device is proposed. The technical result achieved by implementing the claimed technical solution, in

addition to implementing the product and/or method for its intended purpose, is to ensure the reliability and stability of generating an XR scene using the web environment of a mobile user device. In some other aspects, the technical result achieved by implementing the claimed technical solution is also an increase in the stability of the XR scene.



21: 2024/08814. 22: 2024/11/20. 43: 2025/05/20  
 51: A61G  
 71: NINGBO POLYTECHNIC  
 72: SANG, Lingfeng, LAN, Chunxia, CEN, Dawei, GONG, Yuzhi, WANG, Jinhong, TAO, Jing, LI, Yulei, LIANG, Yaokun  
 33: CN 31: 202410022147.4 32: 2024-01-08  
**54: LATERAL MOVEMENT FLEXIBLE TRANSFER BED AND TRANSFER METHOD THEREOF**  
 00: -  
 The present invention belongs to technical field of medical bed, and particularly relates to a lateral

moving flexible transfer bed and a transfer method. The transfer bed in the present invention comprises: a transfer trolley, a bed frame arranged on the transfer trolley, and a flexible movable bed body; the flexible movable bed body comprises an upper-layer bed board and a lower-layer bed board which are fixedly arranged on a lateral moving device, a partition plate provided between the upper-layer bed board and the lower-layer bed board, an open type people moving mechanism provided on the upper-layer bed board, and a closed type auxiliary supporting mechanism provided on the lower-layer bed board. Upper movement and lower movement of patient are realized by the open type people moving mechanism and the closed type auxiliary supporting mechanism, the closed type auxiliary supporting mechanism plays a role in supporting the upper-layer bed board and the lower-layer bed board, so that used materials of the upper-layer bed board and the lower-layer bed board are not limited in a range of hard material, and the upper-layer bed board and the lower-layer bed board are both made of relatively flexible material; while stable movement of the patient is ensured, extrusion feeling and back pushing feeling of the patient in a movement process can be reduced through the relatively flexible material.

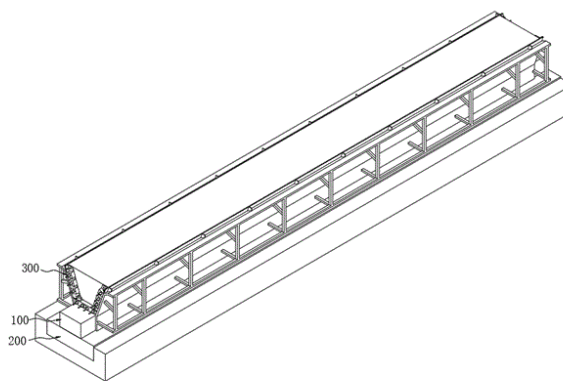


21: 2024/08822. 22: 2024/11/20. 43: 2025/05/29  
51: E02D  
71: NO.2 ENGINEERING LTD OF FHEC, CCCC,  
CHINA FIRST HIGHWAY ENGINEERING CO.,  
LTD., CHANGZHOU TRANSPORTATION  
CONSTRUCTION MANAGEMENT CO., LTD  
72: CHEN, Yunping, HUANG, Yongliang, JIA,  
Junjun, WANG, Yifei, BAO, Shichun, QU, Qiang,  
YANG, Yang, ZHANG, Jin, LI, Jin, XIAO, Wenhui

33: CN 31: 202411276926.3 32: 2024-09-12  
**54: BEAM-FABRICATION ENTABLEMENT BASE  
STRUCTURE FOR PRECAST BEAMS AND  
DESIGN METHOD THEREOF**

00: -

The present disclosure relates to the technical field of beam-fabrication entablement bases, and particularly to a beam-fabrication entablement base structure for precast beams and a design method thereof. The beam-fabrication entablement base structure for precast beams includes an entablement expansion base and an entablement base, where the entablement base is arranged at a center of a top of the entablement expansion base, and a precast beam template is arranged at a top of the entablement base, to transfer a weight of the precast beam template and a weight of a precast beam to the entablement base. The beam-fabrication entablement base structure for precast beams overcomes the problems of long construction periods and high costs caused by the large amount of original foundation soil replacement and the extensive paving of concrete entablement on the foundation during the construction of the existing precast beam sites, through the coordinated design of the entablement base and the entablement expansion base. By optimizing dimensions and layout of the entablement base and the entablement expansion base, the paving area and the paving amount of concrete are reduced, thereby reducing the construction costs and shortening the construction periods.



21: 2024/08825. 22: 2024/11/20. 43: 2025/05/29  
51: A01M; G01N; G01V; G08B  
71: FARMSENSE, INC.  
72: SINGH, Shailendra, VERDEGAN, Christopher

33: US 31: 17/728,753 32: 2022-04-25

33: US 31: 17/747,855 32: 2022-05-18

**54: PEST DETECTION SYSTEMS AND METHODS**

00: -

The inventive subject matter is directed to pest detection systems that implement infrared emitters with detectors that look for variations in incident light indicative of wingbeats from various pests. Emitters and detectors are placed on one or more printed circuit boards such that infrared light projected from an emitter can be received by one or more detectors. Based on signal generated by a detector, systems of the inventive subject matter can determine whether a pest has flown between an emitter and detector. To save on power, emitter, detectors, or both can be driven by pulse width modulation. Methods of the inventive subject matter are directed to determining pest presence via signal filtering and interpretation.

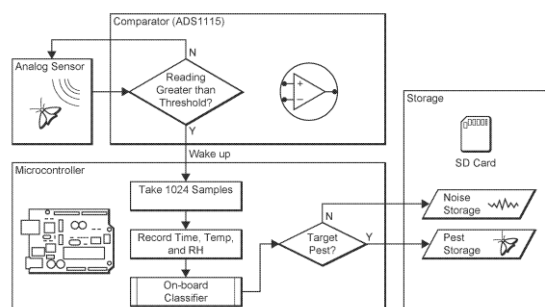


FIG. 17

21: 2024/08849. 22: 2024/11/21. 43: 2025/05/29

51: A63B

71: The Fourth people's Hospital of Jinan

72: Wang Hui, Li Xiaorong, Hao Tiantian, Chen Hongxia, Tang Zizheng, Xie Kangqi, Li Mengqian, Dong Rongrong

33: CN 31: 2024114954131 32: 2024-10-25

**54: A LIMB TRAINING DEVICE FOR THE REHABILITATION OF RHEUMATISM PATIENT**

00: -

The invention discloses a limb training device for the rehabilitation of patients with rheumatism, relating to the field of medical equipment technology. The invention includes a bed frame, a bed body, and mounting slots. The bed body is mounted on the upper surface of the bed frame. There are two mounting slots located at one end of the bed's upper surface, each equipped with a sliding rail on its bottom surface. Each sliding rail houses a slider,

with a bearing block welded on the upper surface of each slider. Pressure plates are welded to the upper surfaces of the bearing blocks, with one end of each pressure plate extending outside the mounting slot. One surface of each pressure plate is equipped with an elastic strap, while the other surface is welded with a first buckle, which is connected to a traction rope. Through the structure of the pressure plate, piston rod, and sliding rail, the invention allows patients to perform leg joint rehabilitation exercises while lying in bed. Additionally, the design incorporates a traction rope, traction pulley, auxiliary roller, and rotating support arm, enabling the patient to raise their arms during leg rehabilitation exercises.

21: 2024/08850. 22: 2024/11/21. 43: 2025/05/29

51: C02F

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

72: WANG Linpei, LI Songya, LIU Biao, WU Junfeng, WANG Le, LI Lei, MAO Yanli, KANG Haiyan, YANG Menghan, ZHAO Yanping

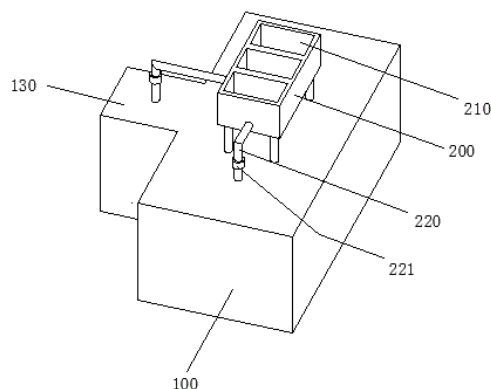
**54: DEVICE FOR EFFECTIVELY CONTROLLING BIOCHEMICAL SLUDGE BULKING**

00: -

The invention belongs to the technical field of sewage treatment, in particular to a device for effectively controlling biochemical sludge bulking, which comprises a sewage treatment tank and a sludge bulking control module, wherein the sewage treatment tank comprises a primary sedimentation tank, a biochemical tank and a secondary sedimentation tank, the biochemical tank is communicated with the secondary sedimentation tank through a connecting pipe, a sludge pump is installed on the connecting pipe, the sludge bulking control module comprises an early warning control module and a medicament adding module, and the early warning control module comprises a mud layer height sensor and a controller. The mud height in the secondary sedimentation tank is monitored by a mud layer height sensor, and the medicament adding module comprises an ozone tank, an oxidant tank and a coagulant box, wherein the ozone tank is connected with the primary sedimentation tank through an adding pipe, the oxidant tank is connected with the biochemical tank through an adding pipe, and the coagulant box is connected with the secondary sedimentation tank through an



adding pipe; when the mud height exceeds a threshold, the mud layer height sensor feeds back to the controller, and the controller can adjust the opening of the electromagnetic metering valve on the adding pipe to add ozone in the primary sedimentation tank, add oxidant in biochemical tank and coagulant in secondary sedimentation tank, which can reduce sludge bulking in three ways, thus greatly improving practicability.



21: 2024/08851. 22: 2024/11/21. 43: 2025/05/29

51: C12Q

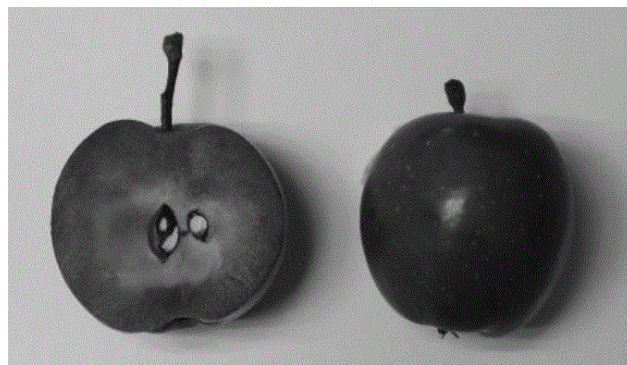
71: Shandong Agricultural University

72: Zongying ZHANG, Cong CHEN, Sumin QI, Ziyi YANG, Xinyue ZHOU, Qi ZOU, Jing ZHANG, Wenjun LIU, Nan WANG, Xuesen CHEN

**54: A METHOD FOR RAPIDLY IDENTIFYING FRUIT STORABILITY OF RED FLESH APPLE AND SPECIFIC PRIMER PAIRS USED THEREOF**

00: -

A method for rapidly identifying fruit storability of red flesh apple and specific primer pairs used thereof is disclosed. The specific primer pair is composed of primer F (a single-stranded DNA molecule shown in sequence 1) and primer R (a single-stranded DNA molecule shown in sequence 2). The specific primer pairs can identify the promoter genotype of ACS1 gene in the seedling stage of apple hybrid offsprings, and then determine the fruit storability, which is helpful to the early directional elimination of single plants that do not meet the target traits and save a lot of land. The present invention is of great significance for significantly improving the breeding efficiency of red flesh apples and saving breeding costs.



21: 2024/08852. 22: 2024/11/21. 43: 2025/05/29

51: B62J

71: VOLKOV Artem Maksimovich

72: VOLKOV Artem Maksimovich

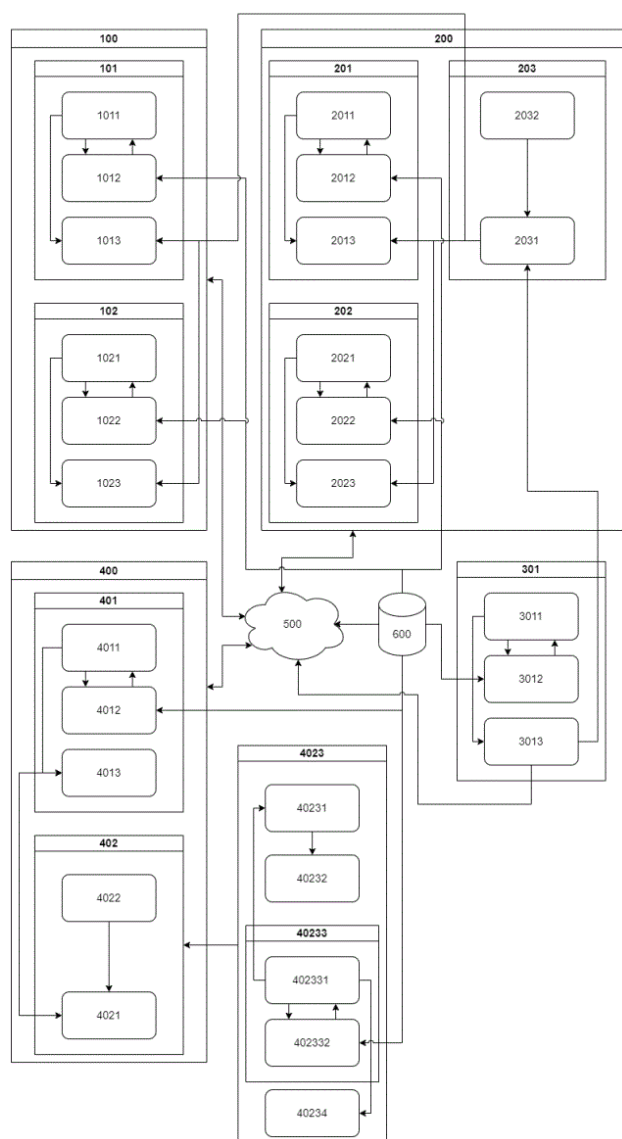
33: RU 31: 2024130471 32: 2024-10-10

**54: METHOD FOR COLLECTING MACHINE LEARNING DATA USING A VEHICLE FOR COLLECTING DATA**

00: -

The technical solution relates to the field of transport, in particular, to auxiliary devices and methods for collecting data for machine learning using vehicles, such as, for example, personal mobility devices (PMD). A method for collecting machine learning data using a vehicle for collecting data is proposed. There is a need to speed up the preparation of data suitable for machine learning and thus reduce the time it takes to prepare machine learning models trained on big data. The technical result achieved by implementing the claimed technical solution, in addition to the implementation of the product and/or method for its intended purpose, is an increase in the speed of preparing data suitable for machine learning, including an increase in the speed of preparing big data that can be used for machine learning. In some aspects, another technical result achieved is also an increase in road safety.





21: 2024/08853. 22: 2024/11/21. 43: 2025/05/29

51: B61L

71: Shandong University of Finance and Economics

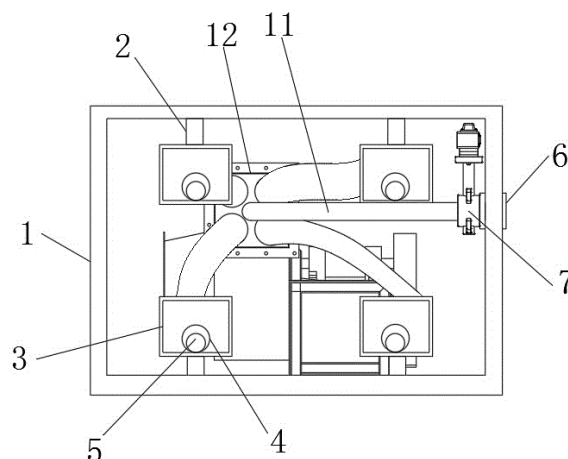
72: Fuling Han

**54: FREE COMBAT REACTION TRAINING DEVICE**

00: -

The present invention belongs to the technical field of training devices, and in particular to a free combat reaction training device. The free combat reaction training and testing device includes a mounting framework, characterized in that stand columns are fixedly mounted on the mounting framework, pushout frames are fixedly connected to the stand columns, one end of each of the pushout frames is communicated with an air pipe, a foam ball is placed

on each of the pushout frames, an air outlet frame is mounted on a side of the mounting framework, a valve housing is mounted and communicated with a part of the air pipe connected with the air outlet frame and the pushout frames, a valve sheet is rotatably connected inside the valve housing, and the valve sheet is connected to a rotating shaft. According to the present invention, through a reasonable structural design, various attack scenarios can be simulated, and the four pushout frames correspond to positions of limbs, so that the reaction ability is comprehensively improved, stable air supply and precise control are realized, and a training effect and the safety are guaranteed; and the processor is wirelessly connected with an external device, so that it is convenient to record and analyze data, and it helps a trainee to improve in a targeted manner and facilitates a coach to guide remotely, thereby improving the training efficiency and quality.



21: 2024/08854. 22: 2024/11/21. 43: 2025/05/29

51: B61L

71: Shandong University of Finance and Economics

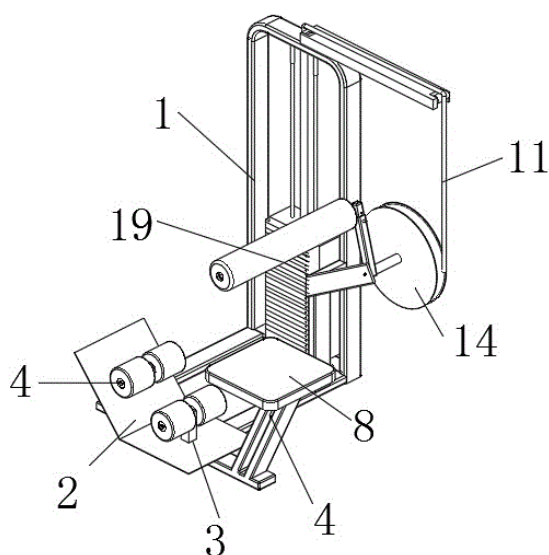
72: Fuling Han

**54: FREE COMBAT STRENGTH TRAINING DEVICE**

00: -

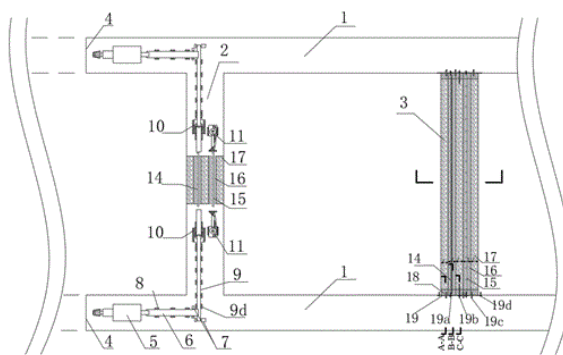
The present invention belongs to the technical field of training devices, and in particular to a free combat strength training device. The free combat strength training device includes a rack, where a mounting plate is fixedly mounted on the rack, stand columns are mounted on the mounting plate, buffer rolls are rotatably arranged on the stand columns, a sleeve is mounted on the rack, a connecting rod is inserted

into the sleeve, an inclined cushion is fixedly connected to the connecting rod, and a counterweight is mounted on the rack. According to the present invention, the structural design is diverse, the L-shaped mounting plate is matched with the stand columns to ensure the stability, the buffer rolls and the design conforming to the foot curve improve a training comfort and a force-exerting effect, a height of the connecting rod is adjustable, the counterweight is subjected to limited sliding, a length of a hand lever is variable, and a handrailing is dual-purpose, so that the requirements of different trainees can be met, the strength and coordination of multiple parts of a whole body can be exercised, and the free combat strength training device is suitable for different training stages, has high safety and universality, and can effectively improve a training effect.



21: 2024/08855. 22: 2024/11/21. 43: 2025/05/29  
51: E21C  
71: CHINA UNIVERSITY MINING AND TECHNOLOGY-BEIJING  
72: CHEN, Dongdong, ZHANG, Zhixuan, CHANG, Jingchen, SUN, Hao, WANG, Zhigen, XIE, Shengrong, ZHU, Lei, PAN, Hao, TIAN, Chunyang, YANG, Junhui  
33: NG 31: F/PT/NC/2024/12399 32: 2024-05-16  
**54: SYSTEM AND METHOD FOR DIRECTLY FILLING OLD EMPTY ROADWAY BY USING ROADWAY-DIGGING COAL BODY**  
00: -

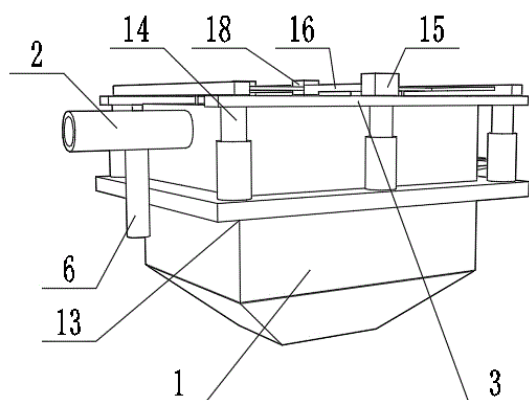
The present invention discloses a system for directly filling old empty roadway by using roadway-digging coal body and method thereof, wherein the system comprises coal transporting and throwing units, combined units for zonal grouting solidification and coal fixation, and tunnel sealing and coal retaining units; and a working process of the system comprises: tunnel boring machines in mining tunnels excavate crushed coal blocks on coalfaces and transport the crushed coal blocks to mining tunnel belt conveyors, the mining tunnel belt conveyors then continue to transport the crushed coal blocks to empty tunnel belt conveyors, and the crushed coal blocks are finally sent to coal throwers, the coal throwers then throw the crushed coal blocks to suitable positions to fill the empty tunnels, and grouting machine are used to solidify accumulated coal blocks in the empty tunnels by grouting in different areas. The present invention solves the problem of strong pressure when working faces pass through empty tunnels and economic problems and coal washing problems caused by purchasing a large amount of filling materials, and has important promotion and application value.



21: 2024/08856. 22: 2024/11/21. 43: 2025/05/30  
51: B01D  
71: Xingzhi College Zhejiang Normal University  
72: LI Xiaozhong  
**54: HEAVY METAL WASTEWATER SEDIMENTATION TANK**  
00: -

The invention provides a heavy metal wastewater sedimentation tank, belonging to the technical field of sedimentation tanks, which includes a sedimentation tank, wherein the upper side of one end of the sedimentation tank is communicated with a water inlet pipe, and a filtering component and a cleaning component are arranged in the water inlet

pipe; the cleaning component is located at one side of the filtering component; a lifting component is arranged around the sedimentation tank; a plurality of mounting plates are fixedly connected to the lifting component; a moving component is arranged on the mounting plate, and a drain net is detachably connected to the moving component and located in the sedimentation tank. According to the invention, the metal substance can be intercepted for many times, so that the sedimentation effect of the whole wastewater can be improved, the efficiency of the whole device can be improved, the subsequent sedimentation steps can be simplified, and the use effect can be improved.



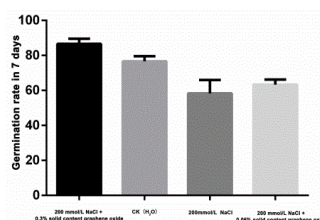
21: 2024/08858. 22: 2024/11/21. 43: 2025/05/29  
51: A01C  
71: Jiangsu Vocational College of Agriculture and Forestry  
72: YIN, Congfei, SHI, Peihua, ZHAO, Yanling, GE, Cheng, LI, Xijie, TAN, Xiaoyu, LI, Gang, LI, Min, XU, Jinnuo, TANG, Yuqi

#### **54: METHOD FOR INCREASING GERMINATION RATE OF CORN SEEDS UNDER SALT STRESS**

00: -

The present invention discloses a method for increasing the germination rate of corn seeds under salt stress, relating to the technical field of corn breeding. The method includes: (1) selection and sterilization of corn seeds; (2) cleaning; (3) preparation of a working solution: diluting a graphene oxide dispersion by using ddH<sub>2</sub>O and mixing well to prepare a graphene oxide working solution; (4) preparation of a germination bed: soaking double-layered germinating sterile filter

paper in the graphene oxide working solution, then taking out as the germination bed for later use; and (5) germination test: absorbing the water on the surface of cleaned corn seeds, placing the corn seeds on the germination bed soaked with the graphene oxide working solution, placing in a culture dish, and adding a salt stress solution, followed by germination.

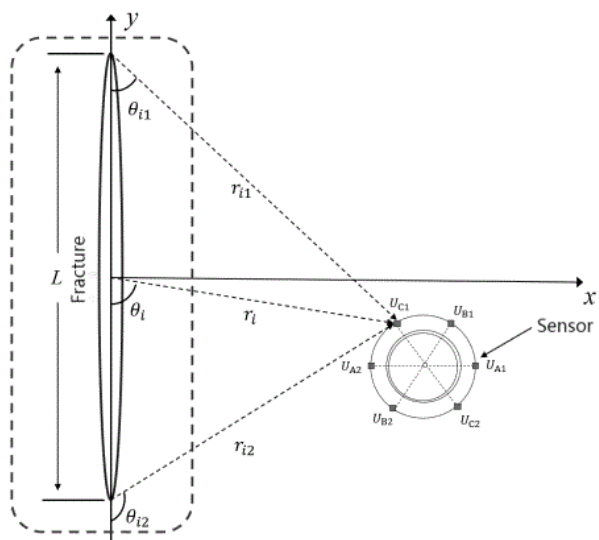


21: 2024/08859. 22: 2024/11/21. 43: 2025/05/29  
51: G01N  
71: University of Science and Technology Beijing, Deep Mining Laboratory Branch of Shandong Gold Mining Technology Co., Ltd., Bgrimm Technology Group  
72: Shengjun MIAO, Xiangfan SHANG, Zejing LIU, Zhaojun QI, Hui WANG, Huanxin LIU, Baoqiang PAN

#### **54: METHOD FOR MEASURING SURFACE STRESS OF FRACTURED ROCK MASS**

00: -

A method for measuring surface stress of fractured rock mass is disclosed, which relates to the field of rock mass stress measurement. The method includes: leveling the surface of rock mass, mounting laser displacement sensors, measuring the positional relationship between fractures and sensors, performing stress relief, carrying out vector superposition of multiple sets of fractures, correcting the displacement values of each sensor, and calculating the magnitude and direction of the principal stress after the correction of the surface of the fractured rock mass. Compared with the conventional stress measurement method, the proposed method eliminates the effect of fractures on each measurement point, further reduces the measurement error, and the measurement method is relatively simple.



21: 2024/08861. 22: 2024/11/21. 43: 2025/05/29  
51: H04M

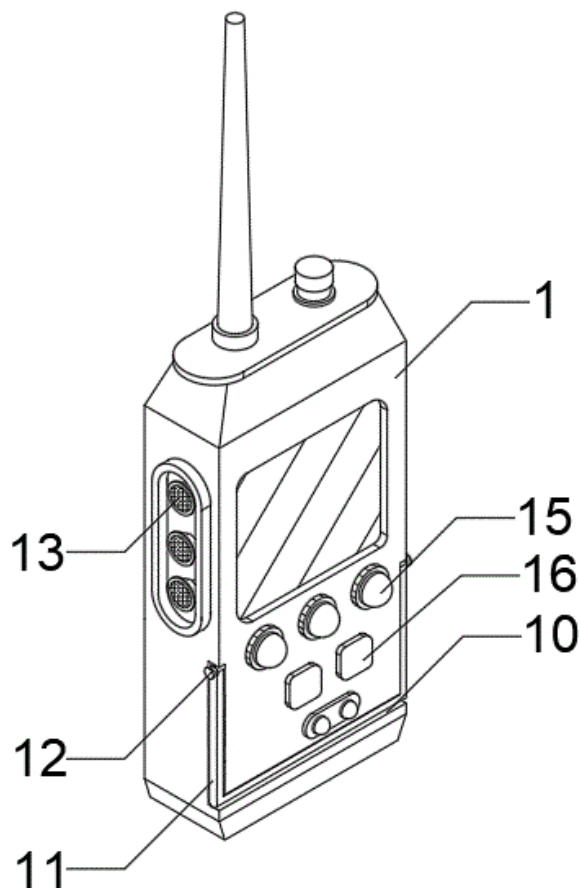
71: Zhejiang College of Construction

72: Lu Xiaoli, Lu Canyu, Cheng Wenjuan, Wang Zicheng, Pan Chenglong, Wang Yin, Wang Kun, Zhang Jinyun

#### 54: AN ELECTRONIC COMMUNICATION TERMINAL

00: -

The present invention provides an electronic communication terminal comprising a walkie talkie body. The back of the walkie talkie body is provided with a groove, and a first solar panel is fixedly arranged inside the groove. A sliding track is symmetrically arranged on both sides of the groove, and a second solar panel is slidably arranged inside the sliding track. A protective plate is hinged at the rear end of the walkie talkie body, and a third solar panel is fixedly arranged inside the protective plate. One side of the walkie talkie body is provided with a hook, and a pull buckle is fixedly arranged on the protective plate, and the pull buckle is clamped to the hook. By hinging a protective plate on the back of the walkie talkie body and fixing a third solar panel inside the protective plate and a first solar panel in the groove, and sliding a second solar panel inside the slide, when it is necessary to charge the walkie talkie body, the three solar panels can be unfolded to increase the sunlight exposure area, thereby improving charging efficiency. At the same time, when it is not necessary to charge, it can be directly recycled into the interior of the walkie talkie body, reducing the volume occupied by the solar panels.



21: 2024/08873. 22: 2024/11/21. 43: 2025/05/29  
51: A45B

71: RIVERS, Dannie

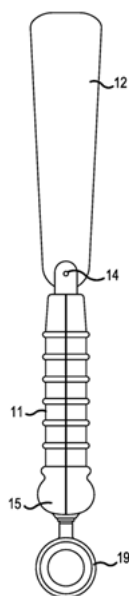
72: RIVERS, Dannie

33: US 31: 17/826,397 32: 2022-05-27

#### 54: PERSONAL NOISEMAKER FAN DEVICES

00: -

Personal fan devices that are configured to transition between an open configuration for use and a closed configuration for storage or transport. A fan device includes noisemaking structure(s), such as a rattle and/or a clapper, disposed with the fan device. As the fan device is moved, the handle generates noise as a result of the noisemaking structure(s). A plurality of fan devices may be used to generate high-decibel noises at an event, such as a sporting event or a performance.



21: 2024/08884. 22: 2024/11/22. 43: 2025/05/29

51: B01D

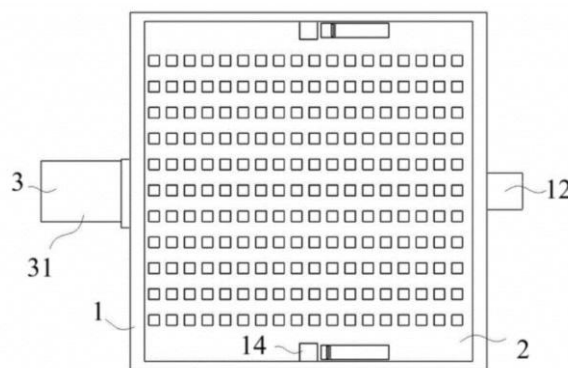
71: Institute of Water Resources for Pastoral Area, MWR

72: WU, Yingjie, ZHOU, Quancheng, LIU, Wei, WANG, Wenjun, XU, Kairan, YOU, Songhua, CHEN, Xiaojun, ZHANG, Weijie, YIN, Hang, MIAO, Ping, MA, Hongli, ZHAO, Qian, ZHOU, Yajun, GAO, Weizheng

#### **54: WATER IMPURITY-REMOVAL WATER- SAVING PURIFICATION DEVICE**

00: -

Provided is a water impurity-removal water-saving purification device, including a box, a filter assembly, an aeration assembly, an irradiation assembly, a reflux assembly and a control component, wherein a treatment chamber is arranged in the box, and a water inlet, a water outlet and a feed inlet are further arranged on the box; the filter assembly is used for filtering sewage; the aeration assembly is used for providing oxygen; the irradiation assembly is used for irradiating and sterilizing; the reflux assembly includes a reflux pipe that communicates the water outlet and the water inlet, a water quality monitoring component and a reflux driving piece are arranged on the reflux pipe, and the water quality monitoring component is used to monitor the water quality information at the water outlet. The water impurity-removal water-saving purification device can improve the effect of water impurity removal and purification.



21: 2024/08885. 22: 2024/11/22. 43: 2025/05/29

51: A01G

71: Zhejiang Normal University

72: ZHU, Pingyang, JIN, Zhixi, ZHAI, Xinyi, YANG, Yiting, LIN, Yiwen, YAO, Xiaoming, XU, Hongxing

#### **54: ECOLOGICAL REGULATION SYSTEM FOR RICE PESTS USING BASIL AS NECTAR SOURCE PLANT**

00: -

The present invention belongs to the technical field of biological control of crop pests, and in particular relates to an ecological regulation system of rice pests using basil as a nectar source plant. According to the ecological regulation system of rice pests provided by the present invention, basil is planted in a rice field system to provide nutrient source and shelters for arthropod natural enemies, regulate arthropod natural enemies in rice fields, increase population numbers of parasitic and predatory natural enemies, prolong the life span of natural enemies, and enhance the ability of natural enemies to control pests, thereby controlling the population density of pests. In the system, the basil needs to be rationally distributed in the rice field system, without artificially changing the biological community, and without extra chemicals being applied to the environment, which is very safe and effective.

21: 2024/08887. 22: 2024/11/22. 43: 2025/05/29

51: G06Q

71: China Institute of Water Resources and Hydropower Research

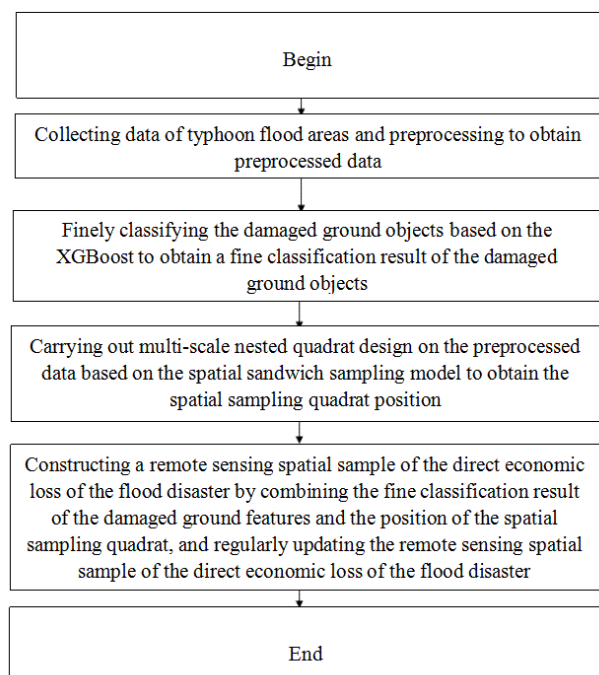
72: JIANG Wei, WANG Yanyun, SHANG Yizi, PANG Zhiguo, Akiyuki Kawasaki, LONG Tengfei, CUI Shiai, YAN Denghua, SONG Wenlong, Elhadi Adam

#### **54: METHOD FOR CONSTRUCTING SPATIAL SAMPLE OF DIRECT ECONOMIC LOSS OF TYPHOON FLOOD DISASTER**



00: -

The invention discloses a method for constructing a spatial sample of direct economic loss of typhoon flood disaster, which includes that following steps: selecting a typical typhoon flood disaster, firstly obtaining high resolution optical and radar images of a disaster-bearing body of the typhoon flood disaster by using a low-altitude small unmanned aerial vehicle and a high resolution remote sensing satellite, then carrying out fine classification on damaged ground objects by adopting an XGBoost, the spatial sandwich model is used to determine the location of spatial sampling quadrats in typhoon flood-stricken areas. Then, combined with the field disaster loss survey data, a grid-scale estimation model of direct economic loss of disaster-stricken bodies is constructed, and the spatial calculation of direct economic loss of flood-stricken areas is carried out. Finally, the construction and updating of multi-scale remote sensing spatial samples of direct economic loss of typhoon flood-stricken areas are realized through the variable-scale grid division method.



72: LIU Jin, ZHANG Guangteng, SUN Xiaoming, LI Zhun, LIU Jianxu, FANG Zhe, LIU Gaoling, WANG Wanying, JIANG Hao, DOU Quanjin, FAN Shuanshe  
33: CN 31: 202411563817X 32: 2024-11-04

#### 54: MULTI-SCENE COLD WAVE PREVENTION AND HEAT PRESERVATION DEVICE FOR FRUIT TREES

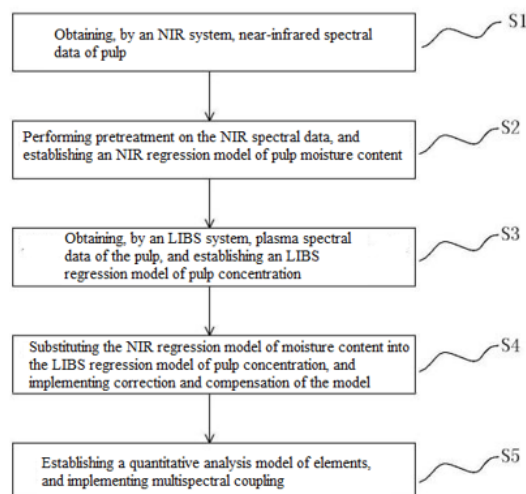
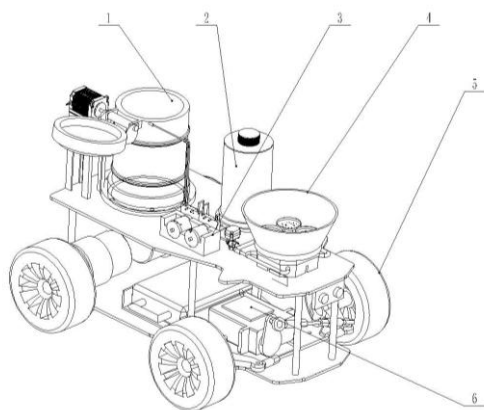
00: -

The invention provides a multi-scene cold wave prevention and heat preservation device for fruit trees and belongs to the technical field of fruit tree cold wave prevention, including a driving mechanism, where a straw burning mechanism for burning straws is installed at the top of the driving mechanism, and the straw burning mechanism is connected with a storage mechanism, and the straw burning mechanism includes a burning barrel connected with the storage mechanism, the top of the driving mechanism is also provided with an alcohol burning mechanism, the storage mechanism is respectively connected with the burning barrel and the alcohol burning mechanism through a conveying mechanism, and a control mechanism is arranged in the driving mechanism. When the temperature needs to be increased outdoors, the device is driven outdoors, straw briquettes are put into the burning barrel, and then the alcohol in the storage mechanism is conveyed to the burning barrel through the conveying mechanism and ignited, and the straw briquettes are burned in the burning barrel to release heat, while releasing heat, the driving mechanism drives the device to move back and forth in the field, thus increasing the heating efficiency; when the temperature needs to be increased indoors, the alcohol in the storage mechanism is transported to the alcohol burning mechanism by the conveying mechanism and ignited.

21: 2024/08888. 22: 2024/11/22. 43: 2025/05/29

51: A01G

71: Shandong Agriculture And Engineering University, Shaanxi Yumei Agriculture Co., Ltd



21: 2024/08890. 22: 2024/11/21. 43: 2025/05/29  
51: G01N

71: BGRIMM MTC TECHNOLOGY CO., LTD  
72: SHI, Yehong, ZHAO, Zhen, HAN, Pengcheng,  
XU, Bicong, LI, Huachang, FANG, Shengnan,  
YANG, Fei, XIAO, Shan, XIE, Mai  
33: CN 31: 2023117257712 32: 2023-12-15  
**54: MULTISPECTRAL COUPLING METHOD FOR  
ONLINE DETECTION OF PULP COMPONENTS IN  
MINERAL DRESSING TECHNOLOGICAL  
PROCESS**

00: -

Disclosed is a multispectral coupling method for online detection of pulp components in a mineral dressing technological process including collecting a pulp sample with gradient distribution of moisture content as a test sample, and obtaining, by a near-infrared (NIR) system, near-infrared spectral data of the test sample; performing spectral pretreatment for the near-infrared spectral data to reduce the interference of spectral noise on subsequent modeling, and establishing an NIR regression model of the pulp moisture content; obtaining, by an LIBS (laser-induced breakdown spectroscopy) system, plasma spectral data of the test sample, and establishing an LIBS regression model of pulp concentration; substituting the NIR regression model of the pulp moisture content into the LIBS regression model of the pulp concentration, and optimizing an algorithm to implement the correction and compensation of the model; and establishing a quantitative analysis model of pulp element content to achieve multispectral coupling of LIBS and NIR.

21: 2024/08891. 22: 2024/11/22. 43: 2025/05/29  
51: C08J

71: NEVEON GERMANY GMBH  
72: BETTINGER, Herbert, AJARROUD, Asmaa  
33: DE 31: 10 2022 113 374.5 32: 2022-05-26  
**54: CONVERSION OF POLYURETHANE IN A  
TAPERED REACTOR**

00: -

The invention relates to a continuous method for converting a plastic material containing a polyurethane, comprising the following steps: providing a reaction mixture, the reaction mixture comprising - a plastic material, which is in the form of a solid and which contains a polyurethane, and - an aqueous medium, optionally containing an additive reaction, the mass ratio between the water of the aqueous medium and polyurethane being not more than 0.6 to 1 in the reaction mixture; transporting the reaction mixture, by means of a first conveying screw disposed in a first line, to a filling opening of a reactor, the reactor being tapered at least in an end region with respect to the transport direction, and the filling opening being in the form of a pressure lock; transporting the reaction mixture, by means of a reactor conveying screw disposed in the reactor vessel, at a pressure of > 1 bar to 60 bar and at a temperature of 180°C to 270°C to the end region of the reactor; in the end region of the reactor, transferring the reaction mixture, which has been pressure- and heat-treated in such a way, into a second line via a removal opening in the form of a pressure lock; transporting the pressure- and heat-treated reaction mixture by means of a second conveying screw disposed in the second line; within

the second line, providing an evaporation zone having a temperature above the temperature in the reactor; in the evaporation zone, removing gaseous constituents via at least one degassing point; and, in or downstream of the evaporation zone, obtaining the pressure- and heat-treated reaction mixture free of gaseous constituents.

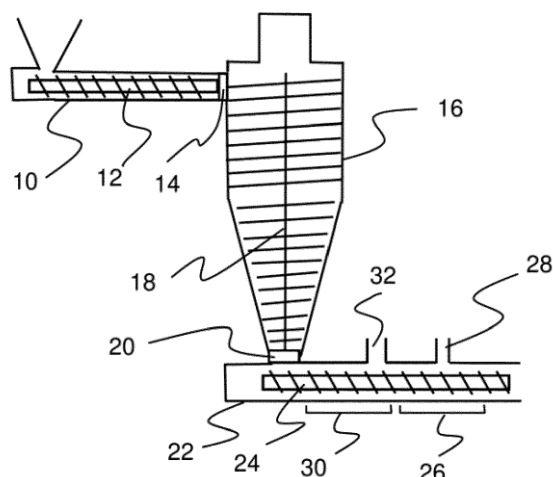


Fig. 2

21: 2024/08895. 22: 2024/11/22. 43: 2025/05/29  
51: G01J; G01N

71: BGRIMM MTC TECHNOLOGY CO., LTD.

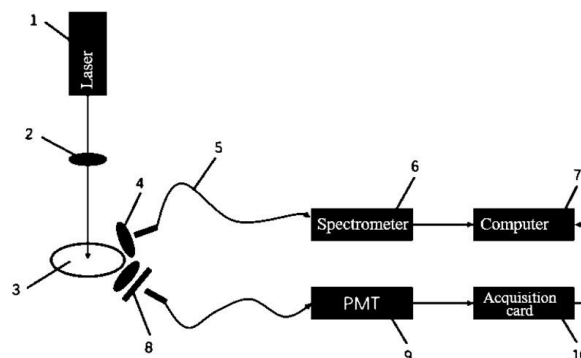
72: SHI, Yehong, HAN, Pengcheng, ZHAO, Zhen, LI, Huachang, FANG, Shengnan, YANG, Fei, XU, Bicong, XIA, Jingyuan, WANG, Xuan, FENG, Xianjin, XIAO, Shan, OU, Zhibing, SUN, Jialiang  
33: CN 31: 2023116169165 32: 2023-11-29

#### **54: LIBS SYSTEM BASED ON DUAL-MODE SPECTRAL ACQUISITION**

00: -

The present invention relates to the technical field of spectral analysis, in particular to an LIBS (laser-induced breakdown spectroscopy) system based on dual-mode spectral acquisition, which comprises a laser excitation device, first beam splitting component, second beam splitting component and data processing apparatus, wherein the laser excitation device emits a laser beam to a sample for exciting the sample to generate plasma; the first beam splitting component is used for acquiring a full-spectrum signal obtained and converting the full-spectrum signal into a first digital signal; the second beam splitting component is used for acquiring a local spectral signal of a target frequency band

obtained after the sample is excited and converting the local spectral signal into second digital signal; the target frequency band is an acquisition frequency band; and the data processing apparatus is used for acquiring and fusing the first and second digital signal, generating a spectral acquisition result.



21: 2024/08908. 22: 2024/11/22. 43: 2025/05/29  
51: H04L

71: NATIVE DIGITAL S.A.

72: BIONDI, Davide, BIONDI, Andrea

33: IT 31: 102022000012245 32: 2022-06-09

#### **54: METHOD AND SYSTEM FOR THE UNEQUIVOCAL CHARACTERIZATION OF A PRODUCT BY MEANS OF AN INTELLIGENT PAINT**

00: -

The present invention relates to the univocal characterization of a handwork (100), such as a work of art, for example, through the application of a substrate or paint containing a certain number of micro transponders (110) dispersed therein. A detection system (130) reads (220) the identifiers of said transponders (110) detectable in said position and measures one or more of the following parameters for each transponder: RSSI, reading speed, response time of each transponder, its position, the distance and/ or proximity from/to neighboring transponders. A pattern consisting of or based on said information is stored (230) as a reference pattern or identification pattern of the handwork (100). A recognition scan (240) can be carried out by acquiring the same parameters on a portion of the handwork. The pattern of such parameters in the reference scan can be compared (250,260) with the reference one, in order to determine whether it is the original handwork (280) or a copy (270).

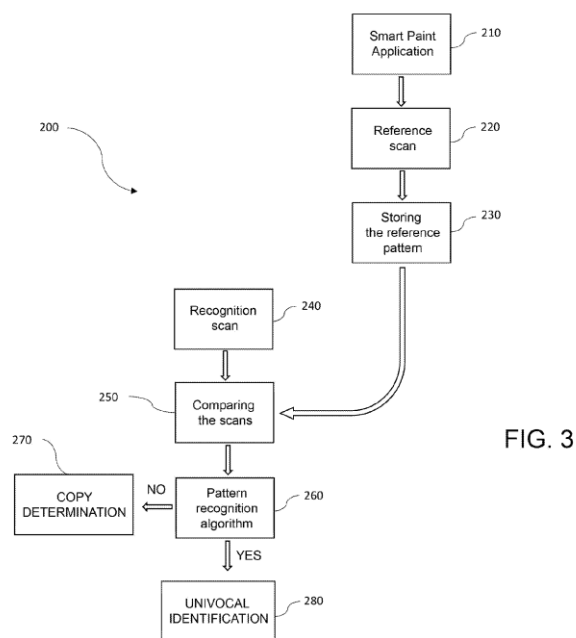


FIG. 3

21: 2024/08909. 22: 2024/11/22. 43: 2025/05/29  
51: F25B

71: SHANDONG ZKNKT ARTIFICIAL  
ENVIRONMENT CO., LTD.

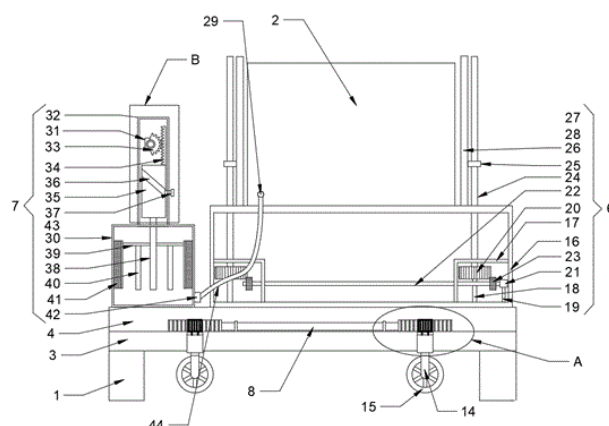
72: ZHANG, Teng, ZHANG, Chuntian, YUAN, Qihe,  
ZHANG, Caixia, ZHANG, Chunyu

#### 54: HIGH-TEMPERATURE WATER SOURCE HEAT PUMP UNIT FOR RECOVERING WASTE HEAT FROM HIGH-TEMPERATURE WASTEWATER

00: -

The present invention discloses a high-temperature water source heat pump unit for recovering waste heat from high-temperature wastewater, and relates to a water source heat pump unit, comprising a support column and a main unit, a support base is fixedly connected above the support column, a movable chamber is fixedly connected above the support base, a moving assembly is fixedly connected with a bottom portion of an inner cavity of the movable chamber, and a soundproof component and a water purification component are fixedly connected above the movable chamber. The device has a simple structure and diverse functions. The device raises and lowers the moving wheel through a bidirectional electric push rod, which achieves the effect of moving and placing the device and saves manpower; the soundproof cloth is also pulled up and lowered through a soundproof motor, which reduces noise pollution and protects the hearing of

the staff; since industrial wastewater often contains large particle impurities such as iron filings and particulate matter, it may cause damage to the machine body if used directly, so the device is provided with a water purification component to pre-treat the wastewater, which avoids the above-mentioned problems. The use effect of the device is outstanding and worthy of promotion.



21: 2024/08910. 22: 2024/11/22. 43: 2025/05/29  
51: A61K; C07D

71: TAIGEN BIOTECHNOLOGY CO., LTD., TAIGEN  
BIOPHARMACEUTICALS CO. (BEIJING), LTD.

72: HONG, Chung-Shu, CHEN, Wei-Tsung

#### 54: PHARMACEUTICAL COMPOSITION COMPRISING A CAP-DEPENDENT ENDONUCLEASE INHIBITOR

00: -

Provided herein is a pharmaceutical composition including a solid dispersion containing a cap-dependent endonuclease inhibitor or a pharmaceutically acceptable salt thereof for oral administration.

21: 2024/08919. 22: 2024/11/25. 43: 2025/06/02  
51: A61B

71: Yichang Central People's Hospital (First Clinical  
Medical College of Three Gorges University, Central  
People's Hospital Affiliated to Three Gorges  
University)

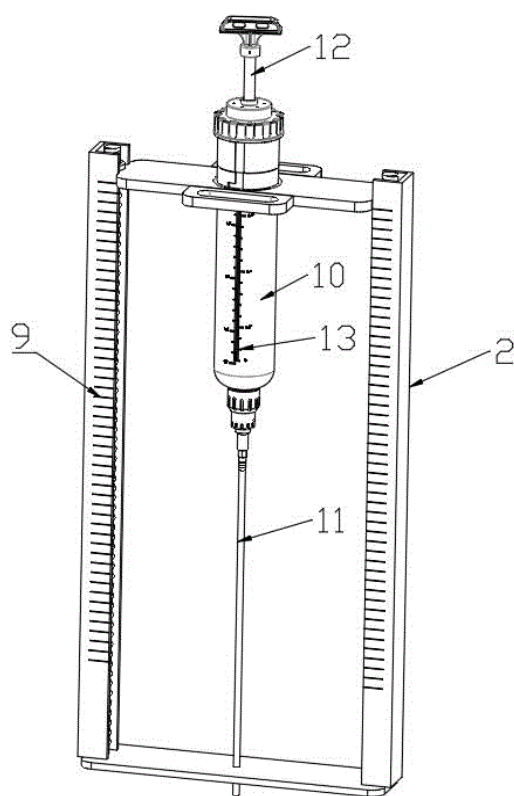
72: Danlei Han

#### 54: BONE MARROW BIOPSY SAMPLING DEVICE

00: -

A bone marrow biopsy sampling device, comprising a bone marrow biopsy sampling needle and a fixed frame, wherein a transverse pressure plate is connected to an outer peripheral surface of the bone

marrow biopsy sampling needle; guide rods are provided inside the fixed frame; springs are sleeved on outer sides of the guide rods; connection holes are provided on both sides of the transverse pressure plate, and the connection holes are sleeved on the guide rods; limiting components are threaded on tops of the guide rods; a circular hole for the bone marrow biopsy sampling needle to pass through is provided at a bottom end of the fixed frame. The invention adopts a combination of multiple structures such as a bone marrow biopsy sampling needle, a fixed frame, a transverse pressure plate, guide rods, and springs; medical personnel can press the transverse pressure plate downwards as needed, and the transverse pressure plate drives the sampling needle tube and sampling needle tip to move downwards to complete the puncture process for the patient; the bone marrow biopsy sampling is used to complete the sampling process for the patient; the structural arrangement of the transverse pressure plate and fixed frame mentioned hereinabove facilitates the operation and control of the entire sampling device.



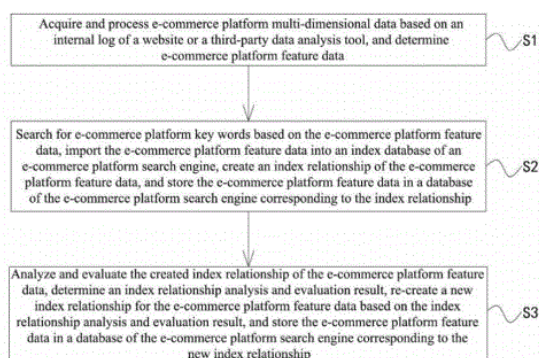
21: 2024/08920. 22: 2024/11/25. 43: 2025/06/02  
51: G06F

71: Shandong University of Finance and Economics  
72: YUE, Houguang

#### 54: METHOD FOR CONSTRUCTING DATABASE OF E-COMMERCE PLATFORM SEARCH ENGINE

00: -

The present invention discloses a method for constructing a database of an e-commerce platform search engine, falling within the technical field of database construction and including the following steps: S1: acquiring and processing e-commerce platform multi-dimensional data, and determining e-commerce platform feature data; S2: importing the e-commerce platform feature data into an index database of an e-commerce platform search engine, creating an index relationship of the e-commerce platform feature data, and storing the e-commerce platform feature data in a database of the e-commerce platform search engine; and S3: analyzing and evaluating the created index relationship of the e-commerce platform feature data. In the present invention, problems that the existing construction of a database of an e-commerce platform search engine is not good in effect, the accuracy of search results is low, and the user experience is affected, are solved.



21: 2024/08921. 22: 2024/11/25. 43: 2025/06/02  
51: A01M

71: Gansu Agricultural University  
72: Lixiang WANG, Chunchun LI, Ning LYU, Xuan WANG, Zhuandi PEI

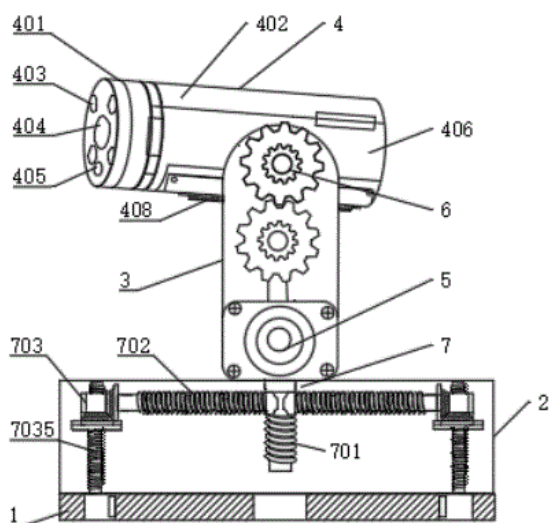
#### 54: AUTOMATIC SPRAYING DEVICE FOR FOREST PESTS AND DISEASES

00: -

An automatic spraying device for forest pests and diseases is disclosed, which relates to the field of



automatic spraying technology. The device includes a bottom plate, a box body, a support and a pesticide applicator, the box body is arranged on a top of the bottom plate, one end of the support is connected to the box body, and another end of the support is connected to the pesticide applicator; a height adjustment structure is arranged in the box body, the height adjustment structure is connected to a controller arranged at a top of the box body, an angle regulator is arranged above the controller, and an output end of the angle regulator is rotatably connected to the pesticide applicator. The present invention adopts a controller, an angle regulator and a height adjustment structure, which can realize automatic adjustment of height and angle, it can adapt to complex terrain and vegetation conditions in different forest environments to ensure accurate and efficient application of the device, and the image recognition module and infrared positioning lamp are adopted to realize the accurate identification and positioning of the target plant, and control the opening and closing of the nozzle, so as to realize the precise pesticide application operation, so as to realize the high accuracy and coverage of the pesticide application.



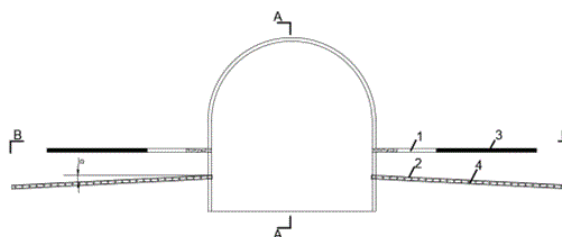
21: 2024/08922. 22: 2024/11/25. 43: 2025/06/02  
51: E21D

71: Xinjiang University  
72: Honglin LIU, Meng WANG, Yang XIA, Hongzhi WANG, Jun LIU, Wenxiang CAO, Chengfang SHAN, Zhongzong CAO, Yong QU

#### **54: CONTROL METHOD FOR HIGH-STRESS STRONG-RHEOLOGY ROADWAY FLOORS BASED ON STRESS REGULATION AND REINFORCEMENT OF SURROUNDING ROCKS**

00: -

The present invention discloses a control method for high-stress strong-rheology roadway floors based on stress regulation and reinforcement of surrounding rocks. In response to extrusion flow deformation of high-stress strong-rheology roadway floors, based on a real stress transmission path of surrounding rocks of a roadway, a stress transfer technology, a stress blocking technology and a floor reinforcement technology are used to synergistically control a roadway floor bulging phenomenon, and to synergistically control large deformation of the high-stress strong-rheology roadway floors, which can achieve the effect of stabilizing the floors and effectively reduce a repair rate of roadway floors, and thus reducing the maintenance cost of mine roadways during the later stage.



21: 2024/08923. 22: 2024/11/25. 43: 2025/06/02  
51: G01N

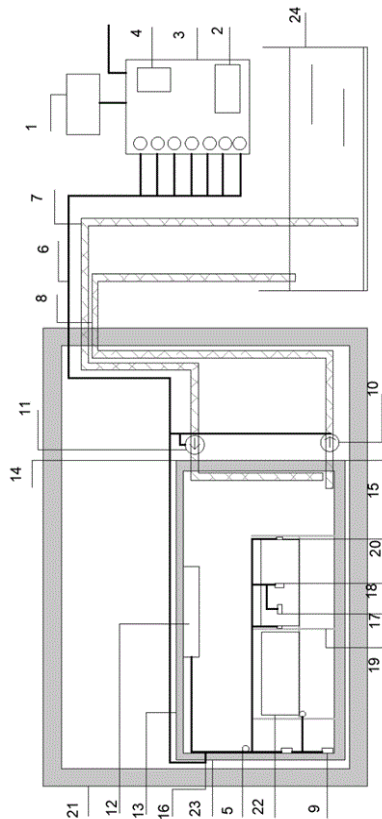
71: Xinjiang University  
72: Honglin LIU, Meng WANG, Zhongzong CAO, Yang XIA, Chengfang SHAN, Haishan HUANG, Hongzhi WANG, Jinmao JU, Guofeng NIU

#### **54: PLC CONTROL-BASED FREEZE-THAW CYCLE EXPERIMENT DEVICE AND METHOD**

00: -

The present invention discloses a PLC control-based freeze-thaw cycle experiment device and method. According to the present invention, a freeze-thaw temperature interval from -40 to 100 degrees Centigrade can be implemented by using a refrigeration compressor and an electric heater, a purpose of automatically controlling a freeze-thaw cycle by a PLC can be implemented through a PLC controller, a control circuit, a water circulation system, and a temperature control system, and an automatic freeze-thaw cycle of a rock sample is

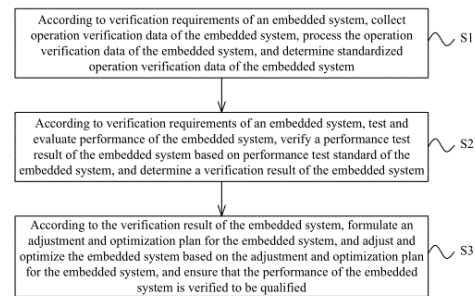
implemented by using a human-machine interface control system and the temperature control system. A studied damage mechanism of a rock under a freeze-thaw cycle condition is of a certain engineering significance for freeze-thaw damage assessment and prevention in cold region engineering.



21: 2024/08924. 22: 2024/11/25. 43: 2025/06/02  
51: G06F  
71: Shandong University of Finance and Economics  
72: YUE, Houguang  
**54: VERIFICATION METHOD, DEVICE AND APPARATUS FOR EMBEDDED SYSTEM**  
00: -

Disclosed are a verification method, device and apparatus for an embedded system. The verification method includes: S1: collecting operation verification data of an embedded system, processing the operation verification data of the embedded system, and determining standardized operation verification data of the embedded system; S2: testing and evaluating performance of the embedded system, verifying a performance test result of the embedded system based on performance test standard of the embedded system, and determining a verification

result of the embedded system; and S3: formulating an adjustment and optimization plan for the embedded system, adjusting and optimizing the embedded system, and ensuring that the performance of the embedded system is verified to be qualified. The present invention solves the existing problem that the embedded system cannot be well verified and cannot be optimized and improved in time, resulting in a poor using effect of the embedded system.



21: 2024/08925. 22: 2024/11/25. 43: 2025/06/02

51: G06F

71: LACUNA LIMITED LIABILITY COMPANY

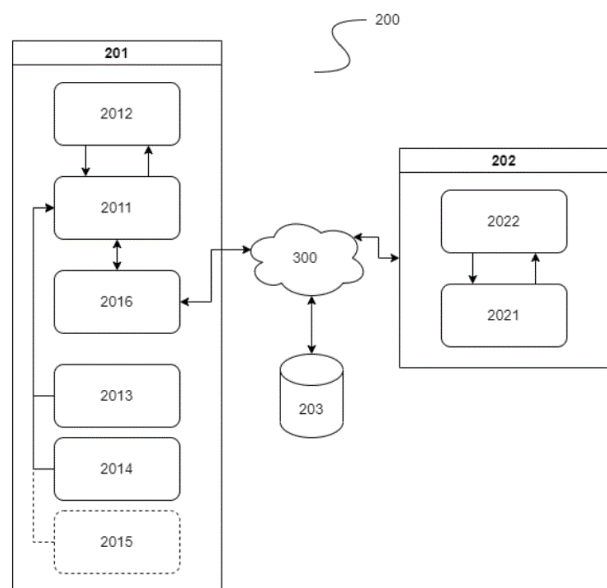
72: VETROV Dmitriy Viktorovich, POPOV Sergey Alekseevich, GIRIN Ivan Andreevich, BUROV Kirill Vitalievich

33: RU 31: 2024131172 32: 2024-10-17

**54: MACHINE READABLE MEDIUM FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE**

00: -

The technical solution relates to the field of information technology, more specifically, to methods and techniques for creating extended reality (XR) scenes. There is a need to ensure the ability to create reliable and stable XR applications that allow for stable and reliable generation of an XR scene regardless of the operating system of the mobile user device. A machine readable medium for generating an XR scene using web environment of a mobile user device is proposed. The technical result achieved by implementing the claimed technical solution, in addition to implementing the product and/or method for its intended purpose, is to ensure the reliability and stability of generating an XR scene using the web environment of a mobile user device. In some other aspects, the technical result achieved by implementing the claimed technical solution is also an increase in the stability of the XR scene



21: 2024/08926. 22: 2024/11/25. 43: 2025/06/04  
51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: DOMBALE, Anita Bapu, AGRAWAL, Aaditya, CHAVAN, Aayush, KOTHARI, Aagam, GADIYA, Aayush, GAVASKAR, Aarya, GUHAGARKAR, Abhishek

#### **54: A SYSTEM FOR PIXEL DATA MANAGEMENT**

00: -

The present invention is related to a system for pixel data management. This innovation presents a unique approach for converting audio, video, and PDF files into binary representations and further transforming them into grayscale images. These grayscale images are then merged to create a video, facilitating efficient compression for storage and transmission purposes. The proposed system utilizes binary encoding techniques to represent the audio, video, and PDF files as sequences of binary digits. By converting the files into binary format, the system prepares the data for subsequent transformation into visual representations. Next, the binary sequences are processed to generate grayscale images. Each binary digit is mapped to a corresponding pixel value, creating a grayscale pixel grid. The grayscale images provide a visual representation of the binary data, with darker and lighter shades reflecting the presence or absence of specific binary values. To compress the data, the grayscale images are merged to form a video. The individual grayscale frames are sequentially

combined to create a coherent video stream. By merging the grayscale images, redundant information is minimized, resulting in a compressed video representation. The compression process offers several benefits, including reduced storage requirements and efficient transmission. The merged grayscale video allows for compact representation of the original audio, video, and PDF files, optimizing the usage of storage resources. Additionally, the compressed video facilitates faster transmission over networks or other communication channels. It is important to note that while this approach achieves compression, it may result in a loss of fidelity and detail due to the nature of grayscale representation. However, the degree of compression can be controlled by adjusting the frame rate, resolution, and other parameters during the video creation process. In conclusion, this innovation introduces a novel method for converting audio, video, and PDF files into binary representations, transforming them into grayscale images, and merging these images to create a compressed video. The proposed approach provides a means to efficiently store and transmit multimedia content, making it suitable for scenarios with limited storage capacity or bandwidth. Further research and experimentation can explore the optimization of compression parameters to strike a balance between file size reduction and preserving the essential characteristics of the original content.

21: 2024/08927. 22: 2024/11/25. 43: 2025/06/02  
51: G06F

71: China University of Mining and Technology, Xinjiang University

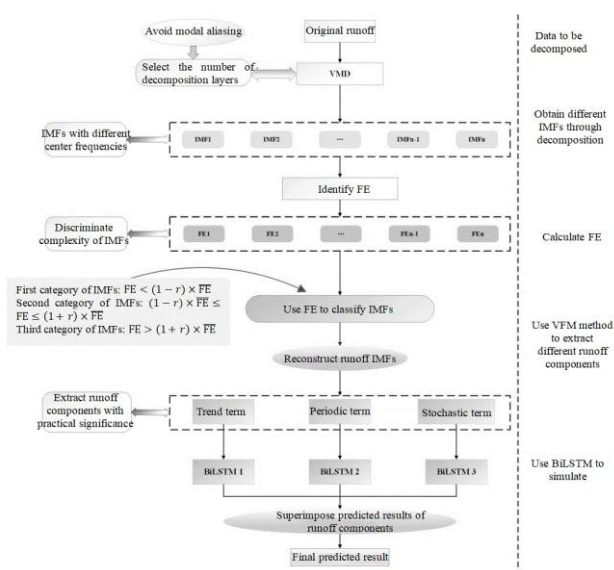
72: Zhu Kui, Zhang Shujian, Dai Yanyu, Zhang Ming  
33: CN 31: 202411484952.5 32: 2024-10-23

#### **54: RUNOFF PREDICTION METHOD, DEVICE, APPARATUS AND MEDIUM**

00: -

The present invention provides a runoff prediction method, device, apparatus, and medium, relating to the field of hydrological forecasting. In the present invention, variational mode decomposition (VMD) is utilized to decompose original runoff sequence data. Fuzzy entropy (FE) is employed to evaluate the signal complexity of the subsequences obtained after decomposing the original runoff sequence data. A virtual flow metering (VFM) method is employed to set recombined components of runoff subsequences

with low, medium, and high signal complexity as a trend term, a periodic term, and a stochastic term, respectively. This process extracts the rich feature information from the original runoff sequence while decomposing and presenting the short-term and long-term periodic variation trends of the runoff. Subsequently, a bidirectional long short-term memory (BiLSTM) prediction model is adopted to predict the trend term, the periodic term, and the stochastic term separately to obtain their respective predicted values. These predicted values are summed to forecast the runoff variation trend at a hydrological station, significantly enhancing the accuracy of predicting runoff.



connectivity. By utilizing various sensors, the Arduino board can perceive its surroundings by receiving input and interacting with its environment by controlling LCDs, speakers, motors, and GSM modules. Among these sensors, the ultrasonic sensor stands out as it enables non-contact distance measurement of target objects or materials through the air. This technology allows for distance measurement without causing any damage and is user-friendly. The sensor provides analog output signals, which are then digitally formatted and processed by the microcontroller. In this particular invention, the ultrasonic sensor is employed for obstacle detection and precise distance measurement. The microcontroller's built-in analog-to-digital converter is calibrated to ensure accurate distance measurements. Furthermore, the measured distance is displayed on an LCD screen for easy visualization. One can also store the data/measurements in the app made using Flutter and can also view the basic 3-D model made from the measurements that have been taken.

21: 2024/08929. 22: 2024/11/25. 43: 2025/06/05  
51: G01N

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: BORA, Shradha, JAIN, Chetan, CHILBULE, Pranit, CHHAJED, Jeevaan, CHIKHALE, Shramanraj

#### 54: A WASTE DETECTION SYSTEM FOR GARBAGE SEGREGATION

00: -

The present invention is related to a waste detection system for garbage segregation. It has been warned continuously about the high amount of waste production and its effect on our ecology. One can contribute to solving this problem by the waste segregation. The way the waste is being disposed today is causes creation of landfills, contamination. So by effective segregation this problem can be solved to an effective extent. This invention aim to create a waste detection system based on image processing and deep learning to differentiate between metallic, paper, plastic, and organic waste. This can help in clean sorting of different materials and can later be sorted in recyclable and non-recyclable waste.

21: 2024/08928. 22: 2024/11/25. 43: 2025/06/04  
51: G01S

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: ADSUL, Sanjivani, BAHIR, Mangesh, BAILMARE, Vedant, BAJAJ, Ramanuj, BAHADKAR, Susmit, BAHIRAM, Manisha

#### 54: AN ULTRASONIC SENSOR BASED SYSTEM FOR DETECTING OBJECTS AND DISTANCE MEASUREMENT

00: -

The present invention is related to an ultrasonic sensor based system for detecting objects and distance measurement. A sensor is a device that detects or measures a physical property and records, indicates, or otherwise responds to it. On the other hand, Arduino is a compact microcontroller board equipped with a USB plug for computer



21: 2024/08930. 22: 2024/11/25. 43: 2025/06/02

51: F16F

71: Xinyu University

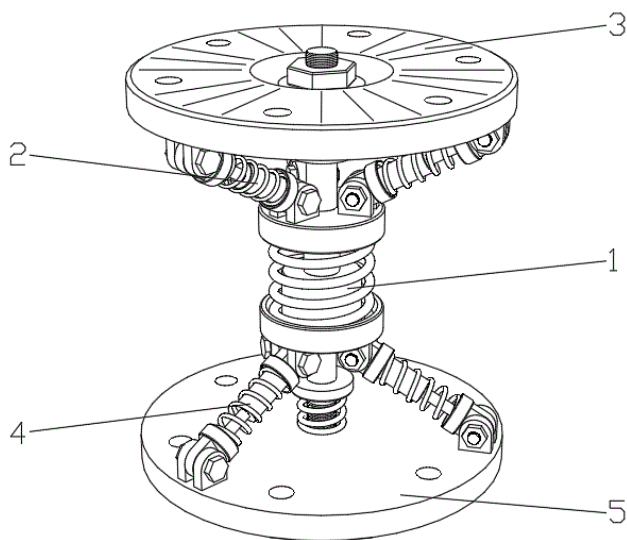
72: Yang Guojun, Yu Longhai, Huang Haishui, Xiao Xi, Li Xiaomie

#### **54: DAMPING DEVICE FOR MECHANICAL ENGINEERING EQUIPMENT**

00: -

The present invention disclosed a damping device for mechanical engineering equipment, including a supporting damping component. Upward inclined damping components are rotatably connected to an upper end of the supporting damping component, an upper mounting bracket component is rotatably connected to upper ends of the upward inclined damping components, and downward inclined damping components are rotatably connected to a lower end of the supporting damping component. In the present invention, multiple damping devices can be positioned collectively beneath bases of devices and between the supporting components.

Alternatively, the multiple damping devices can be securely mounted between the devices and the supporting components by utilizing the fixed mounting through holes. The multiple disk anti-slip patterns arranged on a disk body can achieve excellent cushioning and anti-slip effects. Three sets of the upward inclined damping components and the downward inclined damping components, arranged at upper and lower ends of the supporting damping component, will dampen multi-directional vibration impact forces and simultaneously compress the supporting damping component inwardly. The supporting damping component provides shock absorption and support in a vertical direction, achieving an enhanced shock absorption effect.



21: 2024/08931. 22: 2024/11/25. 43: 2025/06/05

51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: DOMBALE, Anita Bapu, PALA, Aniketh, ANSINGKAR, Atharva, DESAI, Anish, WAKHURE, Anjali, ANSINGKAR, Atharva, CHAHARE, Ansh

#### **54: AN ARTIFICIAL INTELLIGENCE BASED EVENT AND TASK MANAGEMENT SYSTEM**

00: -

The present invention is related to an artificial intelligence based event and task management system. The rapid advancements in artificial intelligence (AI) have revolutionized various aspects of our daily lives. In this, an AI-based smart diary application (android) designed to enhance productivity and support emotional well-being. Traditional diaries have served as a means of recording events and thoughts, but they often lack intelligent features that can provide personalized support and insightful analysis. Furthermore, the smart diary incorporates smart reminders and notifications, leveraging AI algorithms to identify relevant events or tasks based on the user's entries. The system can intelligently prioritize and schedule reminders, ensuring important events and deadlines are not overlooked.

21: 2024/08932. 22: 2024/11/25. 43: 2025/06/05

51: G08G

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY



72: RAJPUT, Vaishali Sham, GAIKWAD, Srushti, GAIKWAD, Priyanka, GAIKWAD, Pruthviraj, GAIKWAD, Rutvik, GAIKWAD, Shravani, GAIKWAD, Siddhant

#### **54: AN AUTOMATIC NUMBER PLATE RECOGNITION SYSTEM FOR PARKING ALLOTMENT**

00: -

The present invention is related to an automatic number plate recognition system for parking allotment. In recent times parking allotment has been a big problem in over crowded areas. So the project provides a proper frame work for parking allotment systems. It uses deep learning technology to read the number plate and show the profile of the person owning the vehicle through number plate detection. Project helps to show the parking space available in the campus and then allot a particular parking space.

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21: 2024/08933. 22: 2024/11/25. 43: 2025/06/05  
51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: DOMBALE, Anita Bapu, NAPHADE, Amit, ASIT, Anand, SHARMA, Ananya, ANDHALE, Aditya, ANDRASKAR, Shruti, ANDURE, Sidhant

#### **54: A SYSTEM FOR DATA SECURITY**

00: -

The present invention is related to a system for data security. When data exchange advances through the electronic system, the need for information security becomes a must. The protection of images, texts and videos is important in today's visual communication system. Confidential videos, text and image data must be shielded from unauthorized uses. Detecting and identifying unauthorized users is a challenging task. Various researchers have suggested different techniques for securing the transfer of texts. Keeping security in mind we have designed an encryption and decryption algorithm. We have mainly focused on data security which can be used by security agencies, IT sector, SMBs, health care, government entities, the legal sector, financial and banking, etc. Encryption and decryption techniques are essential for preserving confidential data, maintaining the integrity of communication channels, and safeguarding the security of sensitive information. These strategies transform plaintext data into unintelligible ciphertext and vice versa

using a variety of encryption algorithms and cryptographic techniques. Asymmetric encryption (public key encryption) uses two keys: a public key for encryption and a private key for decryption, as opposed to symmetric encryption, which uses a single secret key for both encryption and decryption. Through the creation of fixed-size hash values, hash functions allow data integrity verification. The benefits of symmetric and asymmetric encryption are combined in hybrid encryption, while Transport Layer Security (TLS) assures safe network connection.

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21: 2024/08934. 22: 2024/11/25. 43: 2025/06/05  
51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: SONAWANE, Vishnu, BELURE, Prasad, BENDALE, Girija, BHADANE, Om, BHADDE, Shourya, BHAGAT, Chirag

#### **54: A SYSTEM FOR SIGN LANGUAGE RECOGNITION**

00: -

The present invention is related to a system for sign language recognition. In sign language, hand gestures are one of the nonverbal modes used. It is most used by deaf and dumb people who have hearing or speech problems to communicate with other deaf and dumb people or non-deaf people. It is also a piece of software that demonstrates a system prototype capable of automatically recognizing sign language, allowing deaf and dumb people to communicate more effectively with one another and with the public. Dumb people are permitted to refuse normal communication with other members of society. Ordinary people find it difficult to understand and communicate with them. Deaf and Dumb people must communicate with an interpreter or some form of visual communication. Visual communication is notoriously difficult to learn, and a translator will not always be accessible. understand. The deaf and dumb community's principal mode of communication is signing language. Because the average person does not understand the syntax or meaning of many of the gestures used in sign language, it is mostly utilized by the families of the deaf and dumb.

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21: 2024/08935. 22: 2024/11/25. 43: 2025/06/05  
51: G07B

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JADHAV, Balasaheb, BHOR, Vaishnav, BHOSALE, Rajas, BHOSALE, Ajinkya, BHOSALE, Dipraj, BHOSALE, Prathamesh, BHOSALE, Shreya

#### **54: A QR CODE AND GPS BASED BUS TICKET SYSTEM**

00: -

The present invention is related to a QR code and GPS based bus ticket system. The QR code-based ticket system for the Pune Mahanagar Parivahan Mahamandal Limited (PMPML) introduces an efficient and convenient method for ticketing. This system utilizes QR codes generated on passengers' mobile devices, enabling them to purchase and validate tickets seamlessly. By scanning the QR codes at designated points, the system verifies ticket authenticity, simplifies fare collection, and reduces reliance on physical tickets. This technology-driven approach improves passenger experience, enhances operational efficiency, and promotes contactless transactions in public transportation.

21: 2024/08936. 22: 2024/11/25. 43: 2025/06/05  
51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: UBALE, Ganesh, DASARWAR, Eshaan, DAVARE, Pratik, DATIR, Dev, DATE, Ameya, D'COSTA, Shane, DATTAWADE, Pratham

#### **54: A HAND GESTURE RECOGNITION SYSTEM FOR ENHANCING HUMAN-COMPUTER INTERACTION**

00: -

The present invention is related to a hand gesture recognition system for enhancing human-computer interaction. This invention examines the application of hand gesture detection utilizing computer vision and machine learning approaches. It highlights the importance of hand gestures in increasing user experience and enhancing interaction with digital systems. The process of hand gesture recognition is then briefly described in its many stages, including image acquisition, feature extraction techniques, and machine learning techniques. Python libraries and frameworks like OpenCV serve as effective implements for hand gesture recognition. A live example of an interactive Python-based application is presented to highlight the use of hand gesture recognition. The benefits and potential uses of hand

gesture recognition are highlighted in the detailed description, enabling developers to quickly integrate hand gesture detection capabilities into their applications.

21: 2024/08937. 22: 2024/11/25. 43: 2025/06/05  
51: G06K

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: DOMBALE, Anita Bapu, DEORE, Aditya, AGONE, Bhavesh, AGRAWAL, Shiven, AGAWANE, Shreyash, BIHANI, Aditya, ADSUL, Atharva

#### **54: A SYSTEM FOR HANDWRITTEN TO TEXT CONVERSION AND PLAGIARISM CHECKING**

00: -

The present invention is related to an innovative app that utilizes the Tesseract OCR engine for handwritten-to-text conversion and plagiarism checking. The app has undergone successful testing and implementation, demonstrating its reliability and seamless functionality. Powered by Tesseract's advanced optical character recognition technology, the app accurately converts diverse handwriting styles into editable digital text, preserving the integrity of the original content. Additionally, the app incorporates a powerful plagiarism detection API that compares the converted text against extensive databases, ensuring the authenticity and originality of the content. With a user-friendly interface and customizable features, the app provides an intuitive and personalized experience for users. This research paper explores the development and capabilities of the app, emphasizing the crucial role of Tesseract OCR in enabling efficient handwritten-to-text conversion and plagiarism checking in academic and professional contexts.

21: 2024/08938. 22: 2024/11/25. 43: 2025/06/02  
51: G11B

71: Xinyu University

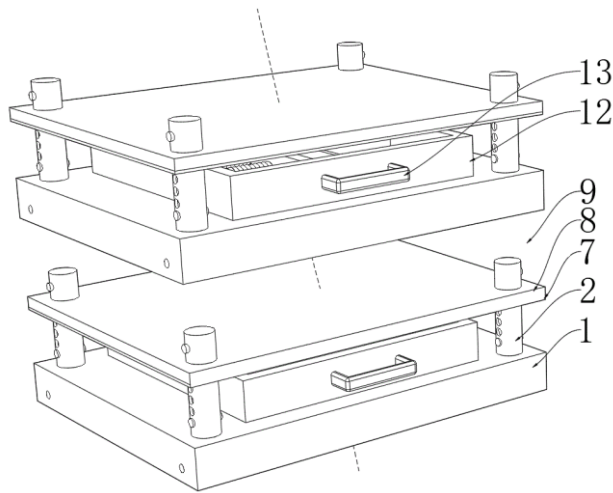
72: Luo Haiyong, Li Xiaomie, Fu Kai, Li Shiwen, Liu Mingqi, Liu Xueping

#### **54: STORAGE DEVICE FOR STATISTICAL COLLECTION OF COMPUTER BIG DATA**

00: -

The present invention provides a storage device for statistical collection of computer big data. The storage device includes a plurality of bearing plates. Four bearing rods is fixedly connected to a periphery of a top of one of the bearing plates, a connecting

rod is slidably connected to an inner wall of one of the bearing rods, and every interior of the connecting rods is arranged with a spring I. Two ends of the spring I are fixedly connected to sliders. In the present invention, the device is designed into a segment type through the linkage among the bearing plates, the bearing rods, the connecting rods, the springs I, the sliders, a connecting plate, fixing rods, springs II and lock blocks, and the storage capacity can be flexibly increased or decreased according to the needs.



21: 2024/08939. 22: 2024/11/25. 43: 2025/06/02

51: B09C; G01N

71: HENAN COLLEGE OF URBAN CONSTRUCTION

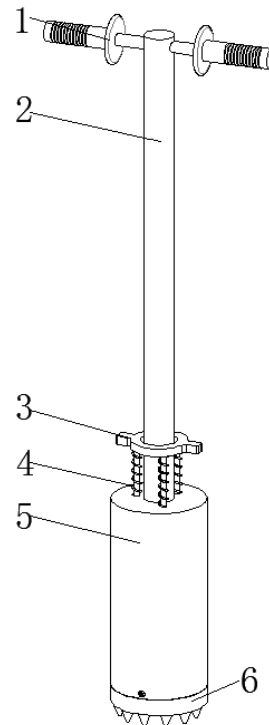
72: LI, Yan, HUANG, Xiaoping, GUO, Guangyuan, SONG, Ziyang, GUO, Junxue, ZHANG, Xiaorui, MA, Wenming, YIN, Shouqiang

#### **54: DEVICE FOR COLLECTING SOIL BASED ON LAND CONSOLIDATION**

00: -

The present invention relates to the technical field of land consolidation and proposes a device for collecting soil based on land consolidation, including a fixed rod, a bottom end of the fixed rod is fixedly connected to a drilling barrel, a bottom end of the drilling barrel is arranged with a champing slot, a lower end of a surface of the drilling barrel is arranged with a reserved slot, an interior of the reserved slot is movably connected to a fixed bolt, a bottom end of the drilling barrel is provided with a drilling gear ring, a top end of the drilling gear ring is fixedly connected to a champing block, and one end of the champing block is arranged with a bolt hole.

When the drilling gear ring is worn, it can be disassembled and repaired or directly replaced to reduce the subsequent maintenance cost. At the same time, It is convenient to push and take out a soil sample at the interior of the drilling barrel by using the sliding pushing plat, thereby facilitating the subsequent detection of the soil.



21: 2024/08940. 22: 2024/11/25. 43: 2025/06/02

51: A01B

71: HENAN COLLEGE OF URBAN CONSTRUCTION

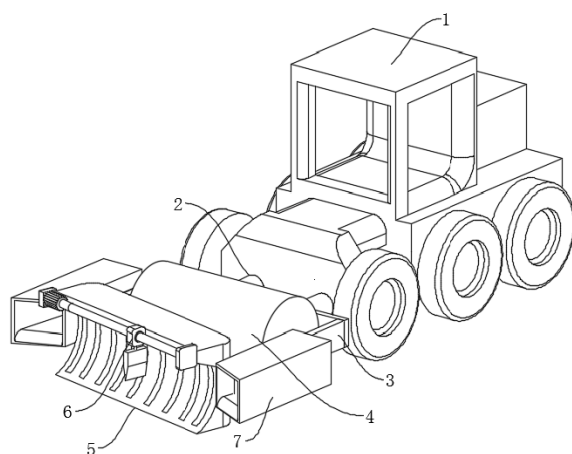
72: LI, Yan, GUO, Panpan, HUANG, Xiaoping, LIU, Sen, YIN, Jiandang, YANG, Feng, QU, Qianlong, LIU, Yuhong, MA, Zhanlin

#### **54: GROUND LEVELLING DEVICE USED FOR LAND CONSOLIDATION**

00: -

The present invention discloses a ground levelling device for land consolidation, which belongs to the field of processing and production of land consolidation, including a driving vehicle, one side of the driving vehicle is connected to two ejector pins, one side of the two ejector pins is connected to a same pushing plate, an interior of the pushing plate is rotatably connected to a pressing flatten roller, one side of the pushing plate is connected to a sieve

plate, one side of the sieve plate is connected to a driving device used for cleaning redundant stones, and front and back sides of the pushing plate are connected to a receiving device used for collecting the stones. By starting the motor, the motor drives the reciprocating screw to rotate, then drive the thread cap and the cleaning plate to move synchronously, at this time, the cleaning plate clears up the stones that are piled up outside the sieve plate, avoiding excessive accumulation of stones, which may affect the driving force of the vehicle.



21: 2024/08966. 22: 2024/11/26. 43: 2025/06/02  
51: H04L

71: Shanxi Agricultural University

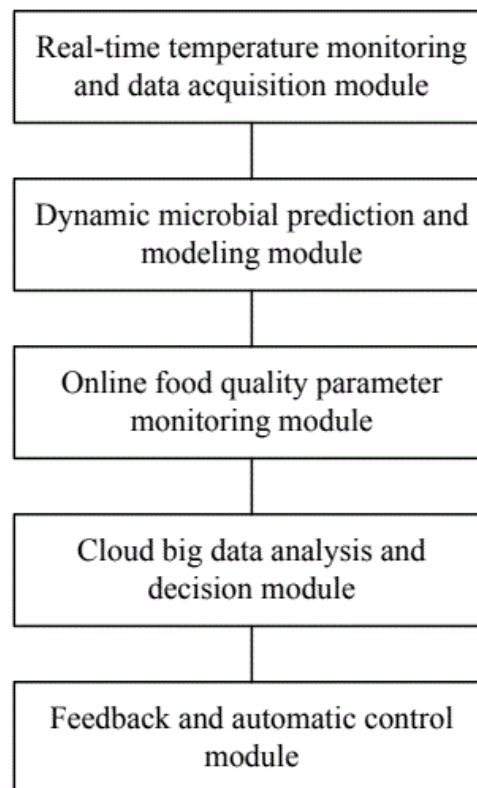
72: ZHAO, Xiaoqiang, ZHANG, Yuanqing

#### **54: MEAT PRODUCT COLD-CHAIN LOGISTICS MONITORING SYSTEM**

00: -

Disclosed is a meat product cold-chain logistics monitoring system, including a real-time temperature monitoring and data acquisition module, configured to monitor and record ambient temperature data in cold-chain logistics in real time, and give early warning in case of temperature anomalies; a dynamic microbial prediction and modeling module, configured to predict microbial growth in meat based on the ambient data, and estimate the spoilage risk and shelf life; an online food quality parameter monitoring module, configured to monitor meat quality parameters in real time to directly assess spoilage; a cloud big data analysis and decision module, configured to integrate and analyze data of all modules, generate a visual result and provide operational recommendations; and a feedback and

automatic control module, configured to automatically adjust ambient parameters according to the analysis result. The present invention can maximize the freshness and safety of meat.



21: 2024/08967. 22: 2024/11/26. 43: 2025/06/02  
51: G05B

71: Shenzhen Zheyang Changke Intelligent Technology Development Co., Ltd

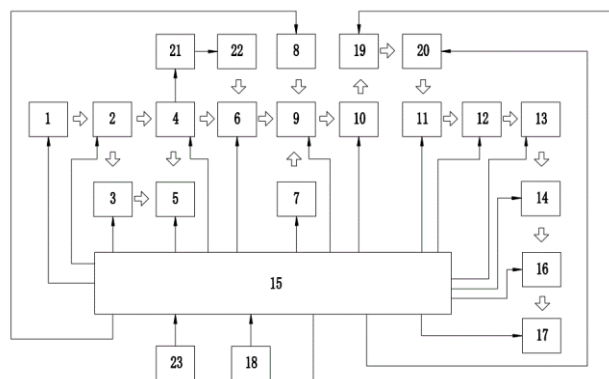
72: Peng Zhe, Feng Mingfa, Wu Yunguo, Liu Wen, Liu Lishu, Gan Xuezheng, Jin Junwen, Peng Yiwen, Yang Xinrong, Yu Anquan, Wang Longfei, Chen Xuyong, Guo Zhilin, Gan boning, Xing Chunan, Liu Jianxing, Deng Guoqiang, Jiang Shi, Zhou Yingchun, Cao Hongxi, He Jun, Peng Yibin  
33: CN 31: 2024114838272 32: 2024-10-23

#### **54: INTELLIGENT FULL-AUTOMATIC PHOSPHOGYPSUM PAPERMAKING SYSTEM AND PAPERMAKING METHOD**

00: -

The present invention provides an intelligent full-automatic phosphogypsum papermaking system and a papermaking method. The system includes the following sequentially arranged along a set direction: a feeding mechanism, a dehumidifying mechanism, a foreign matter removal mechanism, a subdivision mechanism, a batching mechanism, a deep refining

mechanism, a granulation mechanism, a rapid cooling mechanism, a deployment mechanism, a coating mechanism, a receiving mechanism, a slitting mechanism and a warehousing robot. The dehumidifying mechanism is connected to a water vapor collection mechanism, and the foreign matter removal mechanism includes a magnetic metal removal mechanism and a non-magnetic metal and non-metal removal mechanism respectively configured to remove magnetic metal foreign matter and non-magnetic metal and non-metal foreign matter, the foreign matter removal mechanism being connected to a foreign matter collection mechanism; and the batching mechanism is connected to an adhesive dispensing device and an auxiliary agent dispensing device, and configured to mix phosphogypsum powder with a material from the adhesive dispensing device and an auxiliary agent from the auxiliary agent dispensing device. In the present invention, phosphogypsum can be turned into usable resources on a large scale, and at the same time, the produced paper product is ensured to be within an environment-friendly range of compliance.



21: 2024/08968. 22: 2024/11/26. 43: 2025/06/06  
51: G06K

71: Henan University of Urban Construction

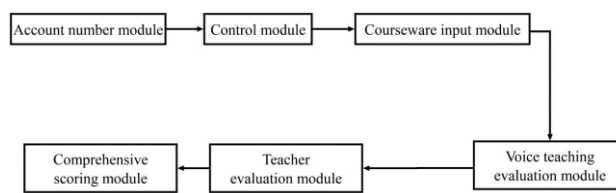
72: HE Wei, SHI Chunlei, PANG Kaige

#### **54: INTELLIGENT TEACHING EVALUATION SYSTEM BASED ON VOICEPRINT DETECTION AND EMOTION ANALYSIS**

00: -

The invention discloses an intelligent teaching evaluation system based on voiceprint detection and emotion analysis, including a teaching evaluation platform, a heat dissipation and dust collection component, a limiting component, an account

number module, a control module, a courseware input module, a voice teaching evaluation module, a teacher evaluation module, a voiceprint emotion analysis module and a comprehensive scoring module, the heat dissipation and dust collection component is fixed on the inner wall of the bottom end of the teaching evaluation platform, and the limiting component is fixed on the inner wall of the bottom end of the teaching evaluation platform, and the account number module, the control module, the courseware input module, the voice teaching evaluation module, the teacher evaluation module, the voiceprint emotion analysis module and the comprehensive scoring module are distributed and installed on the inner wall of one side of the teaching evaluation platform; in the invention, students' information is directly detected and identified by acoustic signals, so that the teaching evaluation process is simplified, and the teaching evaluation efficiency is improved; moreover, heat dissipation and dust collection operations are carried out on the teaching evaluation platform, which can prevent excessive temperature or static electricity from attracting too much dust during the teaching evaluation process, thereby improving the operation of the equipment.



21: 2024/08970. 22: 2024/11/26. 43: 2025/06/02  
51: A23N

71: Anhui Science And Technology University, Chuzhou Hetian Agricultural Machinery Co., Ltd.

72: QIAO, Yinhu, LI, Yunfei, ZHANG, Chunyan, ZHU, Renshan, AI, Zhiyun, LIAO, Junling

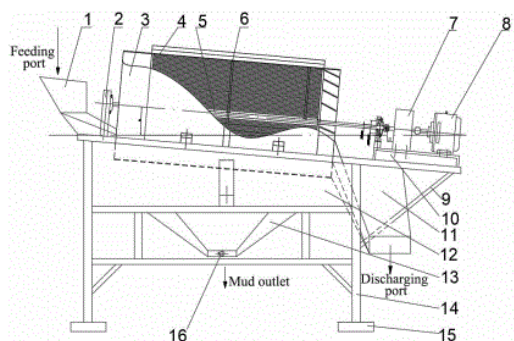
#### **54: AGRICULTURAL DRUM-TYPE YACON CLEANING MACHINE**

00: -

The present invention discloses an agricultural drum-type yacon cleaning machine. The cleaning machine is driven by a motor, and raw materials constantly rotate in a drum in a water tank. A main shaft of the drum and welding connecting members are fixed at an opening inside the drum. An inner wall of the drum is cleaned by a plurality of brush rollers. For the cleaning purpose, soil and sand after



cleaning can flow out from a lower part of the tank. The cleaning machine is composed of brackets, a motor, a belt drive system, a speed reducer, a coupling, a sprocket drive system, bearings, a spiral drum, flushing water pipes, a material baffle plate, and a discharging mechanism. The drum has a certain inclination angle; and a mud outlet, a water outlet, and a discharge hopper are provided separately.



21: 2024/08971. 22: 2024/11/26. 43: 2025/06/02  
51: A01K

71: Shanghai Ocean University, SHANG HAI MOOGONUTRITION CO., LTD

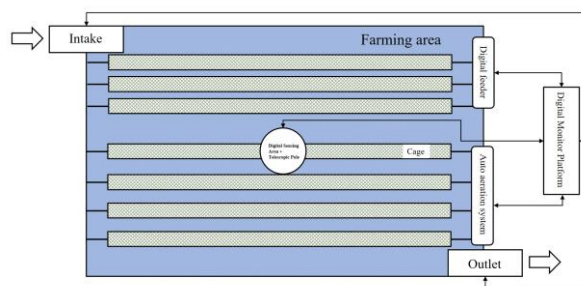
72: Li, Wenjuan, Fu, Yuanshuai, Liu, Shijun, Yin, Yiming

**54: A BROADLY APPLICABLE FRESHWATER PEARL MUSSEL SMART ECOLOGICAL AQUACULTURE SYSTEM**

00: -

This invention addresses the needs of smart aquaculture development in China, solving the problem of intelligent breeding of pearl mussels and their mixed breeding with carnivorous or omnivorous aquatic animals. It combines key technologies in pearl mussel breeding to construct an automatic monitoring system for water quality parameters related to pearl mussel breeding, and designs a new type of smart IoT system for breeding environments suitable for smart breeding, smart aquaculture, and automated monitoring of water quality ecology. The system has the advantages of digital intelligence, easy disassembly, and wide applicability. By utilizing the characteristic of freshwater mussels to filter algae, it can effectively filter water quality, curb eutrophication and excessive proliferation of algae, achieve a virtuous cycle in the breeding system, grow pearls and shells, and play a role in water quality ecological regulation. The innovative plan

consists of three parts: an automatic monitoring and numerical control system; a breeding net protection system; and a water quality regulation system. This invention is widely applicable to different pearl mussel breeding scenarios, achieving the maximum degree of intelligent and automated pearl mussel breeding, and injecting new vitality into the sustainable development of the breeding industry.



21: 2024/08976. 22: 2024/11/26. 43: 2025/06/04  
51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: RAJPUT, Vaishali Sham, GAWALI, Pruthvaik, GAWAI, Sumit, GAWADE, Rushikesh, GAVIT, Jaykumar, GAVATE, Aditya

**54: A SYSTEM FOR AGRICULTURAL INSURANCE CLAIM SETTLEMENT**

00: -

The present invention is related to a system for agricultural insurance claim settlement. Agriculture is a fundamental industry that provides food for the world's population, but it also faces severe risks such as adverse weather events, disease outbreaks and pest infections. Agricultural insurance provides financial protection to farmers in all these aspects. But, traditional insurance methods involve time consuming physical visits to assess damage. However, using the advent in technology, this work can be done easily and efficiently. This invention aims to make insurance a hassle-free task. Using IoT services like the ESP32 camera modules for WiFi transmission and integrating it with the own weather database that accesses live as well as past data, one will be able to make Agriculture Insurance claims, fast and hassle free. The images help to determine the degree of damage to the crops due to the environmental factors considered. Also the data of weather gathered from it, help to authenticate the exact weather effects. The invention claims a system

that uses the database containing images and weather data, integrating it to verify the authenticity of the claims and making the process of dispersion of claims prompt.

21: 2024/08977. 22: 2024/11/26. 43: 2025/06/04

51: G06N

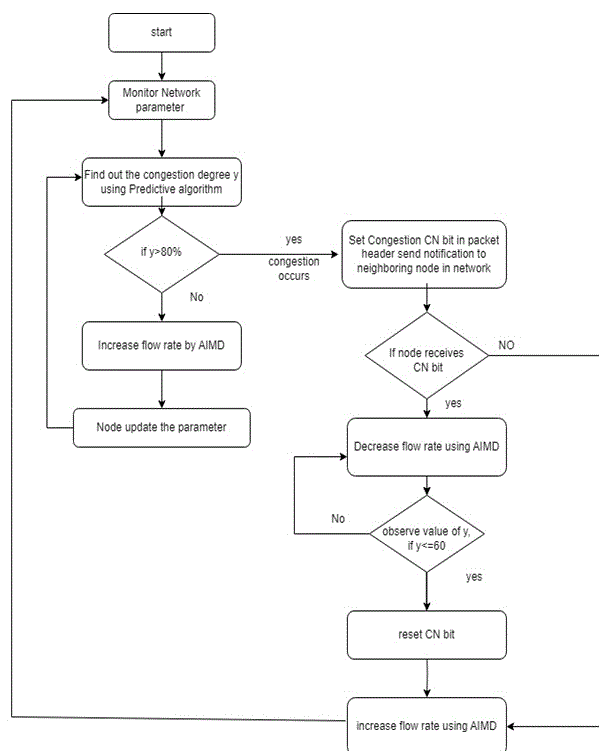
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: SHRIRAO, Shital M., SHINDE, Gitanjali R., MAHALLE, Parikshit N., SABLE, Nilesh P., DESHPANDE, Vivek S.

#### **54: A MACHINE LEARNING-BASED SYSTEM FOR CONGESTION PREVENTION IN WIRELESS SENSOR NETWORKS**

00: -

The present invention is related to a machine learning-based system for congestion prevention in wireless sensor networks. a predictive system for congestion prevention in Wireless Sensor Networks (WSNs) using advanced learning techniques. It addresses limitations of traditional congestion control methods by leveraging machine learning method to analyze real-time network data and environmental factors. By predicting congestion events before they occur based on parameters such as buffer occupancy, channel load, transmission rate, and distance from the sink node, the mechanism dynamically adjusts network parameters to optimize performance and prevent disruptions. This proactive approach enhances network reliability, energy efficiency, and quality of service metrics like packet delay and throughput. The invention's flexibility and adaptability make it suitable for diverse WSN applications, from environmental monitoring to industrial automation and healthcare systems, ensuring seamless data communication and operational efficiency in complex and dynamic network environments.



21: 2024/08978. 22: 2024/11/26. 43: 2025/06/04

51: A61B

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

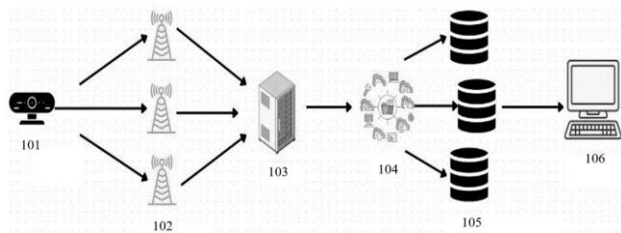
72: PATIL, Vivek D., MAHALLE, Parikshit Narendra, BAGWAN, Nomaan Nijam, GOLE, Ashutosh Dattatray, JOSHI, Vallabh Vinayak, INGALE, Pushkar Kishor

#### **54: AN IOT-BASED INTELLIGENT SYSTEM FOR UNHEALTHY ORGAN PREDICTION**

00: -

The present invention is related to an IoT-based intelligent system for unhealthy organ prediction. The system has a Wi-Fi-enabled high-resolution webcam (101), the system captures facial images and transmits data via access points (102) to a server (103). Advanced machine learning algorithms analyze this data on the server, with storage and processing facilitated by cloud infrastructure (104) and databases (105). The system performs facial feature analysis to detect acne patterns and correlate them with potential internal organ health issues. A user-friendly interface (106) provides personalized health insights, recommendations, and real-time alerts. The continuous learning mechanism ensures the model refines predictions based on user outcomes and incorporates the latest health research. Seamless integration with existing

healthcare systems enhances comprehensive health management. This innovative approach aims to improve early detection and proactive management of health risks, ultimately enhancing the quality of life through personalized preventive measures.



21: 2024/08979. 22: 2024/11/26. 43: 2025/06/04

51: G06Q

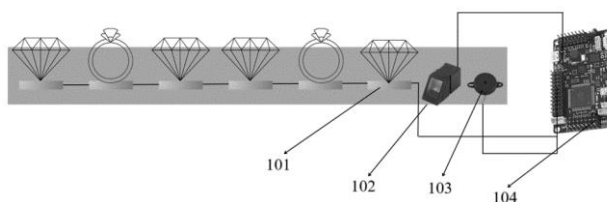
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: MAHANDULE, Ayush Chandrakant, MAGAR, Krishna Vijaykumar, KASTURE, Omkar Balaji, TIWASKAR, Shweta, SAKHARE, Sachin, RATHI, Snehal

#### **54: AN AUTOMATED JEWELLERY SECURITY SYSTEM FOR SHOPS**

00: -

The present invention is related to an automated jewellery security system for shops, integrating Force-Sensitive Resistor sensors (101) and fingerprint authentication (102) to enhance inventory management and security. FSR sensors embedded in display trays detect pressure changes, enabling real-time monitoring of jewellery items, while fingerprint authentication ensures authorized access. The ESP32 microcontroller (104) processes data and provides remote monitoring via Wi-Fi, with alerts triggered by unauthorized access attempts. an alarm system (103) sounds upon detecting potential security breaches. this system reduces manual inventory efforts, minimizes theft risk, and improves accuracy in inventory control. customizable settings and user-friendly interfaces facilitate easy integration and operation, making the security system adaptable to varying needs and enhancing the overall security posture of jewellery shops.



21: 2024/08980. 22: 2024/11/26. 43: 2025/06/03

51: H04W

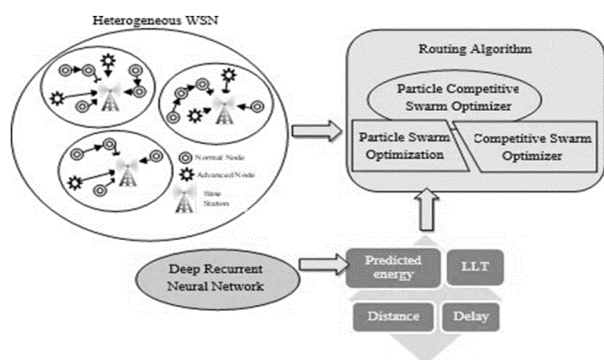
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: MOKASHI, Mandar Krishnarao, BHOITE, Sonali Prashant, KODMELWAR, Manohar Kisanrao, PATHAK, Kishor Renukadas, WANKHEDE, Shalini, BIRARE, Komal Madhukar, SHELKE, Ganesh Chandrabhan

#### **54: A METHOD FOR OPTIMIZING ROUTING IN HETEROGENEOUS WIRELESS SENSOR NETWORKS**

00: -

The present invention is related to a method for optimizing routing in Heterogeneous Wireless Sensor Networks. To improve the network lifetime of wireless sensor network, a routing method, named Particle Competitive Swarm Optimizer (PCSO), is proposed considering several factors, such as predicted residual energy, Link Lifetime (LLT), distance, and delay. PCSO is proposed by the hybridization of Particle Swarm Optimization (PSO) and Competitive Swarm Optimizer (CSO), which is a variant of the PSO algorithm. Moreover, the residual energy of the nodes is predicted using Deep Recurrent Neural Network (DRNN) to prolong the network lifetime during routing. The effectiveness of the proposed PCSO-based routing is proven by analyzing its performance. This has been validated by comparing the performance of the proposed method with that of a few existing works using four metrics, namely residual energy, delay, link lifetime, and throughput. This approach offers significant potential for enhancing the effectiveness and longevity of HWSNs.



21: 2024/08981. 22: 2024/11/26. 43: 2025/06/02  
51: C09K

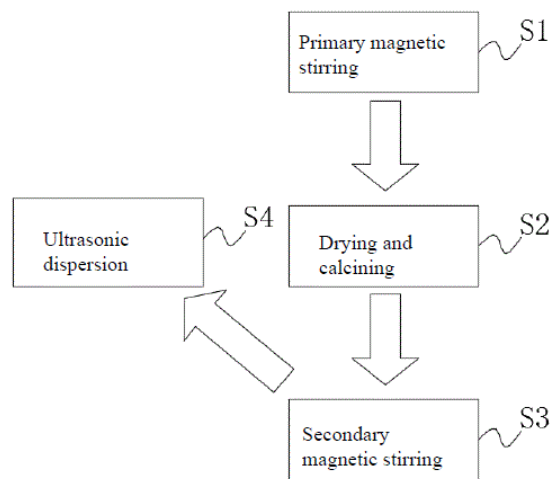
71: Inner Mongolia University of Technology

72: Zhang Shuyan, Cui Ya'nan, Chen Qi

#### **54: PREPARATION METHOD FOR NANOMETER TiO<sub>2</sub> ASPHALT MIXTURE FOR CATALYTIC DEGRADATION OF AUTOMOBILE EXHAUST GAS**

00: -

The present invention provides a preparation method for a nanometer TiO<sub>2</sub> asphalt mixture for catalytic degradation of automobile exhaust gas, and specifically includes the following steps. In S1 primary magnetic stirring, butyl titanate, taken as the matrix, and methanol, taken as the solvent, were fully mixed and reacted with acetic acid and deionized water under high-speed stirring condition of the magnetic stirrer to obtain the transparent sol. In S2 drying and calcining, the transparent sol was dried in the constant-temperature drying oven, and calcination treatment was carried out to obtain the modified nanometer TiO<sub>2</sub> composite photocatalyst. In S3 secondary magnetic stirring, additive and proper amount of deionized water were added into the magnetic stirrer, and stirred continuously and mixed evenly with the TiO<sub>2</sub> sol to obtain the mixed liquid. In S4 ultrasonic dispersion, the present invention relates to the technical field of pavement material preparation. The preparation method for a nanometer TiO<sub>2</sub> asphalt mixture for catalytic degradation of automobile exhaust gas, has the advantages of relatively simpler preparation process, relatively low cost, easy operation, better practical use effect of a prepared nanometer TiO<sub>2</sub> asphalt mixture, good purification effect on exhaust gas, and being easily popularized.



21: 2024/08982. 22: 2024/11/26. 43: 2025/06/02  
51: A62C

71: Xinyu University

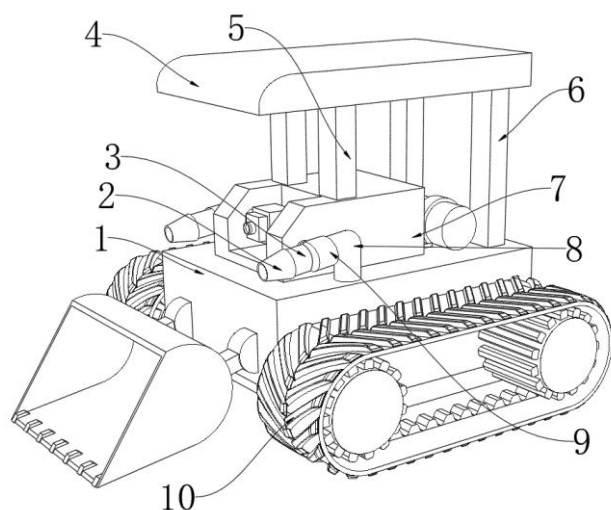
72: Li Naigen, Peng Xiaojun, Liu Hesheng, Wang qing, Wu Shilan, Zhang Xianglin

#### **54: ROBOT FOR FIRE SCENE DETECTION AND RESCUE**

00: -

The present invention relates to the technical field of robots, provides a robot for fire scene detection and rescue. The robot includes a vehicle body, left and right sides of the vehicle body are arranged with tracks, a top of the vehicle body is fixedly connected to a connecting seat, and the top of the vehicle body is positioned at left and right sides of the connecting seat and is fixedly connected to two connecting pipes. In the present invention, rotary motors I are started to drive the fixing rings to rotate, makes a nozzle align with a flame root. Dry ice injectors are started to spray carbon dioxide out from the nozzle, and the carbon dioxide jet extinguishes the flame, making a front field of vision become clear and improving the accuracy and efficiency of the rescue.





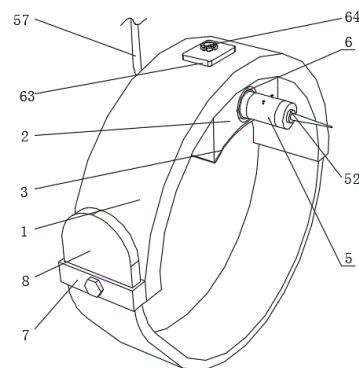
21: 2024/08983. 22: 2024/11/26. 43: 2025/06/02  
51: A61M

71: Xuzhou Traditional Chinese Medicine Hospital  
72: Hao Hongbo, Shen Sining, Yang Jing, Ding Kai

#### **54: ANTI-EXTRAVASATION CHEMOTHERAPY MEDICINE DELIVERY DEVICE FOR CLINICAL USE**

00: -

The present invention provides an anti-extravasation chemotherapy medicine delivery device for clinical use which includes a curved elastic fixing plate. An inner side of the curved elastic fixing plate is fixedly mounted with a fixing seat close to one side of a hand, one end of the fixing seat is disposed with a positioning slot, and a syringe for performing injection is arranged on an inner side of the positioning slot. The syringe includes a syringe body. In the present invention, by means of a positioning and fixing assembly, a needle is capable of being kept parallel inserted into a patient's body, the extravasation of medicine liquid is avoided, the transportation of the medicine liquid is convenient, a situation where the needle is obliquely inserted into the patient's body, and the subsequent downward bending of the patient's hand causes the needle and the socket where the needle is inserted into the patient's body to cause tearing is capable of being avoided. Meanwhile, through the adjustment of a top positioning curved plate and a bottom positioning curved plate, the syringe body is capable of being conveniently replaced, and the operation time is capable of being saved and the treatment efficiency is capable of being improved.



21: 2024/08984. 22: 2024/11/26. 43: 2025/06/02  
51: G06F

71: Leshan Normal University

72: Li Qin

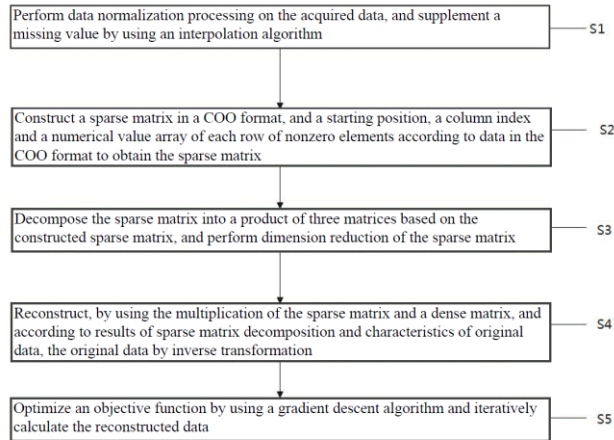
33: CN 31: 202410081165.X 32: 2024-01-19

#### **54: ITERATIVE CALCULATION METHOD FOR DATA COMPRESSION**

00: -

The present invention relates to the technical field of iterative calculation for data compression and provides an iterative calculation method for data compression. The method includes the steps of: S1: performing data normalization processing on the acquired data, and supplementing a missing value by using an interpolation algorithm; S2: constructing a sparse matrix in a coordinate (COO) format, and a starting position, a column index and a numerical value array of each row of nonzero elements according to data in the COO format to obtain the sparse matrix; S3: decomposing the sparse matrix into a product of three matrices based on the constructed sparse matrix, and performing dimension reduction of the sparse matrix; and S4: reconstructing, by using the multiplication of the sparse matrix and a dense matrix, and according to results of sparse matrix decomposition and characteristics of original data, the original data by inverse transformation. The process of compression and dimensionality reduction by the decomposition technology of sparse matrix is lossless, which reduces data storage space and calculation cost, while retaining the integrity of the original data, and makes iterative calculation better.





21: 2024/08985. 22: 2024/11/26. 43: 2025/06/02

51: G11B

71: Xinyu University

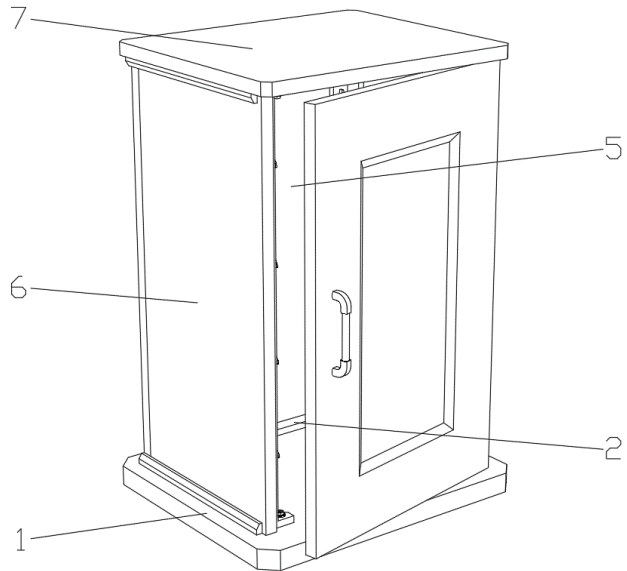
72: Li Rong, Li Shuigen, Hu Hao, Liu Hesheng, Zeng Xiangming, Peng Xiaojun

#### 54: COMMUNICATION CABINET FOR ELECTRONIC INFORMATION ENGINEERING

00: -

The present invention provides a communication cabinet for electronic information engineering, including: a communication cabinet base assembly, an internal mounting skeleton assembly is arranged at an end above the communication cabinet base assembly, an end inside the internal mounting skeleton assembly is penetrated and connected to back-plate mounting assemblies, side-plate mounting assemblies are fixedly arranged at an other end inside the internal mounting skeleton assembly, a communication cabinet back-plate assembly is arranged at the end of the internal mounting skeleton assembly, communication cabinet side-plate assemblies are arranged at two sides of the internal mounting skeleton assembly. In the present invention, by rotating a plurality of sets of the back-plate mounting assemblies until two sets of rotating knob bumps are in a vertically up-and-down state, at this time, the limiting mounting clamping grooves on the communication cabinet back-plate assembly are aligned with the limiting rotation seats and the limiting clamping blocks, and the positioning long embedding grooves are aligned with the positioning long insertion strips before being embedded, the plurality of sets of back-plate mounting assemblies are rotated to quickly mount and fix the communication cabinet back-plate

assembly. With this structure, the entire communication cabinet may be quickly and conveniently disassembled, and the mounting and use are more convenient.



21: 2024/08986. 22: 2024/11/26. 43: 2025/06/02

51: H04L

71: Xinyu University

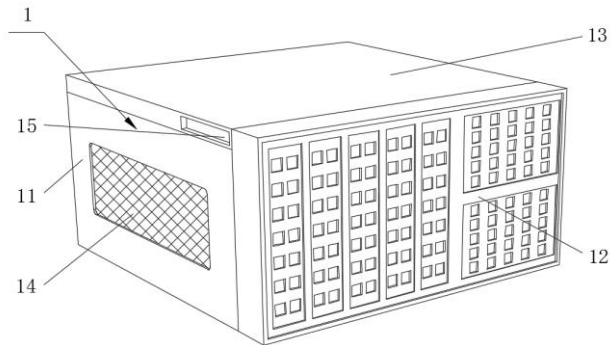
72: Li Xiaomie, Luo Haiyong, Fu Kai, Xia Meihua, Yang Guojun, Wan Mingxiu

#### 54: MULTI-INTERFACE CONTROLLER FOR COMPUTER NETWORK SECURITY

00: -

The present invention provides a multi-interface controller for computer network security. The controller includes a controller body. The controller body includes a body and a network interface end arranged at one end of the body, and a top end of the body is arranged with a cover plate which is convenient to open and dissipate heat. An interior of the body is arranged with an unfolding assembly which is convenient for opening the cover plate, the unfolding assembly includes an empty slot disposed at the top end of the body, two fixing plates fixedly mounted at an interior of the empty slot, two rotating blocks rotatably connected to one side of the fixing plates, and two double-headed connecting blocks rotatably connected to one side of the fixing plates and positioned directly above the rotating blocks. In the present invention, the cover plate at the top end of the body can be quickly opened by arranging the unfolding assembly to increase the circulation rate

between the body and the external air during use, and increase the heat dissipation effect of the body. Meanwhile, the dust baffle arranged on the inner side of the body can block the dust when the cover plate is unfolded to reduce the damage of internal electronic components caused by the dust entering the body.



21: 2024/08987. 22: 2024/11/26. 43: 2025/06/02  
51: A61H; G06F

71: LIMITED LIABILITY COMPANY "SPEKTRIA"

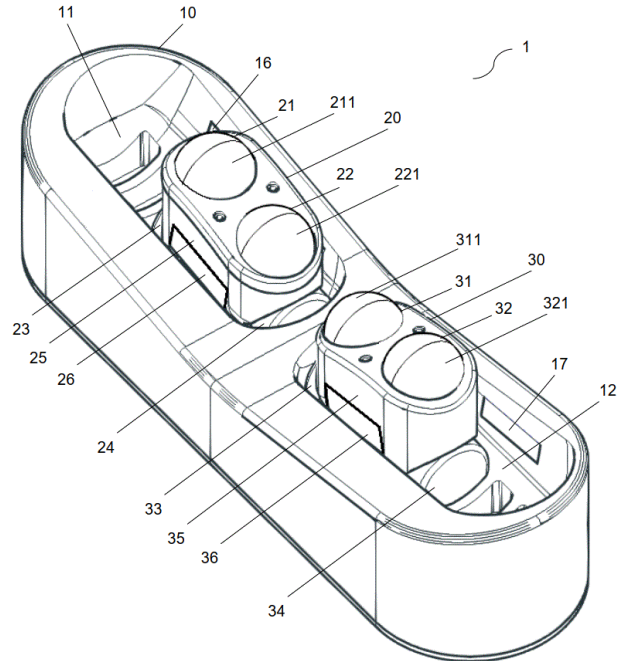
72: MONAKU Vitalii Georgievich

33: RU 31: 2024129563 32: 2024-10-02

**54: MASSAGE DEVICE WITH A CARRIER ELEMENT WITH A CONTROLLED MOVABLE MASSAGE MODULE**

00: -

The proposed technical solution relates to medical and/or sports equipment, in particular to means intended for performing body massage. A massage device with a carrier element with a controlled movable massage module is proposed. The technical result achieved by implementing the claimed invention, in addition to implementing its purpose, is the elimination of the shortcomings of the closest analogue and thus increasing the efficiency of using the massage device, expanding the functional capabilities of the massage device and providing the ability to control the angle of inclination of the massage element directly during operation and/or providing the ability to automatically change the angle of inclination of the massage element directly during operation.



21: 2024/08988. 22: 2024/11/26. 43: 2025/06/02  
51: A61H; G06F

71: LIMITED LIABILITY COMPANY "SPEKTRIA"

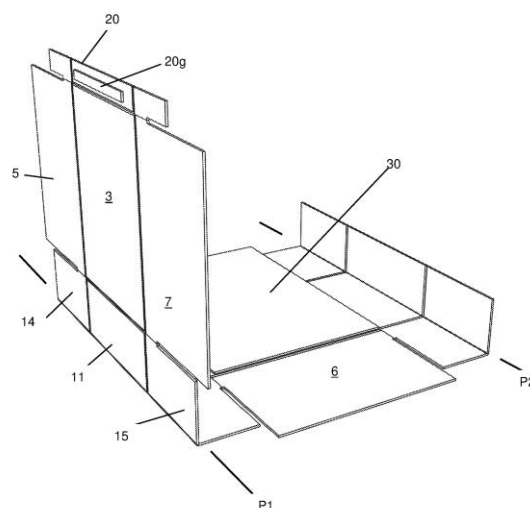
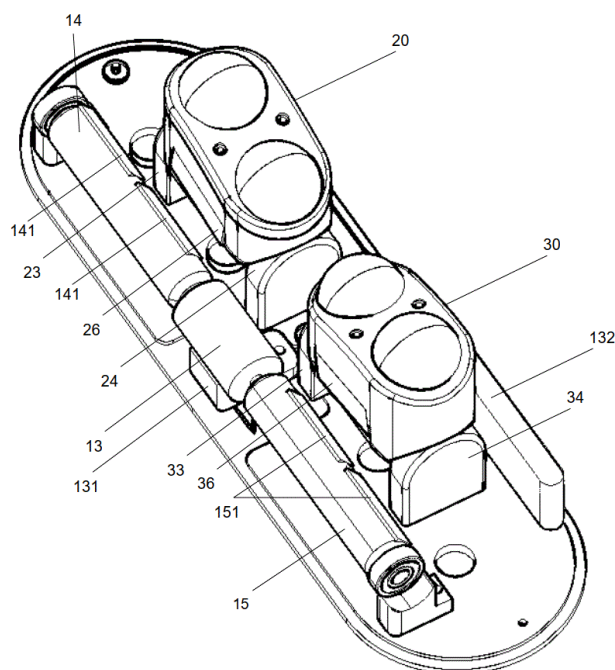
72: MONAKU Vitalii Georgievich

33: RU 31: 2024129564 32: 2024-10-02

**54: MASSAGE DEVICE WITH A CARRIER ELEMENT AS A BASE WITH A CONTROLLED MOVABLE MASSAGE MODULE**

00: -

The proposed technical solution relates to medical and/or sports equipment, in particular to means intended for performing body massage. A massage device with a carrier element as a base with a controlled movable massage module is proposed. The technical result achieved by implementing the claimed invention, in addition to implementing its purpose, is the elimination of the shortcomings of the closest analogue and thus increasing the efficiency of using the massage device, expanding the functional capabilities of the massage device and providing the ability to control the angle of inclination of the massage element directly during operation and/or providing the ability to automatically change the angle of inclination of the massage element directly during operation.



21: 2024/09012. 22: 2024/11/26. 43: 2025/06/02  
51: B65D

71: WHITESIDE, Andrew David

72: WHITESIDE, Andrew David

33: US 31: 17/819,005 32: 2022-08-11

33: GB 31: 2206170.9 32: 2022-04-28

**54: RECYCLABLE SHIPPING PACK AND METHOD OF AND APPARATUS FOR FORMING A SHIPPING PACK FOR LOOSE-FILL PRODUCE**  
00: -

A container blank (1), so sized and shaped as to form a shipping pack having front (2) and rear (3) walls to which there are attached, along respective fold lines (2a, 2b, 3a), side wall sections (11, 12; 16, 17) each being foldable so that said front and rear walls are in juxtaposed alignment, wherein an interior open-mouthed bag (30) is adhered to the inner surfaces of the front and rear walls. When a shipping pack is erected from said container blank, the folded interior bag (30) is deployed to align with the inner volume of said erected pack so as to provide an open- mouthed container with open-mouthed interior bag to be filled and subsequently sealed for dispatch. The shipping pack is configurable in a folded flat stackable form having an interior bag in situ for storage or dispatch and is easily machine assembled or manually formed into an open-mouthed shipping pack at point of use.

21: 2024/09019. 22: 2024/11/27. 43: 2025/06/03  
51: A61K

71: JIANGNAN UNIVERSITY

72: ZHANG Hongxing

33: CN 31: 2024109683290 32: 2024-07-18

**54: HYPOLIPIDEMIC AND HYPOGLYCEMIC TRADITIONAL CHINESE MEDICINE AND PREPARATION METHOD AND USE THEREOF**  
00: -

The present invention provides a hypolipidemic and hypoglycemic traditional Chinese medicine and preparation method and use thereof, which relates to the technical field of natural medicines. The Chinese medicine includes the following ingredients by weight: Lycium barbarum 10-30 parts, Pueraria root 10-30 parts, Coix seed 10-30 parts, Poria 10-30 parts, Chinese yam 10-30 parts, Turmeric 10-30 parts. It is found that the main component is the molecular weight of 2890.7kDa of the polysaccharide molecules of the traditional Chinese medicine, through the preparation method. Experiments show that the polysaccharide molecules of traditional Chinese medicine can obviously reduce the blood glucose and lipid levels of diabetic model rats, and at the same time reduce the damage of liver, kidney and pancreas. Clinical trials also show that the polysaccharide molecules of traditional Chinese medicine has a good hypoglycemic and lipid-lowering effect, the adopted natural ingredients of the traditional Chinese medicine have medicinal properties of calm, more suitable for long term use for diabetes mellitus combined with hyperlipidaemia patients, and provide the basis for the development of health care

products and medicines for the treatment of type II diabetes mellitus and have a good prospect of application.

21: 2024/09020. 22: 2024/11/27. 43: 2025/06/10

51: H01M

71: Kunming University of Science and Technology

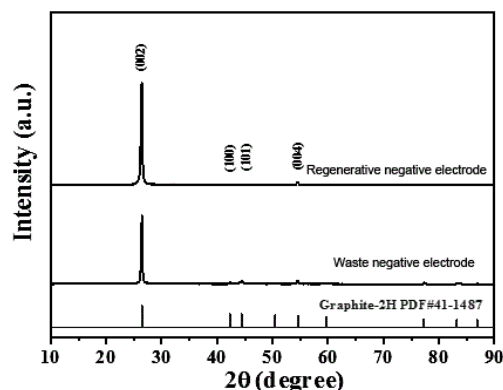
72: MENG Qi, SONG Jirui, LI Yuyun, FAN Yi, LUO Yun

33: CN 31: 2024101464929 32: 2024-02-02

#### **54: REGENERATION AND REPAIR METHOD OF GRAPHITE ANODE SHEET OF WASTE LITHIUM-ION BATTERIES**

00: -

The invention provides a regeneration and repair method of graphite anode sheet of waste lithium-ion batteries, which belongs to the technical field of electrode material restoration and regeneration, and comprises the following steps: sequentially carrying out ultrasonic treatment, drying, plasma ball milling and roasting treatment on the graphite anode sheets, and finally obtaining regenerated graphite anode powder. The method can quickly repair the waste graphite in a short time, greatly reduce the treatment cost of the waste battery, is simple to operate, does not produce secondary pollution, and provides a new idea for the repair and regeneration of the anode material of the waste lithium-ion battery.



21: 2024/09021. 22: 2024/11/27. 43: 2025/06/03

51: G01M

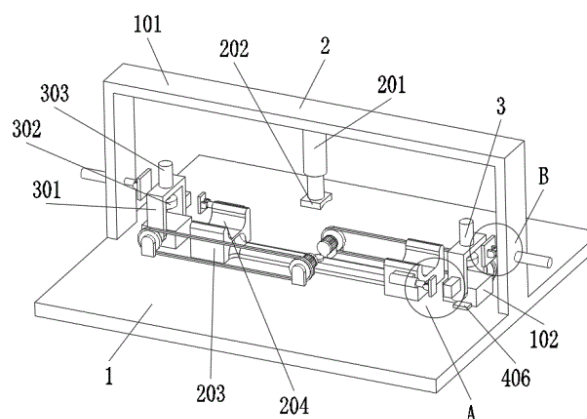
71: Dongguan Xiesheng Auto Parts Technology Co., Ltd.

72: Fengbo Cheng

#### **54: AUTOMOTIVE SUSPENSION STRENGTH TESTING DEVICE**

00: -

An automotive suspension strength testing device, comprising a base plate; a vertical frame, bottom blocks and vertical plates are provided on the base plate; it also comprises strength measuring components, adjusting mechanisms, first supporting mechanisms and second supporting mechanisms; the strength measuring components are provided on the bottom blocks; the adjusting mechanism is provided on one side of the bracket. The invention belongs to the field of automotive parts measuring devices, and in particular to an automotive suspension strength testing device used to solve the problem of limited data range for measuring suspension strength at fixed angles and inconvenient manual adjustment of angles.



21: 2024/09022. 22: 2024/11/27. 43: 2025/06/03

51: G06T

71: Henan University of Urban Construction

72: WANG, Limei, JIANG, Yongtao, WEN, Feng, LU, Chunyang, QU, Qianlong, CHEN, Lianjun, DING, Leixiang, MA, Zhanlin, YIN, Shouqiang

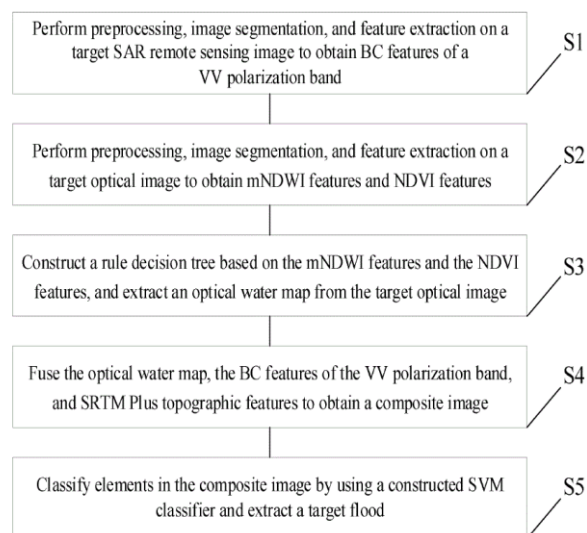
#### **54: METHOD FOR EXTRACTING FLOOD BASED ON FUSION OF OPTICAL AND SAR REMOTE SENSING IMAGES AND SYSTEM**

00: -

The present application discloses a method for extracting a flood based on the fusion of optical and SAR remote sensing images and a system. The method includes: performing preprocessing, image segmentation, and feature extraction on a target synthetic aperture radar (SAR) remote sensing image to obtain backscattering coefficient (BC) features of a vertical transmit-vertical receive (VV) polarization band; performing preprocessing, image segmentation, and feature extraction on a target



optical image to obtain modified normalized difference water index (mNDWI) features and normalized difference vegetation index (NDVI) features; constructing a rule decision tree based on the mNDWI features and the NDVI features, and extracting an optical water map from the target optical image; fusing the optical water map, the BC features of the VV polarization band, and SRTM Plus topographic features to obtain a composite image; and classifying elements in the composite image and extracting a target flood.



21: 2024/09023. 22: 2024/11/27. 43: 2025/06/10

51: B01J

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

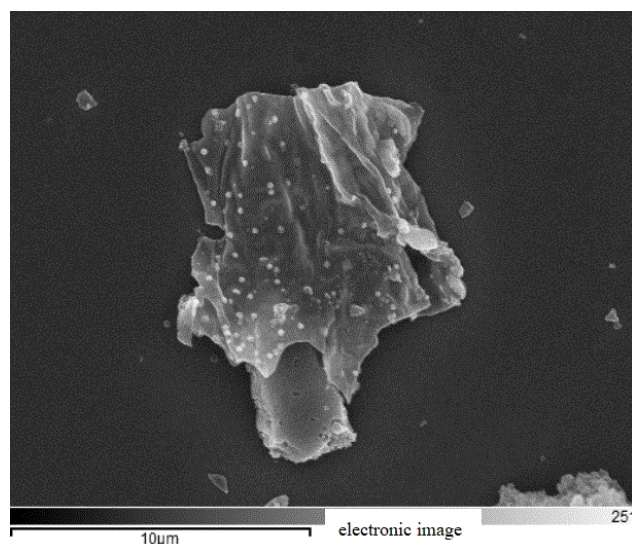
72: WANG Yingchun, JI Hainan, WU Junfeng, LU Yuting, SUN Qi, ZHANG Xinhai

#### **54: NOVEL COPPER OXIDE MODIFIED PEANUT SHELL BIOCHAR PREPARATION METHOD AND ITS APPLICATION**

00: -

The invention provides a novel copper oxide modified peanut shell biochar preparation method and its application, and belongs to the technical field of water treatment. In this invention, peanut shells are used as biochar raw materials, which are dipped in copper nitrate solution after pretreatment, and finally carbonized by high-temperature pyrolysis to obtain efficient novel copper oxide modified peanut shell biochar. When the pyrolysis temperature is 600 degree centigrade, the adsorption and degradation performance of copper oxide modified peanut shell

biochar is the best, and the adsorption kinetic mechanism is evaluated by pseudo-first-order kinetics. The invention provides a new method for resource utilization of peanut shells, which has low cost, simple and feasible preparation process and good popularization and application prospects.



21: 2024/09024. 22: 2024/11/27. 43: 2025/06/10

51: C23C

71: CHANGZHOU INSTITUTE OF TECHNOLOGY  
72: XU Ji, GUO Hun, YU Mingli, BAI Jianhui, JIANG Wei, LONG Bing, HE Yafeng, WU Xiaofeng, YU Ze, XIA Yuan

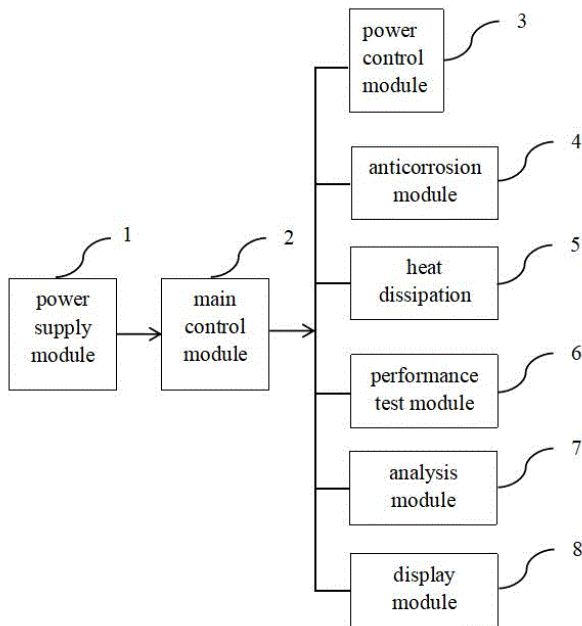
#### **54: ANTICORROSION METHOD FOR FUEL CELL ENGINE AND THERMAL MANAGEMENT SYSTEM**

00: -

The invention belongs to the technical field of batteries, and discloses an anticorrosion method for fuel cell engine and thermal management system, wherein the fuel cell engine comprises a power supply module, a main control module, a power control module, an anticorrosion module, a heat dissipation module, a performance test module, an analysis module and a display module. In the invention, the power parameters are controlled by the power control module on the basis of considering the electrochemical reaction characteristics of the initial power parameters of the fuel cell, the response delay of the air compressor and the design delay of the pipeline, so that the load change rate of each power parameter interval is optimized, the possibility of gas shortage is reduced, and the service life of the fuel cell is prolonged; at the same time, the analysis module can improve the accuracy of



performance analysis of fuel cell engine components.



21: 2024/09025. 22: 2024/11/27. 43: 2025/06/10  
51: G06T

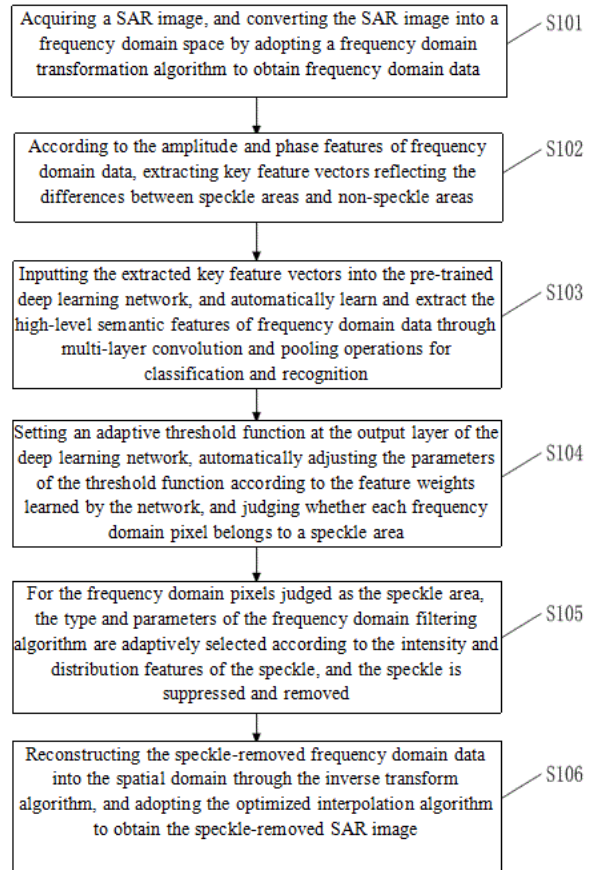
71: TANGSHAN UNIVERSITY, Tangshan Juchen Environmental Protection Technology Co., Ltd  
72: MA Yuqing, DU Ning, GAN Zhifen, ZHAO Xueqing

#### 54: SPECKLE REDUCTION METHOD FOR SAR IMAGES BASED ON FREQUENCY DOMAIN DEEP LEARNING NETWORK

00: -

The invention discloses a speckle reduction method for SAR images based on frequency domain deep learning network, which comprises the following steps: acquiring an input SAR image, and converting the SAR image into a frequency domain space by adopting a frequency domain transformation algorithm to obtain frequency domain data; according to the amplitude and phase features of the frequency domain data, extracting a key feature vector reflecting the difference between a speckle area and a non-speckle area; for the frequency domain pixels judged as speckle areas, the type and parameters of frequency domain filtering algorithm are adaptively selected according to the intensity and distribution features of spots for suppression and removal, and the best speckle reduction effect is achieved. The speckle-removed frequency domain data is reconstructed to spatial domain by inverse

transform algorithm, and the optimized interpolation algorithm is adopted to ensure the image quality and the integrity of detail information, and the speckle-removed SAR image is obtained.



21: 2024/09026. 22: 2024/11/27. 43: 2025/06/10  
51: G01N

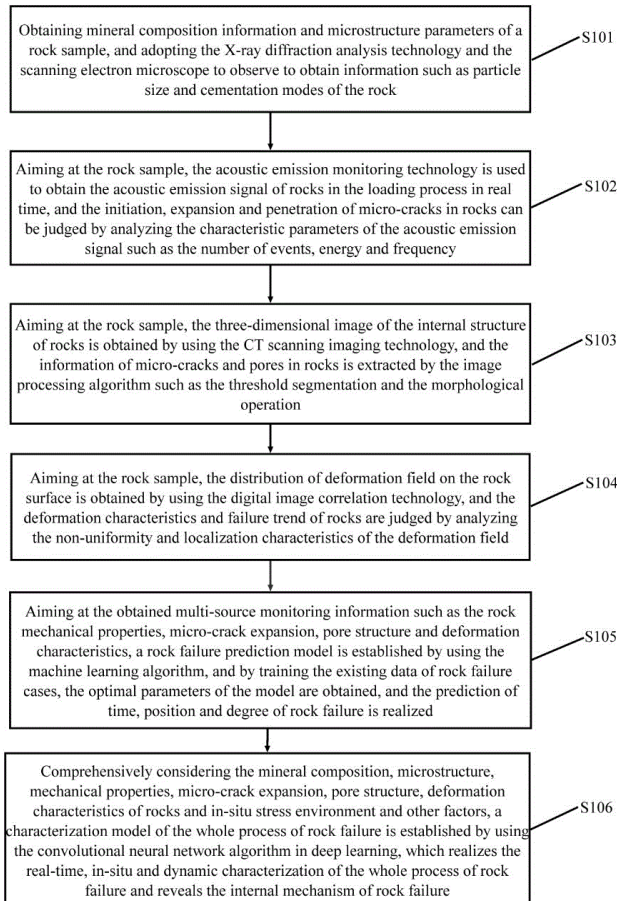
71: Huzhou Vocational and Technical College  
72: NIU Jiangrui, SU Yingqiang, SUN Lu, XIE Enpu

#### 54: METHOD AND SYSTEM FOR MONITORING ROCK FAILURE PROCESS

00: -

The invention discloses a method and a system for monitoring the rock failure process, which includes the following steps: acquiring comprehensive characteristic information of a rock sample; the acoustic emission signals of rock samples during the loading process are obtained in real time, and the spatial distribution characteristics of micro-cracks are determined by combining the comprehensive characteristic information; acquiring and preprocessing three-dimensional structural image data to obtain the marked micro-cracks and pore

regions, and extracting geometric characteristic parameters of the micro-cracks and pore regions; obtaining the distribution information of the surface deformation field of the rock sample; judging the deformation characteristics and failure trend of rock samples based on the distribution information of surface deformation field; aiming at the multi-source monitoring information obtained above, a rock failure prediction model is established by using the machine learning algorithm to predict the time, location and degree of rock failure. The invention realizes the multi-scale, multi-parameter and multi-means comprehensive characterization of rock failure, constructs a rock failure prediction model, and provides important theoretical basis and technical support for rock engineering safety assessment and disaster early warning.

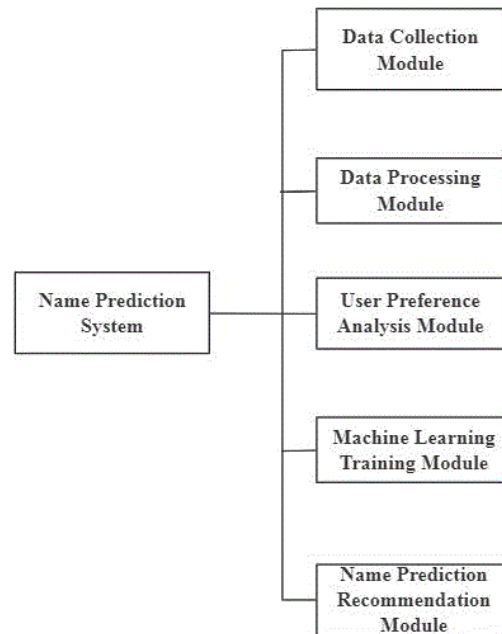


21: 2024/09027. 22: 2024/11/27. 43: 2025/06/03  
 51: G06F  
 71: Beijing Tianmixuan Cultural Communication Co., Ltd  
 72: Baojun Yan

#### 54: NAME PREDICTION SYSTEM

00: -

A name prediction system, comprising a data collection module, a data processing module, a user preference analysis module, a machine learning training module, and a name prediction recommendation module, ensuring the accuracy, reliability, and usability of the data; especially the formulation of data backup and recovery strategies further ensures the security and reliability of data.



21: 2024/09028. 22: 2024/11/27. 43: 2025/06/10

51: B23B

71: SHANXI INSTITUTE OF ENERGY

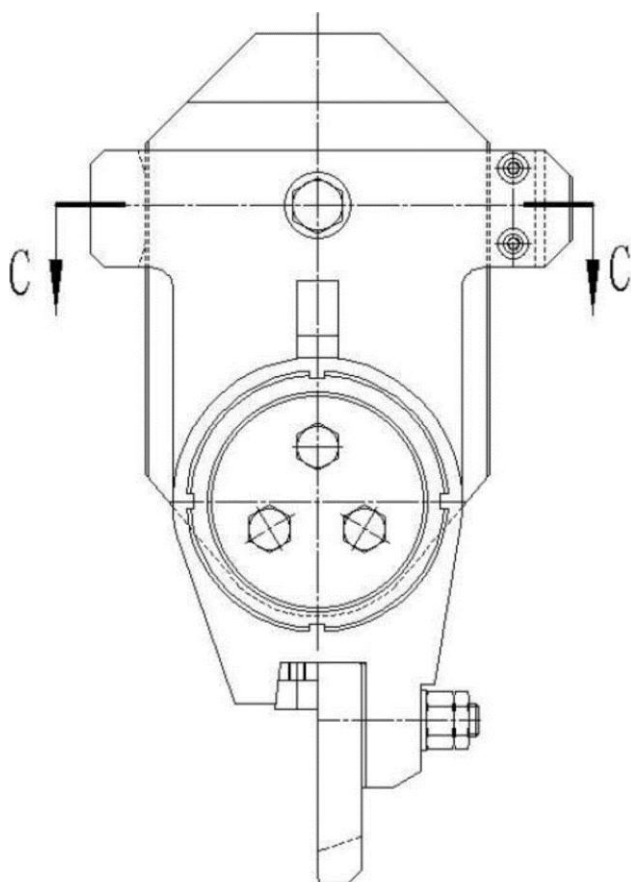
72: ZHANG Liying, ZHANG Chen, GAO Yonghong, LI Yan, GUO Hantao, ZHANG Yun, WEN Guifeng, MU Yuheng

#### 54: LOCKING DEVICE FOR DOUBLE-LENGTH FLYING SHEAR CRANKSHAFT AND ROTATING KNIFE HOLDER

00: -

The invention belongs to the technical field of double-length flying shear components and specifically relates to a locking mechanism for a crankshaft and a rotary knife holder. It addresses the issue of the existing locking structure between the crankshaft and the rotary knife holder in double-length flying shears not being able to securely lock, as well as the difficulty in manufacturing. The rotary knife holder is designed with a concave structure,

where the inner side of the vertical plane of the concave structure contacts one vertical side of the crankshaft, and there is a gap between the inclined inner side of the concave structure and the other vertical side of the crankshaft. Within this gap, there is a locking plate, which is an inverted right-angled trapezoid. One vertical side of the locking plate contacts the other vertical side of the crankshaft, and the inclined side of the locking plate contacts the inclined side of the concave structure. At the bottom of the rotary knife holder, corresponding to the vertical center of the locking plate, there is a through hole. Inside this through hole, there is a locking bolt, which is threadedly connected to the locking plate. This invention features a simple and practical structural design that ensures easy machining to meet technical requirements and facilitates on-site maintenance and upkeep.

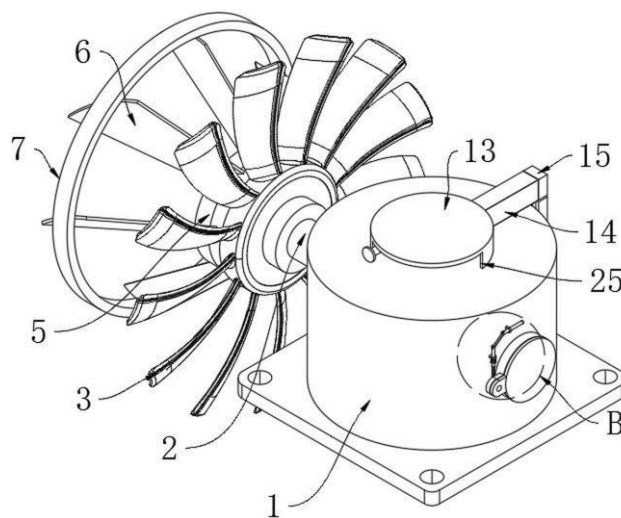


21: 2024/09029. 22: 2024/11/27. 43: 2025/06/03  
51: B64D  
71: Huailing Cheng  
72: Huailing Cheng

#### **54: COAXIAL REVERSING DEVICE FOR THE AIRCRAFT**

00: -

The invention discloses a coaxial reversing device for an aircraft, comprising a circular gear box, wherein one end of the circular gear box is provided with an external rotary shaft rotating through the outer surface of the circular gear box, one end of the outer surface of the circular gear box is provided with a propeller, one end of the outer surface of the circular gear box is provided with a first bevel gear, and the circular gear box is provided with an internal rotary shaft. One end of the inner rotating shaft rotates through the outer rotating shaft and extends the outer surface of the circular gear box. The outer surface of the circular gear box away from the outer rotating shaft is inset with a sleeve column extending into the circular gear box, and the inner ring of the sleeve column is provided with a bearing. The invention has simple structure, and can complete the power output coupling of a variety of aircraft only through three bevel gears, and can also realize the reverse coaxial non-torque lifting flight. When any aircraft is connected to any point of the device, the rotation speed of the reverse rotor is synchronized.



21: 2024/09030. 22: 2024/11/27. 43: 2025/06/03  
51: F24F

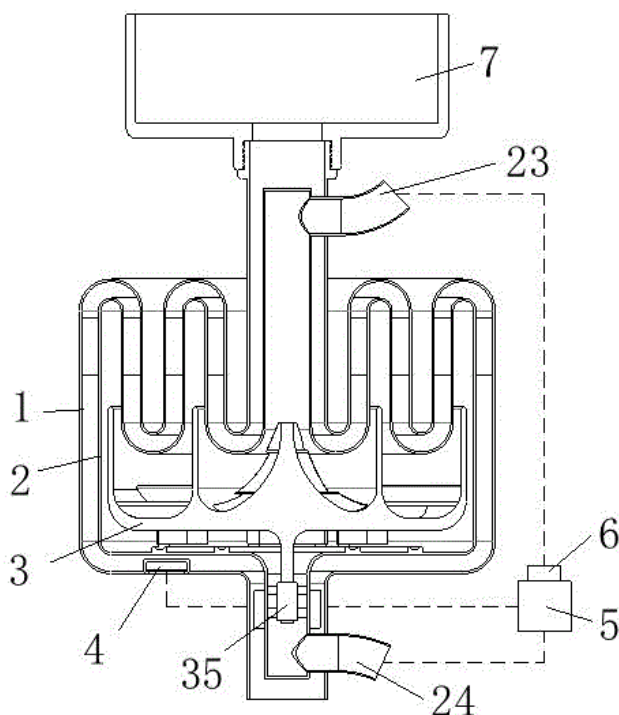
71: Daxiang Hu

72: Daxiang Hu, Moqi Li, Wenchang He, Jiachuan Xiong, Jinghong Zhao, Yiqin Wang, Lu Yu, Hao Zhong, Xiangli Zeng, Quanchao Zhang, Ling Nie

**54: A DEVICE FOR REAL TIME MONITORING AND REGULATING TEMPERATURE IN CONTINUOUS RENAL REPLACEMENT THERAPY**

00: -

The invention relates to the technical field of renal therapy, in particular to a device for real time monitoring and regulating temperature in continuous renal replacement therapy, including a replacement liquid purifier, the lower end of which is connected with a diversion shell, and the inner cavity of the diversion shell is provided with a diversion inner shell; The rotating plate rotates and is installed in the inner cavity of the diversion inner shell of the diversion, and the upper surface of the rotating plate is fixed with a plurality of concentric annular separator plate, and the upper part of the rotating shaft is a circular table, and the surface is fixed with a spiral diversion blade; The beneficial effects are: Through the replacement liquid purifier is arranged under the diversion shell, the diversion shell cavity is provided with a diversion shell, the upper surface of the rotating plate is fixed with a plurality of concentric annular separator, the heat exchange medium from top to down into the diversion shell cavity, by the annular separator and along the upper wall of the diversion shell in a wave flow, It can fully exchange heat with the replacement liquid flowing between the diversion shell and the diversion inner shell, so as to adjust the temperature of the replacement liquid in time.



21: 2024/09036. 22: 2024/11/27. 43: 2025/06/05

51: H04L

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: RAJPUT, Vaishali Sham, GEJAGE, Vipul, GAWANDE, Dnyaneshwar, GAWANDE, Harshal, GHAVATE, Sarthak, GHATOLE, Mayuri

**54: A SYSTEM FOR SMART HOME AUTOMATION**

00: -

The present invention is related to a system for smart home automation. This invention presents a comprehensive study on the implementation of a smart home automation system, focusing on five key components: automatic gate control, night lamps, rain alerts, water tank full alerts, and enhanced wall security. The system utilizes Arduino UNO microcontroller boards along with various sensors such as IR sensors, LDR sensors, and rain sensors. It discusses the design, implementation, and integration of each component, providing detailed circuit diagrams and programming codes. Experimental results demonstrate the successful functioning of the system, including automatic gate opening and closing, efficient night lighting, real-time rain alerts, and full water tank notifications. The enhanced wall security system utilizing LDR sensors adds an additional layer of protection. This invention contributes to the development of smart home technology and offers convenience, safety, and efficiency for homeowners.

21: 2024/09037. 22: 2024/11/27. 43: 2025/06/05

51: G06T

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: BARHATE, Madhuri M., PATIL, Harsh, KOLARKAR, Harsh, HARALE, Aditi, NADAR, Hamlin, DHAKE, Harsh, HALBE, Soham

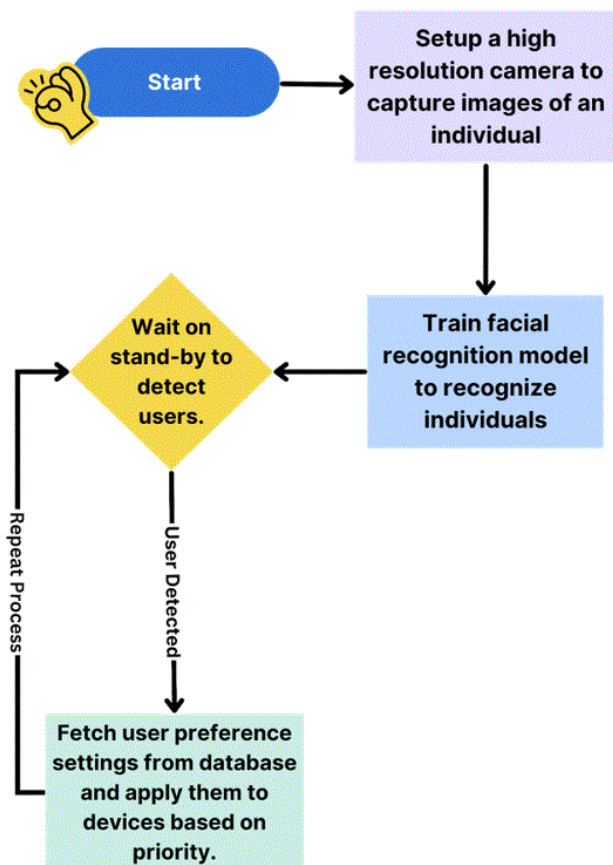
**54: A FACIAL RECOGNITION SYSTEM FOR SMART HOME AUTOMATION**

00: -

The present invention is related to a facial recognition system for smart home automation. The invention aims to enhance home security, convenience, and energy efficiency. The system utilises OpenCV, a popular open-source computer vision library, and Dlib, a powerful machine learning toolkit, to recognise and authenticate individuals based on their facial features. By analysing the real-time video feed from a camera, the system identifies



registered users and performs predefined actions tailored to their profiles. The proposed home automation system offers a wide range of functionalities, including personalised access control, energy management, and smart device integration. Users can unlock doors, adjust lighting and temperature settings, and control appliances through facial recognition. Furthermore, the system adapts to users' preferences and learns their patterns to optimise energy consumption and provide a seamless user experience. Experimental results demonstrate the system's high accuracy in facial recognition with low false-positive rates. The invention showcases the potential of OpenCV and Dlib in developing robust and reliable home automation systems based on facial recognition. The implementation offers promising avenues for future research and development in the field of smart homes, paving the way for safer, more convenient, and energy-efficient living environments.



71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: GHUGE, Darshan, SAWANT, Sachin Shridhar, GHODKE, Siddhant, GHUGE, Dnyaneshwari, GHODAKE, Kanishka, GHODAKE, Shivam, GHUGE, Aditya

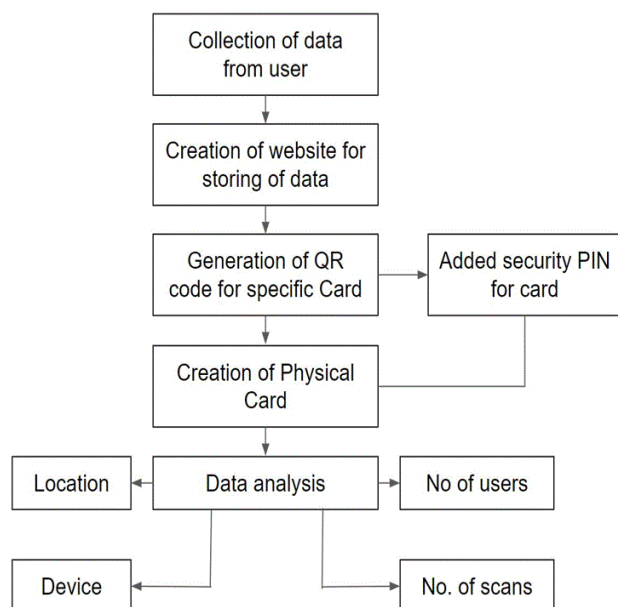
#### **54: A DATA ANALYTICS SYSTEM FOR IDENTIFICATION AND AUTHENTICATION THROUGH SINGLE SMART CARD**

00: -

The present invention is related to a data analytics system for identification and authentication through single smart card. Efficient and secure authentication where time is of the essence is crucially important for modern world. Increasing number of cards in various domains has led to inconvenience and clutters to users. This invention presents a promising solution for the same that re-imagines the way these cards are managed with the introduction of the concept "Authenticated Smart Card", that consolidates multiple cards into a single cards using QR codes. This eliminates the need for carrying multiple cards and comes up offering unparalleled convenience, carry with ease element, providing an accessibility factor and reducing cognitive burden. The system here leverages data analytics for making informed decisions in a targeted manner. This strategic approach minimizes disruptions, optimizes operational efficiency and also enhances overall user experience through targeted innovation. By adopting a password protected website, it emphasize on preventing unauthorized access and safeguarding user privacy. Potential benefits, challenges and use cases are discussed, providing strategies to address compatibility issues and ensure user experience authenticated smart card offers a streamlined and organized card management solution that sets a new benchmark for hassle-free authentication in diverse domains, allowing continuous improvement, ensuring that the system remains efficient, relevant, and adaptable to changing user needs and technological advancements.

21: 2024/09038. 22: 2024/11/27. 43: 2025/06/03  
51: G06Q





21: 2024/09039. 22: 2024/11/27. 43: 2025/06/03  
51: C23G

71: Yanbian University

72: LI, Guangchun, LIU, Minghui, LI, Xiangzi, CUI, Lianhua, YAN, Changguo, GAO, Qingshan, ZHANG, Haonan, CUI, Huazi

#### 54: METHOD FOR MICROBIAL REMEDIATION OF HEAVY METAL POLLUTION

00: -

Disclosed is a method for microbial remediation of heavy metal pollution, and it relates to the field of heavy metal extraction technology. The method for microbial remediation of heavy metal pollution disclosed includes: mixing yeast, nutrients, and heavy metal pollutants for adsorption treatment to obtain adsorbed pollutants; and utilizing carrier materials loaded with nutrients for extraction treatment to extract the adsorbed pollutants. The method provided by the invention adsorbs and extracts heavy metals from heavy metal pollutants, with simple operation.

21: 2024/09040. 22: 2024/11/27. 43: 2025/06/03  
51: F16F

71: Henan University of Urban Construction

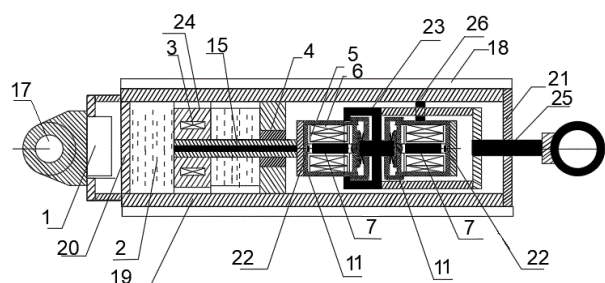
72: LI, Jiangle, QU, Songzhao, WANG, Yi, ZHANG, Fengjian, YOU, Peibo, GU, Xiaoyong, LOU, Yafei, ZHAO, Yuxia, WU, Wenlong, OUYANG, Kai, FENG, Biao, LI, Lin, MAN, Yuan, FAN, Yunxia

33: CN 31: 202411127001.2 32: 2024-08-16

#### 54: ENERGY DISSIPATION AND SHOCK ABSORBER

00: -

Disclosed is a dissipation and shock absorber, which relates to the technical field of vibration damping and energy consumption, and includes a sleeve, a photovoltaic power generation device, a magnetorheological module, and a super magnetostrictive module, when a power rod moves to the right side, the cross type connecting rod piston is able to pull the super magnetostrictive component and the flat moving part located on the left side to move to the right side in a synchronized manner, and meanwhile, the super magnetostrictive material of the super magnetostrictive component located on the right side is squeezed, and at the same time the left side At the same time, the super magnetostrictive material of the super magnetostrictive assembly located on the left side is squeezed, at which time the super magnetostrictive material of the super magnetostrictive assembly located on the right side is idle; when the power rod moves to the left side, the super magnetostrictive assembly and the flat moving part located on the left side move to the left side in a synchronized manner, and at the same time the super magnetostrictive material of the super magnetostrictive assembly located on the left side is squeezed, at which time the super magnetostrictive material of the super magnetostrictive assembly located on the right side is idle. The present invention utilizes electrical energy generated by solar energy for driving without relying on an electrical system, and is able to realize vibration reduction and energy consumption.



21: 2024/09041. 22: 2024/11/27. 43: 2025/06/03  
51: G08C

71: Henan University of Urban Construction

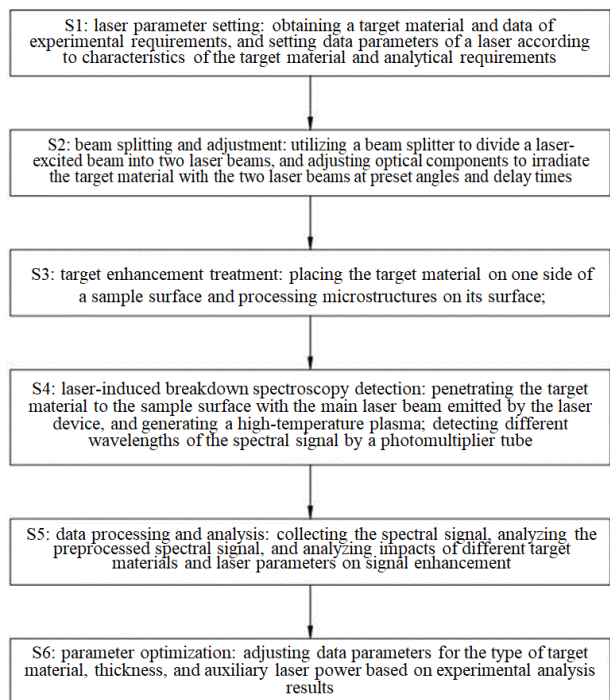
72: WANG, Yarui, WANG, Chaoyong, LIU, Le, WANG, Kai, GUO, Junji, CHEN, Jiaye, ZHAO, Jun, CHEN, Shanbao, ZHAO, Yapeng

#### 54: TARGET-ENHANCED SINGLE PULSE-DUAL BEAM LASER-INDUCED BREAKDOWN

## SPECTROSCOPY SIGNAL ENHANCEMENT METHOD AND SYSTEM THEREOF

00: -

Disclosed are a target-enhanced single pulse-dual beam laser-induced breakdown spectroscopy signal enhancement method and a system thereof, and relate to the field of laser spectroscopic analysis technology. To address the technical issues of low signal intensity and susceptibility to sample surface conditions that still exist in traditional LIBS technology, the target-enhanced single pulse-dual beam laser-induced breakdown spectroscopy signal enhancement method is provided. In this method, by introducing the synergistic action of an auxiliary laser beam with the main laser beam and combining with the target material, the laser-induced breakdown spectroscopy signal is significantly enhanced, the intensity, stability, and signal-to-noise ratio of LIBS signals are significantly improved, and detection limits are reduced. The signal enhancement effect reaches several times to tens of times, with reduced dependency on sample surface conditions, enhancing accuracy and reliability of spectral analysis, thereby enabling high-sensitivity elemental analysis and expanding an applicability range.



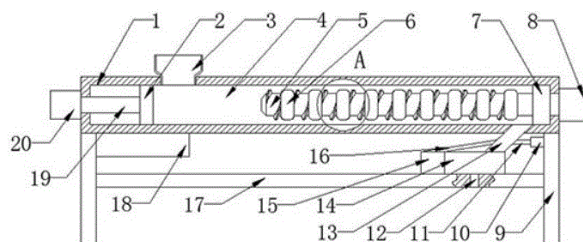
21: 2024/09042. 22: 2024/11/27. 43: 2025/06/03  
 51: A23N  
 71: INNER MONGOLIA MINZU UNIVERSITY

72: Jiang Mingyang

## 54: ELECTRICAL AUTOMATIC PROCESSING APPARATUS

00: -

The present invention provides an electrical automatic processing apparatus, which belongs to the technical field of electrical automation. The apparatus includes a box body, and the box body is in a circular cylindrical structure. A feeding hopper is arranged at an upper left portion of the box body, and a crushing chamber is arranged inside the box body. A material pushing plate is arranged at a left side inside the crushing chamber, and a crushing rotating shaft is arranged at a right side of the crushing chamber. Several pressing blocks coaxial with the crushing rotating shaft are arranged on the crushing rotating shaft at equal intervals, and a spiral blade is arranged between two adjacent pressing blocks.



21: 2024/09043. 22: 2024/11/27. 43: 2025/06/03  
 51: F16C

71: INNER MONGOLIA MINZU UNIVERSITY

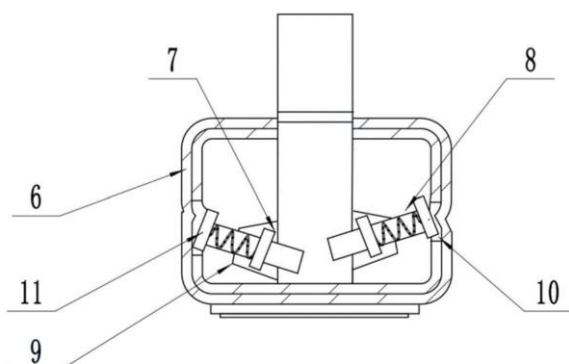
72: Fan Xiaojing, Jiang Mingyang, Yu Xiaoze

## 54: UNIVERSAL STEERING ROD FOR VEHICLES

00: -

Disclosed is a universal steering rod for vehicles. This technical solution includes a driving ball head and a driven ball head that are connected through a rod. The driving ball head is provided with a rubber cavity, and the rubber cavity includes a convex column and a helical gear assembly. The helical gear assembly includes a group of gear rings, a screw rod penetrates the gear rings, two axial ends of the screw rod are obliquely and slidably connected in the rubber cavity, and sliding grooves are formed at the joints between the rubber cavity and the two ends of the screw rod. The gear rings are gradually in contact with a ratchet denture during a movement stroke, the ratchet denture is gradually converged in a deflection direction of the helical gear

assembly, and a locking direction of the ratchet denture is a deflection direction of the gear rings.



21: 2024/09044. 22: 2024/11/27. 43: 2025/06/03  
51: H05B

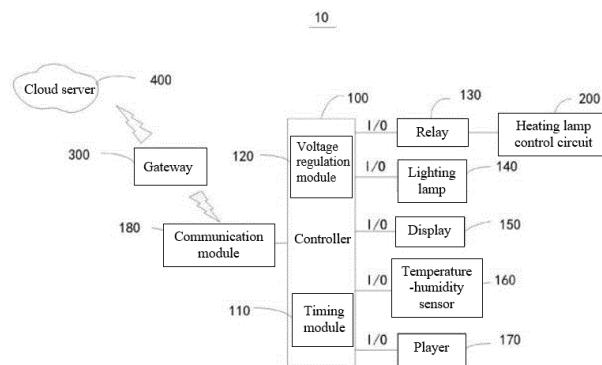
71: The First Affiliated Hospital of Chongqing Medical University

72: Xu Xiaoming, Wang Wo

#### **54: INDOOR LIGHTING CONTROL SYSTEM AND INDOOR LIGHTING CONTROL METHOD**

00: -

The examples of the present invention provide an indoor lighting control system and an indoor lighting control method, including a controller, a lighting lamp connected to the controller, a relay connected to the controller, and a heating lamp control circuit connected to the relay; the controller includes a timing module and a voltage regulation module; the controller turns on the lighting lamp according to a first preset time set by the timing module and adjusts the brightness of the lighting lamp according to an adjustment mode set by the voltage regulation module; and the controller also controls the relay according to the first preset time to turn on heating lamps on the heating lamp control circuit. By setting the lighting lamp and heating lamps to simulate the irradiation process of sunlight in sunrise at a fixed time every day, a more stable daily schedule for indoor occupants is established. The consistent change of indoor lighting every day also avoids the situation where sudden weather conditions cause the indoor light to be too dim and thus affect the daily routine of indoor occupants.



21: 2024/09045. 22: 2024/11/27. 43: 2025/06/04  
51: C02F

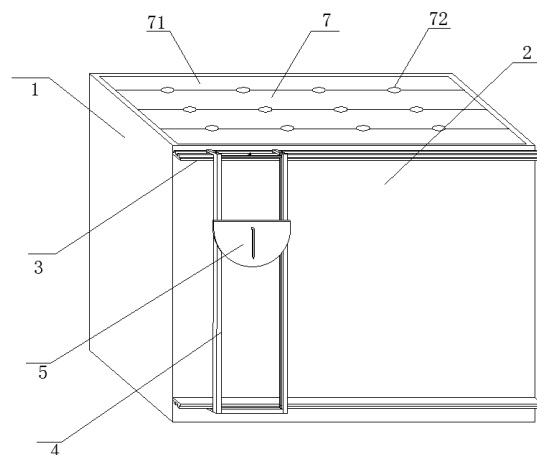
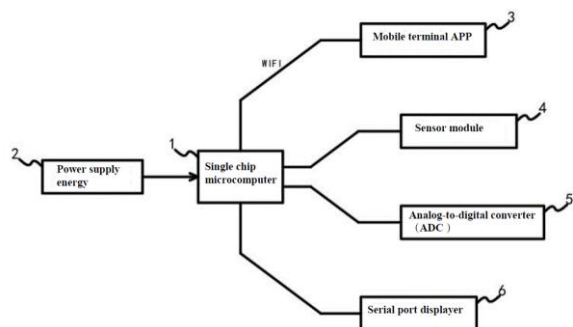
71: Xinyu University

72: Xie Fuzhen, Zhu Xiaofeng, Chen Ping, Xiao Chuncai, Peng Jiaqiang, Zeng Guangxiong

#### **54: NEW ENERGY WATER QUALITY TESTING SYSTEM AND TESTING METHOD THEREFOR**

00: -

A new energy water quality testing system and a testing method therefor are disclosed in the present invention, including: a single chip microcomputer, a power supply energy is electrically connected to one end of the single chip microcomputer, and a mobile terminal APP is wirelessly connected to the other end of the single chip microcomputer; in the present invention, the single chip microcomputer is used as a micro-controller to design a data acquisition unit, realizing real-time acquisition of water quality related data, and a plurality of data acquisition modules are applied to achieve complete and comprehensive data monitoring; the use of a WIFI module realizes the interconnection with cellphone APP, and various real-time data monitored by the system may be uploaded, easy for users to view at any time, and more convenient for data monitoring; and it is green and environmentally friendly to use new energy as the power source, which may be used off the power grid, greatly reducing the space limitation of the system, and improving the range of application of the product, and an alarm device is disposed, when the monitored real-time data exceeds a preset value set by the user, the system will alert to the user, so that the user may find and solve the water quality problem in time.



21: 2024/09046. 22: 2024/11/27. 43: 2025/06/04  
51: A01G

71: Anhui Science and Technology University

72: Liu huabin, Zhang qinying, Li feiyan, Bai chuanyang, Wu yue, Yang ning, Zhang wenwu, Zhou cheng

#### **54: HYDROPONIC DEVICE FOR PLANT SEEDLING CULTIVATION AND ROOT OBSERVATION**

00: -

The present invention relates to the technical field of plant root measurement, and provides a hydroponic device for plant seedling cultivation and root observation, including a hydroponic tank with an opening on a side; an observation plate is mounted at the opening of the hydroponic tank, guiding mechanisms fixedly connected to the hydroponic tank are mounted on a top and a bottom of the observation plate, an adjusting and locking mechanism is slidably connected between the two sets of guiding mechanisms, the adjusting and locking mechanism is connected to a measuring mechanism, and a cover plate with a U-shaped structure slidably connected to the guiding mechanisms is mounted on a side of the measuring mechanism away from the hydroponic tank. The present invention facilitates plant fixing and removal without damaging the roots, thus favoring subsequent cultivation and measurement and reducing inaccurate results due to root damage. It may meet the measurement needs at different positions, avoid light's impact on root growth, and fulfill the requirements for measuring root length and the angle of deviation from the gravity vector, facilitating cultivators' operations and improving measurement efficiency.

21: 2024/09047. 22: 2024/11/27. 43: 2025/06/12  
51: A23C

71: Linxia Prefecture Liao Yuan Dairy Co., Ltd., Liao Yuan Dairy Co., Ltd., Linxia Liaoyuan Dairy Industry Research Institute Co., Ltd.

72: WANG, Xiangzhu, QIN, Hong, MA, Keping, LIU, Ying, MA, Juanjuan, HU, Yulan

#### **54: BOS GRUNNIENS FORMULA MILK POWDER FOR MIDDLE-AGED AND ELDERLY PEOPLE AND PREPARATION METHOD THEREFOR**

00: -

The present invention relates to the technical field of dairy products, and in particular to a Bos grunniens (yak) formula milk powder for middle-aged and elderly people and a preparation method therefor. The present invention utilizes yak milk or yak milk powder as primary nutritional components, and adds auxiliary ingredients including colostrum basic protein (CBP) and milk minerals to promote calcium absorption and contribute to bone health. The added inulin and probiotics are beneficial to intestinal health.

21: 2024/09048. 22: 2024/11/27. 43: 2025/06/04  
51: E02B

71: Changjiang River Scientific Research Institute, Changjiang Water Resources Commission

72: DONG, Jing, CHEN, Duan, ZHOU, Wangzi, JIANG, Zhibing, HAN, Songlin, REN, Kunjie, CHENG, Zibing

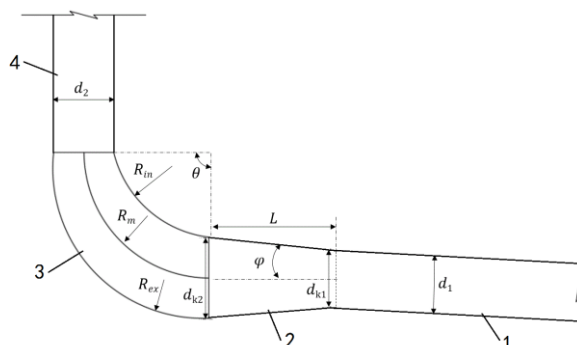
33: CN 31: 202411267477.6 32: 2024-09-10

#### **54: DESIGN METHOD OF SHAFT TYPE INLET AND OUTLET STRUCTURE AND SHAFT TYPE INLET AND OUTLET STRUCTURE**

00: -



The present invention provides a design method of a shaft type inlet and outlet structure and a shaft type inlet and outlet structure. The design method includes the following steps: step 1, an initial body shape design of the shaft type inlet and outlet structure is carried out according to the actual engineering operation conditions to obtain basic design parameters; step 2, diameters of starting end and end cross-section of a turning section is determined; step 3, a radius, an inner diameter and an outer diameter of the turning section and a length of and a connecting diffusion section are calculated; and step 4, a verification is carried out in a three-dimensional design software. The present invention solves the problem of uneven flow rate distribution of each flow channel caused by influence of deviation flow of the turning section, and ensures safe and stable operation of hydraulic and hydropower projects.



21: 2024/09051. 22: 2024/11/27. 43: 2025/06/04  
51: A61B

71: The Second People's Hospital of Wuhu, Anhui Medical University

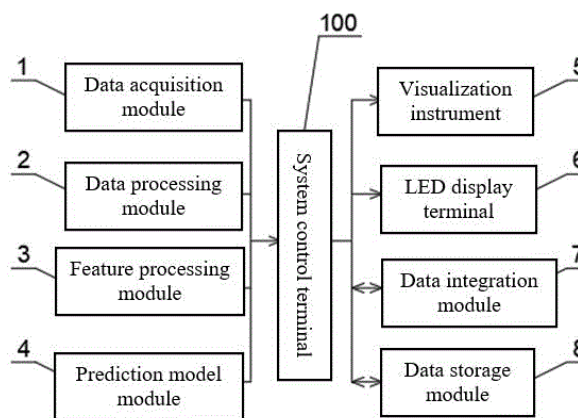
72: Wang Yi, Hong Jingfang, Wang Zhuzhu, Song Yongxia, Lv Xiaoqing, Li Chengcheng, Shen Ziyi, Fang Yan, Liu Yanchang, Hu Haiyan, Zhang Yuhan, Xu Qin, Yang Shengmei, Tu Hailing, Cao Ziyi, Wang Minghui, Ding Man

#### 54: MULTI-MODAL PREDICTION AND IDENTIFICATION SYSTEM FOR POSTOPERATIVE SUBSYNDROMAL DELIRIUM IN ELDERLY PATIENTS UNDER GENERAL ANESTHESIA

00: -

The present invention provides a multi-modal prediction and identification system for postoperative subsyndromal delirium in elderly patients under general anesthesia, including a system control

terminal. A data acquisition module, a data processing module, a feature processing module, a prediction model module, a visualization instrument, a light-emitting diode (LED) display terminal, a data integration module and a data storage module are arranged at an end of the system control terminal; output ends of the data acquisition module, the data processing module, the feature processing module and the prediction model module are connected to an input end of the system control terminal, an output end of the system control terminal is connected to input ends of the visualization instrument and the LED display terminal. In the present invention, data cleaning is used to remove noisy data, fill in missing values and eliminate abnormal values to ensure the integrity and accuracy of the data. Standardization processing performs standard transformation on physiological data of different metrics through the Z-score method to ensure the comparability and usability of the data. The processed data are stored in the database management system for the convenience of subsequent analysis and use.



21: 2024/09052. 22: 2024/11/27. 43: 2025/06/04  
51: B25H

71: Xinyu University

72: Pei Jianliang, Pei Zhiwen

33: CN 31: 2024104731654 32: 2024-04-19

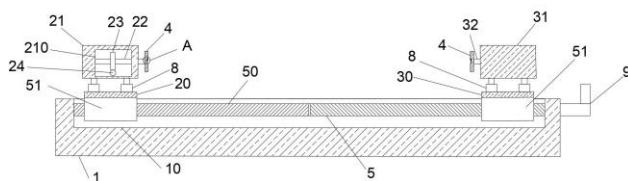
#### 54: AN AUXILIARY MAINTENANCE EQUIPMENT FOR AN AUTOMOBILE MOTOR CONTROLLER

00: -

The present invention relates to the field of electromechanical maintenance equipment, and discloses an auxiliary maintenance equipment for an automobile motor controller, comprising: an operating table, a displacement component, a first



clamping component, and a second clamping component, wherein the displacement component is connected to the operating table, the displacement component comprises two moving ends, and the two moving ends can move toward or away from each other; the first clamping component comprises a baffle and a first fixed block rotatably connected to the baffle; the second clamping component comprises a baffle and a second fixed block rotatably connected to the baffle, and the first fixed block and the second fixed block are each connected to a moving end, so that the first fixed block and the second fixed block move toward or away from each other, thereby driving the two baffles to clamp or loosen the circuit board. The equipment can rotate the circuit board to the most suitable tilt angle, thereby improving the maintenance efficiency.



21: 2024/09053. 22: 2024/11/27. 43: 2025/06/04  
51: A63B

71: Hainan Medical University

72: Ren Cai, Chen Jicheng, Xia Minhui, Ren Guangbo, Li Xinhua, Du Wenshan

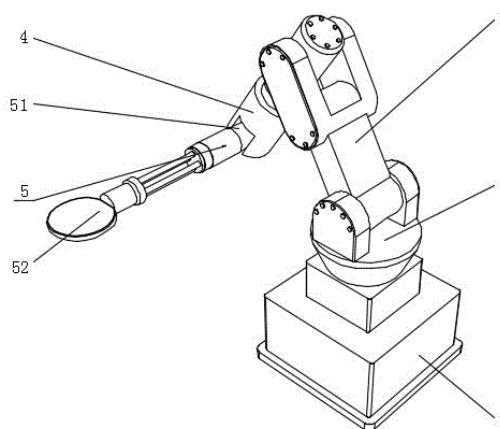
33: CN 31: 2024115389853 32: 2024-10-31

#### **54: TABLE TENNIS PLAYING ROBOT FOR SPORTS AND FITNESS**

00: -

The present invention provides a table tennis playing robot for sports and fitness, includes a base. A top of the base is rotatably connected to a first connecting arm, an end of the first connecting arm is rotatably connected to a second connecting arm, an end of the second connecting arm is rotatably connected to a third connecting arm, and a hitting connecting arm for hitting a table tennis ball is arranged at an end of the third connecting arm; the hitting connecting arm includes a fixing end rotatably connected to the third connecting arm, a hitting end fixedly mounted with the fixing end, a connecting end fixedly mounted at an end of the hitting end, and a fixing groove disposed at an end of the fixing end, and an insertion fixing rod inserted and fixed into the fixing groove is fixedly arranged at an end of the

connecting end. Through the insertion fixing rod, clamping balls, adjusting sleeve and fixing groove, the present invention may quickly mount and fix a hitting end, which is convenient for quickly replacing and mounting after the hitting end is worn, thereby increasing the wear-repair efficiency of the hitting end.



21: 2024/09054. 22: 2024/11/27. 43: 2025/06/04  
51: G06T

71: Sichuan Gaolu Information Technology Co., Ltd.  
72: Liu Haocheng, Dai Chao, Tan Yuxin, Zhu Shu, Zhang Jing, Chen Yunping, Wang Yujie, Peng Zhuang

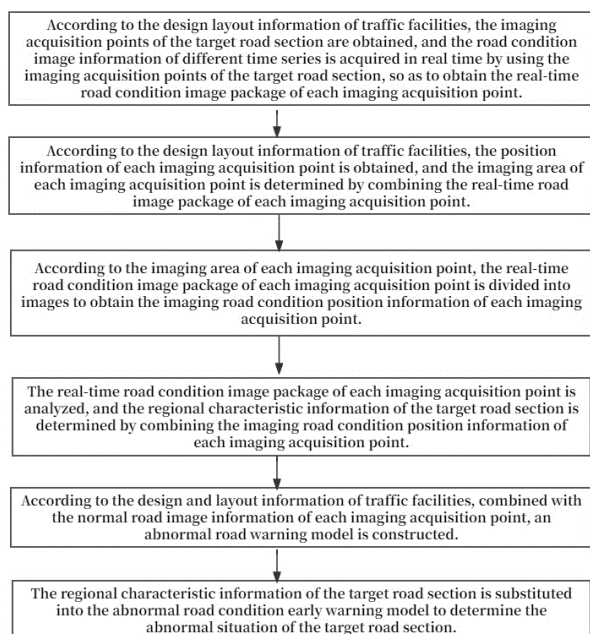
33: CN 31: 2024112444736 32: 2024-09-06

#### **54: METHOD SYSTEM AND EQUIPMENT FOR TREATING LOW VISIBILITY METEOROLOGICAL DISASTERS BASED ON IMAGE PROCESSING**

00: -

The invention discloses a method, a system and equipment for treating low visibility meteorological disasters based on image processing, and relates to the technical field of road image monitoring. The method comprises the following steps: acquiring imaging acquisition points of a target road section according to the design layout information of traffic facilities, and acquiring road image information of different time sequences in real time by using the imaging acquisition points of the target road section. According to the invention, the real-time road image is collected in real time, and the features of the real-time road image are identified, extracted and analyzed; meanwhile, an abnormal road condition early warning model is constructed according to normal road conditions; and then, the visibility of the real-time road image is judged

abnormally by using the abnormal road condition early warning model, so as to determine whether the visibility of the real-time road condition can be opened for driving, so that the situation that the visibility of a vehicle is too low during driving on a traffic section is avoided, and a judgment basis can be provided for open driving of road traffic in advance. That is to say, the problem that traffic jams are easy to occur under the condition of low visibility in the prior art is solved.



21: 2024/09055. 22: 2024/11/27. 43: 2025/06/04  
51: A41D

71: Shandong University

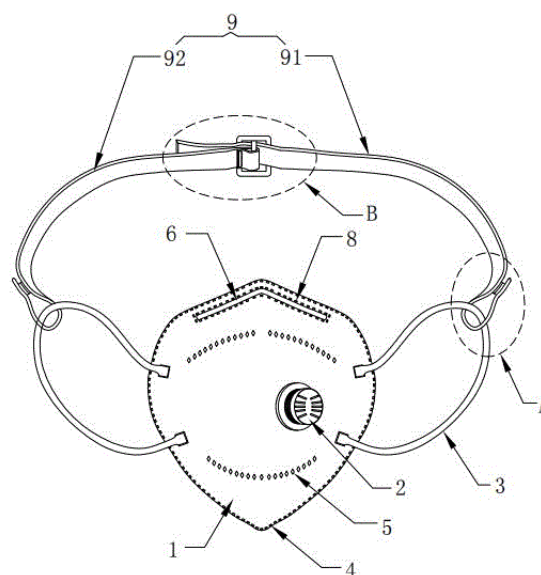
72: He Zuoli, Xiao Lihui, Zheng Ziyue, Zhang Jing, Chang Jingcai

#### 54: SELF-CLEANING AND ANTIBACTERIAL MASK BASED ON PHOTOCATALYTIC COMPOSITE FIBERS

00: -

The present invention provides a self-cleaning and antibacterial mask based on photocatalytic composite fibers. The self-cleaning and antibacterial mask based on photocatalytic composite fibers includes: a mask main body. A breather valve is fixedly mounted on the mask main body, and two ear ropes are welded on the mask main body. An adjusting component is arranged at the two ear ropes, and the adjusting component is used for adjusting tightness of the two ear ropes. The self-

cleaning and antibacterial mask based on photocatalytic composite fibers provided by the present invention has bactericidal effect. It allows for the adjustment of the tightness of the two ear ropes, avoiding discomfort of ear pressure for individuals with wider faces when wearing the mask, eliminating discomfort to user's ears caused by the ear ropes, and preventing individuals with narrower faces from wearing a loosely fitted mask that compromises sealing tightness around the mask.



21: 2024/09056. 22: 2024/11/27. 43: 2025/06/04  
51: D01F

71: Shandong University

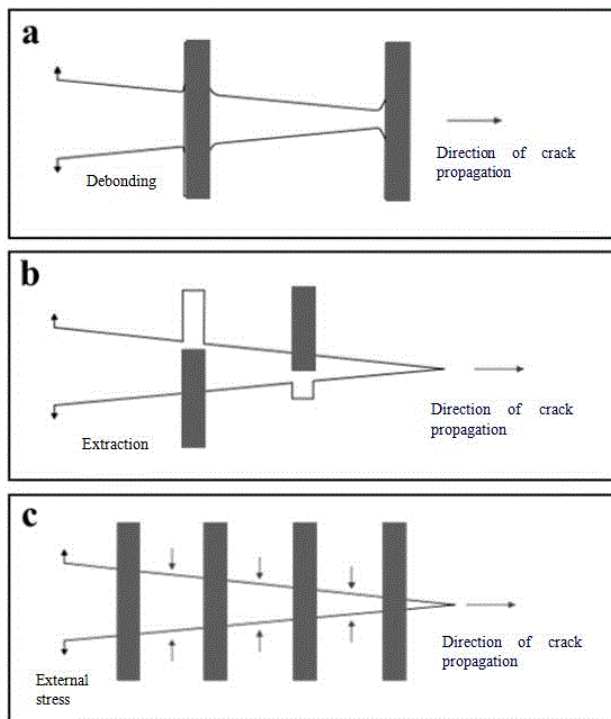
72: He Zuoli, Xiao Lihui, Zhang Jing, Chang Jingcai

#### 54: METHOD FOR PREPARING TNF/TPU COMPOSITE FIBER WITH HIGH TENSILE STRENGTH

00: -

The present invention provides a method for preparing of TNF/TPU composite fiber with high tensile strength. The method for preparing of the TNF/TPU composite fiber with high tensile strength includes the following steps: (1) preparing spinning solution: S1: 10-20 g of N, N-Dimethylformamide (DMF) solution is weighed into a 25 mL beaker, and 0.4-4 g of surfactant sodium dodecyl sulfate powder (SDS) is added. S2: 0.1-1 g of TNF powder is weighed into the solution after ultrasonic dispersion for 4-8 min, and ultrasonicated for 0.5-1.5 h with an ultrasonic cell disruptor to uniformly disperse the

TNF powder in the solution. S3: 1-2 g of TPU elastomer into solution is weighed, heated in water bath at 80-100°C and stirred for 1-3 h to completely dissolve TPU elastomer. S4: stirred continually until a temperature of the spinning solution dropped to room temperature, and spinning can be performed. The prepared TNF/TPU composite fiber not only has high content of photocatalyst, but also has high tensile strength and elongation at break.



21: 2024/09057. 22: 2024/11/27. 43: 2025/06/04  
51: A01K

71: Tongliao Scientific Research Institute of Agriculture and Animal Husbandry, Guizhou University

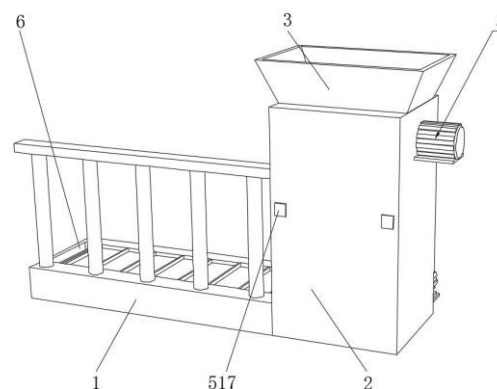
72: Liu Dianpeng, Gao Lijuan, Han Yuguo, Zheng Haiying, Wang Haifeng, Cheng Qiming, Wang Zi, Cheng Tao, Hu Hongzhe, Zheng Biaobiao, Shen Jiawen, Gao Xing, Yang Shuai, Zhai Tianhui

#### **54: TYPE OF AUTOMATIC FEED DEVICE FOR SHEEP FARMING**

00: -

The present invention discloses an automatic feed device for sheep farming, including a feeding base, one end of the feeding base is fixedly installed with a feed bin, and the top of the feed bin is fixedly installed with a feed hopper, the inside of the feed bin is provided with a cutting component for shredding the feed, the cutting component includes

a rotating shaft connected to the inner side of the feed bin, and a cutting roller fixedly installed on the rotating shaft; the rotating shaft penetrates through the feed bin and is rotatably connected to a first rotating motor on the outside. The present invention, by incorporating the chopping roller, may break large feed particles into finer pieces, making it easier for the sheep to chew and consume the feed, as well as facilitating better absorption; at the same time, any large feed particles that are not shredded will be separated by the screening mesh plate; the rotating disc, connecting arm, L-shaped connecting rods, and adjustable connecting rods work together to drive the cleaning plate in a reciprocating motion across the surface of the screening mesh plate, which reduces the risk of feed blockages caused by unshredded large particles, preventing clogging of the screening mesh plate.



21: 2024/09077. 22: 2024/11/28. 43: 2025/06/04  
51: B07C

71: Tangshan University

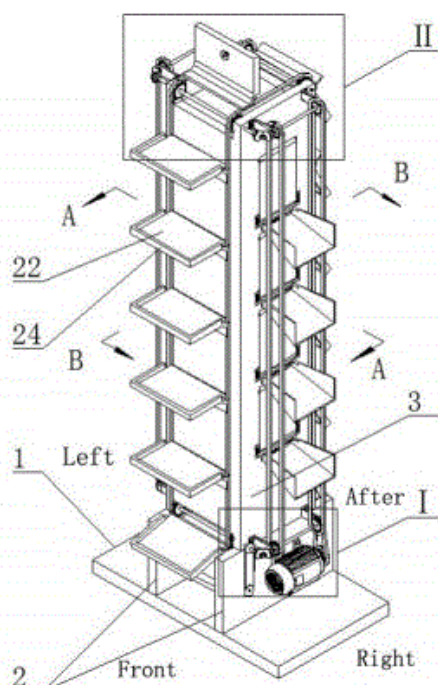
72: YANG, Li, ZHANG, Huiyan, LIU, Yashuang, DAI, Jinchao, MA, Shuang

#### **54: MULTIFUNCTIONAL LOGISTICS SORTING DEVICE BASED ON INTERNET OF THINGS**

00: -

A multi-functional logistics sorting device based on the Internet of Things comprises a bottom plate on which a column is fixed, a main channel is arranged in the middle of the column, a sorting channel is arranged on both sides of the column, a sorting component is arranged in the sorting channel, a transmission component is arranged on both sides of the column, a transmission component is arranged on the outside of the column, and the transmission component is connected with the transmission component. The transmission

component can drive the transmission component to transmit the package to the main channel, the sorting component can be the corresponding package from the sorting channel output, each sorting channel is provided with a hopper, the hopper outlet is provided with a baffle plate, and the baffle plate on the same side is opened or closed synchronously through the linkage mechanism.



21: 2024/09078. 22: 2024/11/28. 43: 2025/06/10

51: C02F

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

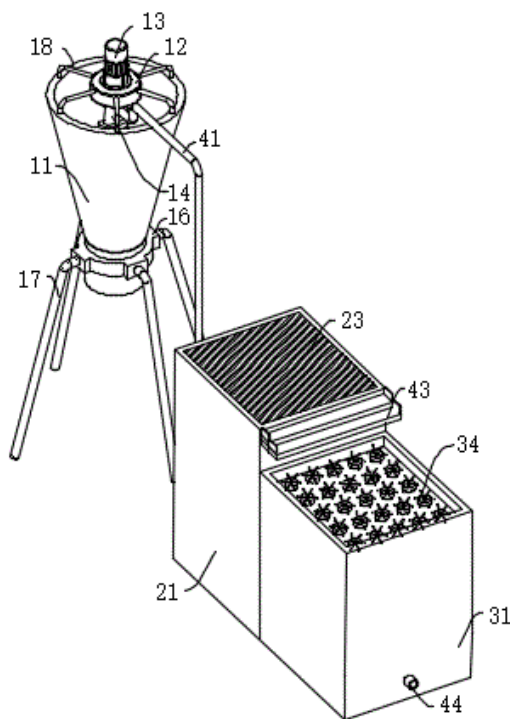
72: WANG Linpei, LI Songya, LIU Biao, WU Junfeng, WANG Le, YAN Xiaole, MAO Yanli, KANG Haiyan, ZHU Xinfeng, LIU Jiahui, ZHAO Yanping, GENG Yanxiang, YANG Menghan

#### **54: ARTIFICIAL WETLAND TREATMENT DEVICE**

00: -

The invention discloses an artificial wetland treatment device, which comprises sand-water separation zone, anaerobic zone and floating bed zone; the sand-water separation zone comprises a sand bucket, a driving motor, a hollow cylindrical net and an auger, wherein the driving motor is arranged right above the sand bucket, the hollow cylindrical net is fixed at the lower part of the output end of the driving motor, and the auger is fixed on the outer

surface of the hollow cylindrical net, and the outer diameter of the auger is gradually increased from bottom to top; the anaerobic zone comprises an anaerobic tank; the floating bed zone includes a floating bed tank. The invention is provided with a sand-water separation zone with a small floor space, which can effectively remove the sediment in the water and prevent the filter layer from clogging. At the same time, the anaerobic zone and the floating bed zone enrich the functional microbial diversity of artificial humidity, improve the treatment efficiency, and solve the problems of large floor space and low treatment efficiency of the existing traditional constructed wetland.



21: 2024/09079. 22: 2024/11/28. 43: 2025/06/10

51: C09D

71: Henan University of Urban Construction

72: DUAN Nannan, XU Longyun, TAN Yanfang, XIA Xuelian, WANG Zongtao

#### **54: METHOD FOR DETECTING BENZENE SERIES IN ARCHITECTURAL COATINGS**

00: -

The invention discloses a method for detecting benzene series in architectural coatings, which belongs to the field of preparation of environmental functional materials and includes the following steps: adding architectural coating and adsorbent into



organic solvent, stirring to dissolve the benzene series in the organic solvent, standing to adsorb the benzene series in the adsorbent, filtering, taking out the adsorbent, and placing the adsorbent in a thermal desorption instrument, wherein a transmission line of the thermal desorption instrument is connected with a sample inlet of a gas chromatograph; and heating to enable the benzene series to be desorbed from the adsorbent and enter the gas chromatograph to measure content of the benzene series in the architectural coating; the method for detecting benzene series in architectural coatings provided by the invention firstly adsorbs the benzene series in the coatings through an adsorbent, and then analyzes the benzene series through a thermal analyzer; and the adopted adsorbent is simple to operate, and diatomite is cheap, and has high adsorption selectivity for benzene series, so that the extraction rate of benzene series in architectural coatings is improved.

21: 2024/09080. 22: 2024/11/28. 43: 2025/06/10

51: G01N

71: Henan University of Urban Construction

72: DUAN Nannan, LIANG Banglei, TAN Yanfang, XIA Xuelian, WANG Zongtao

#### **54: METHOD FOR DETECTING VOCs IN BUILDING DECORATION MATERIALS**

00: -

The invention proposes a method for detecting VOCs in architectural decoration materials, which belongs to the field of testing technology for decoration materials. The invention disperses nanogold particles in anhydrous ethanol and adds nickel chloride ethanol solution, cobalt chloride ethanol solution, hydrazine hydrate and sodium hydroxide ethanol solution, and centrifugally cleans it after heating and stirring reaction to obtain nickel and cobalt composite metal oxides-coated nanogold sol, and prepares it as a detecting chip, which can be directly carried out for the detection of different concentrations of VOCs gases in the building decorative materials. The preparation method of the nickel-cobalt composite metal oxide-coated nanogold sol of the invention is simple and inexpensive, and the use of which for the detection of VOCs in building decorative materials has the advantages of simple operation, fast detection

speed, and high versatility, and it can be applied to the preparation of gas sensing chips.

21: 2024/09081. 22: 2024/11/28. 43: 2025/06/04

51: B62J

71: VOLKOV Artem Maksimovich

72: VOLKOV Artem Maksimovich

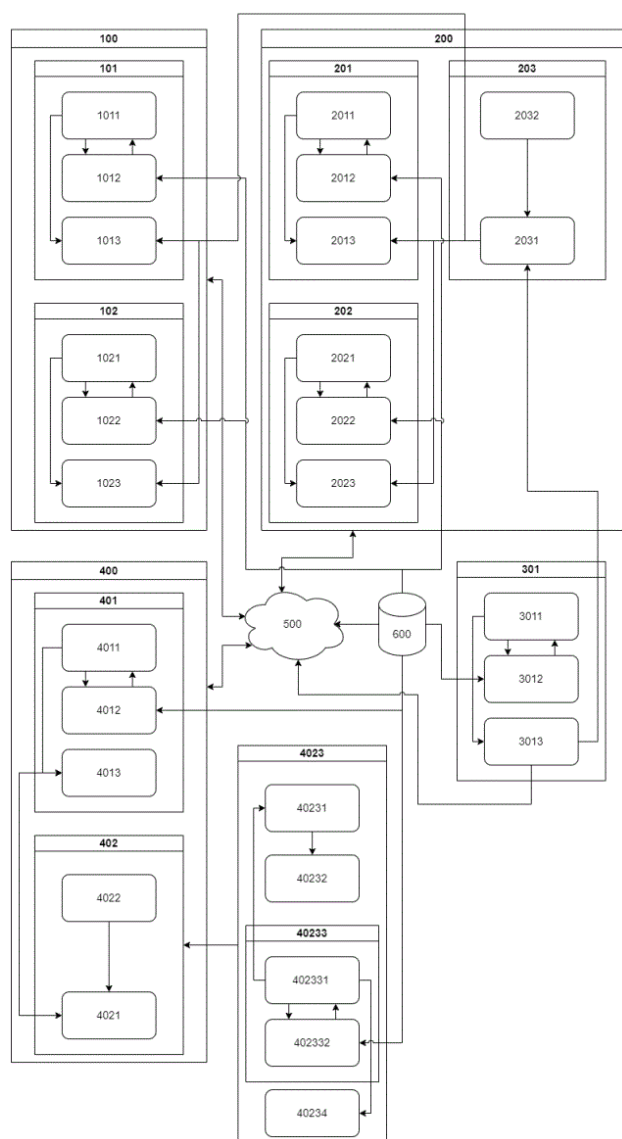
33: RU 31: 2024130483 32: 2024-10-10

#### **54: METHOD FOR CONTROLLING A VEHICLE**

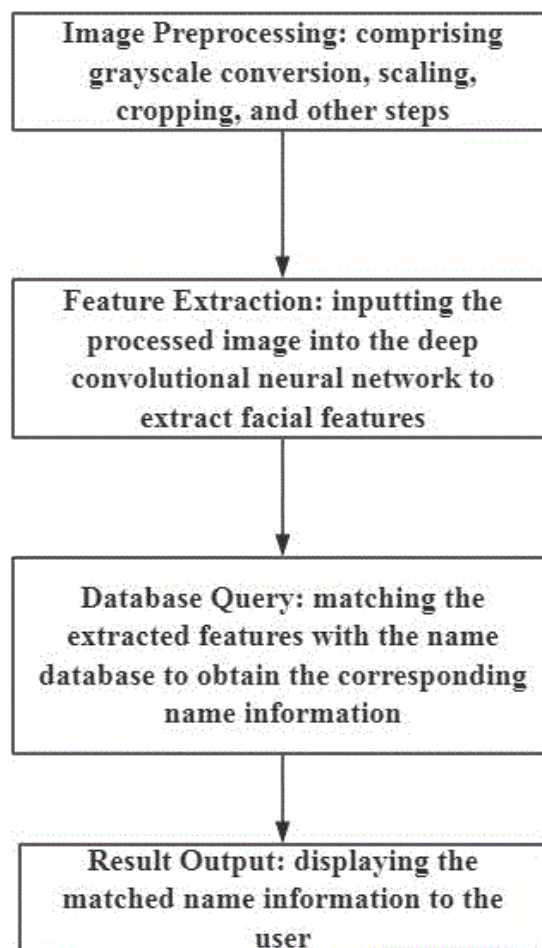
00: -

The technical solution relates to the field of transport, in particular, to auxiliary devices and methods for collecting data for machine learning using vehicles, such as, for example, personal mobility devices (PMD). A method for controlling a vehicle is proposed. There is a need to speed up the preparation of data suitable for machine learning and thus reduce the time it takes to prepare machine learning models trained on big data. The technical result achieved by implementing the claimed technical solution, in addition to the implementation of the product and/or method for its intended purpose, is an increase in the speed of preparing data suitable for machine learning, including an increase in the speed of preparing big data that can be used for machine learning. In some aspects, another technical result achieved is also an increase in road safety.





with the features in the name database through a similarity comparison algorithm to find the corresponding name information.



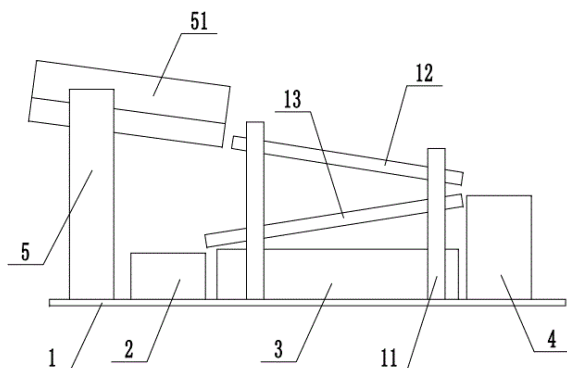
21: 2024/09082. 22: 2024/11/28. 43: 2025/06/04  
51: G07C  
71: Beijing Tianmixuan Cultural Communication Co., Ltd  
72: Baojun Yan  
**54: SYSTEM FOR MATCHING HUMAN FACES AND NAMES**  
00: -

A system for matching human faces and names, comprising face detection and alignment, feature extraction, name database query, and result output; wherein the face detection alignment obtains the target face image through a camera or other image acquisition device, the aligned face image is subjected to feature extraction through a deep convolutional neural network, the extracted face features are stored in the database and matched

21: 2024/09086. 22: 2024/11/28. 43: 2025/06/04  
51: A01D  
71: MA, Sai  
72: MA, Sai, LI, Fengming  
**54: SCREENING MECHANISM FOR POTATOES**  
00: -

The present invention discloses a screening mechanism applied to potatoes, belonging to the technical field of screening devices, and includes a base plate, a screening device, and a feeding component. The screening device consists of a frame, a first screening frame, and a second screening frame; the first screening frame is equipped with multiple first rollers arranged in parallel, while the second screening frame has multiple second rollers arranged in parallel; the first

rollers extend from the first end to the second end with a gradually downward incline, and the second rollers extend from the second end to the first end with a gradually downward incline. The screening mechanism provided by the present invention has a simple structure, low cost, and high practicality.



21: 2024/09087. 22: 2024/11/28. 43: 2025/06/04

51: C12M

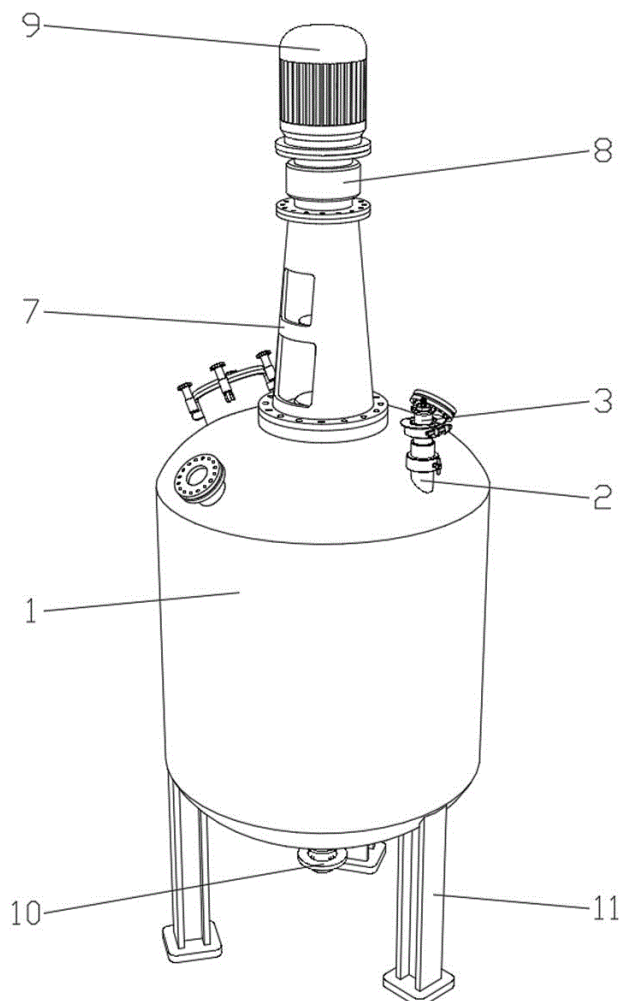
71: Suzhou University

72: Chen Jun, Xu Lisheng, Feng Fan, Peng Lei, Zhao Wenlong

**54: SYSTEM AND METHOD FOR AVOIDING BACTERIA CONTAMINATION DURING INOCULATION BY MICROBIAL FERMENTATION**

00: -

The present invention provides a system and a method for avoiding bacteria contamination during inoculation by microbial fermentation, including a microbial fermentation tank. In the present invention, liquid or solid matrix ethanol fuel is put into an annular sterilization groove and ignited, and a shaker bottle mouth is directly placed above for burning, a bottle mouth is placed on an U-shaped limiting groove, a bottle stopper is removed, and the bottle stopper is directly poured into inside to complete the inoculation. A negative pressure inoculation mode is selected to sterilize an inoculation connecting part and connect the inoculation connecting part to an inoculation seat part through a connecting seat external thread pipe by screwing a connecting internal thread, liquid or solid matrix ethanol in the annular sterilization groove is likewise ignited. The structure allows for convenient flame sterilization as well as rapid flame extinguishing, can be easily adjusted according to different usage needs, more convenient for flexible application.



21: 2024/09088. 22: 2024/11/28. 43: 2025/06/04

51: E04F

71: Chang'an University

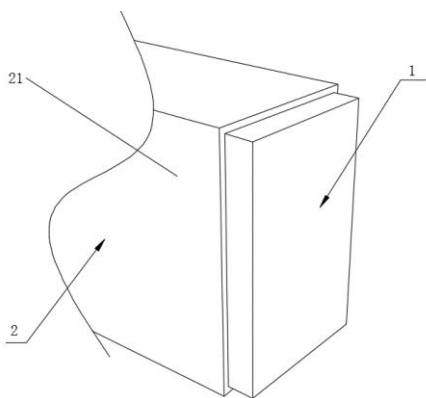
72: Ma Siqing

**54: DECORATIVE PLATE WITHOUT REMOVING FORMWORK AND STRUCTURE FOR EXTERIOR WALL OF BUILDING**

00: -

Disclosed are a decorative plate without removing formwork and a structure for exterior wall of building in the present invention, including a decorative plate body. The decorative plate body includes a panel body arranged inside the decorative plate body, a decorative layer arranged at a top end of the panel body and a mounting layer arranged at a bottom end of the panel body; an insulation layer for increasing the insulation performance is arranged at a middle part of the mounting layer and the panel body, and a sealing outer layer for increasing the sealing performance is arranged at a periphery of the

decorative plate body; and in the present invention, through elastic beads and card slots being evenly arranged on peripheries of connecting rods, the decorative plate body and the connecting rods may be mounted and disassembled quickly, and through embedded connecting tubes, the connecting rods, the card slots and the elastic beads, the decorative plate body may be quickly removed when damaged or in need of replacement, not causing damage of concrete structure of the wall during replacement, convenient for replacement.

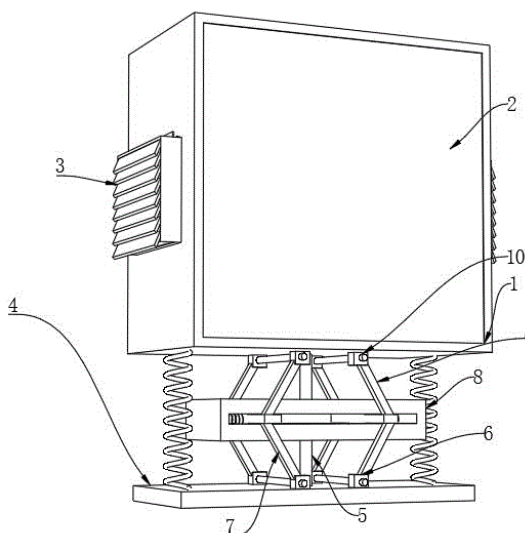


21: 2024/09089. 22: 2024/11/28. 43: 2025/06/04  
51: F16M  
71: Xinyu University  
72: Peng Xiaojun, Li Naigen, Xi Jun, Du Qiulai, Sun Yanping

#### **54: FLOATING SHOCK-ABSORBING ELECTRICAL DEVICE FOR ELECTRONIC INFORMATION ENGINEERING**

00: -

The present invention discloses a floating shock-absorbing electrical device for electronic information engineering, including a cabinet body. A rotating door is rotatably connected to a front end of the cabinet body, and protective frames are fixedly connected to left and right sides of the cabinet body. The present invention effectively addresses an impact of vibrations on the cabinet body in a vertical direction by using elastic deformation of damping springs to buffer impact force and damping characteristics of the damping springs to dissipate vibrational energy. A synergistic effect of components including first inclined bars, second sliding blocks, springs and a compression spring greatly enhances an overall shock absorption effect, better protecting electrical devices from damage caused by vibrations of varying intensities.



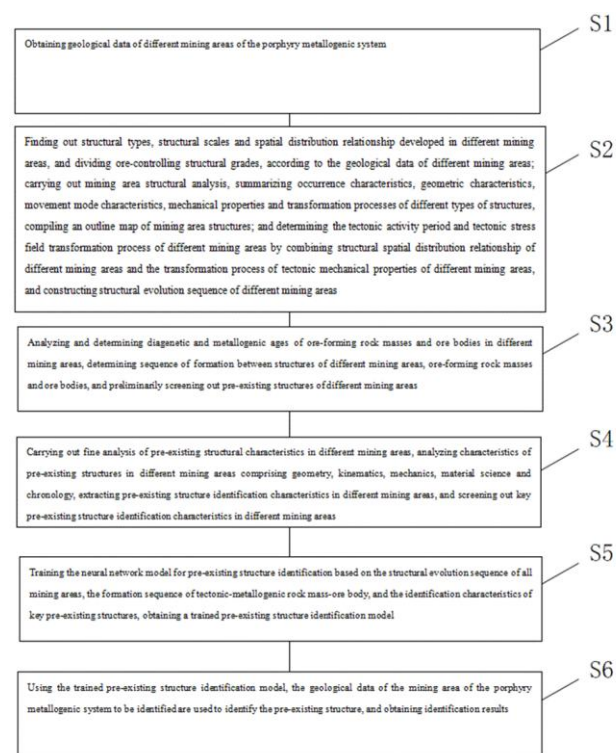
21: 2024/09090. 22: 2024/11/28. 43: 2025/06/04  
51: G01V

71: Kunming University of Science and Technology  
72: LIU, Fei, HAN, Runsheng, REN, Tao, ZHAO, Dong

#### **54: METHOD FOR IDENTIFYING PRE-EXISTING STRUCTURES CONTROLLING PORPHYRY METALLOGENIC SYSTEM BASED ON NEURAL NETWORK MODEL**

00: -

The present application provides a method for identifying pre-existing structures controlling a porphyry metallogenic system based on a neural network model, falling within the technical field of magmatic hydrothermal ore deposit exploration. The method includes: obtaining structural evolution sequence of all mining areas, the sequence of tectonic-metallogenic rock mass-ore body formation, and the key identification characteristics signs of pre-existing structures. The present application substitutes geological data of the mining area of a porphyry metallogenic system to be identified into the trained pre-existing structure identification model to identify the pre-existing structure, simplifying identification process, improving accuracy, reducing subjective influence caused by artificial evaluation, and improving characterization ability of the identification result.



21: 2024/09091. 22: 2024/11/28. 43: 2025/06/04  
51: E01F

71: Xinyu University

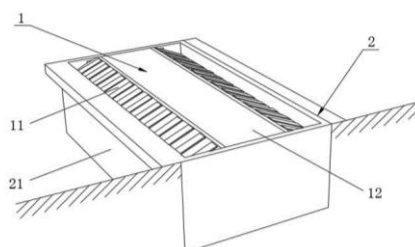
72: Yu Longhai, Yang Guojun, Chen Shuping, Wu Shudong, Hong Yun, Li Qiao

#### 54: ADJUSTING MECHANISM FOR LIFTING SPEED BUMP

00: -

The present invention provides an adjusting mechanism for lifting a speed bump, includes a speed bump body. The speed bump body includes a top surface and inclined surfaces symmetrically and fixedly mounted at two ends of the top surface, and a lifting assembly for convenient adjustment and lifting is arranged at a bottom end of the speed bump body. The lifting assembly includes an adjusting shell, a first rotating seat is symmetrically and fixedly arranged at an interior of the adjusting shell, and the first rotating seat is also symmetrically and fixedly mounted at a bottom end of the inclined surface. One end of the first rotating seat is rotatably connected to a connecting rod I, the first rotating seat at the bottom end of the inclined surface is rotatably connected to a connecting rod II. In the present invention, the connecting rod III is driven to rotate through the connecting end of one end of the hydraulic rod, further drives the connecting rod I and

the connecting rod II to rotate, further drives the speed bump body to adjust the height at the interior of the adjusting shell, can adjust the height of the speed bump body according to the change of traffic flow, reducing traffic congestion and increasing the use functionality of the speed bump body.



21: 2024/09092. 22: 2024/11/28. 43: 2025/06/04  
51: G01V

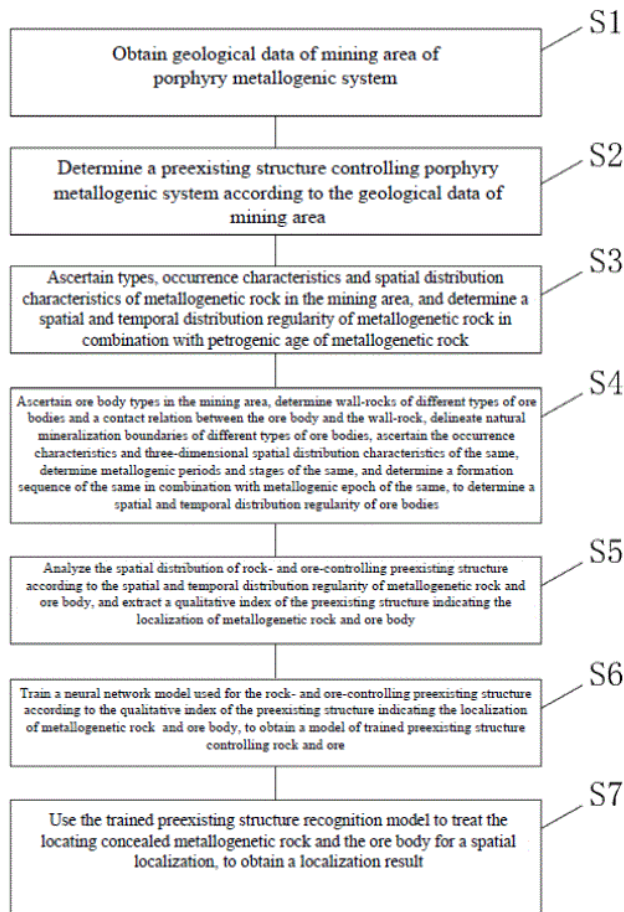
71: Kunming University of Science and Technology  
72: LIU, Fei, HAN, Runsheng, ZHAO, Dong, ZHANG, Yan

#### 54: LOCALIZATION METHOD FOR CONCEALED METALLOGENETIC ROCK AND ORE BODY BASED ON ROCK- AND ORE-CONTROLLING PREEXISTING STRUCTURAL MODEL

00: -

Disclosed is a localization method for concealed metallogenetic rock and ore body based on a rock- and ore-controlling preexisting structural model in the present application, relating to the field of ore deposit exploration, and including the following steps: determining a preexisting structure controlling porphyry metallogenetic system according to geological data of mining area; and respectively determining spatial and temporal distribution regularity of metallogenetic rock and ore body. In the present application, the spatial and temporal distribution regularity of metallogenetic rock and ore body is determined respectively according to different attributes, the model is trained in combination with a qualitative index of the preexisting structure indicating the localization of metallogenetic rock and ore body, and a spatial localization is carried out based on the model, improving the accuracy of the concealed metallogenetic rock and ore body for the spatial localization.





21: 2024/09093. 22: 2024/11/28. 43: 2025/06/04  
51: A01D

71: LI, Fengming

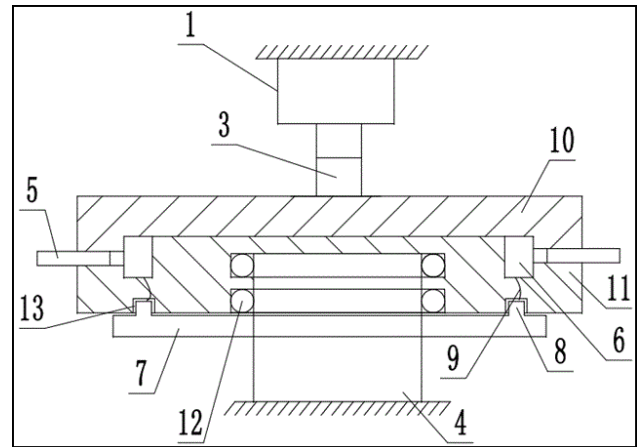
72: LI, Fengming, MA, Sai

#### **54: DRIVE DEVICE FOR HORIZONTAL ROTARY RAKE**

00: -

The present invention discloses a drive device for the rake teeth arms of a horizontal rotary rake, which relates to the field of rake machinery. The rake arm shafts are arranged around the central line of the mounting box, and each divided drive motor corresponds to one rake arm shaft; the divided drive motors are arranged around the central line of the mounting box inside the mounting box; the power output shafts of the divided drive motors can drive the rake arm shafts to rotate, thereby driving the rake teeth arms to perform raking operations; the power output shaft of the main drive motor can drive the connecting shaft to rotate around the central line of the mounting box, with the top of the vertical shaft inserted into the mounting box. The present

invention effectively improves the performance and working efficiency of the horizontal rotary rake.



21: 2024/09093. 22: 2024/11/28. 43: 2025/06/04  
51: A01D

71: LI, Fengming

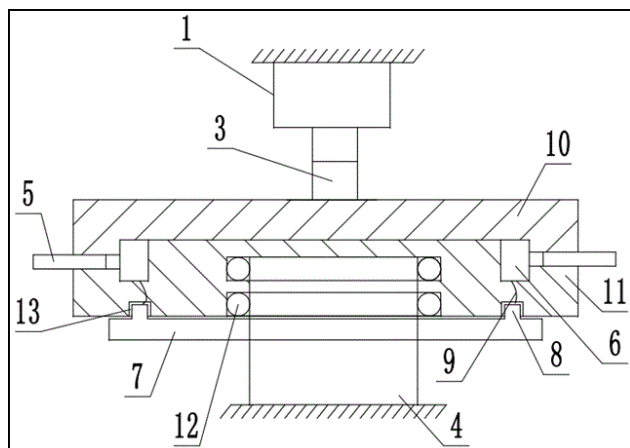
72: LI, Fengming, MA, Sai

#### **54: DRIVE DEVICE FOR HORIZONTAL ROTARY RAKE**

00: -

The present invention discloses a drive device for the rake teeth arms of a horizontal rotary rake, which relates to the field of rake machinery. The rake arm shafts are arranged around the central line of the mounting box, and each divided drive motor corresponds to one rake arm shaft; the divided drive motors are arranged around the central line of the mounting box inside the mounting box; the power output shafts of the divided drive motors can drive the rake arm shafts to rotate, thereby driving the rake teeth arms to perform raking operations; the power output shaft of the main drive motor can drive the connecting shaft to rotate around the central line of the mounting box, with the top of the vertical shaft inserted into the mounting box. The present invention effectively improves the performance and working efficiency of the horizontal rotary rake.





21: 2024/09094. 22: 2024/11/28. 43: 2025/06/04  
51: C21B

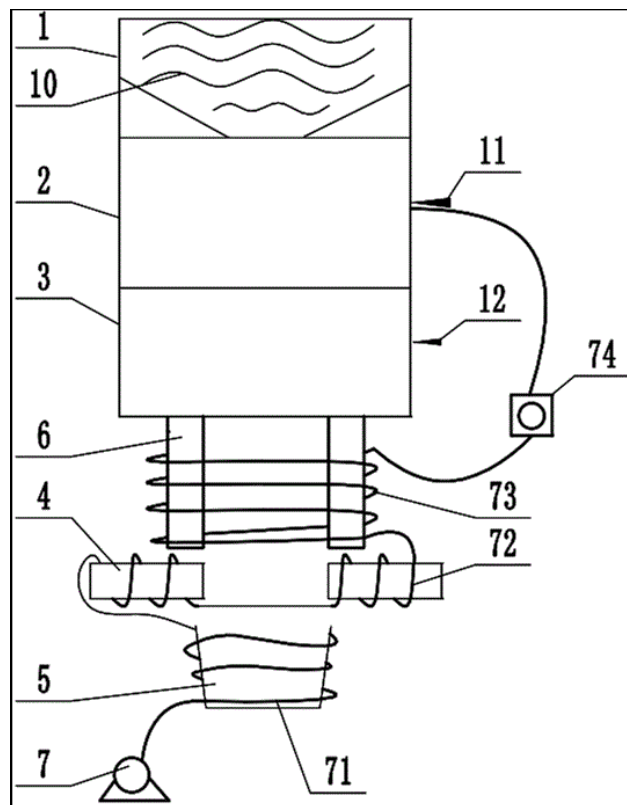
71: Tangshan University

72: WANG, Lili, XIN, Lijun, YAN, Xiaoli

**54: DEVICE FOR GRANULATING BLAST FURNACE SLAG AND METHOD THEREFOR**

00: -

Disclosed is a device for granulating blast furnace slag and a method therefor, relating to the technical field of metallurgical waste slag treatment. A crushing device includes a device body, a crushing channel is arranged at an interior of the device body, and the device body includes a gas quenching crushing section and a water quenching crushing section. A plurality of Laval nozzles are arranged on the gas quenching crushing section. Heat-conducting sleeves are fixedly arranged between the crushing device and a slag collector, a first air conduction heat exchange pipe is arranged at an outer side wall of the slag collector, and a second air conduction heat exchange pipe is arranged at outer side walls of waste heat recovery pipelines. Slag powder prepared by the present invention combines advantages of fine particle size from a water quenching method and good sphericity from a gas quenching method, while also enabling recovery of waste heat from blast furnace slag.



21: 2024/09095. 22: 2024/11/28. 43: 2025/06/05  
51: C09D

71: Guangdong Carpoly Science and Technology Material Co., Ltd.

72: CAI, Zhengwei, WANG, Aolei, PENG, Haoming, HU, Hengzhi

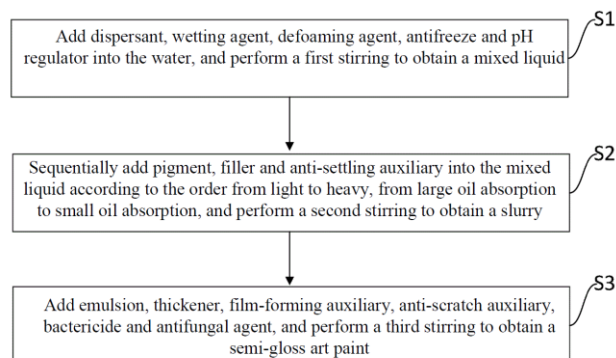
33: CN 31: 202311612008.9 32: 2023-11-28

**54: SEMI-GLOSS ART PAINT WITH HIGH HARDNESS AND UNIVERSAL USE OF MULTIPLE SUBSTRATES AND PREPARATION METHOD THEREFOR**

00: -

The present invention relates to a semi-gloss art paint with high hardness and universal use of multiple substrates and a preparation method therefor, belonging to the technical field of paint. The above semi-gloss art paint includes the following raw materials in parts by weight: 40-70 parts of emulsion, 0.4-0.8 parts of wetting agent, 0.5-1.6 parts of dispersant, 1-3 parts of thickener, 2-15 parts of filler, 1-2 parts of anti-scratch auxiliary, 0.1-0.5 parts of anti-settling auxiliary and 1-51 parts of water. The present invention adopts a self-crosslinking acrylic emulsion with small particle size as a main film-forming matter, and uses cooperatively a spherical polyethylene wax dispersion with high melting point for physical chimerism into the paint film and other

components like specific thickener, and each component cooperates with each other to prepare a semi-gloss art paint with high hardness, universal use of multiple substrates, high durability and tunable colors.



21: 2024/09099. 22: 2024/11/28. 43: 2025/06/05  
51: E04G

71: China Railway Beijing Engineering Bureau Group First Engineering Co., LTD, Xi'an University of Architecture and Technology

72: Yonggang Wang, Xiaohu Yin, Hua Gao, Pengtao Yang, Zhanping Song, Chao Xiong, Penghui Lu, Fei Xie, Rui Xu, Hu Chu, Panpan Li, Shaohua Heng

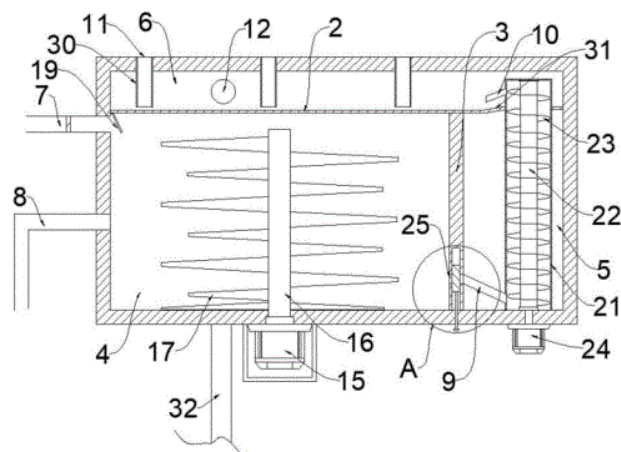
33: CN 31: 2024105831999 32: 2024-05-11

#### **54: INITIAL SUPPORT FLATNESS CONTROL DEVICE AND CONTROL METHOD THEREOF**

00: -

The present invention provides an initial support flatness control device and a control method thereof. An initial support flatness control device includes: a box body, the first partition plate and the second partition plate dividing an interior of the box body into a first chamber and a second chamber on lower two sides and a third chamber on an upper side, and an external connection mechanism being arranged on a top of the box body to position the box body beneath a construction surface; a mixing mechanism, arranged in the first chamber to mix materials into a slurry; a conveying mechanism, to convey the slurry in the first chamber into the third chamber; a plurality of spraying mechanisms, uniformly arranged on the top of the box body, the spraying mechanisms spraying the slurry in the third chamber from the third chamber onto the construction surface on the top of the box body through the spraying nozzles; detection mechanisms, respectively arranged close to the spraying nozzles to obtain the flatness of the construction surface. According to the present

invention, a plurality of spraying mechanisms are uniformly arranged on the top of the box body, a high-pressure air nozzle is arranged on a side wall of the third chamber. By connecting to an external high-pressure gas source, high-pressure gas is enabled to enter the third chamber. Through the siphon effect, the high-pressure air flow causes the slurry to be sprayed out from the spraying nozzles and act on the construction surface.



21: 2024/09100. 22: 2024/11/28. 43: 2025/06/05  
51: E04D

71: CHINA ROAD & BRIDGE CORPORATION, Xi'an University of Architecture and Technology

72: Changwei Li, Ang Jiao, Bin Zhi, Shulin Jiang, Jinglin Tan, Fuyun Wang, Zhanping Song, Xiaojing Xu, Zhuoyu Guo, Xiaokun Li

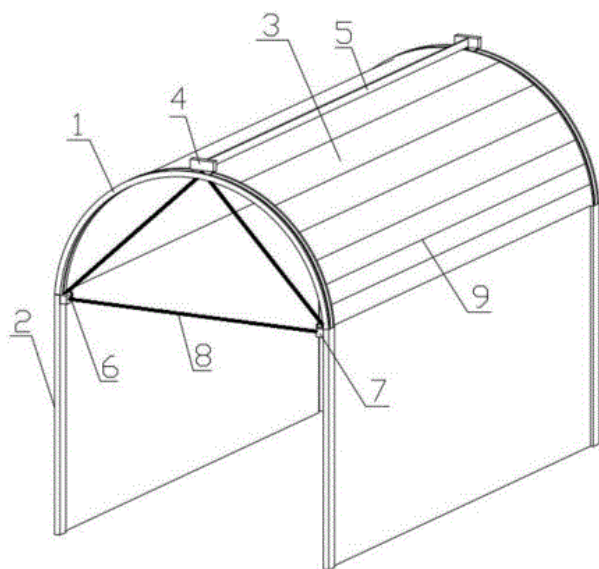
33: CN 31: 2024105346476 32: 2024-04-30

#### **54: TUNNEL SNOW-PROOF SHED WITH A FULLY AUTOMATIC SNOW REMOVAL DEVICE**

00: -

The present invention belongs to the technical field of tunnel wind and snow protection, and relates to a tunnel snow-proof shed with a fully automatic snow removal device. The tunnel snow-proof shed includes a snow-proof shed main body, a snow removal device and a control module. The snow-proof shed main body includes a C-shaped light-shielding board and two sets of side support parts. Tops of the two sets of side support parts are respectively connected to two ends of an open side of the C-shaped light-shielding board, used for forming an arched doorway at a tunnel entrance. The snow removal device is mounted on the C-shaped light-shielding board. The control module is used for detecting the snow amount on the C-

shaped light-shielding board and generating a first control instruction or a second control instruction to be issued to the snow removal device. When the snow removal device receives the first control instruction, it automatically cleans the snow on the top of the C-shaped light-shielding board. Thereby, it may avoid causing damage to the C-shaped light-shielding board due to serious snow accumulation on the top of the snow-proof shed, as well as affecting the light transmittance of the C-shaped light-shielding board, preventing the glare effect on drivers and ensuring driving safety. It also reduces the difficulty of manual maintenance for the tunnel snow-proof shed and saves resources.



21: 2024/09101. 22: 2024/11/28. 43: 2025/06/05  
51: G06F  
71: CHINA ROAD & BRIDGE CORPORATION,  
Xi'an University of Architecture and Technology  
72: Huixing Li, Jing Zhang, Huace Tao, Ruiping Ma,  
Cong Chen, Haoyu Wang, Zhanping Song, Xu Li,  
Jiefeng Zhang  
33: CN 31: 2024103355659 32: 2024-03-22  
**54: METHOD FOR ESTABLISHING A SLOPE  
BLASTING PREDICTION MODEL BASED ON THE  
RF-WOA-ELM MODEL**

00: -

The present invention relates to the technical field of blasting construction, and specifically relates to a method for establishing a slope blasting prediction model based on the RF-WOA-ELM model. The method includes the following steps: step S1: screening the blasting control parameters by using

the random forest method to obtain a blasting control parameter data set, and dividing the blasting control parameter data set into a training set and a testing set; step S2: normalizing both the training set and the testing set based on an adaptive strategy to obtain an initialized training set and a testing set; step S3: improving an extreme learning machine model by using an improved whale optimization algorithm to optimize the optimization effect of the training set and obtain the optimal parameter results; step S4: conducting statistics on the optimal parameter results through the testing set, and verifying and evaluating the optimal parameter results after the statistics; and step S5: establishing a blasting effect prediction model according to the verified optimal parameter results. The present invention obtains the reasonable blasting parameter settings in the slope blasting expected effect scheme through the prediction model.

21: 2024/09102. 22: 2024/11/28. 43: 2025/06/05  
51: A23B

71: Beijing Academy of Agriculture and Forestry Sciences

72: Dan DONG, Ting LIU, Huiling WU, Taotao ZHANG

**54: A POTATO GERMINATION INHIBITOR AND PREPARATION METHOD THEREOF**

00: -

The present invention relates to a new type of potato germination inhibitor and preparation method thereof, which is a potato germination inhibitor composed of natural plant extract and inorganic nanomaterial. Including the following raw materials by weights: natural plant essential oil mixture: it is composed of peppermint essential oil, lavender essential oil, clove essential oil, spearmint essential oil and carvacrol; mineral salt combination: including magnesium sulfate, calcium chloride and potassium dihydrogen phosphate; antioxidant: the antioxidant is selected from sodium ascorbate or vitamin E; moisturizer: glycerol or propylene glycol; preservatives: potassium sorbate or sodium benzoate; stabilizer: sodium carboxymethyl cellulose or sodium alginate; surfactant: sodium dodecyl sulfate or Tween 80; the balance is water, which is used to dilute and reconcile the above ingredients. The inhibitor can effectively reduce the germination rate of potatoes during storage, prolong the storage

time, and maintain the quality and nutritional value of potatoes. The method is simple, low cost and easy to scale production.

21: 2024/09106. 22: 2024/11/28. 43: 2025/06/05

51: A24B

71: Ouya Liu

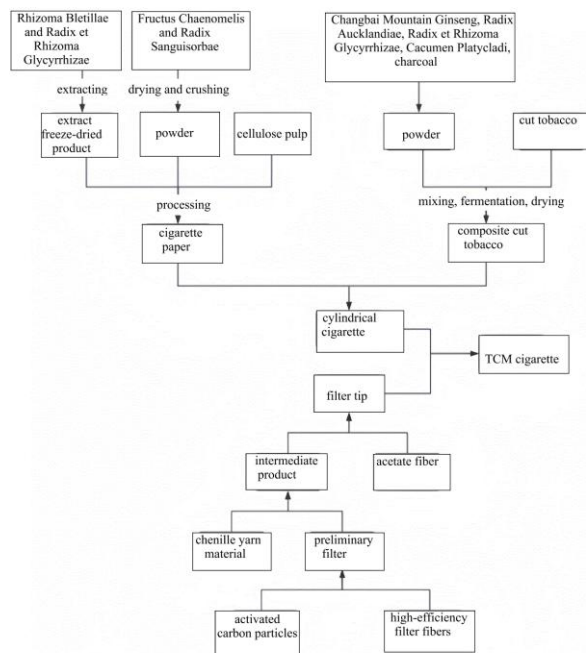
72: Ouya Liu

33: CN 31: 2024113944931 32: 2024-10-08

#### 54: TRADITIONAL CHINESE MEDICINE CIGARETTE AND PREPARATION METHOD THEREOF

00: -

A preparation method for a traditional Chinese medicine cigarette, comprising the following steps: processing of cigarette paper, processing of composite cut tobacco, filter tip preparation, rolling and shaping. The traditional Chinese medicine (TCM) cigarette of this invention successfully incorporates the active ingredients of TCM into tobacco products through meticulous screening of TCM herbs, optimized extraction processes, scientific formulation, and innovative processing techniques. Wherein charcoal serves dual functions of moisture resistance and adsorption, while also aiding in increasing temperature and enhancing the volatilization of tar during cigarette combustion; the combination of TCM herbs such as Rhizoma Bletillae, Radix et Rhizoma Glycyrrhizae, Fructus Chaenomelis, Radix Sanguisorbae, Changbai Mountain Ginseng, Radix Aucklandiae, Cacumen Platycladi and charcoal possesses effects of promoting blood circulation to remove blood stasis and calming the nerves; the medicinal smoke generated during cigarette combustion helps to enhance alveolar microcirculation; the invention allows smokers to enjoy the pleasure of smoking while also benefiting from certain health-promoting effects, making it particularly suitable for individuals who need to gradually quit smoking.



21: 2024/09114. 22: 2024/11/28. 43: 2025/03/27

51: A61K; A61P; C07D

71: Aligos Therapeutics, Inc.

72: VANDYCK, Koen, RABOISSON, Pierre Jean-Marie Bernard, MCGOWAN, David, DEVAL, Jerome  
33: US 31: 62/845,252 32: 2019-05-08

#### 54: MODULATORS OF THR- $\beta$ AND METHODS OF USE THEREOF

00: -

Disclosed herein are compounds of Formula (I) or a pharmaceutically acceptable salt, prodrug, amide or ester thereof, where i) TL is a moiety of Formula IIa, IIb, IIIa, IIIb, IIIc, or IIId; ii) CE is a moiety of Formula IV; iii) HD is a moiety of Formula V or VI; where the substituents are as defined herein. Disclosed are also pharmaceutical compositions comprising the above compounds, and methods of treating disease by administering or contact a patient with one or more of the above compounds.

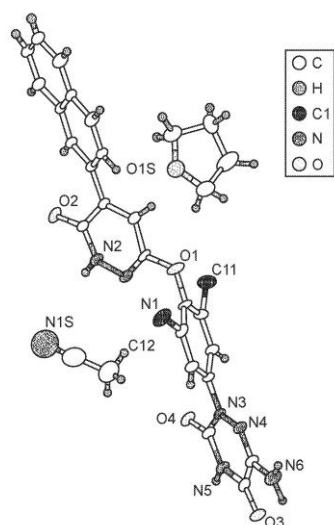
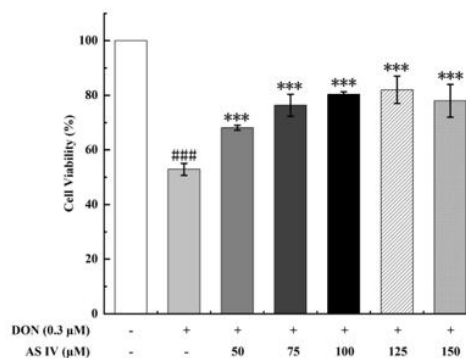
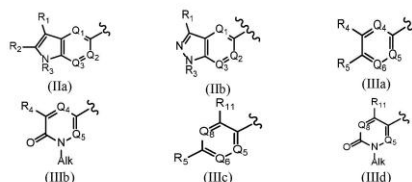


FIG. 1

(I) TL-L<sub>2</sub>-CE-HD

21: 2024/09153. 22: 2024/11/29. 43: 2025/06/06

51: G06F

71: Hohai University

72: Xiuhui LIU, Ying GE, Meiyun LAI, Zhenrong GU, Simin CHU, Han DING, Yong LI

33: CN 31: 2024113392870 32: 2024-09-25

#### 54: REMOTE SENSING FINE EXTRACTION METHOD FOR SURFACE WATER IN AFRICA BASED ON GLI-MFUNET

00: -

The invention relates to a remote sensing fine extraction method for African surface water based on GLI-MFUNet, the satellite sample images of the preset sample areas in the target area to be identified are used to construct each sample, for the GLI-MFUNet model constructed with the dual encoder as input, processed by the feature fusion module, and the multi-scale decoder as output, the surface water extraction model corresponding to the target area to be identified is obtained, and then the detection of surface water distribution in the target area to be identified is realized, the design scheme uses Sentinel-2 image data to achieve rapid acquisition of large-scale surface water distribution, it reduces the dependence of traditional methods on manpower and material resources, and greatly saves the monitoring cost, the design not only improves the accuracy and efficiency of surface water identification, but also provides reliable data support for water resources management, agricultural irrigation and environmental protection.

21: 2024/09116. 22: 2024/11/28. 43: 2025/06/05

51: A61K

71: BEIJING ACADEMY OF AGRICULTURE AND FORESTRY SCIENCES

72: WANG, Meng, LIU, Lin, WANG, Xinlu, WANG, Yudan

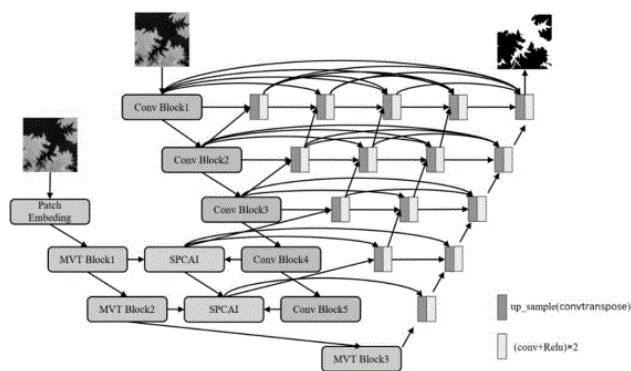
33: CN 31: 2024100988700 32: 2024-01-24

#### 54: APPLICATION OF ASTRAGALOSIDE IV (ASIV) IN PREPARATION OF DRUGS FOR ALLEVIATING DEOXYNIVALENOL-INDUCED TOXIC INJURY

00: -

The present invention discloses an application of astragaloside IV (ASIV) in preparation of drugs for alleviating deoxynivalenol-induced toxic injury, relates to the technical field of biomedicine, and provides an application of ASIV in preparation of drugs or antidotes as well as drugs. The present invention finds that ASIV has significant therapeutic effects on deoxynivalenol-induced nerve injury and intestinal inflammation and has broad application prospects in treatment of deoxynivalenol infection without specific antidotes as well as intestinal and nervous system damage





21: 2024/09154. 22: 2024/11/29. 43: 2025/06/06

51: A01K

71: HUZHOU UNIVERSITY

72: Chenglong WU, Jinjing ZHANG, Songting YANG, Yuanyuan ZHANG

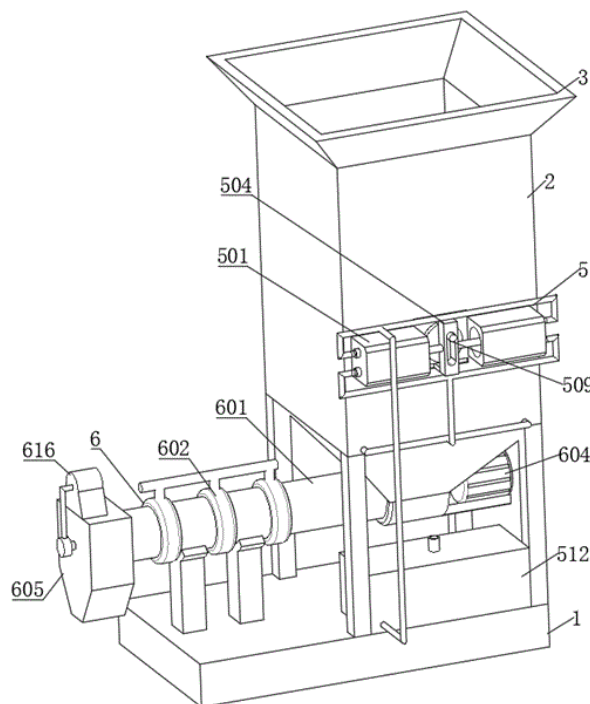
33: CN 31: 2024115804818 32: 2024-11-07

**54: PROCESSING DEVICE AND PROCESSING TECHNOLOGY OF BLACK CARP FEED**

00: -

The present invention provides a processing device and a processing technology of a black carp feed, and belongs to the technical field of black carp feeds. The processing device of a black carp feed includes a base, a feed box, and a discharging mechanism. The feed box is mounted on a surface of the base and is used for storing raw materials, a feeding bin is mounted on a surface of the feed box, and the discharging mechanism is mounted in an inner cavity of the feed box. The discharging mechanism includes a discharging barrel, a first rotating shaft, a screen plate, and a first sliding block. The discharging barrel is rotatably mounted in the inner cavity of the feed box, and an accommodating cavity is symmetrically formed in an inner cavity of the discharging barrel. In the present invention, the discharging mechanism is arranged, and a discharging barrel is driven to be rotate to enable raw materials to fall into an accommodating cavity through a first motor, so that intermittent discharging is achieved, and the raw materials is prevented from being accumulated at the bottom of the feed box. During rotation of the discharging barrel, the first rotating shaft is driven to rotate, and the raw materials in the accommodating cavity is turned over through the stirring rods, so as to prevent the raw materials from being agglomerated. Meanwhile, when the discharging barrel rotates, the protruding block is driven to rotate synchronously,

and the screen plate is driven to vibrate reciprocally, so as to prevent the raw materials from being accumulated on a surface of the screen plate, and enable the raw materials to fall down uniformly through the screen plate.



21: 2024/09157. 22: 2024/11/29. 43: 2025/06/06

51: F01N

71: Xinjiang Institute of Engineering

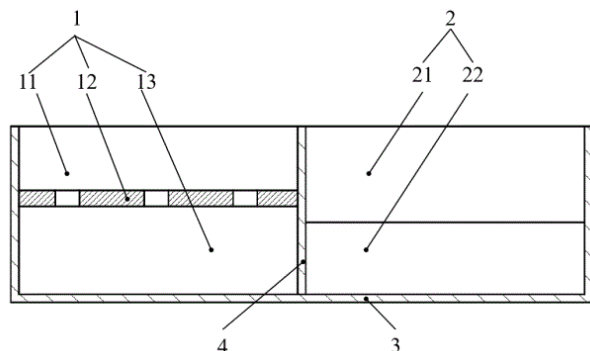
72: LI Xin, WANG Gang, YIN Shaowu, FAN Xiaochao, QI Changxin, WANG Yingchao

**54: FREQUENCY-BAND-EXPANSION POROUS MATERIAL LAYER SOUND ABSORBER AND DESIGN METHOD THEREOF**

00: -

The present invention relates to the technical field of sound absorbers, and provides a frequency-band-expansion porous material layer sound absorber and a design method thereof, including a casing. A partition plate is arranged inside the casing to divide an interior of the casing into two chambers, a unit I is arranged in chamber I, the unit I is a porous material layer-perforated plate-porous material layer structure, a unit II is arranged in chamber II, and the unit II is a porous material layer-cavity structure. By effectively paralleling and coupling the acoustic impedances of the porous material-perforated plate-porous material unit and the porous material layer-cavity unit, the present invention may exhibit four

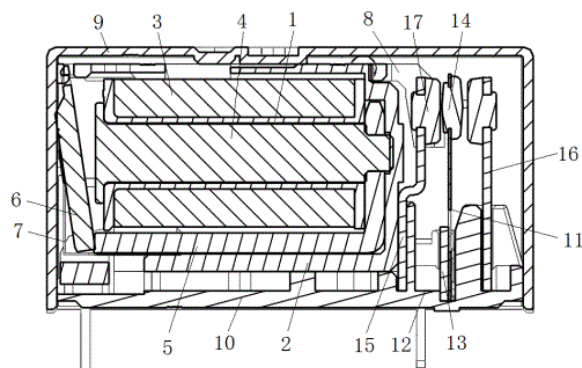
distinct absorption peaks within a relatively wide frequency band, demonstrating the ability to expand the effective absorption frequency band towards lower frequencies.



21: 2024/09184. 22: 2024/11/29. 43: 2025/06/06  
51: H01H  
71: MINGGUANG XINDA ELECTRONICS CO., LTD  
72: ZONG, Bin  
33: CN 31: 202211044170.0 32: 2022-08-30  
**54: MODULAR RELAY STRUCTURE HAVING HIGH UNIVERSALITY AND HIGH COMPATIBILITY FOR PARTS**

00: -

Disclosed is a modular relay structure having high universality and high compatibility for parts. Firstly, an iron core assembly can attract an armature, and under the driving action of an elastic hook, the armature moves in an axial direction of the iron core assembly so as to be reset and thus can push a push card to move; secondly, an NC terminal, a movable contact spring and an NO terminal are distributed in the axial direction of the iron core assembly, such that the push card can be in contact with the NC terminal and the NO terminal, so as to complete the conversion of the path; and furthermore, on the basis of an electrical contact structure, a hollow insulating cover of a driving mechanism is connected to a bottom plate of a load mechanism, and only the load mechanism needs to be replaced for different models.



21: 2024/09196. 22: 2024/12/02. 43: 2025/06/10  
51: C12R; H01R

71: LANZHOU UNIVERSITY

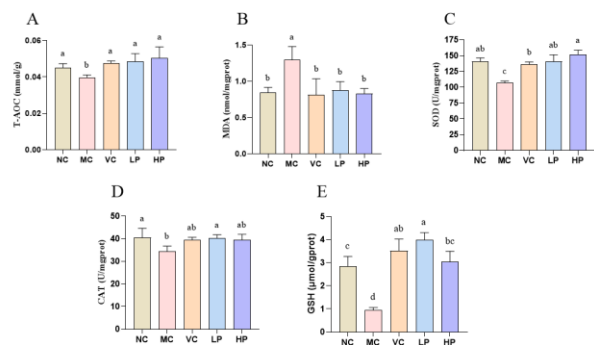
72: Ying ZHANG, Diyan WU, Xuan WANG, Runtong CHEN, Zhenchuang TANG, Ruochen WANG

33: CN 31: 2024114079578 32: 2024-10-10

**54: A STRAIN OF LACTOBACILLUS PLANTARUM QL01 WITH ANTIOXIDANT CAPACITY AND ITS APPLICATION**

00: -

The present invention provides a strain of *Lactobacillus plantarum* QL01 with the antioxidant capacity and its application, belonging to the field of microbial technology. The *Lactobacillus plantarum* QL01 strain is proved to be able to stably colonize in the intestinal tract, optimize the intestinal flora, and display high antioxidant activity. It can effectively improve the organ indices of aging mice and significantly enhance the total antioxidant capacities, increase activities of the antioxidant enzymes - superoxide dismutase and catalase, and the level of the antioxidant - glutathione, meanwhile, significantly reduce the content of the malondialdehyde in the liver of aging mice. In addition, *Lactobacillus plantarum* QL01 strain can significantly increase the level of the anti-inflammatory factor IL-10 and significantly reduce the levels of the pro-inflammatory factors TNF- $\alpha$ , IL-1 $\beta$  and IL-6 in the serum of aging mice, which can effectively alleviate the oxidative stress and inflammatory state of aging mice, and can be widely applied to develop functional foods, fermented products, cosmetics and pharmaceuticals.



21: 2024/09198. 22: 2024/12/02. 43: 2025/06/10  
51: D03D

71: JIHUA 3542 TEXTILE CO., LTD., Xinxing Jihua Inspection and Testing (Beijing) Co., Ltd., Henan University of Engineering, Xinxing Jihua (Beijing) Engineering Technology Research Institute Co., Ltd.  
72: TANG, Hao, TANG, Jiandong, PENG, Zhilong, LI, Ying, FENG, Xiangwei, REN, Sen, LIU, Wei, WANG, Shen, CHEN, Keyan, LI, Mengxiang  
**54: MODIFIED ARAMID FIBER FABRIC, AND PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The present invention provides a modified aramid fiber fabric, and a preparation method and application thereof, belonging to the technical field of textile weaving. In the present invention, the characteristics of basalt fiber, aramid fiber and conductive fiber are integrated, and a small jacquard weave is made of double layers of different warps to make the fabric more flame retardant.

21: 2024/09199. 22: 2024/12/02. 43: 2025/06/10  
51: D03D

71: JIHUA 3542 TEXTILE CO., LTD., Henan University of Engineering, Xinxing Jihua Inspection and Testing (Beijing) Co., Ltd., Xinxing Jihua (Shanghai) Engineering Research Institute Co., Ltd., Wuhan Textile University  
72: TANG, Jiandong, PENG, Zhilong, XIA, Zhigang, ZHAO, Pengfei, TANG, Hao, REN, Sen, ZHENG, Minbo, FAN, Yonggang, FENG, Xiangwei, LI, Mengxiang

**54: BLENDED HIGH-DENSITY FLAME-RETARDANT FABRIC, AND PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The present invention relates to the technical field of weaving, in particular to a blended high-density flame-retardant fabric, and a preparation method

and application thereof. The blended high-density flame-retardant fabric provided by the present invention is woven by warp yarns and weft yarns, wherein the warp density of the blended high-density flame-retardant fabric is 270-310 yarns/inch, and the weft density is 160-180 yarns/inch; blended raw materials of the warp yarns include the following components in percentage by mass: 20-30 percent of flame-retardant viscose fiber, 20-30 percent of basalt fiber and 40-60 percent of flame-retardant acrylic fiber; and blended raw materials of the weft yarns include the following components in percentage by mass: 70-90 percent of polyimide hollow fiber and 10-30 percent of aramid fiber.

21: 2024/09200. 22: 2024/12/02. 43: 2025/06/10  
51: F25D

71: China Three Gorges Construction Engineering Corporation, China Institute of Water Resources and Hydropower Research  
72: ZHANG, Lei, ZHOU, Youxin, XIN, Jianda, JING, Maogui, ZHU, Zhenyang, YAO, Liang, ZHANG, Guoxin, GONG, Zhao, LIU, Yi, YANG, Ge, ZHENG, Lei, YAN, Zhongluan, SUN, Changmao, DU, Junliang, LI, Ruyao, ZHOU, Tao, ZHANG, Xinlu, MO, Zhikun, DENG, Wenyang

**54: SEGMENTED CONTROL DEVICE FOR CONCRETE COOLING SYSTEM**

00: -

This invention discloses a segmented control device for a concrete cooling system, which relates to the technical field of concrete cooling. The system includes a housing, water conduit system, and cooling pipeline. The housing has an installation space inside. The water conduit system is located within the installation space and connects to the inlet and outlet pipes. One end of the water conduit is connected to a branching pipeline with a directional valve installed at the connection point. The branching pipeline connects and communicates with the inlet of a cooler, while the cooler's outlet is connected to a return pipeline that also connects to the water conduit. A one-way valve is installed on the return pipeline. One end of the cooling pipeline communicates with the water conduit inside the housing, and the other end extends outside the housing to connect to embedded cooling water pipes in the concrete.

21: 2024/09201. 22: 2024/12/02. 43: 2025/06/10  
51: C08K

71: Suzhou University

72: GUO, Pan, LIU, Fei, SHI, Hongwei, ZHANG, Keying, ZHANG, Dejin

**54: CARBON FIBER FELT PHASE CHANGE ENERGY STORAGE MATERIAL AND PREPARATION METHOD AND APPLICATION**

00: -

The present invention provides a carbon fiber felt phase change energy storage material and a preparation method and application, relating to the technical field of phase change materials. The carbon fiber felt phase change energy storage material provided by the present invention includes a carbon fiber felt composite material and a mesophase pitch-based carbon fiber layer coated on the surface of the carbon fiber felt composite material. The carbon fiber felt composite material includes metal-organic framework (MOF) carbon fiber felt and a phase change material attached to the MOF carbon fiber felt. The MOF carbon fiber felt includes carbon fiber felt and MOFs attached to fibers of the carbon fiber felt. The organic combination of the carbon fiber felt, the phase change material, and the MOFs in the present invention effectively improves the poor interface bonding between the carbon fiber felt and the phase change material.

21: 2024/09202. 22: 2024/12/02. 43: 2025/06/10  
51: G01N

71: Inner Mongolia University

72: ZHANG, Qing, XU, Xue, ZHAO, Yanyun, HAN, Peng

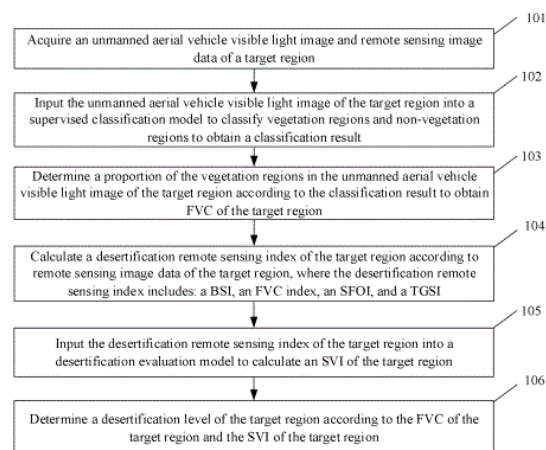
33: CN 31: 202311844160.X 32: 2023-12-27

**54: DESERTIFICATION MONITORING METHOD AND SYSTEM, AND ELECTRONIC DEVICE AND MEDIUM**

00: -

A desertification monitoring method and system, an electronic device, and a medium are disclosed. The method includes: inputting an unmanned aerial vehicle visible light image of a target region into a supervised classification model to classify vegetation regions and non-vegetation regions to obtain a classification result; determining a proportion of the vegetation regions in the unmanned aerial vehicle visible light image of the target region according to the classification result to obtain FVC of the target

region; calculating a desertification remote sensing index of the target region according to remote sensing image data of the target region; inputting the desertification remote sensing index of the target region into a desertification evaluation model to calculate an SVI of the target region; and determining a desertification level of the target region according to the FVC of the target region and the SVI of the target region.



21: 2024/09203. 22: 2024/12/02. 43: 2025/06/10  
51: B62B

71: ZHEJIANG YUYING COLLEGE OF VOCATIONAL TECHNOLOGY

72: Yanfeng ZHANG

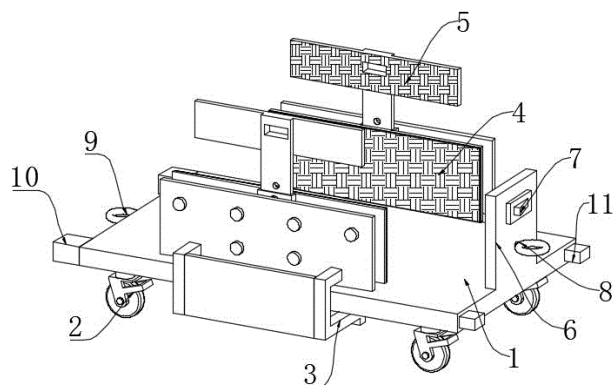
**54: CROSS-BORDER E-COMMERCE GOODS TROLLEY**

00: -

The present invention relates to the technical field of logistics carrying, and discloses a cross-border e-commerce goods trolley, including: a trolley body floor, wherein a lower surface of the trolley body floor is provided with a limiting mechanism for clamping goods, the limiting mechanism is provided with an extension mechanism for limiting stacked goods, and the limiting mechanism is provided with a buffer mechanism; the trolley body floor, the limiting mechanism, the buffer mechanism and the extension mechanism cooperate, and a double-shaft motor drives an adjusting screw to adjust a position of a movable cross beam, such that a lower clamping plate clamps the goods on the trolley body floor under the action of a connecting guide pillar; meanwhile, a buffer assembly can prevent the lower clamping plate from rigidly clamping the goods, thus improving stability in a goods carrying process;



meanwhile, the extension mechanism facilitates limiting of the goods at a higher position, thereby preventing the goods from falling in the carrying process, preventing the goods from dropping and being damaged, and improving a goods carrying efficiency.



21: 2024/09204. 22: 2024/12/02. 43: 2025/06/13

51: C02F

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

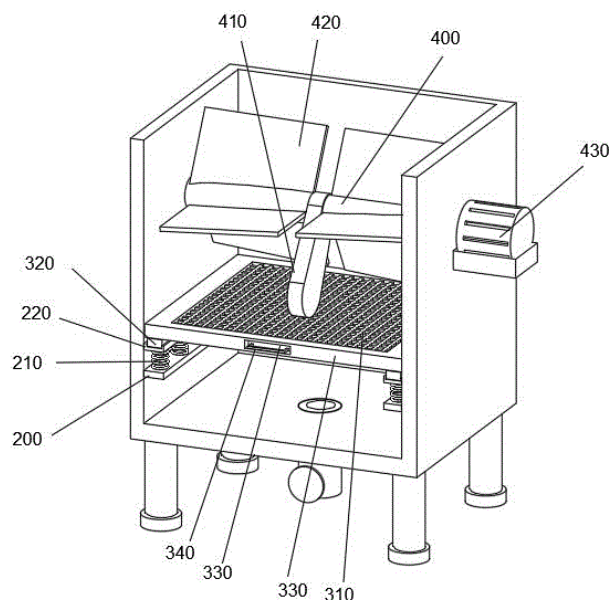
72: LI Lei, WANG Linpei, LI Songya, HE Yali, GU Deming, WANG Bianran, ZHANG Yifan

#### **54: INTEGRATED SEWAGE TREATMENT DEVICE**

00: -

The invention discloses an integrated sewage treatment device, belonging to the technical field of sewage treatment, which comprises a treatment box, wherein a water inlet pipe is communicated with the top of the treatment box; the middle and lower part of the inner cavity of the treatment box is symmetrically provided with a fixed plate, the top of the fixed plate is provided with vertical springs at equal intervals, the top of the springs is provided with a mounting frame, and the upper surface of the mounting frame is provided with a chute; the mounting frame is located above the two mounting frames. According to the invention, when the filter plate is filtering sewage, after the rotating rod is driven by the reduction motor to slowly rotate, the cam can touch the upper surface of the filter plate, so that the spring is forced to compress first, and when the cam is far away from the filter plate, the spring pushes the filter plate back, so that the filter plate is vibrated, so that the mesh impurities blocked in the filter plate can be properly vibrated; and after the drainage is completed, the sealing plate can be opened, and the mounting frame can be drawn out

from the inlet and outlet, thereby further cleaning the mounting frame.



21: 2024/09205. 22: 2024/12/02. 43: 2025/06/10

51: C12N

71: Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences

72: DAI, Lingli, LI, Xuefeng, BAI, Fan, WANG, Na, ZHANG, Yuemei, YANG, Bin, SONG, Yue, ZHANG, Fan, QIAN, Linna, WANG, Fengwu, DALAI, Baolige

33: CN 31: 202410931671.3 32: 2024-07-12

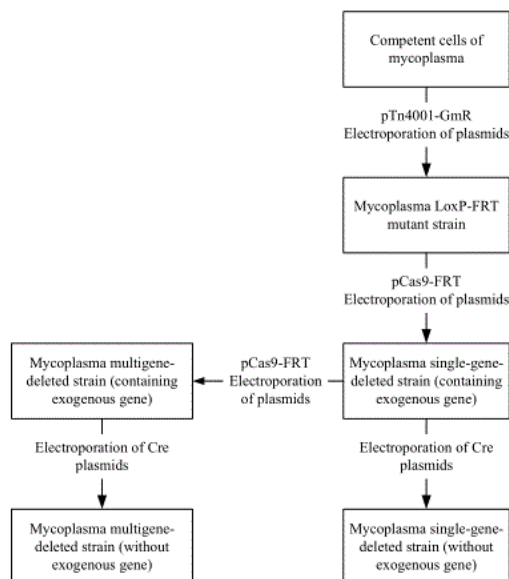
#### **54: MYCOPLASMA MUTANT STRAIN AND PREPARATION METHOD THEREFOR, AND APPLICATIONS**

00: -

The present invention provides a mycoplasma mutant strain and a preparation method therefor, and applications. The mycoplasma mutant strain contains two LoxP sites and one FRT site, and the FRT site is positioned between the two LoxP sites; or the mycoplasma mutant strain contains one LoxP site and two FRT sites, and the LoxP site is positioned between the two FRT sites. The LoxP and FRT sites are positioned in a non-open reading frame. A vector for preparing the mycoplasma mutant strain, a vector for preparing single-gene-deleted strain, and a method for constructing single-gene or multigene-deleted strains are further included. Furthermore, the present invention further provides a method for preparing gene-deleted mycoplasmas without exogenous gene expression. Through the technical solutions of the present



invention, FRT or LoxP sites can be efficiently used for preparing various gene-deleted strains of interest. Further, gene-deleted mycoplasmas without exogenous protein expression can be prepared.



21: 2024/09210. 22: 2024/12/02. 43: 2025/06/12  
51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: BARHATE, Madhuri M., INAMDAR, Chinmay, INANI, Harshit, HUMNE, Subodh, HULENWAR, Harsh, INAMDAR, Yuvraj, INGALE, Chinmay

#### 54: A DRONE DETECTION SYSTEM FOR COUNTERING POTENTIAL MISUSE OF DRONES

00: -

The present invention is related to a drone detection system for countering potential misuse of drones.

This invention presents a drone detection system using closed-circuit television (CCTV) for countering potential misuse, particularly in cross-border terrorism. Extensive experimentation demonstrates high accuracy in detecting drones while minimizing false positives. The proposed system addresses privacy, safety, and security concerns in critical infrastructure, public events, and restricted airspace. Unmanned Aerial Vehicles (UAVs), commonly known as drones, have revolutionized various industries, ranging from aerial photography and surveillance to package delivery and infrastructure inspection. Their versatility and accessibility have made drones increasingly popular, with a significant rise in their usage worldwide. However, this rapid

proliferation of drones has also given rise to concerns regarding their potential misuse for nefarious activities, including cross-border terrorism.

21: 2024/09211. 22: 2024/12/02. 43: 2025/06/12  
51: G06N

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

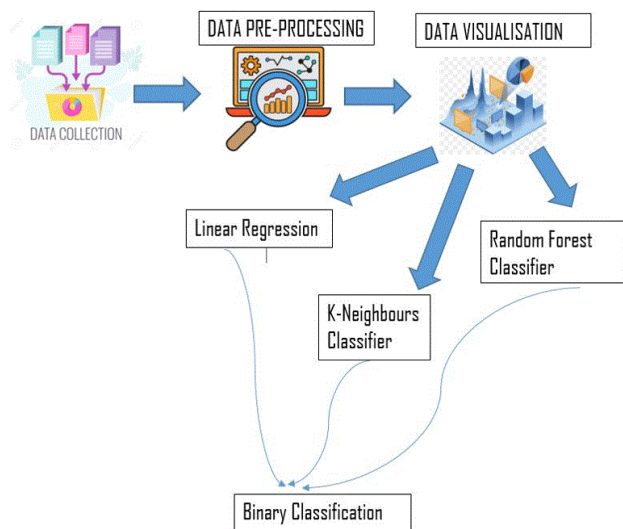
72: BARHATE, Madhuri M., HEPAT, Omkar, MAIKAP, Hritesh, HEDA, Krishna, HOTE, Gaurav, HEREKAR, Ishan, HIRAVE, Avishkar

#### 54: A MACHINE LEARNING SYSTEM FOR DISEASE PREDICTION

00: -

The present invention is related to a machine learning system for disease prediction. Disease prediction is a critical task in healthcare that plays a vital role in early detection, prevention, and effective treatment. In recent years, machine learning techniques have shown great potential in accurately predicting various diseases. This invention aims to investigate the application of machine learning algorithms for disease prediction and evaluate their performance compared to traditional approaches. This utilizes a diverse dataset comprising medical records, demographic information, and clinical measurements of patients. Several popular machine learning algorithms, including decision trees, random forests, support vector machines, and artificial neural networks, are implemented to build predictive models. The models are trained and validated using cross-validation techniques to ensure their generalization capability. The results demonstrate that machine learning algorithms exhibit superior predictive accuracy compared to traditional approaches. The decision tree and random forest models achieve the highest accuracy, while the artificial neural network model demonstrates excellent performance in capturing complex relationships within the data. Feature importance analysis highlights the crucial variables contributing to disease prediction, aiding in understanding the underlying factors and potential risk factors. Moreover, this provides insights into the optimal selection of machine learning algorithms and data pre-processing techniques for disease prediction tasks. In conclusion, this invention highlights the efficacy of machine learning algorithms in disease prediction and emphasizes their potential in

revolutionizing healthcare. Further studies can focus on integrating additional data sources, such as genetic information and environmental factors, to enhance the predictive power of the models.



21: 2024/09212. 22: 2024/12/02. 43: 2025/06/12  
51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: TELSANG, Supriya Shrikant, JAIN, Rishi, JAISWAL, Krishna, JAIN, Pratham, JAIN, Tanay, ANANDHAN, Jainivas, VAIDYA, Jainil

#### **54: A LOGISTIC REGRESSION SYSTEM FOR PERSONALITY PREDICTION**

00: -

The present invention is related to a logistic regression system for personality prediction. Personality plays a crucial role in various aspects of human life, including career development, interpersonal relationships, and overall well-being. Traditional methods of assessing personality traits often rely on self-report questionnaires and subjective assessments, which can be biased and time-consuming. With the advancement of technology, there has been a growing interest in exploring alternative approaches to predict personality traits accurately and efficiently. This invention presents a novel approach to personality prediction using Curriculum Vitae (CV) analysis. The model for parsing the data utilizes Logistic Regression, a machine learning algorithm. Pyresparser, a tool, is employed to extract relevant information from a CV or resume. The proposed personality prediction system based on CV analysis

has several potential applications. It can assist employers in the recruitment process by providing insights into the personality traits of job applicants, helping to identify suitable candidates for specific roles and improving the overall hiring decision-making process. Additionally, it can be used in career counseling and personal development settings, providing individuals with valuable feedback on their strengths, weaknesses, and potential areas for improvement.

21: 2024/09213. 22: 2024/12/02. 43: 2025/06/12  
51: H04L

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

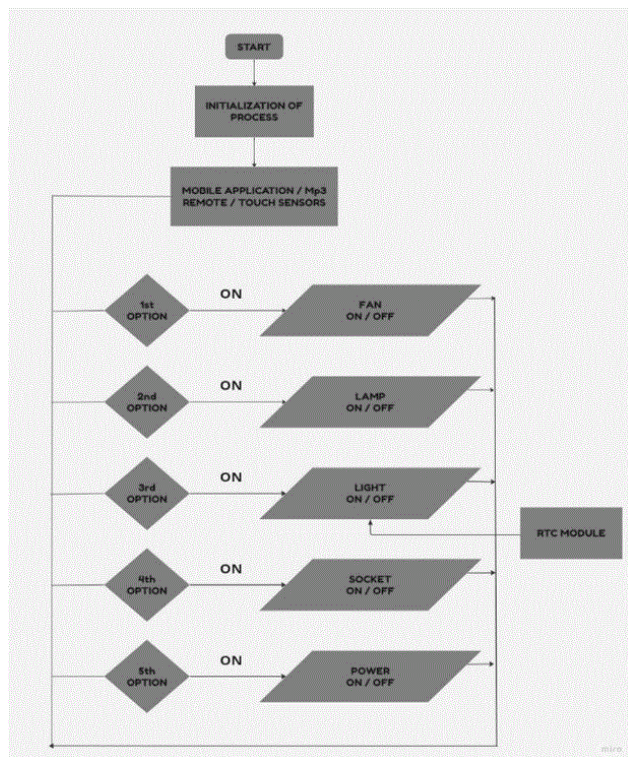
72: TELSANG, Supriya Shrikant, JADHAV, Prithviraj, JADHAV, Nilesh, JADHAV, Pratik, JADHAV, Prithviraj, JADHAV, Ravindra, JADHAV, Ritesh

#### **54: A HOME AUTOMATION SYSTEM WITH MULTIPLE CONTROL ACCESS USING IOT AND RTC MODULE**

00: -

The present invention is related to a home automation system with multiple control access using IOT and RTC module. This invention presents a comprehensive home automation system that incorporates multiple control access methods, including a remote control, a mobile application, and a touch sensor switch. The system utilizes IoT technology to establish a network connection, enabling users to remotely control household appliances such as lights, fans, and electrical outlets. A Real-Time Clock (RTC) module is integrated to enable scheduled programming for specific power-on/off timings. Users can create customized schedules for individual applications or the entire power supply, optimizing energy consumption and convenience. The system offers a convenient and intuitive way for users to manage their home automation through a remote control, mobile application, and touch sensor switch. The mobile application provides an interactive interface for controlling and monitoring connected devices, while the touch sensor switch offers quick access to applications with a simple touch. The integration of an RTC module ensures accurate timekeeping and synchronization, enabling precise power management based on predefined schedules. This comprehensive home automation system enhances

convenience, flexibility, and energy efficiency, empowering users to control their home appliances remotely and automate power supply according to their preferences and energy-saving strategies.



21: 2024/09214. 22: 2024/12/02. 43: 2025/06/12

51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: TELSANG, Supriya Shrikant, JADHAV, Sahil, JADHAV, Shivendra, JADHAV, Shreyash, JADHAV, Sanika, JADHAV, Sarvesh

#### 54: A MACHINE LEARNING SYSTEM FOR CRICKET WIN PREDICTION

00: -

The present invention is related to a machine learning system for cricket win prediction. Cricket, being one of the most popular sports worldwide, has attracted significant interest in developing accurate win prediction models. With the advent of machine learning techniques, researchers have leveraged the power of data-driven algorithms to predict cricket match outcomes. This invention aims to improve cricket win prediction model by using XGBoost machine learning algorithm. Feature importance analysis is conducted to identify the most influential factors contributing to match outcomes. The dataset is divided into training and test sets, and the models

are evaluated on both datasets to measure their generalization performance. The findings demonstrate the potential of machine learning techniques in accurately forecasting cricket match outcomes, enabling stakeholders to make informed decisions in the dynamic and unpredictable domain of cricket.

21: 2024/09215. 22: 2024/12/02. 43: 2025/06/10

51: C09K

71: Shandong Academy of Agricultural Sciences

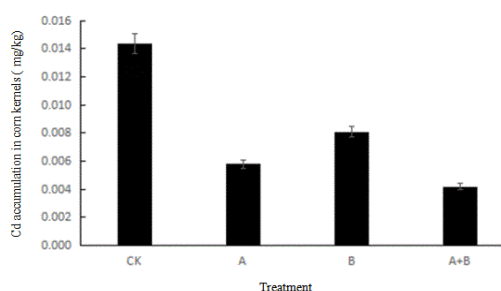
72: JING, Yongping, LI, Yan, FU, Longyun, WANG, Yanqin, LIU, Zhaodong, BO, Luji, ZHONG, Ziwen

33: CN 31: 202410902679.7 32: 2024-07-05

#### 54: COMPOUND HEAVY METAL PASSIVATING AGENT AND APPLICATION THEREOF

00: -

The present invention belongs to the technical field of heavy metal contaminated soil remediation, and in particular to a compound heavy metal passivating agent and application thereof. The compound heavy metal passivating agent of the present invention can fully exert the passivation effect of each raw material, effectively passivate activity of the heavy metal, reduce production cost, does not cause damage to the soil structure, can improve the soil environment and quality, has obvious effect of repairing the heavy metal soil, and is significantly higher than that of the single passivation agent material. At the same time, the compound heavy metal passivating agent can significantly reduce concentration of heavy metals in plants and reduce toxicity of heavy metals to plants.



21: 2024/09219. 22: 2024/12/02. 43: 2025/06/12

51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: ANTAD, Sonali Mallinath, KENJALE, Shrishti, KESKAR, Aarya, KHADE, Anjali, KEDARI, Parth, KECHE, Vedant, KEKAN, Swarup



#### 54: A SYSTEM FOR REDUCTION OF SINGLE USE PLASTIC WASTE THROUGH REFILL STATIONS

00: -

The present invention is related to a system for reduction of single use plastic waste through refill stations. With the escalating environmental concerns posed by the proliferation of single-use plastic waste, innovative solutions are imperative. This invention aims at mitigating plastic waste by implementing packaging-free refill stations. Current consumer behavior often involves purchasing products packaged in single-use plastic containers, which are discarded after a single use. Planet Refill addresses this issue by providing designated refill stations where consumers can replenish their empty containers with the desired contents, eliminating the need to purchase new product packages each time. The invention allows customers to pay exclusively for the product itself, minimizing packaging waste. The introduction provides background on the increasing environmental concerns caused by single-use plastic waste and highlights the urgency for innovative approaches. This contributes to ongoing efforts in mitigating the detrimental effects of single-use plastic waste. This offers a promising solution to reduce plastic waste through packaging-free refill stations, transforming consumer-product interactions. The findings provide valuable insights for policymakers, industry stakeholders, and environmentally conscious consumers striving towards a sustainable future.

21: 2024/09220. 22: 2024/12/02. 43: 2025/06/12  
51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

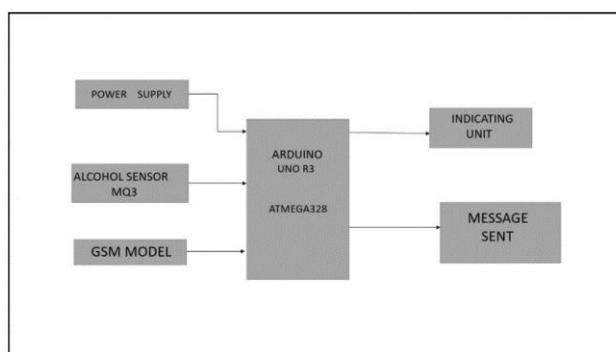
72: BHAWARTHI, Amruta Amol, KATORE, Abhishek, KATURE, Soham, KATHAR, Vallabh, KAULWAR, Ajinkya, KATEPALLEWAR, Prathmesh, KATKAR, Maitrey

#### 54: AN ALCOHOL DETECTION SYSTEM WITH ALERT NOTIFICATION FOR PREVENTION OF ROAD ACCIDENTS

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The present invention is related to an alcohol detection system with alert notification for prevention of road accidents. It is estimated that around 1.5 million people die each year as a result of drunk driving, which has contributed to one of the main reasons for road accidents. A driver who is driving

under the influence of alcohol is not only putting his own life at risk but also others too. The aim of this invention is to avoid these accident rates which have caused due to drinking and driving. This invention proposes an innovative and initial system to reduce accidents caused due to drinking and driving. The system continuously monitors the level of alcohol concentration with the help of an Alcohol detection sensor (MQ3) sensor and thus sends an alert message to the police through the GSM SIM800L module, if the alcohol concentration is above the threshold level. This system provides an efficient solution to control accidents due to drunk driving.



21: 2024/09221. 22: 2024/12/02. 43: 2025/06/12

51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: ANTAD, Sonali Mallinath, KHANDELWAL, Saloni, KHANDELWAL, Anushka, KHANDARE, Rohan, KHANDAVE, Prathamesh, KHANGAR, Dhawal, KHANKE, Raj

#### 54: A PREDICTIVE ANALYTICAL SYSTEM FOR STOCK PRICE PREDICTION

00: -

The present invention is related to a predictive analytical system for stock price prediction. The most valuable indicator of a company's success is its stock price, which can rise in tandem with the price of a single share. Because of this, companies promote their stocks to their clients in an effort to persuade them to purchase them. Clients or stock-holding firms struggle to predict the future value of a single stock due to the volatility of stock prices. As a result, stock market prediction have become the most popular issue in the business world, and hence solving this problem has become so important for the betterment of the investors and buyers as many a times they have to face loss in their

investment and this problem can be solve by various Machine learning algorithms .To solve this problem, one stock price prediction website using Python and Linear Regression is developed which is one of the best Machine Learning statistical method for predictive analysis. Historical Data is used for the prediction. Finding a method to use linear regression models to obtain more precise values is the major goal. It is feasible to alter the dataset that will be used to train the linear regression models in order to obtain results that are more accurate. The aim of this invention is to show that the best and most efficient technique for forecasting stock market analysis is linear regression.

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21: 2024/09222. 22: 2024/12/02. 43: 2025/06/12  
51: H02S

71: VISHWAKARMA INSTITUTE OF  
TECHNOLOGY

72: RAIKWAR, Rajesh Ganesh, KALE, Ishika,  
KALE, Deep, KALE, Anushka, KALE, Harshvardhan,  
KALE, Jaee, KALE, Nirjala

**54: A DETECTION SYSTEM FOR PARTIAL  
SHADING IN PHOTOVOLTAIC (PV) CELL**

00: -

The present invention is related to a detection system for partial shading in photovoltaic (pv) cell. The detection and mitigation of partial shading in photovoltaic (PV) systems are crucial for improving their overall performance and efficiency. This invention focuses on the development of a system for PV cell partial shading detection using image processing and machine learning techniques. The objective is to accurately identify and quantify the impact of shading on PV cells in real time. The invention begins with a comprehensive literature review to understand existing research and techniques related to PV cell partial shading detection, image processing, and machine learning. A methodology is then formulated, encompassing data collection, image pre-processing, feature extraction, and machine learning model development. Experimental data is collected by capturing images of PV cells under various shading conditions. Image processing algorithms are applied to pre-process the images and extract relevant features. Machine learning models are trained using these features to classify and detect the presence of partial shading accurately. The results demonstrate

the effectiveness of the developed system in detecting and mitigating the impact of shading on PV cells. The integration of image processing techniques and machine learning algorithms enables real-time monitoring and enhances the reliability and performance of PV systems. This invention contributes to the advancement of renewable energy technologies by providing an efficient and accurate solution for addressing partial shading in PV systems. Future research directions may include optimizing the system's performance, exploring additional feature extraction techniques, and evaluating the system's scalability for large-scale applications.

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21: 2024/09223. 22: 2024/12/02. 43: 2025/06/12  
51: G06Q

71: VISHWAKARMA INSTITUTE OF  
TECHNOLOGY

72: RAIKWAR, Rajesh Ganesh, KAMBLE,  
Dhruvesh, KAMBLE, Manasi, KAMAT, Ninad,  
KAMBLE, Akanksha, KAMBLE, Prasad

**54: AN IMAGE PROCESSING SYSTEM FOR  
IDENTIFICATION AND ANALYSIS OF SOLAR  
HOTSPOTS**

00: -

The present invention is related to an image processing system for identification and analysis of solar hotspots. Solar energy has proven to be an undisputed front-runner among renewable energy sources: it is clean, environmentally responsible, and cost-effective. The utilization of solar energy as a sustainable and renewable source of power has gained significant attention in recent years. The rapid growth of solar farms and solar roofs of residential buildings has led to an increase in demand for solar modules in the global market. Therefore, the maintenance and monitoring of solar modules must rely on an effective technique for predicting and evaluating future performance. Solar hotspots, also known as solar irradiance anomalies, are areas on solar photovoltaic (PV) panels or arrays that experience excessive heating, resulting in decreased energy output and potential damage to the PV cells. Detecting and analyzing these hotspots is crucial for optimizing the performance and lifespan of solar power systems.

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21: 2024/09224. 22: 2024/12/02. 43: 2025/06/12



51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: BHAWARTHI, Amruta, KARANDIKAR, Soham, HARSHEY, Karan, KAPUSKARI, Onkar, KARDE, Pratik, KARANDE, Prathamesh, KARMALKAR, Apoorv

**54: A WEB-BASED SYSTEM FOR MATHEMATICAL ANIMATION**

00: -

The present invention is related to a web-based system for mathematical animation. Mathematics is a subject whose beauty, while being taught, is often hidden behind complicated equations and incomprehensible theorems. This gives it a reputation for being difficult to grasp. Visualizing math provides intuition for the underlying concepts and helps develop analytical thinking. This invention is especially beneficial for visual and kinesthetic learners. Existing tools like Manim and WolframAlpha have complicated installations and/or cryptic syntax for creating animations. This invention provides a convenient web-based interface to easily create, and share interactive animations.

21: 2024/09242. 22: 2024/12/03. 43: 2025/06/13

51: F24D

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

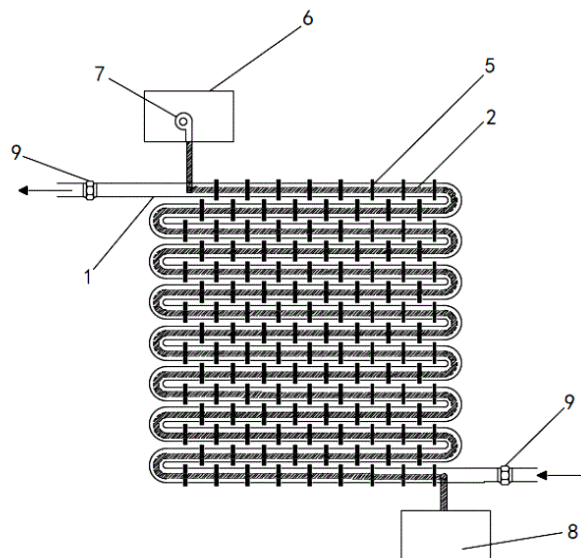
72: FU Haoka, LI Ya, LI Bin, LIU Zhenfeng, ZHANG Xiaodong, JIN Junjie, YU Tingting, REN Jie

**54: SLEEVE-TYPE MULTI-MODE HEATING RADIATOR**

00: -

A sleeve-type multi-mode heating radiator includes an outer sleeve, an inner sleeve and an air supply device, where the inner sleeve is fixedly installed in the outer sleeve; the two side ends of the inner sleeve extend out of the outer sleeve, the air supply device is connected with the inner sleeve, the outer surface of the outer sleeve carries out radiation heat dissipation and convection heat exchange on an indoor room, the inner sleeve carries out air convection and external heat exchange through the air supply device, the heat exchange on the outer surface of the outer sleeve and the internal heat exchange of the inner sleeve do not interfere with each other, and are respectively carried out at the same time, which increases the heat exchange

effect, thus improving the heat exchange efficiency of the heat exchanger.



21: 2024/09244. 22: 2024/12/03. 43: 2025/06/11

51: G06Q

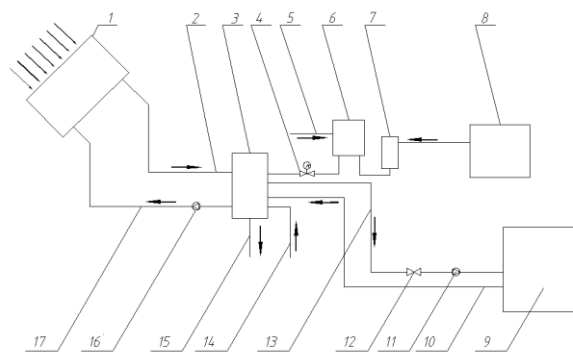
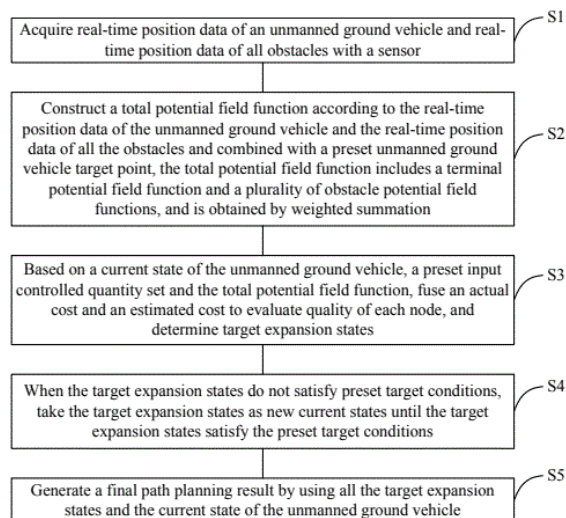
71: Henan University of Urban Construction

72: ZHANG, Xiaoguo, LIU, Changsheng, LI, Hua, HUANG, Xiaoya, HUA, Pei

**54: METHOD FOR PLANNING DELIVERY PATH OF UNMANNED GROUND VEHICLE**

00: -

Disclosed is a method for planning a delivery path of an unmanned ground vehicle. The planning method includes: acquiring real-time position data; acquiring real-time position data of an unmanned ground vehicle and real-time position data of all obstacles with a sensor; constructing a total potential field function; based on a current state of the unmanned ground vehicle, a preset input controlled quantity set and the total potential field function, fusing an actual cost and an estimated cost to evaluate quality of each node, and determining target expansion states; when the target expansion states do not satisfy preset target conditions, taking the target expansion states as new current states until the target expansion states satisfy the preset target conditions; and generating a final path planning result by using all the target expansion states and the current state of the unmanned ground vehicle.



21: 2024/09246. 22: 2024/12/03. 43: 2025/06/11  
51: E21D

71: CHINA ROAD & BRIDGE CORPORATION,  
Xi'an University of Architecture and Technology  
72: Changwei Li, Xiaokun Li, Bin Zhi, Shulin Jiang,  
Jinglin Tan, Fuyun Wang, Zhanping Song, Xiaojing  
Xu, Ang Jiao, Zhuoyu Guo

33: CN 31: 2024103351268 32: 2024-03-22

#### **54: SHOCK-ABSORBING STRUCTURE FOR ENHANCING SEISMIC RESISTANCE CAPACITY OF TUNNELS**

00: -

The present invention provides a shock-absorbing structure for enhancing seismic resistance capacity of tunnels. The shock-absorbing structure is used for significant shock absorption of multi-section continuous tunnels, including several shock-absorbing mechanisms. The shock-absorbing mechanisms are arranged inside each section of the tunnel to enhance the seismic resistance capacity of the tunnel, each shock-absorbing mechanism includes a primary support, a secondary lining, and a waterproof layer located between the primary support and the secondary lining, a foamed concrete filling layer and a mortar filling layer are successively arranged on the outside of the primary support, with the mortar filling layer being filled in the surrounding rock of the tunnel; and the shock-absorbing mechanism further includes a longitudinal shock-absorbing device and a transverse shock-absorbing device, the longitudinal bolt shock-absorbing device is fixed on the outer wall of the primary support and is located inside the foamed concrete filling layer and the mortar filling layer, used for absorbing the longitudinal displacement and energy generated by earthquakes on the tunnel; the transverse bolt shock-absorbing device is installed between two adjacent sections of tunnels, used for absorbing the

21: 2024/09245. 22: 2024/12/03. 43: 2025/06/13  
51: F24D

71: HENAN UNIVERSITY OF URBAN  
CONSTRUCTION

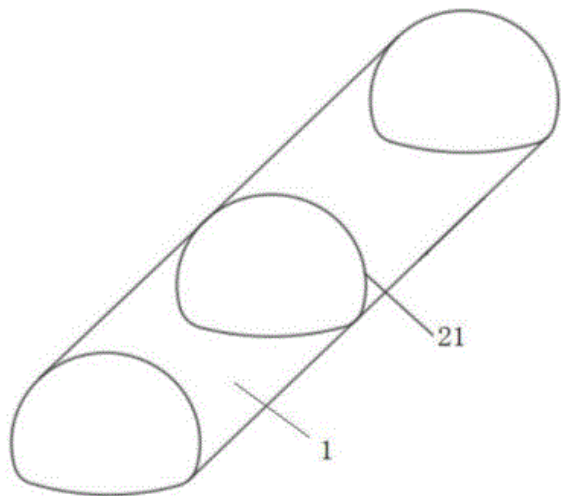
72: FU Haoka, LI Ya, LI Bin, LIU Zhenfeng, JIN  
Junjie, YU Tingting, CUI Qiuna

#### **54: ENERGY-SAVING HEATING DEVICE COUPLED WITH SOLAR ENERGY AND BIOGAS**

00: -

An energy-saving heating device coupled with solar energy and biogas relates to the technical field of heating. The water outlet of the solar collector is connected with the hot water inlet at the upper end of the hot water storage tank through the solar collector return pipe, and the water outlet at the lower end of the hot water storage tank is connected with the water inlet of the solar collector through the solar collector water supply pipe, which is connected with a No.2 circulating water pump in series; the hot water replenishing port at the upper end of the hot water storage tank is connected with the water outlet of the biogas wall-hung boiler through a pipeline, and the pipeline is connected with an electromagnetic valve in series; the water inlet of the biogas wall-hung boiler is connected with a tap water pipe through a pipeline; the gas supply port of the biogas wall-hung boiler is connected with a biogas digester through a pipeline, and a biogas bag is connected with the pipeline in series. It is energy-saving, environment-friendly, free of operation cost, and improves heat exchange efficiency, with flexible layout, simple construction and stronger practicability.

transverse displacement and energy generated by earthquakes. The present invention may improve the self-bearing capacity of tunnels, absorb seismic energy, and buffer the lateral and longitudinal vibrations generated in earthquakes.



21: 2024/09247. 22: 2024/12/03. 43: 2025/06/11  
51: B02C

71: Kunming Metallurgy College

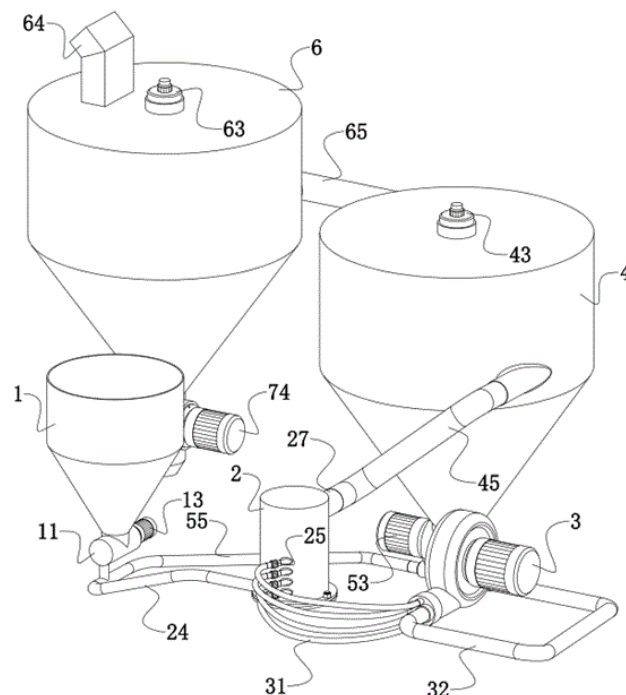
72: Yadong LI, Gang XIE, Ni YANG, Lin TIAN, Jinliang ZHANG, Zhifeng NIE, Yangqing HOU

**54: TITANIUM DIOXIDE AIR JET MILL**

00: -

The invention discloses a titanium dioxide air jet mill, comprising a feeding hopper with the lower end being connected to a feeding pipe; further comprising an air jet pulverization column with a spiral pulverization channel arranged inside and extending along the height direction, the lower end of the channel is connected to a feed pipe connected to the feeding pipe, the outer wall of the column is arranged with multiple air nozzles connected to the channel, the upper end of the column is externally arranged with a pulverized material discharge pipe; and a high-pressure air pump, the outlet of which is connected to the feed pipe and each air nozzle; and a cyclone sedimentation tank, the upper part of which is arranged with a dust filter net inside, the upper end of the tank is connected to an exhaust pipe, the tank is connected to a cutting surface feed pipe that connected to the pulverized material discharge pipe, and the lower end of the tank is connected to a second discharge cylinder. The invention uses multi-stage air acceleration to

increase the probability and pulverization effectiveness of particle collisions, thereby effectively improving the efficiency of air jet pulverization.



21: 2024/09249. 22: 2024/12/03. 43: 2025/06/11  
51: G06T

71: Anhui Medical College, Shigu Health Industry Co., Ltd., NEUROINTENSIVE CARE UNIT, THE FIRST AFFILIATED HOSPITAL OF USTC

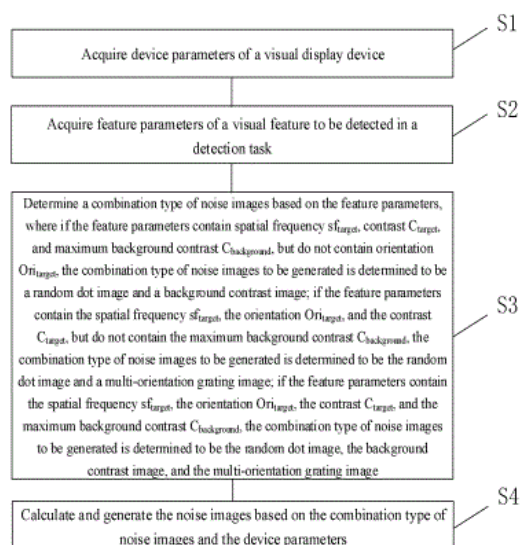
72: TANG, Yong, LIU, Xueliang, ZHANG, Fasu, LI, Guiyun, LIU, Jiachen, HU, Yan

#### 54: MULTI-TYPE COMBINED NOISE GENERATION METHOD BASED ON VISUAL FEATURE DETECTION

00: -

Disclosed is a multi-type combined noise generation method based on visual feature detection. The method includes: acquiring device parameters of a visual display device; acquiring feature parameters of a visual feature to be detected in a detection task; determining a combination type of noise images based on the feature parameters; calculating and generating the noise images based on the combination type of noise images and the device parameters. In the present application, by acquiring the feature parameters of the visual feature to be detected, determining the combination type of noise images based on actual feature parameters, and

generating the noise images of different combination types according to different feature parameters of the visual feature to be detected, the method enhances the adaptability of the noise images and enables targeted masking of the visual feature, creating favorable training conditions for the subsequent feature recognition training process.



21: 2024/09256. 22: 2024/12/03. 43: 2025/06/13  
51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JANOKAR, Sagar, LANJEWAR, Nishant, LANJEWAR, Riya, LASURKAR, Prachi, HERALD, Leevan, LENEKAR, Mrunal

**54: A REAL TIME VEHICLE TRACKING SYSTEM**  
00: -

The present invention is related to a real time vehicle tracking system. In today's life, mostly every college student lives far away from home for their education. Therefore, they live in the hostels provided by college which are in the range of 2-5 kms away from college. Generally, college students travel by the vehicles provided by the hostel itself. The vehicles come to college to pick up the students once there are enough students for the ride. Students who rely on the vehicle as their source of transportation have the major concern of knowing the real time location of the vehicle for which they are waiting and the time it will take to reach the stop. To solve this problem, this invention is created which includes both hardware and software. The main technology used in the hardware is GPS which will

be placed in the vehicle sharing its live coordinates to the server. The software includes an android based application named Ride Tracker which will help the students to track the live location of the vehicle, know the arrival time of the vehicle, their travel history, etc. These features will not only save the time of students but also make the system more convenient.

21: 2024/09257. 22: 2024/12/03. 43: 2025/06/13  
51: H04M

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: ANTAD, Sonali Mallinath, KHINDE, Pratik, KHOBRAGADE, Sachi, KHOCHARE, Gaurav, KHOPADE, Sampada, KHOPADE, Shantanu

**54: A TEXT-TO-SPEECH CONVERSION SYSTEM FOR VISUALLY IMPAIRED INDIVIDUALS**  
00: -

The present invention is related to a text-to-speech conversion system for visually impaired individuals. Text-to-speech converter smart glasses are a promising technology that can enhance accessibility and mobility for visually impaired individuals. This invention explores the design and development of text-to-speech converter smart glasses, which convert written text into audible speech and provide the output directly to the user's ear. This invention discusses the various components of the smart glasses, including the camera, text recognition software, speech synthesis software, and the hardware required to run these applications. It also presents the results of a usability study conducted to evaluate the effectiveness and usability of the text-to-speech converter smart glasses. The study revealed that smart glasses provided a significant improvement in mobility and independence for visually impaired individuals, allowing them to read signs and menus, access information, and navigate their surroundings with ease. It concludes by highlighting the potential impact of text-to-speech converter smart glasses in improving the quality of life for visually impaired individuals, and the future directions for this technology. Overall, this invention provides insights into the design and development of text-to-speech converter smart glasses, highlighting their potential to enhance accessibility and mobility for visually impaired individuals.



21: 2024/09258. 22: 2024/12/03. 43: 2025/06/13  
51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JADHAV, Balasaheb, MADNURKAR, Parth, MAHADIK, Shantanu, MAHAJAN, Bhagyesh, MAGHADE, Saurav, MAGAR, Pradnya

#### **54: AN ACCIDENT REPORTING AND EMERGENCY RESPONSE SYSTEM**

00: -

The present invention is related to an accident reporting and emergency response system. The primary cause of vehicle accidents is often attributed to excessive speed. If emergency services can promptly receive accident information and arrive at the scene in a timely manner, numerous lives could potentially be saved. This invention focuses on developing an accident detection system that utilizes various components to alert the rescue team when an accident occurs. A crucial aspect is the implementation of an efficient automatic accident detection mechanism, which includes automatically notifying emergency services with the precise accident location. This system aims to address the urgent need to preserve human life by detecting accidents and promptly notifying the rescue team. It accomplishes this by reading and transmitting the exact latitude and longitude coordinates of the vehicle involved in the accident to the nearest emergency contact.

21: 2024/09259. 22: 2024/12/03. 43: 2025/06/13  
51: A61B

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JANOKAR, Sagar Gajanan, KHOCHARE, Gaurav, KHOPADE, Shantanu, KHINDE, Pratik, KHOBRAGADE, Sachi, KHOPADE, Sampada

#### **54: A TUMOR DETECTION SYSTEM FOR ACCURATE DIAGNOSIS**

00: -

The present invention is related to a tumor detection system for accurate diagnosis. This invention presents an automated tumor detection system using Python and machine learning. Medical images, such as MRI and CT scans, are processed using normalization and feature extraction. Various machine learning algorithms, including CNNs, SVMs, and RFs, are implemented and compared. Ensemble techniques, such as bagging and boosting, are utilized for improved accuracy.

Experimental results demonstrate the effectiveness of the approach, showcasing its potential for real-world application. The proposed system aids in timely and accurate tumor diagnosis, benefiting patient outcomes.

21: 2024/09260. 22: 2024/12/03. 43: 2025/06/13  
51: G06T

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JANOKAR, Sagar Gajanan, KULKARNI, Tejas, KULKARNI, Yash, KULKARNI, Varad, KULLARKAR, Harshal, KUMARE, Rahul, KUMAWAT, Jay

#### **54: AN IMAGE FORGERY DETECTION SYSTEM FOR IDENTIFICATION OF AUTHENTIC IMAGES**

00: -

The present invention is related to an image forgery detection system for identification of authentic images. With the widespread availability of powerful image editing tools, the integrity of digital images has become increasingly vulnerable to manipulation and forgery. Image forgery is a concept where images are edited/modified and often mislead people to make assumptions. This is a pervasive issue in today's digital age, with the advancements in image editing tools making it increasingly difficult to detect manipulated images. To tackle this problem, a model has been developed to analyze and classify images as either authentic or forged by leveraging the power of deep learning algorithms. The model achieves an impressive accuracy of 93.39%, making it highly reliable for practical applications. The model has been developed by using algorithms such as Error Level Analysis (ELA) and Convolutional Neural Networks (CNN). The user has to enter the path of an image as the input and then the model employs its learnt features and patterns to evaluate the authenticity of the image provided. This invention describes the methodology adopted for training the model, including the dataset used and the deep learning architecture employed.

21: 2024/09261. 22: 2024/12/03. 43: 2025/06/13  
51: G07C

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

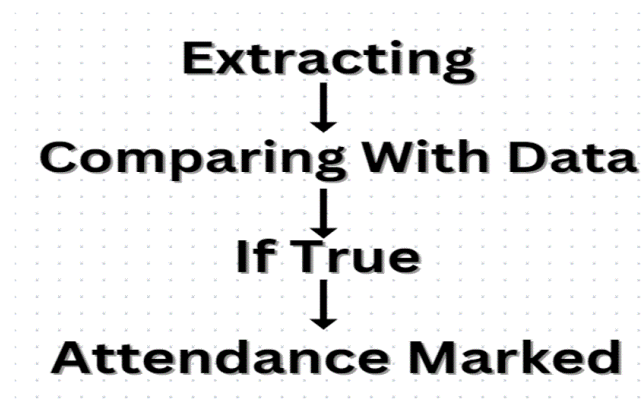
72: RAJAS, Neha, PATIL, Pranav C., PATIL, Pranav P., PATIL, Pranav, PATIL, Prasad, PATIL, Prathmesh, PATIL, Raj

#### **54: AN AI ENABLED ATTENDANCE SYSTEM**



00: -

The present invention relates to an AI enabled attendance system. The proposed system for student is a Face Recognition technology to automate and streamline the attendance monitoring process. These systems leverage advanced AI system to accurately and efficiently track attendance, eliminating the need for manual recording and reducing human error. Overall the proposed system reduces administrative burden, and provide valuable insights for educational institutions, workplaces, and other organizations.



21: 2024/09262. 22: 2024/12/03. 43: 2025/06/13

51: A61B

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JOSHI, Kalpesh Vinayak, PATTHE, Aaditya, PATKAR, Varad, PATWARDHAN, Nikhil, PATLE, Priyanshi, OSWAHA, Patrice

#### **54: A PYTHON EMBEDDED BRAIN TUMORS AND ALZHEIMER'S DETECTING SYSTEM**

00: -

The present invention relates to a python embedded brain tumors and alzheimer's detecting system. The proposed invention discloses an integrated system for early detection of brain tumors and Alzheimer's disease using advanced imaging techniques and machine learning algorithms. The objective is to improve accuracy and efficiency in diagnosis, leading to timely interventions and better patient outcomes. The proposed invention provides non-invasive and accurate diagnosis, reducing patient discomfort. Early detection facilitates timely interventions and potential improvements in treatment outcomes. The integration of advanced imaging and machine learning enables personalized medicine approaches tailored to individual patients.

21: 2024/09263. 22: 2024/12/03. 43: 2025/06/13

51: G06F

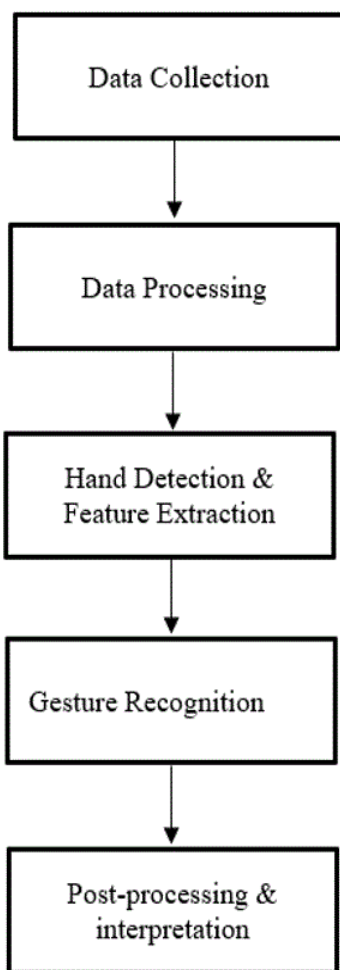
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: MUSALE, Prajakta Prakash, PAPARKAR, Aryan, PARBHANKAR, Ashutosh, PATIL, Paras, PARCHURE, Indrajeet, PARBHANIKAR, Shripad, PARDESHI, Atharva

#### **54: A SIGN LANGUAGE RECOGNITION SYSTEM USING ACTION RECOGNITION WITH PYHTON**

00: -

The present invention relates to a sign language recognition system using action recognition with python. Sign language recognition is an emerging field in computer vision and artificial intelligence that aims to bridge the communication gap between the hearing and the deaf communities. The present invention discloses an in-depth analysis of a sign language recognition program developed to recognize and interpret sign language gestures in real-time. The proposed system utilizes state-of-the-art deep learning techniques and computer vision algorithms to accurately detect and classify the dynamic hand and body movements inherent in sign language. The proposed system provides an overview of the underlying technology, the dataset used for training and evaluation, and the evaluation metrics employed to assess the program's performance.



21: 2024/09264. 22: 2024/12/03. 43: 2025/06/13

51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

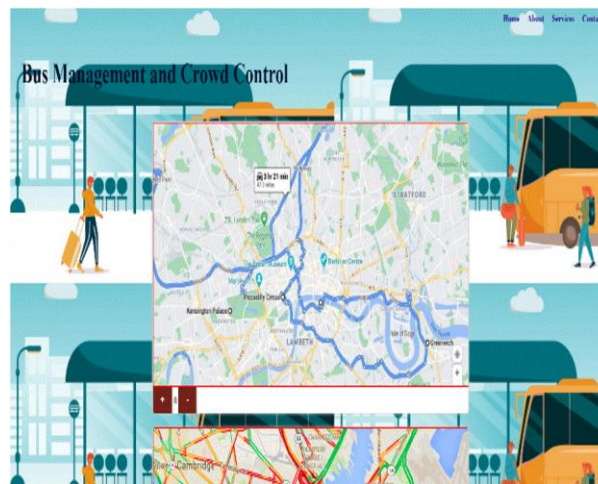
72: KHEDEKAR, Lokesh, PATIL, Piyush, PATIL, Mitali, PATIL, Niraj, PATIL, Om, PATIL, Pranav

#### **54: A BUS MANAGEMENT AND CROWD CONTROL SYSTEM**

00: -

The present invention relates to a bus management and crowd control system. Public transportation, particularly bus networks, plays a crucial role in efficiently transporting people to their desired destinations. However, the existing bus systems in India face certain challenges, such as overcrowding and inefficient resource allocation. The present invention a bus management and crowd control system to address these issues and optimize the utilization of bus routes. The present system incorporates a mobile application for bus conductors and a web platform for operators to monitor and

analyze data. By leveraging real-time passenger data, the system aims to improve crowd management, optimize bus allocation, and enhance overall public transportation efficiency.



21: 2024/09265. 22: 2024/12/03. 43: 2025/06/13

51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JOSHI, Kalpesh Vinayak, PATIL, Vrushabh, PATIL, Taniska, PATIL, Varun, PATIL, Vivek, PATIL, Yog, PATIL, Viraj

#### **54: AN AI BASED MENTAL HEALTH THERAPIST CHATBOT SYSTEM**

00: -

The present invention relates to an AI based mental health therapist chatbot system. The proposed system provide a more human like experience with the help of natural language processing and leverage semantics to understand the context of what a person says. The proposed system provides medical recommendations according to the problem the user might be facing. It will be able to provide medical support in minimal cost and also recommend the treatment required to the user. The proposed system can unlock incredible efficiency and also the breadth of AI chatbots available today is incredible.

21: 2024/09266. 22: 2024/12/03. 43: 2025/06/13

51: H02J

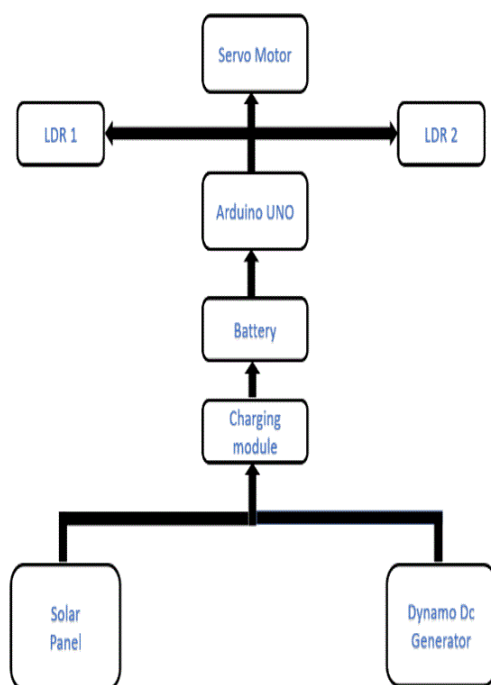
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: TELSANG, Supriya, SUPEKAR, Nikita, NIKOSE, Mayank, CHAUHAN, Nikhilesh, NIKOLE, Shreya, NIMKAR, Kunal, NIMJE, Anshul

#### 54: A NOVEL WIND CUM SOLAR ENERGY GENERATION AND STORAGE SYSTEM WITH SOLAR TRACKING

00: -

The present invention relates to a novel wind cum solar energy generation and storage system with solar tracking. The system utilizes wind turbines and solar panels to harness renewable energy and employs a solar tracking mechanism powered by the generated wind and solar energy. The proposed system discloses the system's architecture, operation, and performance, along with a detailed analysis of the results obtained from a prototype implementation. The findings demonstrate the feasibility and effectiveness of the proposed system in optimizing energy generation and storage, enhancing renewable energy utilization, and improving overall system efficiency.



21: 2024/09267. 22: 2024/12/03. 43: 2025/06/13

51: G06F

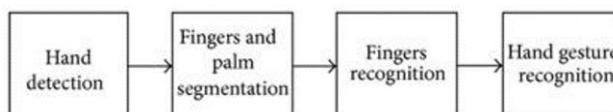
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: KHEDEKAR, Lokesh, PATIL, Koushal, PATIL, Krushna, PATIL, Makrand, PATIL, Manas, PATIL, Manasi, PATIL, Manasvi

#### 54: A GESTURE-BASED VOLUME CONTROL SYSTEM USING COMPUTER VISION AND AUDIO PROCESSING

00: -

The present invention relates to a gesture-based volume control system using computer vision and audio processing. The proposed system discloses a gesture-based volume control system that utilizes computer vision techniques for hand detection and gesture recognition, coupled with audio processing for controlling the system's audio output. The system enables users to control the volume of a device by performing hand gestures in front of a camera. Through the integration of OpenCV for hand detection and PyAudio for audio control, the system provides a novel and intuitive way to interact with audio devices. The effectiveness of the system is evaluated through experiments, and the results demonstrate its accuracy and responsiveness.



21: 2024/09268. 22: 2024/12/03. 43: 2025/06/13

51: G08G

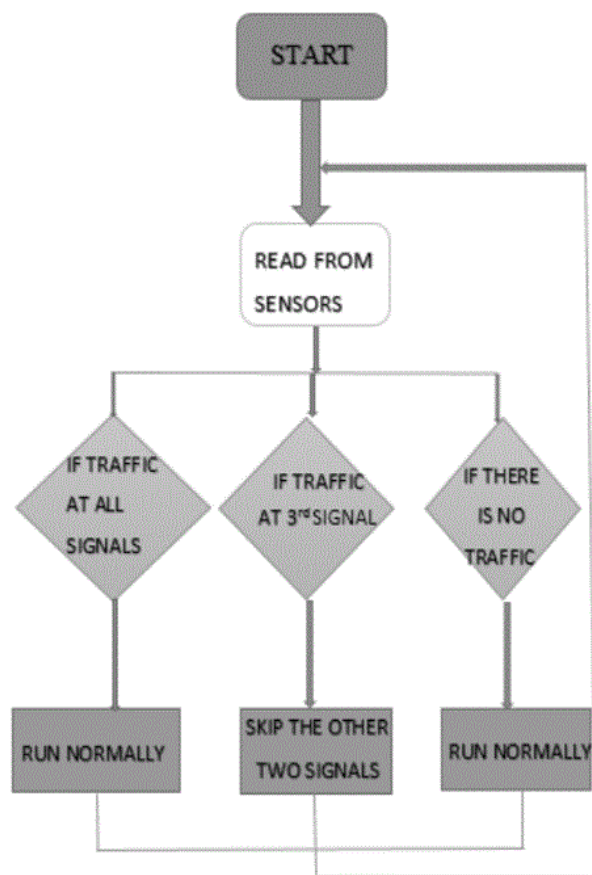
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: TELSANG, Supriya, SHINTRE, Om, JADHAV, Om, TONGARE, Omkar, OSWAL, Kriya, TONGARE, Samarth

#### 54: A SMART TRAFFIC REGULATION SYSTEM

00: -

The present invention relates to a smart traffic regulation system. Traffic congestion and road accidents continue to be significant challenges faced by urban areas worldwide. In recent years, intelligent transportation systems (ITS) have emerged as a promising solution to these issues. The proposed invention discloses on the utilization of infrared (IR) sensors in traffic regulation systems. The objective is to review existing literature and explore the various applications of IR sensors in traffic management, highlighting their effectiveness, limitations, and potential future developments. The findings of the proposed invention will contribute to a better understanding of IR sensor-based traffic regulation systems and their potential for improving urban mobility and safety.



21: 2024/09271. 22: 2024/12/03. 43: 2025/06/11  
51: A01N; C05F; C05G

71: Heilongjiang Green Food Science Research Institute, Northeast Agricultural University  
72: LI, Fenglan, WANG, Xue, WANG, Linlin, LI, Xiaozhong, FENG, Xu, HE, Fumeng, FENG, Yanzhong, LIU, Dan, TIAN, Miao

#### **54: STRAW DECOMPOSITION AGENT FOR IMPROVING SALINE-ALKALI LAND AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The present invention discloses a straw decomposition agent for improving saline-alkali land as well as a preparation method and an application thereof. The main components of the straw decomposition agent of the present invention include composite microbial inocula, zeolite powder, soybean cakes and maize flour. Each raw material in parts by weight includes 1-2 parts of the composite microbial inocula, 31-35 parts of the zeolite powder, 2-5 parts of the soybean cakes, and 30-40 parts of the maize flour. According to the present invention, the use of decomposed straw is applied to saline-

alkali land, the growth of crops planted in the saline-alkali land may be promoted, salt content and pH value of the saline-alkali land may be reduced, and physicochemical properties of soil may be improved.

21: 2024/09289. 22: 2024/12/04. 43: 2025/06/12  
51: B22F

71: Dongguan University Of Technology

72: WAN, Changfeng

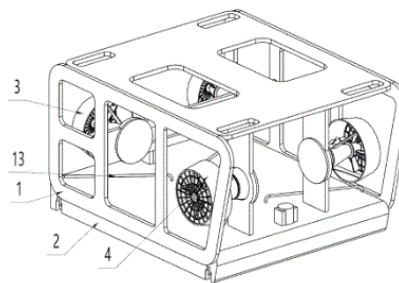
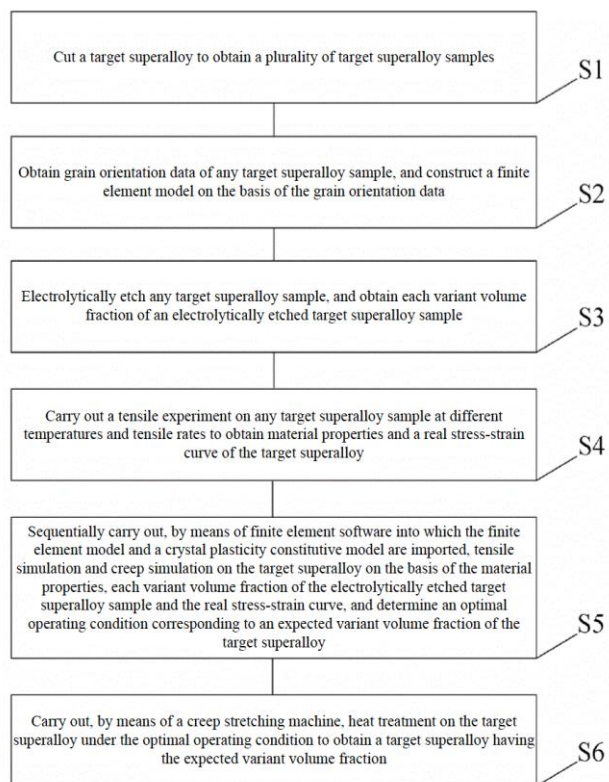
33: CN 31: 202411579360.1 32: 2024-11-07

#### **54: METHOD FOR REGULATING VARIANT VOLUME FRACTION OF SUPERALLOY, SYSTEM AND MEDIUM**

00: -

Disclosed are a method for regulating a variant volume fraction of a superalloy, a system and a medium. The method includes: obtaining grain orientation data of any target superalloy sample, and constructing a finite element model; obtaining eachvariant volume fraction of an electrolytically etched target superalloy sample; carrying out a tensile experiment on any target superalloy sample at different temperatures and tensile rates to obtain material properties and a real stress-strain curve of the target superalloy; sequentially carrying out, by means of finite element software into which a finite element model and a crystal plasticity constitutive model are imported, tensile simulation and creep simulation on the target superalloy, and determining an optimal operating condition corresponding to an expected variant volume fraction of the target superalloy; and carrying out, by means of a creep stretching machine, heat treatment on the target superalloy to obtain a target superalloy





21: 2024/09291. 22: 2024/12/04. 43: 2025/06/12  
51: A61N

71: The First Affiliated Hospital of Xinxiang Medical University

72: Pang Kehua, Yang Jun, Huo Xiaoqing, Xu Liuyang, Shi Liangliang, Wu peng

33: CN 31: 202411617839X 32: 2024-11-13

#### **54: A RADIOTHERAPY POSITIONING FRAME PLATE AND A RADIOTHERAPY POSITIONING METHOD**

00: -

This invention provides a radiotherapy positioning frame plate and a radiotherapy positioning method, related to the field of medical equipment technology. It includes a fixed base plate, a positioning frame plate, and a support plate. A support seat is fixedly connected to both sides at one end of the fixed base plate. The top of the support seat is connected to the positioning frame plate, and the middle part of the positioning frame plate is rotatably connected to a rotation shaft. A support plate is fixedly connected to the middle of one end of the positioning frame plate, with a headrest fixedly connected to the top middle of the support plate. The top middle of the headrest has a concave shape. One end and the middle part of the positioning frame plate are each equipped with a movable adjustment plate, with each end of the movable adjustment plate slidingly fitted to an open slot. By adjusting the position of the movable adjustment plates, the frame can support the patient's hips and shoulders. Medical staff can adjust the patient's position by turning a knob, which rotates a second threaded rod to reposition the patient, allowing for precise positioning and control.

21: 2024/09292. 22: 2024/12/04. 43: 2025/06/13  
51: A61N

71: The First Affiliated Hospital of Xinxiang Medical University

72: Pang Kehua, Yang Jun, Huo Xiaoqing, Shi Liangliang, Xu Liuyang, Liu Bo

21: 2024/09290. 22: 2024/12/04. 43: 2025/06/12  
51: B63C

71: Tangshan University

72: HOU, Xihuan, ZHANG, Hongjuan, SHI, Huimin, JIN, Wenxiang

#### **54: INTELLIGENT UNDERWATER ROBOT AND MOTION CONTROL METHOD**

00: -

Disclosed are an intelligent underwater robot and a motion control method. The robot is provided with a water resisting and blocking frame, a bracket is installed on a lower surface of the frame, propellers are mounted on a rear side of an inner surface of the frame in a nested manner, and further, a direction controller is mounted on the rear side of the inner surface of the frame. The robot includes a gear which is rotatably connected to an inner surface of the bracket, and an outer surface of the gear is connected to a rack in a meshed manner. The bracket facilitating positioning and assembly is arranged, the positioning and rotating gear is internally arranged, and the rack can be effectively controlled by two sides to form limit sliding, such that an angle of a moving rod is adjusted.

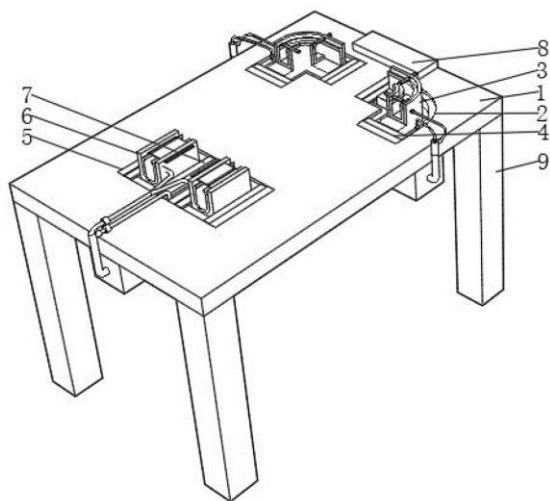


33: CN 31: 2024116176498 32: 2024-11-13

**54: A PRECISE RADIOTHERAPY FIXATION DEVICE FOR THE BODY AND ITS METHOD OF USE**

00: -

This invention provides a precise radiotherapy fixation device for the body, comprising a bed board. The top of the bed board is equipped with shoulder grooves and knee grooves. There are two shoulder grooves symmetrically placed on the left and right sides in an "L" shape, positioned in front of the knee groove. Inside each shoulder groove are a shoulder component and a shoulder clamp component. By incorporating the bed board, shoulder grooves, shoulder components, shoulder clamp components, knee groove, knee components, and knee clamp components, the shoulder component can be adjusted within the shoulder groove, and the knee component can be adjusted within the knee groove. This allows for adaptive adjustments based on the patient's specific body shape, with the shoulder component stabilizing the patient's shoulder joint and the knee component stabilizing the knee joint. This design creates a stable yet flexible fixation, limiting the patient's movement and ensuring high stability. Compared to traditional body fixation using straps, this invention uses airbags, which provide enhanced comfort.



21: 2024/09294. 22: 2024/12/04. 43: 2025/06/12

51: A01G

71: Yibin Forestry and Bamboo Industry Research Institute

72: WANG, Yong, YU, Ying, ZHOU, Guoqiang, YUAN, Min, GAO, Huibin, XIA, Yuanyan

**54: AFFORESTATION METHOD FOR PROMOTING EARLY MATURITY AND HIGH YIELD OF BAMBUSIA CHANGNINGENSIS YI ET B.X.LI**

00: -

The present invention discloses an afforestation method for promoting early maturity and high yield of Bambusa changningensis Yi et B.X.Li, namely, a double-headed stump straw-burying afforestation method for seedlings of Bambusa changningensis Yi et B.X.Li. The method includes seedling quality requirements, planting requirements, and maintenance requirements. The method improves a survival rate of Bambusa changningensis Yi et B.X.Li in large-scale afforestation projects, increases shoot emergence rates, and reduces losses of manpower, materials, and funds caused by the low survival rates of conventional afforestation methods. Furthermore, by the method, bamboo forest is formed within three years, the time to form the Bambusa changningensis Yi et B.X.Li forest is significantly shortened, and an objective of early maturity and high yields is achieved.

21: 2024/09296. 22: 2024/12/04. 43: 2025/06/12

51: C02F

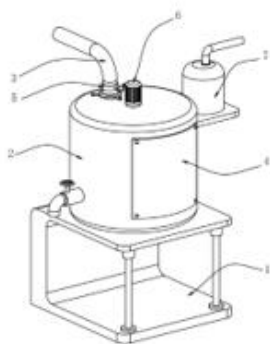
71: SUZHOU UNIVERSITY

72: MA, Jie, DING, Diandian, ZHANG, Haitao, GONG, Wei, FENG Songbao

**54: SLUDGE TREATMENT DEVICE FOR MUD CIRCULATION OF DRILLING ENGINEERING**

00: -

Disclosed in the present application is a sludge treatment device for mud circulation of drilling engineering, which relates to the field of sludge treatment. The sludge treatment device includes a stirring drum, where a top of the stirring drum is fixedly connected to a feeding pipe, and the top of the stirring drum is provided with a stirring mechanism. The stirring mechanism includes a control motor, and a bottom of the control motor is fixedly connected to the top of the stirring drum. An output shaft of the control motor is fixedly connected to a rotating rod, a bottom of the rotating rod is fixedly connected to a disc, and an outer wall of the stirring drum is provided with a chemical spraying mechanism.



21: 2024/09297. 22: 2024/12/04. 43: 2025/06/12

51: A61B

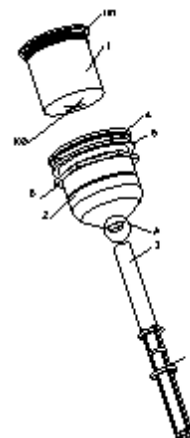
71: THE FIRST AFFILIATED HOSPITAL OF WANNAN MEDICAL COLLEGE (YIJISHAN HOSPITAL OF WANNAN MEDICAL COLLEGE)

72: WANG, Dong, WANG, Xiaoming, ZOU, Junwei, WANG, Lei, YANG, Bingwu

#### **54: CLAMPING DEVICE FOR LAPAROSCOPIC SURGERY TROCAR**

00: -

Disclosed in the present invention is a clamping device for a laparoscopic surgery trocar, which relates to the technical field of operating instruments a department of hepatobiliary surgery. The trocar includes an inner cylinder and an outer cylinder that are detachably connected, and a cannula which is detachably connected to a bottom of the outer cylinder. An outer side of the cannula is provided with a limiting and clamping assembly, the limiting and clamping assembly includes an upper limiting ring and a lower limiting ring, positions of the upper limiting ring and the lower limiting ring in a lengthwise direction of the cannula are adjustable, and the upper limiting ring and the lower limiting ring are capable of being expanded and contracted. An outer side of the outer cylinder is provided with an operating assembly, such that the upper limiting ring and the lower limiting ring are deformed.



21: 2024/09298. 22: 2024/12/04. 43: 2025/06/12

51: H01M

71: KUNMING UNIVERSITY OF SCIENCE AND TECHNOLOGY

72: ZHANG, Yannan, ZHANG, Bao, FENG, Ziliang, ZHANG, Yingjie, DONG, Peng, DUAN, Jianguo, MENG, Qi, ZHANG, Yiyong, LI, Xue, ZHOU, Zhongren, ZENG, Xiaoyuan, XIAO, Jie, WANG, Ding, WANG, Xianshu, WU, Hao, ZHU, Ziyi, YUAN, Shouyi, XING, Yubo, CHENG, Fang, HAN, Lina, ZHANG, Chengxu, ZHANG, Yanjia, CHEN, Yuxiang, XU, Liqianyun, LIU, Jintao

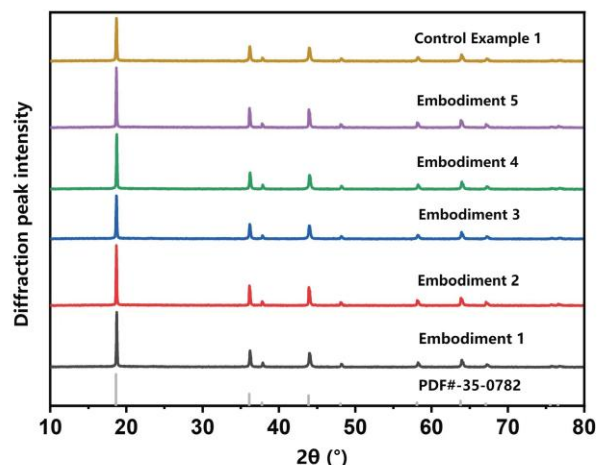
33: CN 31: 2024104999333 32: 2024-04-24

#### **54: MODIFIED LITHIUM MANGANATE ELECTRODE MATERIAL AND MODIFICATION METHOD THEREOF**

00: -

The present invention belongs to the technical field of lithium batteries, and a modified lithium manganate electrode material and a modification method thereof are disclosed. The steps of the modification method are: lithium manganate and hydrogen peroxide solution are mixed, to obtain a surface-modified lithium manganate electrode material. Through the surface modification method of the present invention, on the premise of no significant effect on the crystal structure, surface impurities of the spinel lithium manganate can be effectively removed, improving surface finish and accelerating the diffusion rate of  $\text{Li}^+$ ; in addition, the agglomeration of spinel lithium manganate particles can be effectively suppressed, so as to effectively suppress the phenomenon that the internal stress between agglomerated particles leads to microcracks generated on the surface of the material; the surface-modified lithium manganate

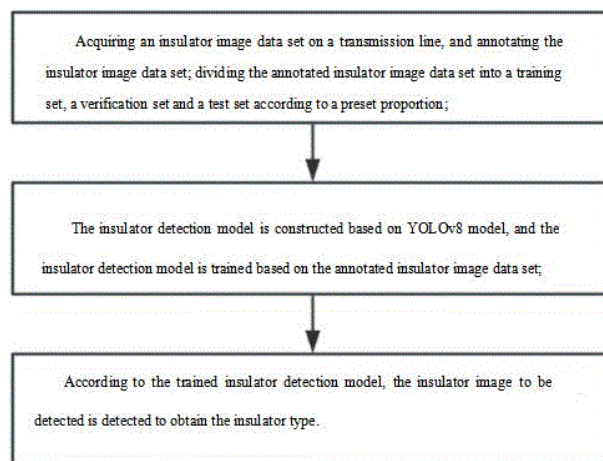
electrode material of the present invention has excellent electrochemical performance; the surface modification method of the present invention is simple and the cost is low, which is suitable for industrial production; and the present invention has low requirements for equipment, simple operation, no special requirements for the production process, no pollution in the production process, and is friendly to the environment.



21: 2024/09313. 22: 2024/12/05. 43: 2025/06/13  
51: G06T  
71: STATE GRID XINZHOU ELECTRIC POWER SUPPLY COMPANY  
72: ZHANG Jie, YANG Ruifeng, WANG Jingyi, SUN Licong, LIU Chang, TIAN Ye, ZHANG Junyao, ZHANG Yanqing, ZHANG Taizhen  
**54: INSULATOR DETECTION METHOD BASED ON IMPROVED YOLOV8**

00: -  
The invention discloses an insulator detection method based on an improved YOLOv8, which comprises the following steps: acquiring an insulator image data set on a power transmission line, and annotating the insulator image data set; dividing the annotated insulator image data set into a training set, a verification set and a test set according to a preset proportion; Optimizing the YOLOv8 model through a normalized attention module, a global attention module and a switchable hole convolution module to obtain an insulator detection model; training the insulator detection model based on the annotated insulator image data set; According to the trained insulator detection model, the insulator image to be detected is detected to obtain the

insulator type. By optimizing the YOLOv8 model, the invention can obtain the key information of the insulator and accurately detect the insulator of the transmission line.



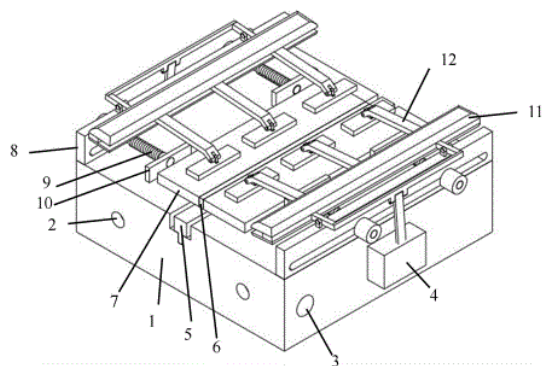
21: 2024/09314. 22: 2024/12/05. 43: 2025/06/12  
51: B23K

71: Tangshan University  
72: XIN, Lijun, WANG, Lili

#### **54: AMORPHOUS FILLER METAL LASER BRAZING FIXTURE**

00: -

The present invention discloses an amorphous filler metal laser brazing fixture, including a base, a clamping mechanism, a pressing mechanism, and a cooling mechanism. The clamping mechanism includes side plates, spring rods, and clamping plates, and is configured to clamp a specimen; the pressing mechanism includes key mounting plates, key mounting rods, key pressing blocks, and connecting frames, and is configured to press the specimen; the cooling mechanism includes a cooling liquid inlet, a cooling liquid outlet, and a cooling pipe. A backing plate groove is formed at a middle position of an upper surface of the base, a brass backing plate is provided in the backing plate groove, and a width of the brass backing plate is less than a width of the backing plate groove.



21: 2024/09315. 22: 2024/12/05. 43: 2025/06/13  
51: C04B

71: Huzhou Vocational and Technical College  
72: XU Ying, YANG Xiaonan, CHEN Jie, LI Chao

**54: SELF-COMPACTING CONCRETE AND PREPARATION METHOD THEREOF**

00: -

The invention provides a self-compacting concrete and a preparation method thereof, and belongs to the technical field of concrete preparation. The self-compacting concrete includes, by weight, 50-65 parts of cement, 25-30 parts of fly ash, 20-30 parts of sand, 25-30 parts of crushed stone, 30-42 parts of silane coupling agent, 48-75 parts of metakaolin, 8-12 parts of silicon carbide whisker regulator, 4-6 parts of fiber additive, 2-3 parts of water reducer and 80-95 parts of water. The matrix obtained by mixing various raw materials such as fly ash, sand, crushed stone and metakaolin with cement can provide basic strength performance support for concrete products, and the hydration heat dissipation efficiency of cement can be improved by adding silicon carbide whisker regulator. In addition, fiber additives can cooperate with silicon carbide whisker regulator to jointly enhance the cracking resistance and compressive strength performance of products.

21: 2024/09316. 22: 2024/12/05. 43: 2025/06/12  
51: B60L

71: Jiangsu Hengtong Wire & Cable Technology Co., Ltd., Jiangsu Hengtong New Energy Electric Technology Co., Ltd.

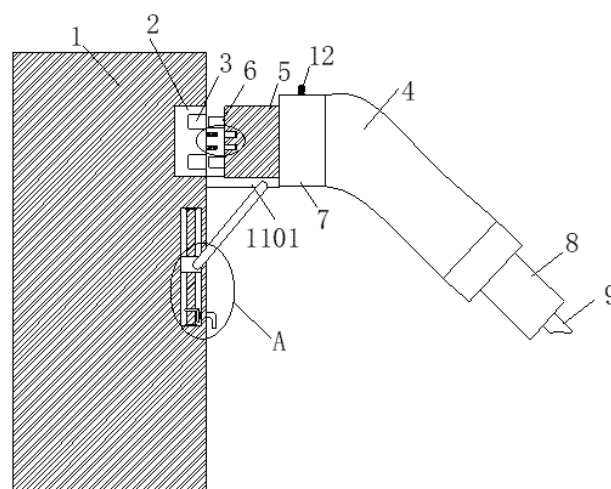
72: Hao WU, Jian YAO, Weichang HONG, Hongqiang DAI, Dongxu ZHAO, Danxia LI, Baoyan WEI, Yuhua MA, Jinjin JI, Jiaona XI

33: CN 31: 2023116658994 32: 2023-12-06

**54: DIRECT-CURRENT CHARGING GUN FOR NEW ENERGY ELECTRIC VEHICLE AND USE METHOD THEREOF**

00: -

The present invention discloses a direct-current charging gun for a new energy electric vehicle and a use method thereof, and relates to the technical field of charging guns for new energy electric vehicles. The direct-current charging gun for a new energy electric vehicle and the use method thereof includes a charging pile, a protection assembly, a sealing assembly, a heat dissipation assembly, and a stabilizing assembly. One side of the charging pile is provided with a charging gun body, a charging seat is fixedly mounted on the charging pile, the charging seat is provided with a charging slot, a fixed seat is fixedly mounted at one end of the charging gun body, a mounting seat is connected to an outer wall of one side of the fixed seat, a charging plug is fixedly connected to an outer wall of one side of the mounting seat, the charging plug and the charging slot are matched and electrically connected, a connecting wire is connected to the other end of the charging gun body, a protective shell is fixedly mounted on the other end of the charging gun body, the connecting wire is located inside the protective shell, and the protection assembly is located inside the protective shell. According to the present invention, the connection stability is improved, the charging plug is prevented from loosening, and the success and continuity of charging are ensured.



21: 2024/09317. 22: 2024/12/05. 43: 2025/06/13  
51: F03B

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

72: HAN Ershuai, LU Bingxue, FU Haoka, XU Yanhui, WANG Lina, WU Jingan

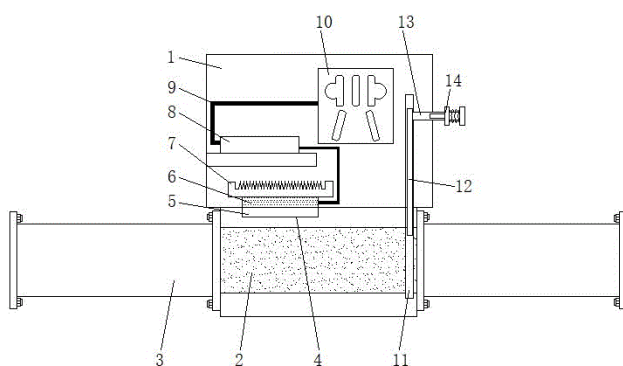


**54: TEMPERATURE-CONTROLLED CHARGING SOCKET FOR GENERATING ELECTRICITY BY USING WATER IN HEATING PIPELINE**

00: -

The invention discloses a temperature-controlled charging socket for generating electricity by using water in heating pipeline, which comprises a shell, a thermoelectric generation chip, a radiator, a voltage regulator and an electrical socket, wherein a water pipe is arranged inside the lower part of the shell; the thermoelectric generation chip is installed inside the upper part of the shell; the thermoelectric generation chip hot surface is located below the thermoelectric generation chip cold surface; a radiator is connected above the thermoelectric generation chip; a baffle is connected inside the chute; and a shifting lever penetrates through the right side surface of the shell; and the front surface of the shell is provided with radiating holes.

According to the temperature-controlled charging socket for generating electricity by using water in heating pipeline, a thermoelectric generation chip is arranged in the shell, and the thermoelectric generation chip can obtain a relatively constant temperature difference by using the joint action of the warm water pipe and the radiator, and with the arranged voltage regulator, stable electric energy can be delivered to the electrical socket, which is convenient for charging some small electrical appliances, and the full utilization of resources is realized.



21: 2024/09318. 22: 2024/12/05. 43: 2025/06/12

51: A61N

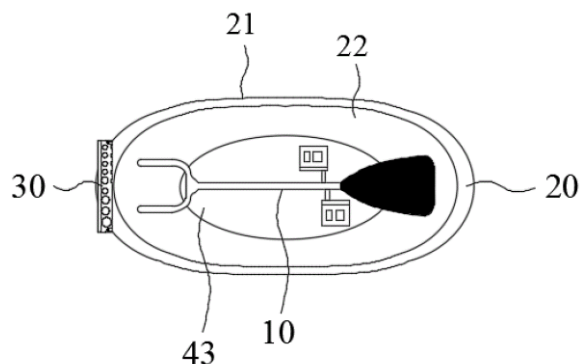
71: Yan'an University

72: WANG, Jiameng, ZHAO, Ruixue, WANG, Yong, HAN, Yao, LI, Jiayi, DAI, Guangyong

**54: REHABILITATION PHYSIOTHERAPY INSTRUMENT FOR CHRONIC DISEASE WITH****INTELLIGENT CONTROL OVER EXERCISE RESISTANCE IN CHINESE MEDICINE LIQUID**

00: -

Disclosed is a rehabilitation physiotherapy instrument for chronic disease with intelligent control over exercise resistance in Chinese medicine liquid, which relates to the field of rehabilitation physiotherapy. The rehabilitation physiotherapy instrument for chronic disease with intelligent control over exercise resistance in Chinese medicine liquid includes a Chinese medicine bath control module for containing medicine liquid, a resistance control bike module mounted in a limited space of the Chinese medicine bath control module and soaked in the medicine liquid, a monitoring, controlling and early warning module mounted on an end wall of the Chinese medicine bath control module and a control mainboard integrated in the monitoring, controlling and early warning module. The resistance control bike module is specially provided with a base, a power generation device and an acousto-optoelectronic unit.



21: 2024/09319. 22: 2024/12/05. 43: 2025/06/12

51: G06Q

71: Jiaxing Vocational &amp; Technical College

72: Junwei Zhang, Yanjun Ji, Yongqi Wang

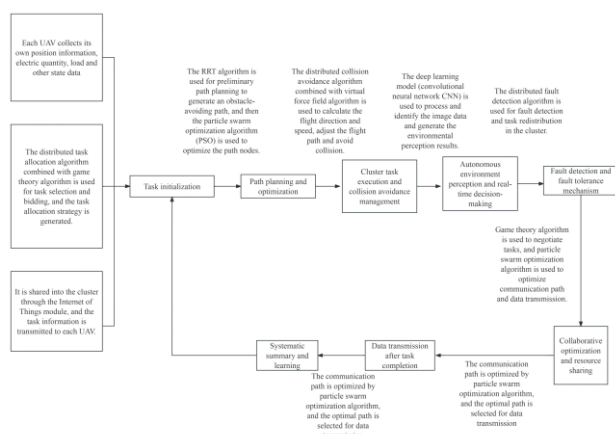
**54: UAV CLUSTER TASK EXECUTION METHOD BASED ON DISTRIBUTED COMPUTING**

00: -

The invention discloses a UAV cluster task execution method based on distributed computing, which relates to the technical field of intelligent control and automation. Through distributed task allocation and game theory algorithm, each task is ensured to be executed by the most suitable UAV, so as to maximize the utilization of resources and improve the task completion efficiency. Path planning adopts RRT preliminary planning,



combined with PSO to optimize the path, generate the shortest path and reduce energy consumption. Distributed fault detection algorithm can find faults in time and assign tasks quickly, which can effectively deal with single-point faults and improve system reliability and fault tolerance. The distributed collision avoidance algorithm adjusts the collision avoidance through real-time location data to enhance the cluster security. Using distributed computing architecture, UAV cluster can independently and flexibly allocate tasks and adjust paths, which reduces communication bottlenecks and improves system scalability. Combined with the deep learning model, UAV can make real-time decisions and adjustments, adapt to complex environments, and improve the flexibility of task execution.



users a valuable resource to assess their risk of developing various diseases.

21: 2024/09323. 22: 2024/12/05. 43: 2025/06/13  
51: H04W

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: RAJAS, NEHA, PISE, Aarya, PISE, Rahul, PITHE, Sarthak, POKALE, Vaibhav, JADHAVRAO, Pooja, NIKAM, Poonam

#### 54: A SMART SYSTEM FOR ENHANCING ACCESS TO ORGAN DONORS

00: -

The present invention relates to a smart system for enhancing access to organ donors. Organ transplantation plays a crucial role in saving countless lives worldwide. However, the lack of an efficient and centralized system for accessing organ donors often results in delayed organ transplantation procedures, leading to increased patient waiting times and decreased chances of successful transplantations. In the present invention discloses a smart system that serves as a precise and common system for hospitals to facilitate easy and quick access to organ donors. The system's aims to streamline the organ donation process, enhance communication among healthcare providers, and ultimately improve patient outcomes.

21: 2024/09322. 22: 2024/12/05. 43: 2025/06/13

51: G06N

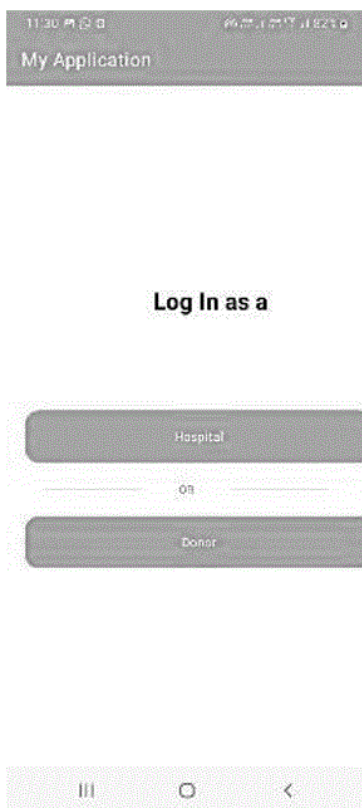
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: TANPURE, Sharda, CHAVAN, Suraj, SURDAS, Soham, SURVE, Omkar, SURWASE, Nikita, SURYAWANSHI, Aditya, SURYAWANSHI, Om

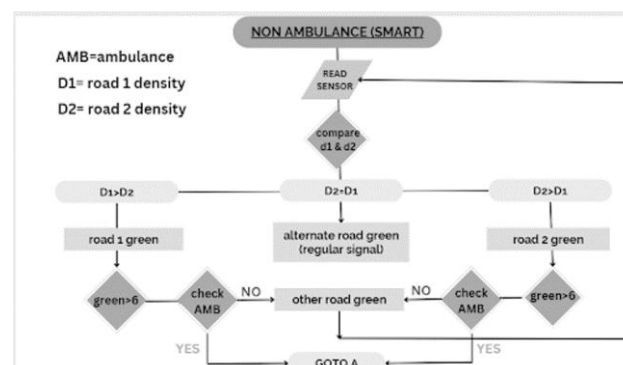
#### 54: A MACHINE LEARNING BASED DISEASE PREDICTION SYSTEM

00: -

The present invention relates to a machine learning based disease prediction system. The advent of machine learning has revolutionized the field of healthcare, enabling the development of powerful tools for disease prediction and early detection. The proposed system harnesses the potential of machine learning algorithms to predict diseases accurately and efficiently. By leveraging diverse ML techniques and incorporating vast datasets, the website offers



potential to significantly improve traffic management in urban areas. The system's ability to process real-time traffic data and optimize traffic flow through adaptive signal control can reduce congestion, travel time, and vehicle emissions. The ATCS can also be integrated with other smart city technologies, such as connected vehicles and infrastructure, to further enhance traffic management and safety. Overall, the ATCS represents an innovative and promising approach to addressing the challenges of urban traffic congestion and advancing sustainable transportation systems.



21: 2024/09324. 22: 2024/12/05. 43: 2025/06/13  
51: G08G

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: MORE, Manisha Nandan, CHAUHAN, Tilaksingh, TILAK, Manas, TODKAR, Aditya, THORAT, Shreyas, TILEKAR, Mansi, THORAT, Rushikesh

**54: AN ADAPTIVE TRAFFIC CONTROL SYSTEM**  
00: -

The present invention relates to an adaptive traffic control system. The Adaptive Traffic Control System (ATCS) is an innovative project aimed at optimizing traffic flow and reducing congestion on roads through the use of intelligent transportation systems. The system is designed to adjust traffic signals in real-time based on traffic data collected from multiple sensors. This optimization reduces wait times, improves safety, and ultimately results in economic and environmental benefits. The heart of the ATCS is the Arduino microcontroller, which processes the real-time traffic data and sends commands to the traffic signals to adjust their timing. The use of this technology provides a cost-effective solution to traffic control by utilizing open-source software and hardware. The ATCS project has the

21: 2024/09325. 22: 2024/12/05. 43: 2025/06/13  
51: G06Q

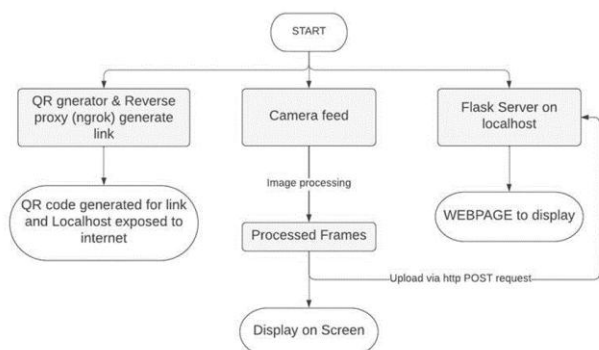
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: GAWADE, Mayuri Mangesh, SAKHARE, Aditya, SALUNKE, Sakshi, KHAN, Saif, SAKPAL, Rahul, SALOKHE, Prathamesh, SAKHARE, Rushikesh

**54: AN AUTOMATED VACANCY DETECTION IN A PARKING-LOT USING IMAGE PROCESSING AND REMOTE ACCESS TO REAL TIME STATE**  
00: -

The present invention relates to an automated vacancy detection in a parking-lot using image processing and remote access to real time state. There has been a sudden increase in the number of vehicles in recent years. Availability of parking spaces is now become a critical issue in urban areas. Finding unoccupied space for parking vehicles has now become a challenge for drivers as it results in time wastage, loss of fuel, and increased traffic congestion. To reduce such problems, an intelligent system is required that can detect vacant parking spots in a specific parking lot. Our present invention discloses an automated vacancy detection system that uses image processing to detect the available parking spots in a parking lot. A proposed

system consists of a camera that monitors the real-time state of the parking lot, an image processing unit, and a display outside the parking lot for users, showing the availability of parking spots. A system uses a vehicle detection algorithm to recognize the presence of vehicles in a parking space. The system includes image binarization, dilation of an image, and edge detection. As the system identifies the available parking spaces accurately, the user display gets updated.



21: 2024/09326. 22: 2024/12/05. 43: 2025/06/13

51: G06T

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JOSHI, Anita, SHAHARI, Sagar, SHAH, Tasmay, SHAIKH, Aadilnawaz, SAWANT, Suyash, SAYAM, Ritik, SHAH, Armik

#### **54: AN ADVANCED 2D PLOTTER SYSTEM FOR PRECISION GEOMETRIC DRAWING**

00: -

The present invention relates to an advanced 2D plotter system for precision geometric drawing. Further the present invention discloses the functionality and potential applications of a 2D plotter capable of drawing shapes and lines at different angles. The present invention aims to explore the design, mechanics, and software aspects of the plotter, highlighting its ability to create precise geometric patterns and intricate artwork. Through experimentation and analysis, the present invention examines the versatility and limitations of the machine, discussing its practical implications and potential future developments.

21: 2024/09327. 22: 2024/12/05. 43: 2025/06/13

51: G08G

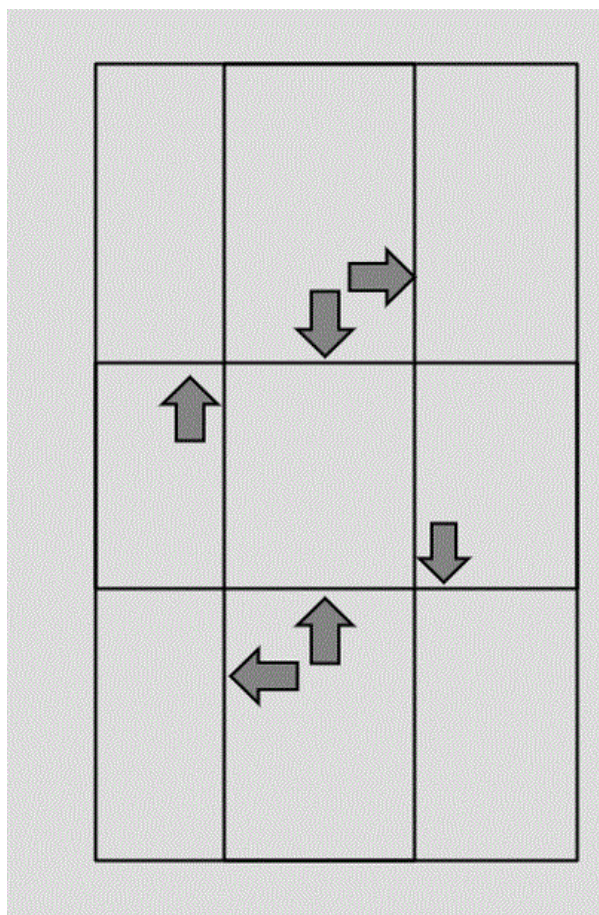
71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: TANPURE, Sharda Vishnu, PATIL, Vrushal, WADEKAR, Harsh, WADADARE, Shrikar, RANDAD, Vivek, MANHAS, Vishal

#### **54: A TRAFFIC SIGNALLING PATTERN SYSTEM**

00: -

The present invention relates to a traffic signalling pattern system. Every day we are witnessing a rapid increase in traffic volume on roads. Traffic signals are made to manage the traffic to get less disturbance during the journey and to avoid collisions. Sometimes these traffic signals might become a reason for a delay due to poor time management at signal timings. The old traffic signal patterns are the main cause of this issue and hence this project of new signalling patterns will help in using traffic signals more efficiently. In the traditional pattern at a crossover only one signal can be opened but using our pattern algorithm more than one signal can be opened and traffic could clear more easily. Even concepts of image processing are used to make the system more automated and intelligent.





21: 2024/09328. 22: 2024/12/05. 43: 2025/06/13

51: G06Q

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JOSHI, Kalpesh Vinayak, PAWAR, Sejal, PAWAR, Mohini, PAWAR, Nikita, PAWAR, Pawan, PAWAR, Sandip

**54: A TV SHOW POPULARITY ANALYSIS SYSTEM USING DATA MINING**

00: -

The present invention relates to a TV show popularity analysis system using data mining. Data mining is the act of examining large amounts of data to look for patterns, identify trends, and develop understanding on how to use the data. The majority of television program that are broadcast these days are reality shows that focus on acting, singing, and dancing. Present invention discloses that can identify emotive TV show commentary. Along with the viewing information, the remarks from the viewer will also be extracted. The feedback will be compiled from a variety of sources and maintained on the excel sheet. People's names, email addresses, ages, genders, locations, and comments will be included in the excel file. The administrator will log in to the system and be able to carry out tasks including adding pages, updating entries, examining graphs, and printing graphs. Visitors can view TV show popularity data in a graphical representation in pie charts and bar charts. Visitor can also view the popular show rating as well as the top show in a country. The system also has a propensity to create a graphical user interface (GUI) that will help users and advertisers assess a particular show. Machine learning models will be used to forecast the model's success.

21: 2024/09329. 22: 2024/12/05. 43: 2025/06/13

51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

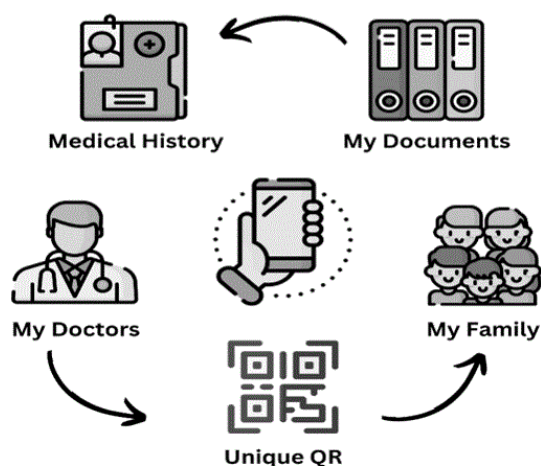
72: RAJAS, NEHA, POTNIS, Hrishikesh, PRABHU, Chinmayee, POWAR, Sujal, POTE, Dnyaneshwari, POWAR, Payal

**54: A SECURE CLOUD STORAGE SYSTEM FOR MEDICAL DOCUMENTS**

00: -

The present invention relates to a secure cloud storage system for medical documents. Storing and managing medical documents such as reports, invoices, and insurance premiums has long been a

challenging task. The accessibility of these documents becomes critical, particularly in emergency situations. In response to these challenges, we have developed a secure cloud storage platform for medical documents. The present invention discloses a methodology, which consists of a Doctor's Portal and a Patient's Portal. The application allows patients to manage their medical data and history, while providing doctors with secure access to patient information. The user-friendly interface ensures ease of use for a wide range of age groups, facilitating seamless data transfer and improving the overall efficiency of healthcare systems.

**Patient's Portal**

21: 2024/09330. 22: 2024/12/05. 43: 2025/06/13

51: G06F

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

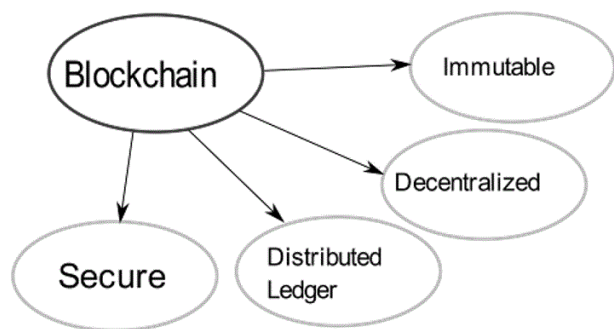
72: KHEDEKAR, Lokesh, VAIDYA, Madhur, SHIVADE, Vaishnavi, SINGH, Vaishnavi, WASULE, Vallabh, GANJOO, Vansh

**54: A BLOCKCHAIN BASED JUDICIAL PETITION FILING SYSTEM**

00: -

The present invention relates to a blockchain based judicial petition filing system. The Petition-filing process in the Indian Judicial System is an integral part of the Indian Judiciary. The digital process of petition filing is very slow and cumbersome. Moreover, it is just dependent on a single node. This makes the system very vulnerable in terms of digital

security and preservation of old records. The present invention can be solved by making the system decentralized. By making use of the Blockchain technology, the petition-filing system would become more secure and easier to access. The present invention would also help in the whole system being faster, for both the courts and the petition-filers.



21: 2024/09331. 22: 2024/12/05. 43: 2025/06/13  
51: G05B

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

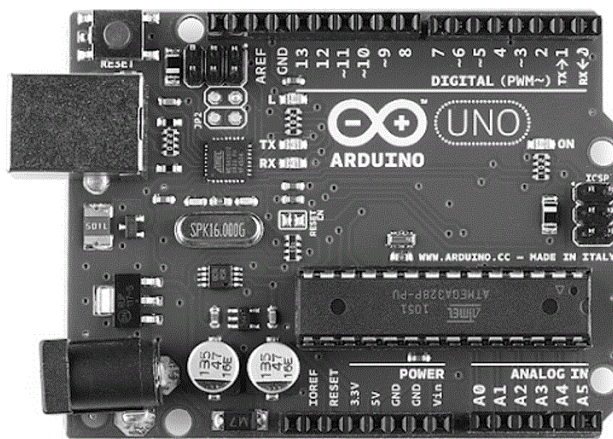
72: MORE, Kiran, SHIRODE, Devang, SHINDE, Satyajit, SHINGANKAR, Piyush, SHIRSAT, Harshal, MATTOO, Shivam, SHIRSAT, Yash

#### **54: A SMART STEALTH CRUISER SYSTEM**

00: -

The present invention relates to a smart stealth cruiser system. Modern technology and the digital world are developing with great speed. Robots are an essential part of future emerging technology. Spy robots are one of the interesting categories of future technologies which all military organizations wish to own it. Several military groups currently deploy military robots to do risky duties for humans. In order to decrease the possibility of accidents for our soldiers and defeat opponents, the armed forces have consistently sought to deploy new technology and equipment. Over the years, military operations have deployed spy vehicles more frequently for border surveillance. Officially manufactured reconnaissance cameras provide with assistance. On spy cars, the cameras are strategically placed. The received warning signals suggest that major improvements are being made using this aural and visual stream. The proposed system satisfies the requirements for unrestrained mobility through any terrain, the identification of things in an unexplored area, and live video transmission of activities. The proposed system is equipped with a camera as well

as a number of cutting-edge technologies, such as a Thermal camera, Radar, GPS, Obstacle-avoiding technology, and a microphone. Our system provides wireless video surveillance technology that is versatile, affordably priced, and incredibly quick to deploy, particularly over a large area as in a fight or even for military monitoring.



21: 2024/09332. 22: 2024/12/05. 43: 2025/06/13  
51: G06T

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: JOSHI, Kalpesh, SHIVANKAR, Ishan, SABUT, Shreya, SARASWAT, Shivansh, PATEL, Shraddha, CHOUGULE, Shrey, NALE, Shreya

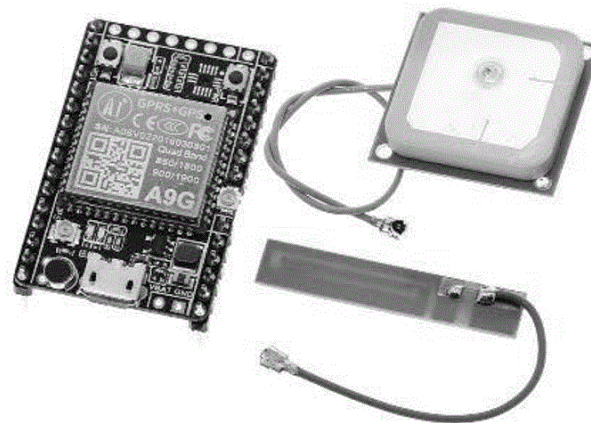
#### **54: A DIMENSIONAL MEASUREMENT SYSTEM USING CANNY EDGE DETECTION**

00: -

The present invention relates to a dimensional measurement system using canny edge detection. In these days, real-time object detection and dimensioning of objects is an important issue in many areas of industry. The present invention discloses an enhanced technique for detecting objects and computing their measurements in real time from images. It is an object measurement technique for real-time image by utilizing OpenCV libraries and includes the canny edge detection, dilation, and erosion algorithms. OpenCV is a library of programming functions mainly used for image processing. It provides de-facto standard API for computer vision applications. The proposed technique nearly achieved 98% success in determining the size of the objects.



START	<ul style="list-style-type: none"> <li>Picture is captured</li> <li>Captured image is sent to function</li> </ul>
GETTING THE IMAGE READY	<ul style="list-style-type: none"> <li>Captured image is turned greyscale</li> <li>Greyscale image is blurred to remove noise</li> </ul>
FINDING EDGES AND CONTOURS	<ul style="list-style-type: none"> <li>Blurred image's edges are find using Canny edge detection algorithm</li> <li>External Contours of closed shapes are recorded and Aruco marker contour is recorded</li> </ul>
FINDING WIDTH AND HEIGHT	<ul style="list-style-type: none"> <li>Bounding box and respective height and width is found in pixels and stored accordingly</li> <li>Height and width of aruco marker is found separately and ratio of pixel to centimeter is found</li> </ul>
FINDING ACTUAL WIDTH AND HEIGHT	<ul style="list-style-type: none"> <li>All height and width found are divided by ratio found from aruco marker</li> <li>Bounding box and edges found are drawn on the original image</li> <li>Actual height and width are also written on original image</li> </ul>
STOP	<ul style="list-style-type: none"> <li>Original image with edges, bounding box and text drawn on it is shown</li> <li>END</li> </ul>



21: 2024/09333. 22: 2024/12/05. 43: 2025/06/13  
 51: H04W  
 71: VISHWAKARMA INSTITUTE OF TECHNOLOGY  
 72: JOSHI, Kalpesh, SHRIVASTAVA, Tanishk, SURYAWANSHI, Shrihari, SHRIVASTAVA, Aanchal, SHRIRAO, Prachi, DAGWAR, Shrid

#### 54: AN EMERGENCY SUPPORT SYSTEM

00: -

The present invention relates to an emergency support system. An emergency signal of support system is critical distress signals used to communicate an urgent need for assistance in life-threatening situations. These signals serve as a lifeline, ensuring that help arrives swiftly and efficiently. Whether in the wilderness, at sea, or in urban environments, SOS signals convey a universal message that someone is in distress and requires immediate aid. Typically transmitted through visual or auditory means, such as flares, distress calls, or Morse code, these signals cut through barriers of language and technology to attract attention and prompt a response from potential rescuers. The urgency and standardized nature of SOS signals make them an indispensable tool in emergency situations, allowing individuals to quickly and effectively communicate their need for help when faced with dire circumstances.

21: 2024/09334. 22: 2024/12/05. 43: 2025/06/13  
 51: A01G

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

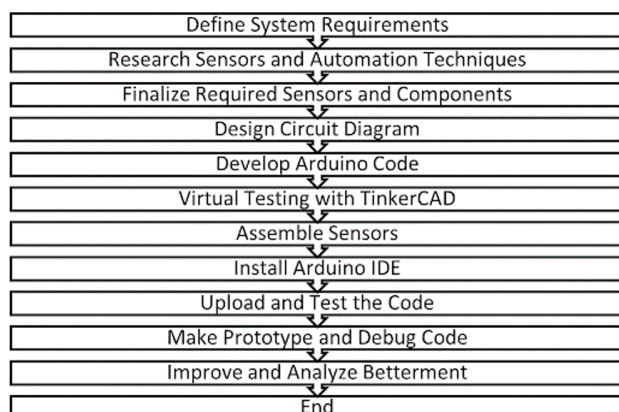
72: MORE, Kiran, SHINDE, Sanskruti, SHINDE, Madhuri, SHINDE, Rishikesh, SHINDE, Pranoti, SHILIMKAR, Siddharth, SHINDE, Mohit

#### 54: A SMART AQUAPONICS SYSTEM

00: -

The present invention relates to a smart aquaponics system. Getting appropriate water source for fish and plant cultivation seems difficult. Moreover, the agricultural production is decreasing due to narrower lands so that land- and water-saving technology combined with a variety of vegetable is important to produce maximum yield. Aquaponics is a sustainable agriculture system in a symbiotic environment by combining aquaculture and hydroponics. This water system should flow on the planting medium periodically to ensure the plants get the nutrients, while the water can be filtered properly by the medium. The present invention discloses a smart aquaponics system that could control and monitor the degree of acidity, water level, water temperature, and fish feed that were integrated with internet-based mobile application. In this system, there was a sensor installed to retrieve data, which was then transmitted to Ubuntu IoT Cloud server that could be accessed in real time through the internet network. Thus, the quality and water circulation were well-preserved. Results showed that the success rate of measurement for ultrasonic sensor was 99.94%, pH sensor of 92.35%, and temperature sensor of 97.91%. The temperature and pH water pool that were suitable for aquaponics

ranged between 20-300C and 7-75 and the monitoring system proceeded as expected.



21: 2025/00832. 22: 2025/01/24. 43: 2025/05/26

51: C01B

71: China Certification & Inspection (Group) Co., Ltd. Hebei Branch, China University of Mining and Technology

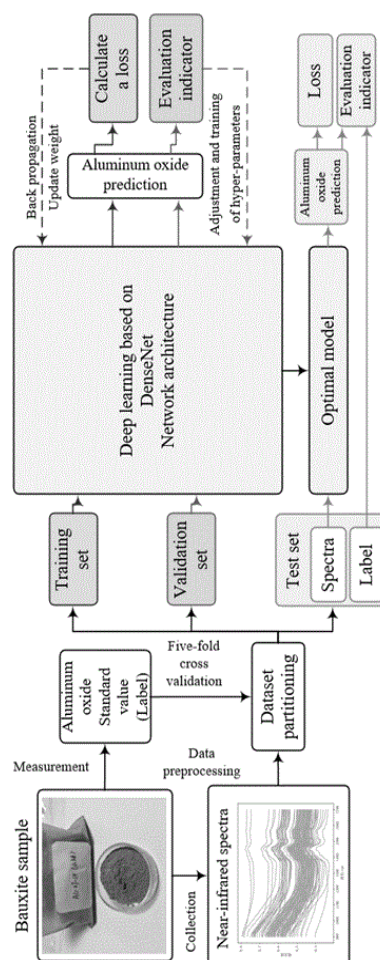
72: Zhibin XU, Xiaoyan ZHANG, Yuhao ZUO, Huifeng LUO, Yuntong LIU, Liang ZOU, Meng LEI, Shifan XU

33: CN 31: 202510015936X 32: 2025-01-06

#### **54: METHOD AND SYSTEM FOR RAPIDLY DETECTING ALUMINUM CONTENT IN BAUXITE BASED ON NEAR-INFRARED SPECTRA**

00: -

The present invention discloses a method and system for rapidly detecting an aluminum content in bauxite based on near-infrared spectra, aiming to meet the needs of cross-fields such as earth science, resource exploration, and artificial intelligence. Conventional methods for detecting aluminum oxide in bauxite are high in cost and low in efficiency and require expensive instruments, which limit the applications thereof in fields of scientific research, industry, and management. In view of the above problems, the present invention adopts the following solution: establishing a sample database by using collected near-infrared spectral data of bauxite and corresponding aluminum oxide standard values of samples; and constructing and training a deep learning model based on DenseNet and Roformer, allowing the deep learning model to be suitable for capturing a non-linear relationship between bauxite spectra and aluminum oxide contents thereof. Therefore, rapid detection and analysis of aluminum oxide in the bauxite can be easily and efficiently achieved.



21: 2025/00956. 22: 2025/01/29. 43: 2025/04/15

51: A61K; A61P; C07K

71: Omeros Corporation, University of Leicester

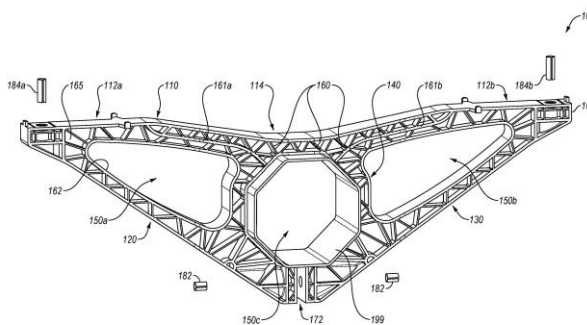
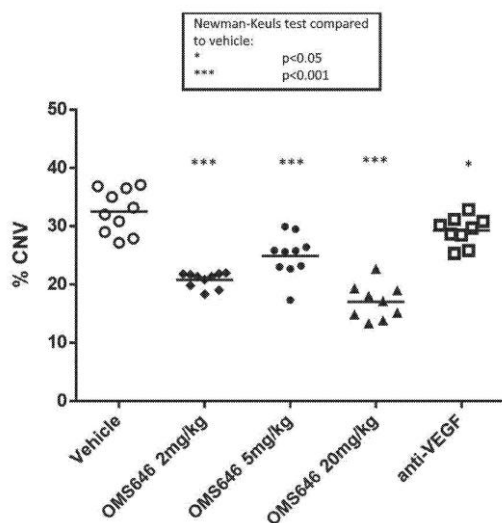
72: DEMOPULOS, Gregory A., SCHWAEBLE, Hans-Wilhelm, DUDLER, Thomas, TJOELKER, Larry

33: US 31: 62/315,857 32: 2016-03-31

#### **54: METHODS FOR INHIBITING ANGIOGENESIS IN A SUBJECT IN NEED THEREOF**

00: -

In one aspect, the present invention provides methods for preventing, treating, reverting and/or delaying angiogenesis in a mammalian subject suffering from, or at risk for developing, an angiogenesis-dependent disease or condition, comprising administering to the subject an amount of a MASP-2 inhibitory agent effective to inhibit angiogenesis. In some embodiments of these aspects of the invention, the MASP-2 inhibitory agent is a MASP-2 antibody or fragment thereof.



21: 2025/01274. 22: 2025/02/11. 43: 2025/05/26  
 51: C02F; C12N

71: Jilin Agricultural University  
 72: ZHANG Bo, LI You, LI Xuefei, ZHANG Tong,  
 TUO Yonglan, HU Jiajun, LI Yu  
 33: CN 31: 2022116961569 32: 2022-12-28

#### 54: PLEUROTUS PULMONARIUS STRAIN FOR DECOLORIZATION AND COD DEGRADATION IN SEWAGE AND USE THEREOF

00: -

The present invention relates to the field of biotechnology. Disclosed are a *Pleurotus pulmonarius* strain for decolorization and COD degradation in sewage and a use thereof. The strain is *Pleurotus pulmonarius* RG-171, and is preserved in the China General Microbiological Culture Collection Center on 08 December 2022; the address of the preservation unit is No. 3, Yard 1, Beichen West Road, Chaoyang District, Beijing; the preservation number is CGMCC No. 40366. According to the present invention, by taking *Phanerochaete chrysosporium* as a control, the decolorization rate and COD degradation rate of each strain for sewage are determined, and then a strain *Pleurotus pulmonarius* RG-171 having decolorization and COD degradation effects is obtained by means of secondary screening. Compared with *Phanerochaete chrysosporium* for treating wastewater in the prior art, the *Pleurotus pulmonarius* RG-171 in the present invention has better sewage decolorization and COD degradation effects.

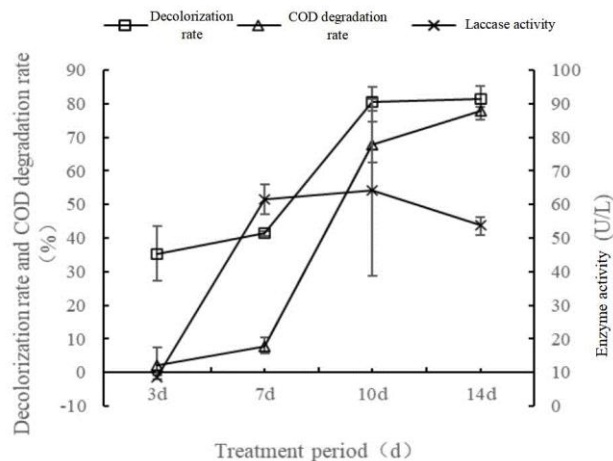
21: 2025/00957. 22: 2025/01/29. 43: 2025/04/15  
 51: E04D; F16M; F24J; H01L; H02S  
 71: Array Technologies, Inc.  
 72: SCHUKNECHT, Nathan, CREASY, Lucas,  
 ADDINK, Jason, CHASE, Andrew  
 33: US 31: 63/022,319 32: 2020-05-08

#### 54: MOUNTING BRACKET

00: -

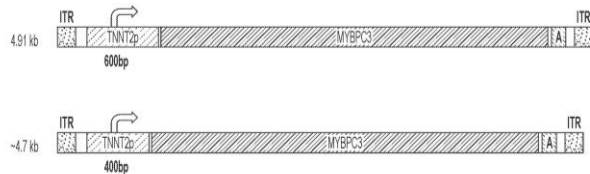
A mounting bracket assembly comprising may include an upper region with flat portions on either end that interface with a photovoltaic (PV) module and a lower portion in between the flat portions, and a central portion at least partially surrounding a hole shaped to accommodate a torsion beam. The mounting bracket assembly may also include side portions extending from the ends of the upper region to below the hole shaped to accommodate the torsion beam, and a first outer lining along a periphery of the mounting bracket assembly. The mounting bracket assembly may also include a second outer lining along the hole shaped to accommodate the torsion beam, and multiple ribs extending between the first outer lining and the second outer lining.





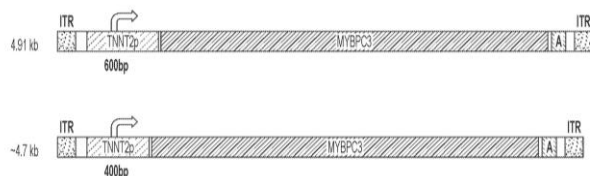
21: 2025/01308. 22: 2025/02/12. 43: 2025/04/15  
 51: A61K; A61P; C07K; C12N  
 71: Tenaya Therapeutics, Inc.  
 72: LOMBARDI, Laura  
 33: US 31: 62/976,160 32: 2020-02-13  
**54: GENE THERAPY VECTORS FOR TREATING HEART DISEASE**  
 00: -

The present disclosure provides methods and compositions useful for the treatment or prevention of heart disease. In particular, the present disclosure provides a vector comprising a modified troponin T promoter operatively linked to a therapeutic gene product for the treatment or prevention of heart disease, e.g., cardiomyopathy. The disclosure also provides recombinant adeno-associated virus (rAAV) virions, rAAV viral genomes, and expression cassettes and pharmaceutical compositions thereof. The disclosure further provides methods for treating a disease or disorder, such as heart disease.

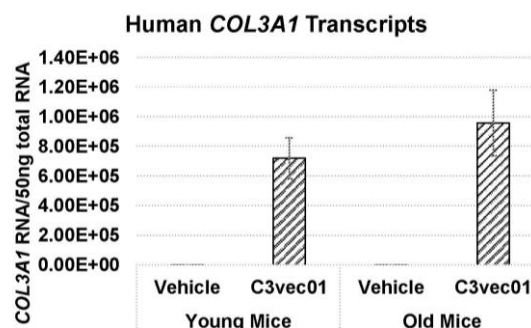


21: 2025/01309. 22: 2025/02/12. 43: 2025/04/15  
 51: A61K; A61P; C07K; C12N  
 71: Tenaya Therapeutics, Inc.  
 72: LOMBARDI, Laura  
 33: US 31: 62/976,160 32: 2020-02-13  
**54: GENE THERAPY VECTORS FOR TREATING HEART DISEASE**  
 00: -

The present disclosure provides methods and compositions useful for the treatment or prevention of heart disease. In particular, the present disclosure provides a vector comprising a modified troponin T promoter operatively linked to a therapeutic gene product for the treatment or prevention of heart disease, e.g., cardiomyopathy. The disclosure also provides recombinant adeno-associated virus (rAAV) virions, rAAV viral genomes, and expression cassettes and pharmaceutical compositions thereof. The disclosure further provides methods for treating a disease or disorder, such as heart disease.



21: 2025/01799. 22: 2025/02/27. 43: 2025/04/15  
 51: A61K  
 71: Krystal Biotech, Inc.  
 72: KRISHNAN, Suma, PARRY, Trevor, AGARWAL, Pooja  
 33: US 31: 62/663,476 32: 2018-04-27  
**54: RECOMBINANT NUCLEIC ACIDS ENCODING COSMETIC PROTEIN(S) FOR AESTHETIC APPLICATIONS**  
 00: -  
 The present disclosure provides recombinant nucleic acids comprising one or more polynucleotides encoding one or more cosmetic proteins (e.g., one or more human collagen proteins); viruses comprising the recombinant nucleic acids; compositions (e.g., cosmetic formulations) comprising the recombinant nucleic acids and/or viruses; methods of their use; and articles of manufacture or kits thereof.



21: 2025/02475. 22: 2025/03/20. 43: 2025/04/08  
 51: A61K; A61P  
 71: PHILOGEN S.P.A.  
 72: NERI, DARIO, PUCA, EMANUELE, ELIA, GIULIANO, NADAL, LISA  
 33: EP 31: 23163294.4 32: 2023-03-21  
 33: EP 31: 22193432.6 32: 2022-09-01  
 33: EP 31: 23168600.7 32: 2023-04-18  
**54: TNF ALPHA AND INTERLEUKIN-2 COMBINATION THERAPY FOR NON-MELANOMA SKIN CANCER**  
 00: -

The application relates to the treatment of cancer, including non-melanoma skin cancer. The invention involves the use of a tumor necrosis factor alpha (TNFα) immunoconjugate and an interleukin 2 (IL2) immunoconjugate in a combination therapy for the treatment of non-melanoma skin cancer.

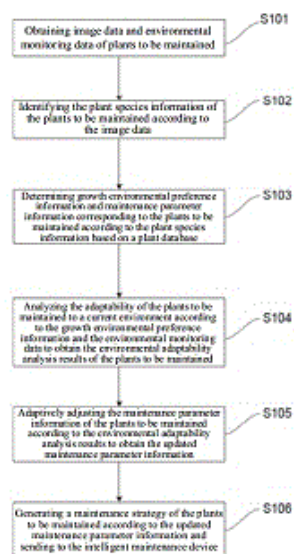
21: 2025/02649. 22: 2025/03/27. 43: 2025/04/16  
 51: G06F; G06V; G06T; G06N  
 71: JINGTIANXIA ECOLOGICAL ENVIRONMENT  
 TECHNOLOGY CO., LTD.

72: LI, YAN, LI, YING, LI, LING, XU, MINYI, SUO,  
 YANG

33: CN 31: 202410626339.6 32: 2024-05-20

**54: INTELLIGENT PLANT MAINTENANCE  
 METHOD, SYSTEM, DEVICE AND MEDIUM**  
 00: -

The present application relates to an intelligent plant maintenance method, system, device and medium, and belongs to the technical field of plant maintenance. The maintenance method includes: obtaining image data and environmental monitoring data of plants to be maintained; identifying the plant species information of the plants to be maintained according to the image data; determining growth environmental preference information and maintenance parameter information corresponding to the plants to be maintained according to the plant species information based on a plant database; analyzing the adaptability of the plants to be maintained to a current environment according to the growth environmental preference information and the environmental monitoring data to obtain the environmental adaptability analysis results of the plants to be maintained; and adaptively adjusting the maintenance parameter information of the plants to be maintained according to the environmental adaptability analysis results to obtain the updated maintenance parameter information, to generate a maintenance strategy of the plants to be maintained and send to the intelligent maintenance device. The present application can adapt to the actual growth needs of different plants and the environmental changes and improve the precision, automation and intelligence of maintenance.



21: 2025/02650. 22: 2025/03/27. 43: 2025/04/16

51: H02J; H02H

71: SHENZHEN WEIPENG CENTURY  
 TECHNOLOGY CO., LTD.

72: WANG, XIN, MA, JING, HE, QINGHUI, ZENG,  
 YANG

33: CN 31: 202420881998.X 32: 2024-04-26

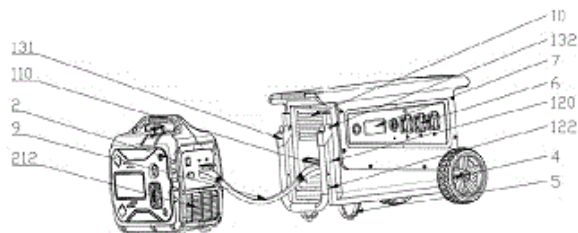
**54: ENERGY STORAGE PRODUCT FOR HYBRID  
 POWER GENERATION**

00: -

The present application relates to an energy storage product for hybrid power generation including an energy storage apparatus; a power generator, wheels provided on one side of a bottom of the energy storage apparatus through a penetrating rotating shaft and foot pads respectively located on another side of the bottom of the energy storage apparatus; power source output interfaces provided in a uniform array on one side of the energy storage apparatus, and at least one power source module mounted inside the energy storage apparatus and electrically connected to the power source output interfaces, wherein the energy storage apparatus further includes a first power source input interface located at a front end; and the power generator is electrically connected to the first power source input interface through a connecting wire. According to the present application, the problems that an electric quantity of an ordinary energy storage product is not enough in the outdoor and a user has electricity anxiety can be effectively solved, which is more conducive to the use of a large load, so as to solve the problems that the energy storage product on the



market has a poor endurance and a voltage output by the power generator has a poor stability, resulting in a high damage rate to a device, a high fuel consumption, and a high noise.



21: 2025/03004. 22: 2025/04/09. 43: 2025/06/10

51: B24B

71: SHENYANG UNIVERSITY OF TECHNOLOGY

72: YUAN Zewei, CHENG Zhihui, ZHANG Xiaojing

33: CN 31: 2023110033481 32: 2023-08-10

#### **54: GRINDING AND POLISHING INTEGRATED METHOD AND APPARATUS FOR DIAMOND WAFER**

00: -

A grinding and polishing integrated method and apparatus for a diamond wafer. The method comprises: grinding sequentially with a porous ceramic-based diamond grinding wheel, a resin-based diamond grinding wheel, and a chemical reaction grinding wheel in a grinding stage; and polishing sequentially with a diamond abrasive polishing solution, an alumina abrasive polishing solution, and a titanium dioxide abrasive polishing solution in a polishing stage. The grinding and polishing integrated apparatus comprises a Z-axis feeding device [1], an X-axis reciprocating device [2], a hollow rotating spindle assembly [3], a polishing disc assembly [4], a marble platform [6], a waste liquid pool [7], and a human-machine interaction and control module [8]. By means of grinding and polishing in stage s, surface roughness of the diamond wafer is reduced step by step, and efficient and ultra-smooth polishing of the diamond wafer of 50-200 mm is implemented, so that an ultra-smooth and flat surface of Ra0.001 can be obtained.

Using a porous ceramic-based diamond grinding wheel mounted on a hollow rotary spindle assembly, combined with an X-axis reciprocating device and a Z-axis feeding device, the diamond wafer adsorbed on the top of the polishing disc assembly is subjected to rough grinding, reducing the surface roughness of the diamond wafer to between Ra0.05 and Ra0.03

Replacing the porous ceramic-based diamond grinding wheel on the hollow rotary spindle assembly with a resin-based diamond grinding wheel, and then performing the first precision grinding on the diamond wafer, reducing the surface roughness of the diamond wafer to between Ra0.01 and Ra0.005

Replacing the resin-based diamond grinding wheel on the hollow rotary spindle assembly with a chemical reaction grinding wheel, and then performing the second precision grinding on the diamond wafer, reducing the surface roughness of the diamond wafer to between Ra0.005 and Ra0.003, thereby completing the grinding process of the diamond wafer

The human-machine interaction and control module commands the Z-axis feeding device to elevate the hollow rotary spindle assembly, facilitating the replacement of the chemical reaction grinding wheel with a polishing pad assembly, a diamond abrasive polishing fluid is then introduced into the liquid dispensing tube within the hollow rotary spindle assembly, enabling the coarse polishing of the diamond wafer, this process reduces the surface roughness of the diamond wafer to a range between Ra0.002 and Ra0.001

Replacing the diamond abrasive polishing fluid in the liquid dispensing tube with alumina abrasive polishing fluid, and then performing the first precision polishing on the diamond wafer, reducing the surface roughness of the diamond wafer to between Ra0.001 and Ra0.0005

Replacing the alumina abrasive polishing fluid in the liquid dispensing tube with titanium dioxide abrasive polishing fluid, and then performing the second precision polishing on the diamond wafer, removing residual scratches and adsorbed substances from the surface of the diamond wafer, ultimately yielding the finished diamond wafer

21: 2025/03073. 22: 2025/04/11. 43: 2025/05/26

51: B05B

71: Anhui Technical College of Mechanical and Electrical Engineering

72: SHEN, Yechao, ZHANG, Yuheng, HOU, Wenlong, ZHU, Min, LIN, Shunshun, ZHANG, Jiayi, LIU, Xiang, YUE, Xingchen

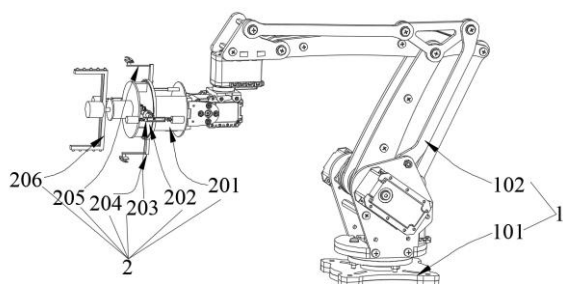
33: CN 31: 202410558137.2 32: 2024-05-08

#### **54: COOPERATIVE PROCESSING ROBOT FOR WELDING SURFACE OF WELDED PARTS**

00: -

The present application discloses a welding surface collaborative processing robot for welding parts, which relates to the field of surface processing technology, and includes: a robot body, the robot body includes a machine base arranged at the bottom thereof and a mechanical arm installed on the top of the machine base, and includes: a surface processing unit, the surface processing unit is arranged at the front end of the mechanical arm, the surface processing unit includes a cylindrical frame, and the cylindrical frame is fixedly connected to the side of the mechanical arm. The scraper is transferred to the bottom end of the pipe part processed by the cylindrical roller, and the movable telescopic part 2 is coordinated with the movement

of the sliding rod along the circular rail to make the scraper fit and scrape the inner wall of the pipe, and after the scraper moves along the inner wall of the pipe for half a circle, the excess paint on the inner wall of the pipe is scraped into the bottom end of the scraping cavity by the scraper, and the scraper cavity moves from the bottom end of the pipe to the top end of the pipe as the driven part moves, which will reduce the situation of scraping paint flipping and leakage caused by the existing scraper rotating one circle.



21: 2025/03277. 22: 2025/04/17. 43: 2025/05/26  
51: B23K

71: China Construction Sixth Engineering Division Co., Ltd.

72: Wang Li, Wang Haifeng, Xu Hao, Lin Lei, Cai Junbao, Xu Xincheng, Song Fei, Zhang Fengli, Wu Minling, Sui Qiuyue

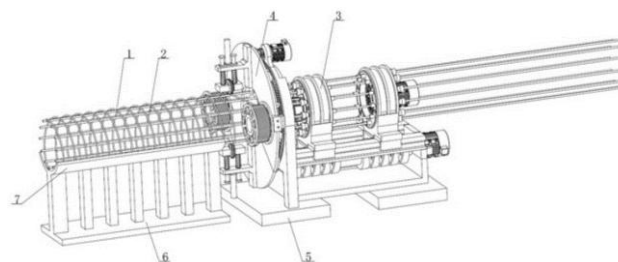
33: CN 31: 2024113252127 32: 2024-09-23

#### **54: WELDING DEVICE OF REINFORCEMENT CAGES FOR CONSTRUCTION**

00: -

The present invention provides a welding device of reinforcement cages for construction, falling within the technical field of welding apparatuses of reinforcing cages. Platforms are arranged with a continuous feeding mechanism and a welding mechanism, main bars are evenly interspersed on the continuous feeding mechanism and the welding mechanism along a circumferential direction, the continuous feeding mechanism continuously transports a plurality of main bars to the welding mechanism at the same time, and the welding mechanism welds an annular stirrup with each main bar to form a reinforcing cage. In the present invention, when a first clamping feeding unit clamps the plurality of main bars and transports forward, a second clamping feeding unit loosens the plurality of main bars and moves backward; when the first clamping feeding unit loosens the plurality of main

bars and moves backward, the second clamping feeding unit clamps the main bars and transports forward, the first clamping feeding unit and the second clamping feeding unit can transport the plurality of main bars continuously in turn, thereby achieving the objective of rapidly transporting the main bars. At the same time, by adopting a resistance welding method, a firm welding spot is formed at a joint of the annular stirrup and the main bar, which can improve the production efficiency of forming and welding of the reinforcing cage.



21: 2025/03320. 22: 2025/04/17. 43: 2025/05/26  
51: G06Q

71: CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, CHECC DATA CO., LTD.

72: SHENG, Mengya, HOU, Yun, DONG, Yuanshuai, SONG, Hongxia, WANG, Hui, LI, Wang, HU, Lin, CAO, Xiangdong

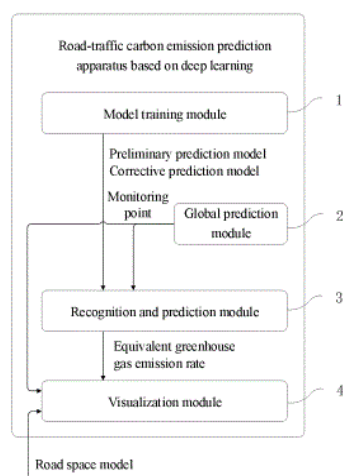
33: CN 31: 202311719331.6 32: 2023-12-14

#### **54: ROAD-TRAFFIC CARBON EMISSION PREDICTION METHOD AND APPARATUS BASED ON DEEP LEARNING**

00: -

The present application relates to the field of traffic environment monitoring. Disclosed are a road-traffic carbon emission prediction method and apparatus based on deep learning. The method in the present application comprises: using contour features and traveling speeds of vehicles as an input layer and using the types of the vehicles and emission rates of a greenhouse gas equivalent as an output layer, and training a preliminary prediction model until same is converged, using measured emission concentrations of various types of exhausts as an input layer and using the emission rates of a greenhouse gas equivalent of the vehicles as an output layer, training a corrective prediction model until same is converged; setting a monitoring point on a road; at the monitoring point, acquiring the contour feature and travelling speed of a vehicle passing by, and the

emission concentrations of various types of exhausts; inputting, into the preliminary prediction model and the corrected prediction model prediction model, the contour feature and traveling speed of the vehicle passing by, and the emission concentrations of various types of exhausts, so as to obtain the emission rate of a greenhouse gas equivalent of the vehicle passing by. The present invention improves the accuracy of carbon emission prediction.

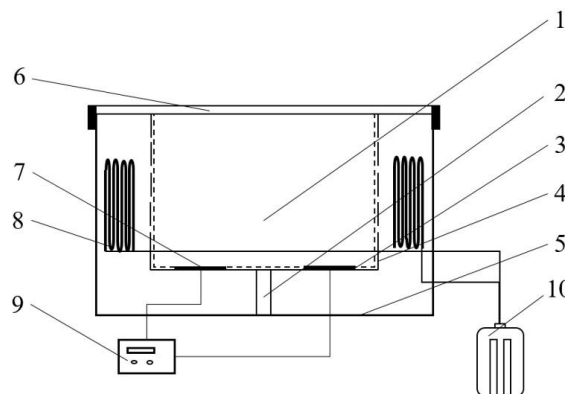


21: 2025/03359. 22: 2025/04/17. 43: 2025/05/26  
 51: B22C; B22D; B33Y  
 71: NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS  
 72: YANG, Haoqin, SHAN, Zhongde, SHI, Jianpei  
 33: CN 31: 202211377138.4 32: 2022-11-04  
**54: MULTI-PATH INTERNALLY-MICROPOROUS EFFICIENT REFRIGERATION METHOD AND DEVICE FOR FROZEN SAND MOLD**

00: -

A multi-path internally-microporous efficient refrigeration method and device for a frozen sand mold. The device comprises a frozen sand mold forming chamber (1), an electric lifting platform (2), a Teflon porous liner (3), a removable porous aluminum plate (4), a frozen sand mold refrigeration device box (5), a sealing cover plate (6), an ultrasonic piezoelectric plate (7), a U-shaped condensing tube (8), an ultrasonic generator (9), and a low-temperature refrigeration system (10), wherein the Teflon porous liner (3) and the removable porous aluminum plate (4) are provided with through hole structures with the same size and shape, and are configured for rapid cooling from a surface to a core

of molding sand. By activating the electric lifting platform (2), the Teflon porous liner (3) rises to the highest point for ease of demolding. The ultrasonic piezoelectric plate (7) with a high-low frequency dual mode can be used not only to vibrate and compact the frozen sand mold, but also to assist cutting and forming. The device can realize quick freezing, easy demolding and low-cost digital forming of a frozen sand mold.



21: 2025/03360. 22: 2025/04/21. 43: 2025/05/26  
 51: G01S

71: CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, CHECC DATA CO., LTD.

72: XIN, Guangtao, DONG, Yuanshuai, ZHANG, Yan, SHAO, Qiushi, ZHANG, Xingzu, ZHANG, Peng, LI, Wang

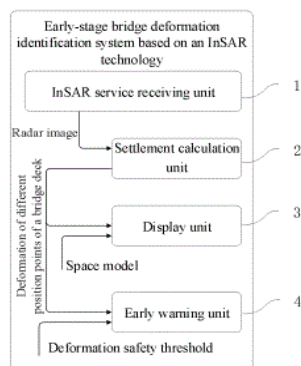
33: CN 31: 202311663193.4 32: 2023-12-06

**54: EARLY-STAGE BRIDGE DEFORMATION IDENTIFICATION METHOD AND SYSTEM BASED ON INSAR TECHNOLOGY**

00: -

The present application relates to the technical field of remote sensing monitoring. Disclosed are an early-stage bridge deformation identification method and system based on InSAR technology. The present application comprises: performing interference contrast on radar maps of a bridge deck that are acquired at different collection moments, so as to obtain radar interferograms of the bridge deck at the different collection moments compared with an initial collection moment, obtaining settlement measurements of different position points of the bridge deck at the different collection moments; on the basis of a horizontal relative positional relationship between the bridge deck and bridge piers and the settlement measurement of the

different position points of the bridge deck at the different collection moments, obtaining historical settlement amounts of different position points of support faces and suspended faces of the bridge deck; and on the basis of the horizontal relative positional relationship between the bridge deck and the bridge piers and the historical settlement amounts of the different position points of the support faces and the suspended faces of the bridge deck, obtaining historical settlement amounts, which are caused by uneven settlement, of the different position points of the bridge deck to serve as the deformations of the different position points of the bridge deck. The present application improves the accuracy of early-stage bridge deformation determination.



21: 2025/03410. 22: 2025/04/23. 43: 2025/05/26

51: B01F; B09B

71: THE SECOND CONSTRUCTION CO., LTD OF CHINA CONSTRUCTION THIRD ENGINEERING BUREAU

72: TANG, Bibo, ZHANG, Yongqing, LIU, Gaojie, LI, Di, ZHAO, Yang, LIU, Bingsheng, ZHANG, Liangpeng, XIA, Anyuan, CAO, Xiaofei, DAI, Lei, LU, Yang, CHENG, Yuwen

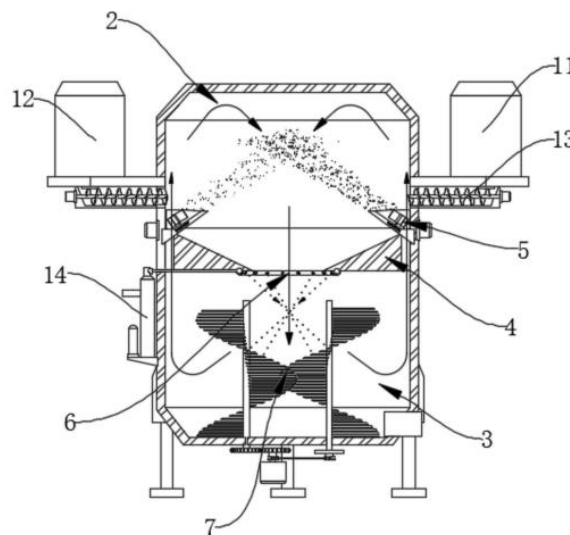
33: CN 31: 202410717287.3 32: 2024-06-04

#### **54: SOLIDIFICATION TREATMENT DEVICE FOR FLY ASH**

00: -

A solidification treatment device for fly ash is provided, including: a mixing and stirring tank, a first feeding pipe, a second feeding pipe and a liquid medicine adding assembly being disposed on the mixing and stirring tank; a separating member, the separating member being fixedly disposed on an inner wall of the mixing and stirring tank, and the separating member separating the mixing and

stirring tank into a diffusion portion and a stirring portion which are distributed up and down. Two groups of raised dust assemblies are symmetrically disposed in the diffusion portion, conveying units are disposed at bottoms of the first feeding pipe and the second feeding pipe, the conveying units are used for conveying powder to the raised dust assemblies. When the solidification treatment device for fly ash provided by the present disclosure is in use, the fly ash and cement can be fed into the mixing and stirring tank through the first feeding pipe and the second feeding pipe. Under the output of the conveying units, the fly ash and cement enter into the raised dust assemblies at an even speed, and then the two kinds of powder can be raised and diffused into the diffusion portion through the raised dust assemblies. During raising, the two kinds of powder collide and interact with each other in the air, achieving the effect of being mixed evenly and quickly, and then the two kinds of powder fall into the stirring portion. The water and chemicals are added through a spraying pipe.



21: 2025/03494. 22: 2025/04/24. 43: 2025/05/26

51: G05D

71: HUBEI HONGYU SPECIAL AUTOMOBILE CO., LTD.

72: LUO, Hao, LIU, Wuzhou

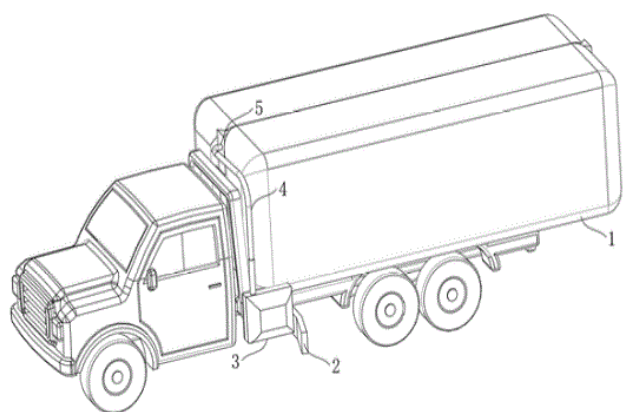
33: CN 31: 202410386403.8 32: 2024-04-01

#### **54: ADAPTIVE DUST COLLECTION CONTROL SYSTEM AND APPLICATION FOR VACUUM SWEEPER**

00: -



The present application provides an adaptive dust collection control system and application for a vacuum sweeper. The adaptive dust collection control system for a vacuum sweeper includes: a. an environment mapping module including a multidimensional sensing technology and a real-time modeling algorithm, and configured to analyze a dust concentration and a particle size, and construct a three-dimensional (3D) model of a working environment; b. a dynamic programming (DP) module connected to the environment mapping module, and configured to compute a dust collection path and a suction parameter, and generate a dust collection strategy; and c. a particle control module connected to the DP module, and configured to perform localized adsorption or repulsion on a dust particle in a specific region.



21: 2025/03552. 22: 2025/04/25. 43: 2025/05/26  
51: B01F

71: SRAVATHI ADVANCE PROCESS  
TECHNOLOGIES PRIVATE LIMITED

72: SOURI, Sreeramagiri Venkata Shanmukha,  
SOHEL, Chungikar Abbas, SIVAKUMAR,  
Sreeramagiri, SAMIR, Anapat

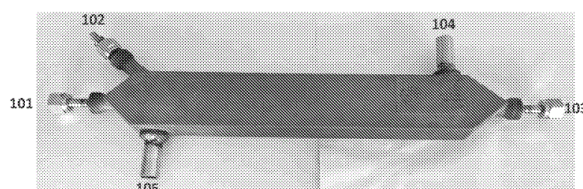
33: IN 31: 202241056411 32: 2022-09-30

#### **54: METHOD AND APPARATUS FOR PASSIVE MIXING OF MULTIPHASE FLOW**

00: -

Method and Apparatus for passive mixing of a multiphase flow or hydrodynamic performance that is housing a conduit/tube, which is a channel extending internally from the fluid inlet to the outlet ports, comprising axially stacked plurality of static mixers possessing structural elements or mixing elements (possessing structural elements on their inner walls), that are responsible for continuous splitting, and

combining of the flow through the conduit, bringing about enhanced mixing of the contents of the flow, mass-transfer, and heat transfer. The structural elements bring about an enhanced mixing of multi-phasic systems passing through the conduit such as liquid-liquid, liquid-gas-liquid, and systems comprising immiscible and viscous liquids. The mixing elements or structural elements are responsible for splitting of flow into sections of multiple streams, followed by forced recombination of the multiple streams which is responsible for the equitable dispersion of individual components of multiphase flow, thereby enhancing mixing of flow.



21: 2025/03553. 22: 2025/04/25. 43: 2025/05/26  
51: B01F

71: SRAVATHI ADVANCE PROCESS  
TECHNOLOGIES PRIVATE LIMITED

72: SOURI, Sreeramagiri Venkata Shanmukha,  
SOHEL, Chungikar Abbas, SIVAKUMAR,  
Sreeramagiri, SAMIR, Anapat

33: IN 31: 202241056441 32: 2022-10-01

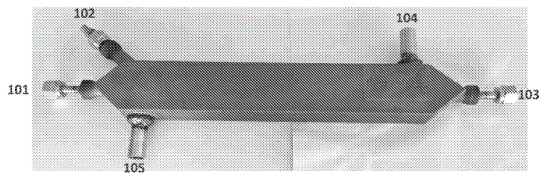
#### **54: APPARATUS FOR PASSIVE MIXING OF MULTIPHASE FLOW**

00: -

The invention discloses an apparatus for passive mixing of a multi-phase flow or hydrodynamic performance that is housing a conduit/tube, which is a channel extending internally from the fluid inlet to the outlet ports, comprising stacked plurality of static mixers possessing structural elements or mixing elements, that are responsible for splitting, twisting and combining of the flow through the conduit, bringing about enhanced mixing of the contents of the flow. The twisting effect offered by the structural elements brings about an enhanced mixing of the multi-phasic systems passing through the conduit such as liquid-liquid, liquid-gasliquid, and also systems comprising immiscible and viscous liquids. The conduit comprises of a plurality of axially stacked static mixers across the length of the conduit that can allow the fluid to pass through them continuously experiencing splitting and twisting



effects resulting in improved mixing, mass-transfer, and heat transfer.



21: 2025/03560. 22: 2025/04/25. 43: 2025/05/26

51: E21D; E21F

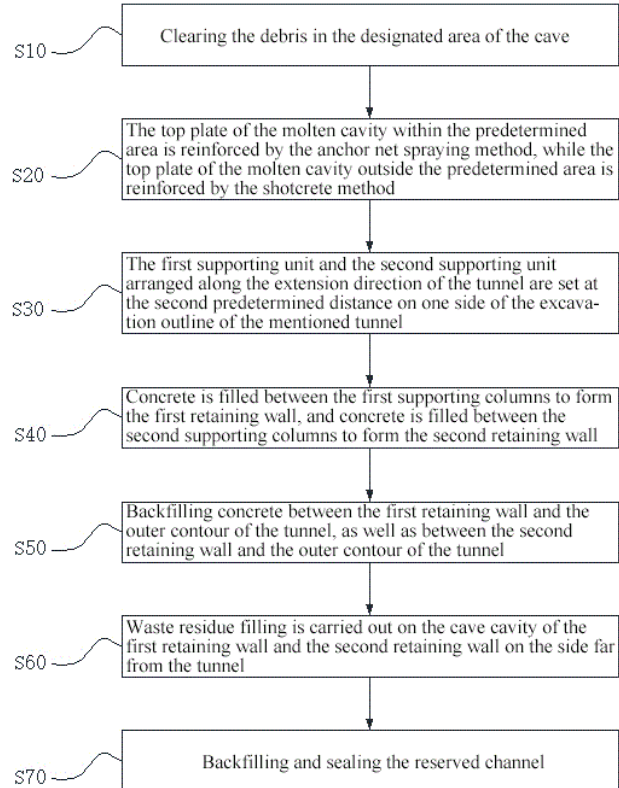
71: CHINA TIESIJU CIVIL ENGINEERING GROUP NO. 2 ENGINEERING CO., LTD., CHINA TIESIJU CIVIL ENGINEERING GROUP CO., LTD.

72: Bo Xu, Zhongchao Yang, Wei Wang, Bo Peng, Peng Di, Yuan Meng, Zhengjia Zou, Mingjian Liu, Jinguo Xu, Huquan Zhang, Lei Chen, Jinzhong Shi  
33: CN 31: 202211081273.4 32: 2022-09-05

#### **54: TREATMENT METHOD FOR SUPER-LARGE KARST CAVE CAVITY BEHIND TUNNEL WALL**

00: -

Disclosed is a treatment method for a super-large karst cave cavity behind a tunnel wall. The treatment method comprises the following steps: cleaning loose debris in a predetermined area of a karst cave; performing reinforcing treatment on a karst cave cavity top plate in the predetermined area in a bolting-mesh shotcreting mode, and performing reinforcing treatment on karst cave cavity top plates outside the predetermined area in a concrete spraying mode; providing at a second predetermined distance on one side of a tunnel excavation contour a first support unit and a second support unit; filling concrete between first support columns to form a first guard wall, and filling concrete between second support columns to form a second guard wall; backfilling concrete between the first guard wall and the outer contour of the tunnel and between the second guard wall and the outer contour of the tunnel; performing waste debris backfilling on karst cave cavities on the side of the first guard wall and the second guard wall away from the tunnel; and backfilling and sealing a reserved channel. The treatment method for a super-large karst cave cavity behind a tunnel wall provided in the present description can effectively ensure the construction safety while not affecting the normal construction progress of the tunnel.



21: 2025/03641. 22: 2025/04/29. 43: 2025/05/26

51: G06Q

71: BEIHANG UNIVERSITY

72: HOU, Yi, HAN, Longzhu, XIE, Yongqi

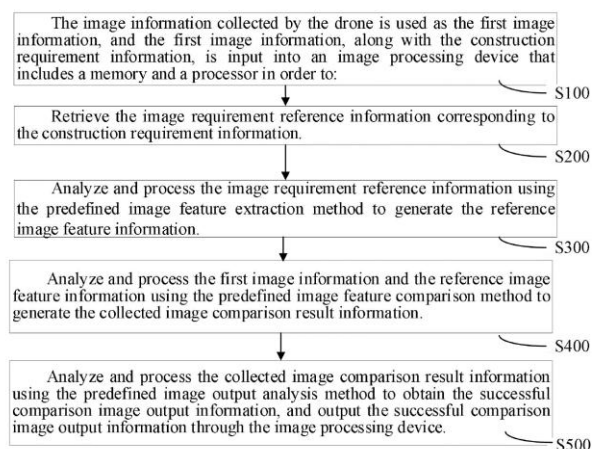
33: CN 31: 202311287726.3 32: 2023-10-07

#### **54: IMAGE PROCESSING METHOD AND SYSTEM FOR REMOTE-SENSING UNMANNED AERIAL VEHICLE FOR INTELLIGENT TRANSPORTATION CONSTRUCTION DATA COLLECTION**

00: -

The present application relates to the technical field of transportation construction, and relates to an image processing method and system for a remote-sensing unmanned aerial vehicle for intelligent transportation construction data collection. The method comprises: acquiring first image information and construction requirement information; on the basis of the construction requirement information, retrieving image requirement benchmark information corresponding to the construction requirement information; on the basis of a preset image feature extraction method, performing analysis processing on the image requirement benchmark information, so as to form benchmark image feature information; on the basis of a preset image feature comparison method, performing analysis processing

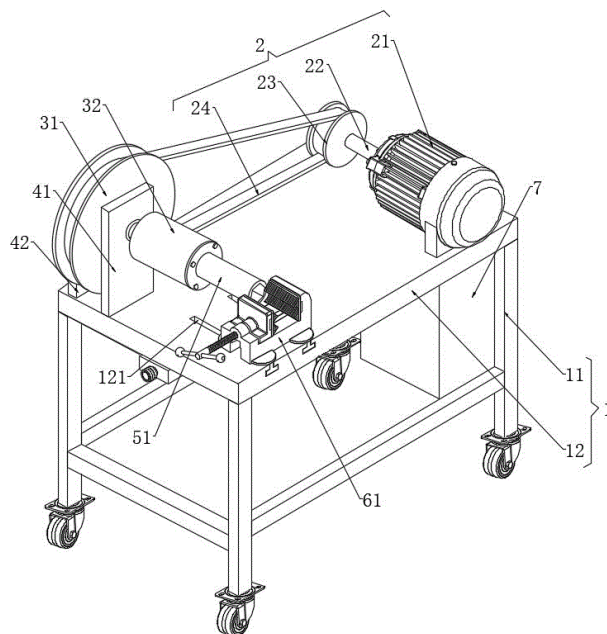
on image information collected by an unmanned aerial vehicle and the benchmark image feature information, so as to form collected-image comparison result information; and on the basis of a preset image output analysis method, performing analysis processing on the collected-image comparison result information, so as to output successfully-compared image output information. The present application has the effect of facilitating the subsequent rapid analysis of images collected by a remote-sensing unmanned aerial vehicle.



21: 2025/03826. 22: 2025/05/06. 43: 2025/05/26  
 51: B23P  
 71: CHINA CONSTRUCTION SIXTH ENGINEERING BUREAU FIFTH CONSTRUCTION CO., LTD  
 72: LIU Wei, GUAN Chunlei, CHEN Ke, ZHANG Zhaohuan, MA Chunlei  
 33: CN 31: 2024105894076 32: 2024-05-13  
**54: FASTENER CONNECTOR DISASSEMBLY DEVICE AND CONTROL METHOD THEREFOR**  
 00: -

Disclosed are a fastener connector disassembly device and a control method therefor, falling within the technical field of building machinery. The device includes a first support portion; a drive portion, arranged on the first support portion; a driven portion, connected to the drive portion; a second support portion, used for supporting the driven portion and driving the driven portion to rotatably connect to the second support portion under the driving of the drive portion; a disassembly portion, with one end detachably connected to the driven portion, and the other end matched with a screw or a

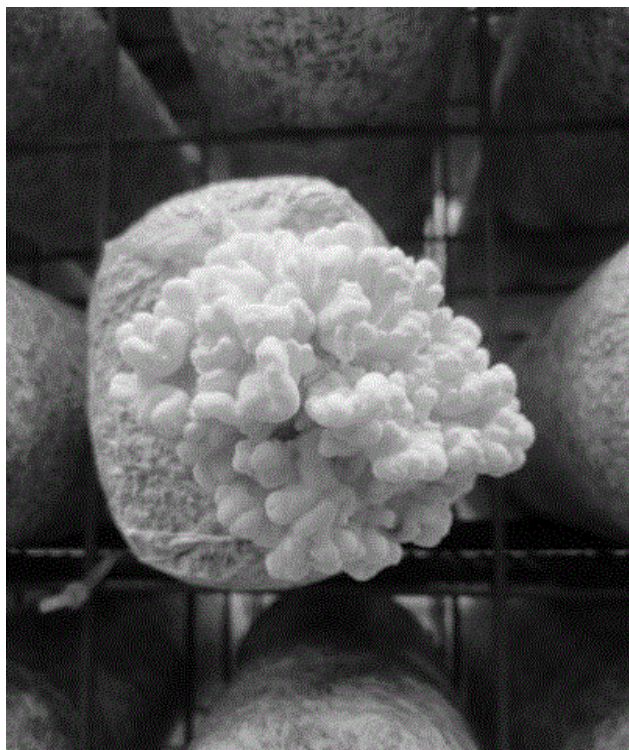
nut; and a clamping portion, slidably arranged on the first support portion, located at the other end of the disassembly portion, used for clamping a fastener connector to match with the disassembly portion, and a rust removing portion being arranged on the clamping portion. According to the present invention, the disassembly of fastener screws and nuts is realized, while facilitating the rust removal, saving both time and labor, and saving costs.



21: 2025/03865. 22: 2025/05/07. 43: 2025/05/26  
 51: A01G; C12N  
 71: Jilin Agricultural University, Heilongjiang heizhen biotechnology co., ltd  
 72: LI Xiao, ZHANG Bo, YIN Minghe  
 33: CN 31: 2023113635666 32: 2023-10-19  
**54: ALBINO MUTANT STRAIN WHITE BRAIN FUNGUS OF AURICULARIA POLYTRICHA AND ARTIFICIAL CULTIVATION METHOD THEREFOR**  
 00: -

The present application discloses an albino mutant strain white brain fungus of *Auricularia polytricha* and an artificial cultivation method therefor. The albino mutant strain white brain fungus of *Auricularia polytricha* is *Auricularia cornea* HZSW-Y7, and is deposited in the China General Microbiological Culture Collection Center on 12 June 2023, with the deposit number CGMCC NO. 40663. The present application provides a new albino mutant strain HZSW-Y7 of *Auricularia polytricha*, and achieves artificial cultivation of the edible fungus, enriching its

market variety supply, and achieving high economic benefits and social benefits.



21: 2025/03967. 22: 2025/05/09. 43: 2025/05/26

51: B63B

71: CURCIO, Mario

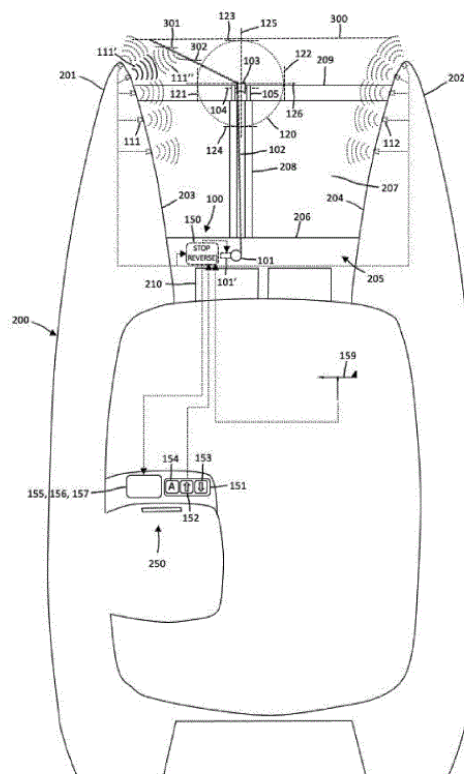
72: CURCIO, Mario

33: EP 31: 22020534.8 32: 2022-11-06

#### **54: ANCHOR DEPLOYMENT AND RETRIEVAL SYSTEM FOR CATAMARANS**

00: -

Disclosed is an anchor deployment and retrieval system for a catamaran comprising a windlass, an anchor chain connected to an anchor, a chain roller for rolling the anchor chain when operating the windlass for deploying or retrieving the anchor, a plurality of proximity sensors arranged such as to determine whether, at a predetermined height above water line, the anchor chain is within or outside of an allowed range, while the anchor chain is deployed or retrieved, and a controller configured to automatically pause operation of the windlass at least during anchor retrieval if the anchor chain is determined to be outside of the allowed range and to continue or resume operation if the anchor chain is determined to be or to be returned within the allowed range. A respective automated method of deploying and/or retrieving an anchor is also disclosed.





algal microrobot; co-culturing the magnetically controlled algal microrobot with human bone marrow mesenchymal stem cells and fibroblasts, allowing the cells to be combined onto the magnetically controlled algal microrobot, resulting in a cell-loaded magnetically controlled algal microrobot. The magnetically controlled algal microrobot prepared by this invention has excellent degradability and mechanical properties, and can be navigated and positioned through magnetic field manipulation to achieve cell-targeted delivery.

#### Cell Pre-treatment:

The cells are treated with a 2.5% glutaraldehyde solution at 4°C for half an hour. Afterward, they are rinsed three times with distilled water and then further processed with phosphate-buffered saline (PBS).

#### Dispersing Fe<sub>3</sub>O<sub>4</sub>NPs:

Fe<sub>3</sub>O<sub>4</sub> nanoparticles (Fe<sub>3</sub>O<sub>4</sub>NPs) are dispersed in the culture medium containing algal cells. Uniform distribution is achieved through stirring or ultrasonic treatment. The interaction between the magnetic nanoparticles and the algal cells causes the particles to bind with the cells.

#### Loading Cells onto Magnetically Controlled Algal Microrobots:

The magnetically controlled algal microrobots are mixed with a solution of human bone marrow mesenchymal stem cells (MSCs) and MC3T3-E1 fibroblasts in the culture medium. Under the influence of the magnetic material, the cells will adhere to the surface of the microrobots via electrostatic interaction.

Determining location and orientation of a hand-held surgical tool is provided. One embodiment captures image data that includes images of a first detectable target on the hand-held surgical tool and a second detectable target on a patient. Location and orientation of the first detectable target in a 3D space is determined based on the image data. Current location and orientation of the hand-held surgical tool in the 3D space determined based on the determined location and orientation of the first detectable target and based on retrieved model data representing the hand-held surgical tool. Location of the second detectable target in the 3D space is determined based on the image data. Then, a location of the patient's tissue in the 3D space relative to the location and orientation of the hand-held surgical tool is determined based on the determined location of the patient's second detectable target.

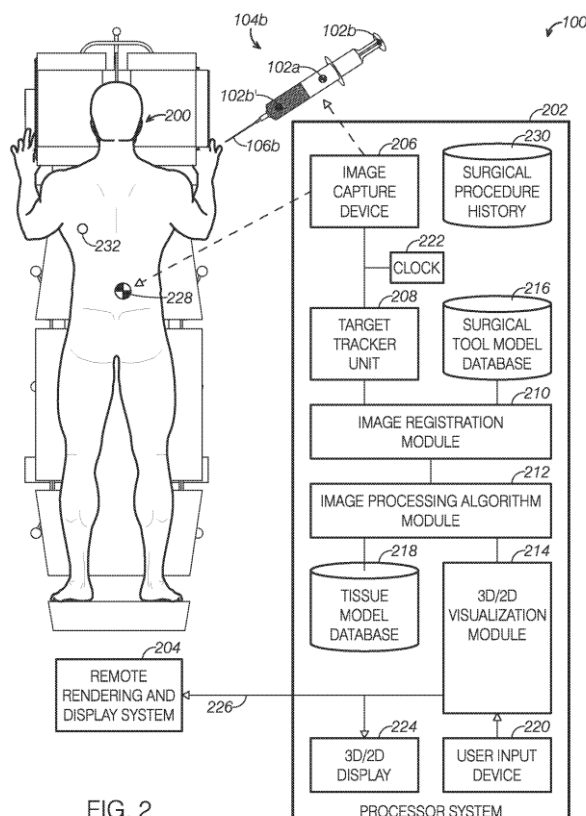


FIG. 2

21: 2025/04055. 22: 2025/05/13. 43: 2025/05/26

51: A61B

71: VERDURE IMAGING, INC.

72: SCHLENGER, Christopher, UNGI, Tamas

**54: APPARATUS AND METHOD FOR TRACKING HAND-HELD SURGICAL TOOLS**

00: -

21: 2025/04133. 22: 2025/05/15. 43: 2025/05/26

51: B01F

71: SRAVATHI ADVANCE PROCESS TECHNOLOGIES PRIVATE LIMITED

72: SOHEL, Chungikar Abbas, SOURI, Sreeramagiri Venkata Shanmukha, SIVAKUMAR, Sreeramagiri, SAMIR, Anapat

33: IN 31: 202241060634 32: 2022-10-23

**54: APPARATUS FOR PASSIVE MIXING OF MULTIPHASE FLOW THROUGH SPLITTING**

00: -

Apparatus for passive mixing of a multi-phase (ic) flow or hydrodynamic performance that is housing a conduit/tube, which is a channel extending internally from the fluid inlet to the outlet ports, comprising axially stacked plurality of static mixers possessing structural elements or mixing elements (possessing structural elements on their inner walls), that are responsible for continuous splitting, and combining of the flow through the conduit, bringing about enhanced mixing of contents of the flow, mass-transfer, and heat transfer. The structural elements bring about enhanced mixing of multi-phasic systems passing through the conduit such as liquid-liquid, liquid-gas-liquid, and systems comprising immiscible and viscous liquids. The mixing elements or structural elements are responsible for splitting of flow into sections of multiple streams, followed by forced recombination of the multiple streams which is responsible for the equitable dispersion of individual components of the multiphase flow, thereby enhancing the mixing of the flow.



21: 2025/04282. 22: 2025/05/20. 43: 2025/05/26

51: E04G

71: CHINA CONSTRUCTION THIRD ENGINEERING BUREAU (SHENZHEN) CO., LTD  
72: ZHAN, Yi, CHEN, Deyang, WANG, Zhe, XIONG Haowen, DENG, Yuangang, HE, Lingbo, MEI, Haohua, LI, Jiwei

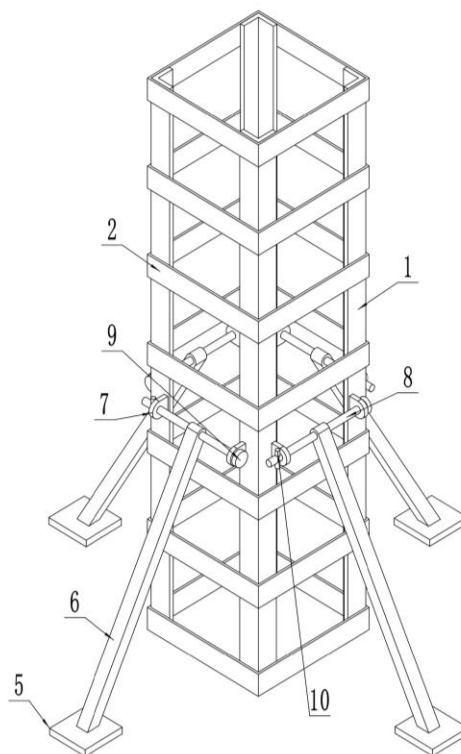
33: CN 31: 202421661759X 32: 2024-07-15

**54: TEMPORARY REINFORCEMENT DEVICE FOR BRICK MASONRY COLUMN OF HISTORICAL BUILDING**

00: -

The utility model discloses a temporary reinforcement device for a brick masonry column of a historical building, which belongs to the technical

field of building engineering. The device includes angle steel, where the angle steel is four in number, inner side faces of the four pieces of angle steel are in fitting contact with four corners of a brick masonry column respectively, a plurality of binding belts are arranged on outer side faces of the four pieces of angle steel in a length direction and are configured to fix the angle steel onto the brick masonry column, rubber pads are arranged between the binding belts and four surfaces of the brick masonry column and completely cover the surfaces of the brick masonry column, and two side faces of the rubber pads are in tight contact with the binding belts and the surfaces of the brick masonry column respectively. This technical solution is used to protect and reinforce the brick masonry column of an ancient building during construction.



21: 2025/04698. 22: 2025/06/02. 43: 2025/06/13

51: G06Q; G06N

71: NANJING NORMAL UNIVERSITY

72: YANG, Yun

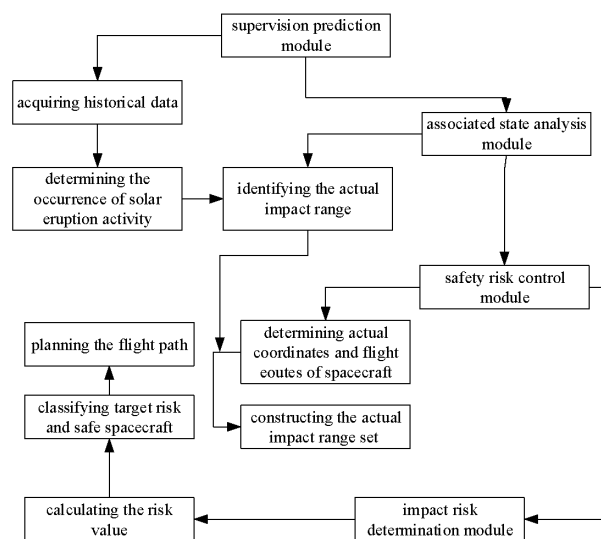
33: CN 31: 2024109956438 32: 2024-07-24

**54: A SOLAR ERUPTION ACTIVITY PREDICTION AND ANALYSIS SYSTEM BASED ON MACHINE LEARNING**

00: -



The present invention relates to a solar eruption activity prediction and analysis system based on machine learning. The system comprises a supervision prediction module, an associated state analysis module, and an impact risk determination module. By training a machine learning model with historical solar data, the system predicts the time, location, and intensity of solar eruption activities. The associated state analysis module determines the corresponding impact range in both space and Earth environments. Based on the predicted impact range, affected spacecraft are identified, enabling flight path re-planning to ensure safe navigation and avoid hazardous zones. The system provides auxiliary decision-making for the secure operation of space equipment. Additionally, by evaluating the impact of solar eruption activities on the Earth environment, the system offers early warning capabilities for potential terrestrial risks. This solution enhances the responsiveness and safety of both spaceborne and ground-based systems facing solar eruption threats.



## HYPOTHECATIONS

No records available

## JUDGMENTS

No records available

## OFFICE PRACTICE NOTICES

The notice of acceptance of South African Patent Application No. **2024/02505**, in the name of **Smith & Loveless Inc**, was erroneously published in the Patent Journal of **18 December 2024**. Therefore, its publication in the Patent Journal of 18 December 2024 is **null and void**.

**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. **2024/02505**, in the name of **Smith & Loveless Inc**, by deleting the following entries:

- (a) 14/10/2024 Application accepted on 14/10/2024
- (b) 19/12/2024– Patent granted on 18/12/2024
- (c) 19/12/2024- Patent advertised on 18/12/2024

## 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 2025/05/24 -

A2025/00602 - SWATCH AG (SWATCH SA) (SWATCH LTD.) Class 10. WATCH CASE

A2025/00601 - SWATCH AG (SWATCH SA) (SWATCH LTD.) Class 10. WRISTWATCH

- APPLIED ON 2025/05/27 -

A2025/00612 - FAAC S.P.A. Class 14. WIRELESS REMOTE CONTROL

A2025/00603 - RAM PRECISION MOULDING (PTY) LTD Class 12. ADVERTISEMENT PANEL FOR A SHOPPING CART HANDLE

A2025/00606 - Stolle Machinery Company, LLC Class 9. CAN ENDS

F2025/00613 - ULRICH SEATS (PTY) LTD. Class 8. CLAMP

A2025/00611 - FAAC S.P.A. Class 14. WIRELESS REMOTE CONTROL

F2025/00610 - REZANT, Delicia Class 9. MULTI-FUNCTIONAL CONTAINER

A2025/00609 - REZANT, Delicia Class 9. MULTI-FUNCTIONAL CONTAINER

A2025/00604 - RAM PRECISION MOULDING (PTY) LTD Class 12. ADVERTISEMENT PANEL FOR A SHOPPING CART HANDLE

A2025/00607 - Stolle Machinery Company, LLC Class 9. CAN ENDS

A2025/00608 - Stolle Machinery Company, LLC Class 9. CAN ENDS

A2025/00605 - RAM PRECISION MOULDING (PTY) LTD Class 12. ADVERTISEMENT PANEL FOR A SHOPPING CART HANDLE

- APPLIED ON 2025/05/28 -

F2025/00617 - V G IDEAS (PTY) LTD Class 06. SHELF

A2025/00614 - Jura Elektroapparate AG Class 07. COFFEE MACHINES

A2025/00619 - BAJAJ AUTO LIMITED Class 12. AUTOMOTIVE VEHICLE

A2025/00618 - POWERUP FUEL CELLS OÜ Class 13. FUEL CELL APPARATUS

A2025/00622 - BAJAJ AUTO LIMITED Class 12. THREE WHEELED VEHICLE

A2025/00621 - BAJAJ AUTO LIMITED Class 12. THREE WHEELED VEHICLE

A2025/00620 - BAJAJ AUTO LIMITED Class 12. THREE WHEELED VEHICLE

A2025/00616 - Jura Elektroapparate AG Class 07. COFFEE MACHINES

A2025/00615 - LVMH Swiss Manufactures SA Class 10. WATCHES

- APPLIED ON 2025/05/29 -

F2025/00624 - Polytech Inc Class 6. MATTRESS CORE

F2025/00623 - LHL GROUP (PTY) LTD Class 09. LEAK-RESISTANT BEVERAGE CUP LID WITH PRESSURE-ACTIVATED VALVE

- APPLIED ON 2025/05/30 -

F2025/00626 - Saadick Choonara Class 04. ACU (ADJUSTABLE CLEANING UTENSIL)

A2025/00628 - PETRUS HENDRIK ROODT Class 26. ILLUMINATION DEVICE

A2025/00625 - BONNIE BRAAI (PTY) LTD Class 07. COOKING APPARATUS

F2025/00627 - BONNIE BRAAI (PTY) LTD Class 07. COOKING APPARATUS

- APPLIED ON 2025/06/02 -

F2025/00629 - ASHLEIGH CADDICK Class 09. REFRESHMENT CONTAINER

F2025/00630 - TIMMDEK (PTY) LTD Class 25. CLIP SYSTEM

- APPLIED ON 2025/06/03 -

A2025/00632 - HS PRODUKT D.O.O. Class 22. PISTOL

A2025/00631 - HS PRODUKT D.O.O. Class 22. PISTOL

- APPLIED ON 2025/06/04 -

A2025/00641 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00636 - YETI COOLERS, LLC Class 7. STRAW

A2025/00634 - Henkel AG & Co. KGaA Class 23. TOILET CLEANING PRODUCTS

A2025/00637 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00638 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00643 - AP Precision Metals, Inc. Class 25. SECURITY PARTITION

A2025/00633 - Chery Automobile Co., Ltd. Class 12. AUTOMOBILES

A2025/00635 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00642 - AP Precision Metals, Inc. Class 25. SECURITY PARTITION



A2025/00639 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00640 - YETI COOLERS, LLC Class 7. TUMBLER

- APPLIED ON 2025/06/05 -

A2025/00675 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00676 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00677 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00680 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00681 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00682 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00683 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00684 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00685 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00686 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00691 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00647 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00649 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00651 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00654 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00655 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00658 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00659 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00660 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00661 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00662 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00672 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00673 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00644 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00648 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00646 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00650 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00653 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00663 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00664 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00671 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00656 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00668 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00645 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00652 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00657 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00669 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00674 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00678 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00679 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00687 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00688 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00689 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00690 - YETI COOLERS, LLC Class 7. TUMBLER

A2025/00665 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00666 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00667 - Huawei Technologies Co., Ltd. Class 14. MOBILE PHONES

A2025/00670 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

. - APPLIED ON 2025/06/06 -

A2025/00694 - OMNI UNITED (S) PTE. LTD. Class 12. TYRE

F2025/00695 - OMNI UNITED (S) PTE. LTD. Class 12. TYRE

A2025/00696 - WORXSAFE AB Class 25. HOLDER FOR A FENCE

A2025/00698 - BOSE CORPORATION Class 14. EAR TIP

A2025/00692 - Chery Automobile Co., Ltd. Class 12. AUTOMOBILES

A2025/00693 - Chery Automobile Co., Ltd. Class 12. AUTOMOBILES

F2025/00700 - OMNI UNITED (S) PTE. LTD. Class 12. TYRE

A2025/00697 - OMEGA SA (OMEGA AG) (OMEGA LTD.) Class 10. WRIST WATCH STRAP

A2025/00699 - OMNI UNITED (S) PTE. LTD. Class 12. TYRE

. - APPLIED ON 2025/06/09 -

F2025/00702 - OCEANSIDE TRADING 644 (PTY) LTD Class 25. TRESPASS DETERRENT MAT

F2025/00703 - OCEANSIDE TRADING 644 (PTY) LTD Class 25. TRESPASS DETERRENT MAT ELEMENT

A2025/00704 - SAMPA OTOMOTIV SANAYI VE TICARET ANONIM SIRKETI Class 12. FIFTH WHEEL

A2025/00705 - Cayley Bolleurs Class 11. HANDCRAFTED CERAMIC BOWL WITH ANIMAL DETAIL

A2025/00701 - BYD COMPANY LIMITED Class 12. AUTOMOBILE

A2025/00707 - Cayley Bolleurs Class 11. RAISED CERAMIC BOWL

A2025/00708 - K SPEC WELDING AND FABRICATION Class 30. A SET OF ANIMAL ENCLOSURES

F2025/00709 - K SPEC WELDING AND FABRICATION Class 30. A SET OF ANIMAL ENCLOSURES

A2025/00706 - Cayley Bolleurs Class 11. HANDCRAFTED CERAMIC PLATTER WITH SCULPTED ANIMAL DETAILS

. - APPLIED ON 2025/06/10 -

A2025/00710 - SUNREEF VENTURE S.A. Class 12. CATAMARAN

A2025/00712 - VANESCO (PTY) LTD Class 12. TROLLEY

F2025/00711 - VANESCO (PTY) LTD Class 12. TROLLEY

. - APPLIED ON 2025/06/11 -

A2025/00714 - Personnel Hygiene Services Limited Class 28. AIR FRESHENERS

F2025/00716 - SOILPRO PTY LTD Class 15. SEEDING POINT HOLDER

A2025/00715 - Chery Automobile Co., Ltd. Class 12. AUTOMOBILES

F2025/00713 - SOILPRO PTY LTD Class 15. SEEDING POINT

F2025/00717 - SOILPRO PTY LTD Class 15. CLOSING DEVICE FOR CLOSING A SOIL SLOT FORMED BY A POINT ELEMENT

- APPLIED ON 2025/06/12 -

F2025/00719 - BOTHA, Gary, PORTER, Dennis John Digby Class 19. A PENCIL

A2025/00726 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00728 - JT INTERNATIONAL S.A. Class 27. ELECTRONIC CIGARETTE

A2025/00730 - JT INTERNATIONAL S.A. Class 27. REMOVABLE COVER OF AN ELECTRONIC CIGARETTE

A2025/00731 - ANALYTICS CONSULTING 1 (PTY) LTD Class 14. DISPLAY WITH A GRAPHICAL USER INTERFACE

A2025/00721 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00722 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00729 - JT INTERNATIONAL S.A. Class 27. ELECTRONIC CIGARETTE BODY

A2025/00732 - ANALYTICS CONSULTING 1 (PTY) LTD Class 14. DISPLAY WITH A GRAPHICAL USER INTERFACE

A2025/00727 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

F2025/00718 - BECKER, Gert Stephanus Class 24. SURGICAL INSTRUMENTATION LEVER

F2025/00720 - BECKER, Gert Stephanus Class 24. SURGICAL ROD INTRODUCER

A2025/00723 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00725 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

A2025/00724 - Huawei Technologies Co., Ltd. Class 14. DISPLAY SCREENS OR PORTIONS THEREOF WITH GRAPHICAL USER INTERFACES

- APPLIED ON 2025/06/13 -

A2025/00733 - Ian Oberem Class 01. STACK SNACKS LOGO

A2025/00734 - TRADE WINDS CAPTIAL Class 14. DISPLAY WITH A GRAPHICAL USER INTERFACE

A2025/00737 - APPLE INC. Class 14. ELECTRONIC DEVICE

A2025/00735 - TRADE WINDS CAPTIAL Class 14. DISPLAY WITH A GRAPHICAL USER INTERFACE

A2025/00736 - APPLE INC. Class 14. ELECTRONIC DEVICE

- APPLIED ON 2025/06/17 -

A2025/00738 - WEZIWE MFANAFUTHI DUMA Class 21. GAMING MAZE

A2025/00741 - Société des Produits Nestlé S.A. Class 07. COFFEE MACHINES

A2025/00742 - Turlen Holding SA Class 10. WATCHES

A2025/00743 - Turlen Holding SA Class 10. WATCH CASES

F2025/00739 - WEZIWE MFANAFUTHI DUMA Class 21. GAMING MAZE

A2025/00745 - Turlen Holding SA Class 10. WATCH MECHANISMS

A2025/00740 - Société des Produits Nestlé S.A. Class 7. COFFEE MACHINES

F2025/00748 - SHARP MOVE TRADING 197 (PROPRIETARY) LIMITED Class 08. CLAMP

A2025/00746 - Ian Oberem Class 01. GEORGES LOGO

A2025/00744 - Turlen Holding SA Class 10. WATCH CASES

- APPLIED ON 2025/06/18 -

A2025/00749 - Ian Oberem Class 01. STACK SNACKS DESIGNS

A2025/00750 - GALLAGHER GROUP LIMITED Class 14. ELECTRONIC IDENTIFICATION READER

- APPLIED ON 2025/06/19 -

A2025/00752 - Ian Oberem Class 01. HAND COOKED ARTWORK

A2025/00757 - FERRARI S.P.A. Class 12. CAR

A2025/00754 - SHANGHAI YAOJI TECHNOLOGY CO., LTD. Class 03. PLAYING CARD CASES AND BLANKS FOR PLAYING CARD CASES

A2025/00755 - SHANGHAI YAOJI TECHNOLOGY CO., LTD. Class 03. PLAYING CARD CASES AND BLANKS FOR PLAYING CARD CASES

A2025/00756 - Stolle Machinery Company, LLC Class 9. CAN ENDS

A2025/00758 - FERRARI S.P.A. Class 12. CAR

A2025/00760 - FERRARI S.P.A. Class 21. TOY CAR



A2025/00761 - FERRARI S.P.A. Class 21. TOY CAR

A2025/00762 - FERRARI S.P.A. Class 21. TOY CAR

F2025/00751 - PIZZA BRAAI BOX (PTY) LTD Class 07. COOKING APPARATUS

F2025/00753 - EICONSULTING (PTY) LTD Class 13. CABLE THEFT DETERRING DEVICES

A2025/00759 - FERRARI S.P.A. Class 12. CAR

**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**

REPUBLIC OF SOUTH AFRICA

DESIGNS ACT, No. 195 OF 1993

APPLICATIONS TO CORRECT AND/OR AMEND DESIGNS APPLICATION OR REGISTRATION (SECTIONS 26, 27/REGULATION 41)

THE DESIGN APPLICATION TO BE CORRECTED OR AMENDED IS OPEN FOR PUBLIC INSPECTION. THE PARTICULARS TO BE PUBLISHED SHALL BE THOSE SET OUT IN PART II AN APPLICATION FOR CORRECTION OR AMENDMENT SO PUBLISHED MAY BE INSPECTED AND MAY BE OPPOSED.

**PART II**

Design No. : A2014/00300

Applicant : ALESSIO TRUST

Class : 21

Article to which the Design is to be Applied: DISPENCER

Date of Lodgment: 20/02/2014

**Registrar of Designs**

**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**

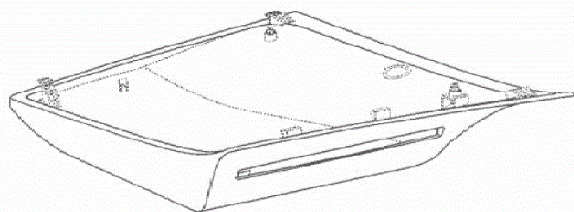
The Designs Office, Private Bag X400, Pretoria, supplies photocopies of all design documents at R1, 00 per page.

The numerical references denote the following: **(21)** Number of application. **(22)** Date of lodgment. **(23)** release date (if applicable). **(43)** 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.

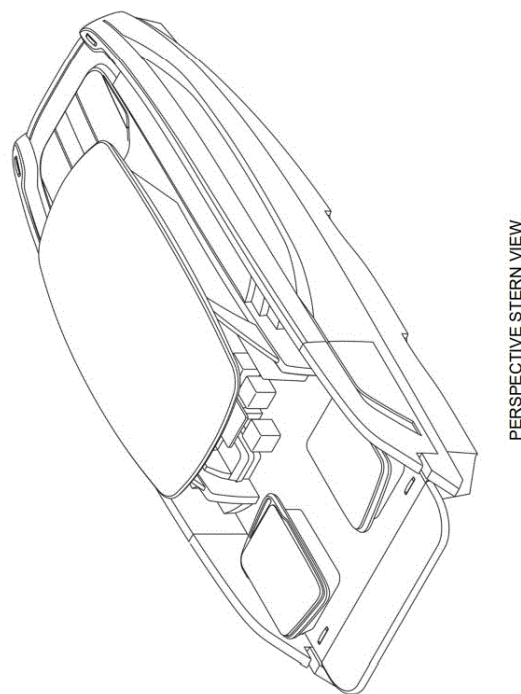
**N.B.:** Date of registration **(43)** is either Date of lodgment **(22)** or Date of convention of application **(32)** whichever is the earlier.

## Registrar of Designs

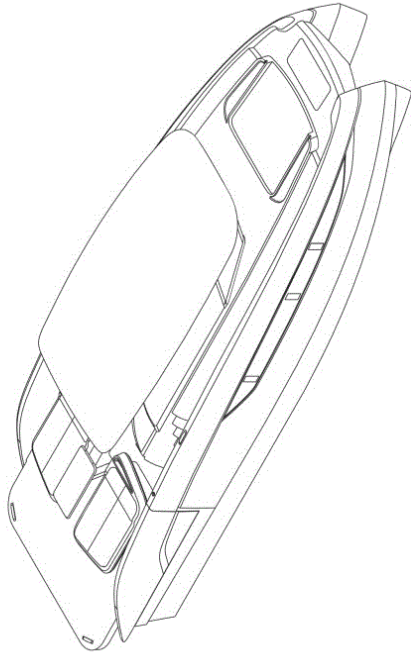
21: A2023/01250 22: 2023-11-21 23:  
43: 2025-03-06  
52: Class 14 24: Part A  
71: SONY INTERACTIVE ENTERTAINMENT INC.  
33: JP 31: 2023-011082 32: 2023-05-31  
**54: COVER FOR ELECTRONIC DEVICE**  
57: The design is applied to a cover for an electronic device and is shown in perspective view in the drawing showing the overall appearance thereof.



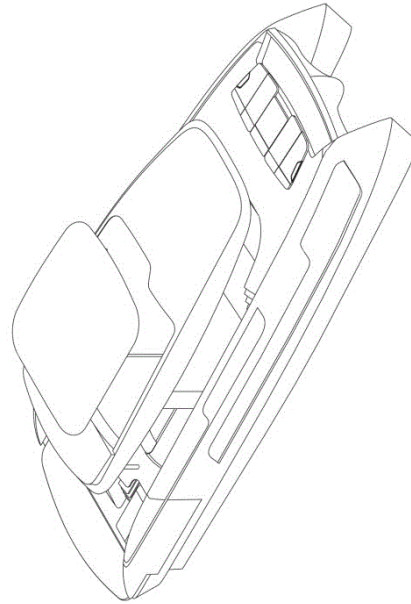
21: A2024/00704 22: 2024-07-18 23:  
43: 2025-04-17  
52: Class 12 24: Part A  
71: SUNREEF YACHTS RMC FZC  
33: EU 31: 015051866-0001 32: 2024-02-27  
**54: CATAMARAN**  
57: The design is to be applied to a catamaran. The features for which protection is claimed are those of shape and/or configuration and/or pattern and/or ornamentation, substantially as shown in the representations.



21: A2024/00705 22: 2024-07-18 23:  
43: 2025-04-17  
52: Class 12 24: Part A  
71: SUNREEF YACHTS RMC FZC  
33: EU 31: 015051866-0002 32: 2024-02-27  
**54: CATAMARAN**  
57: The design is to be applied to a catamaran. The features for which protection is claimed are those of shape and/or configuration and/or pattern and/or ornamentation, substantially as shown in the representations.



PERSPECTIVE BOW VIEW



PERSPECTIVE BOW VIEW

21: A2024/00706 22: 2024-07-18 23:  
43: 2025-04-17  
52: Class 12 24: Part A  
71: SUNREEF YACHTS RMC FZC  
33: EU 31: 015051866-0003 32: 2024-02-27

**54: CATAMARAN**

57: The design is to be applied to a catamaran. The features for which protection is claimed are those of shape and/or configuration and/or pattern and/or ornamentation, substantially as shown in the representations.

21: A2024/00853 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part A  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

**54: GLOVES**

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. An extremity of each finger slot has a thick circumferential rolled hem. The dorsal side has a first strip proximally to which the wrist strap attaches and is adjacent a padded strip. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening, the palm opening with the two flaps and the wrist opening having a thick circumferential rolled hem. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side. The wrist strap has a second strip to attach to the first strip on the dorsal side.

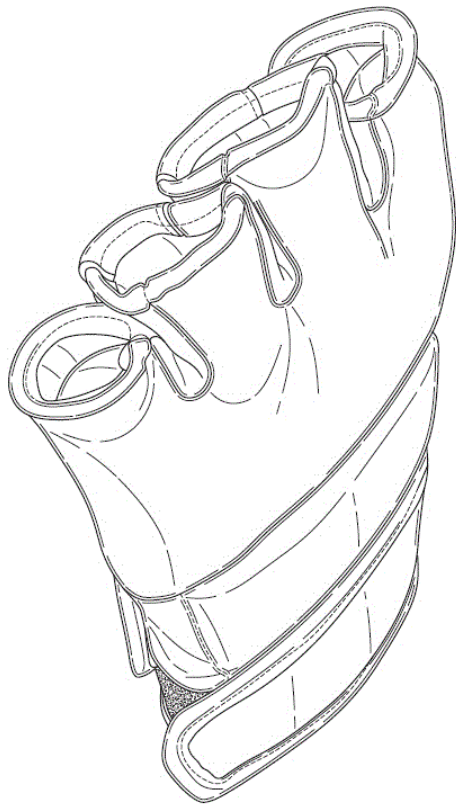


Figure 1  
Three-dimensional view

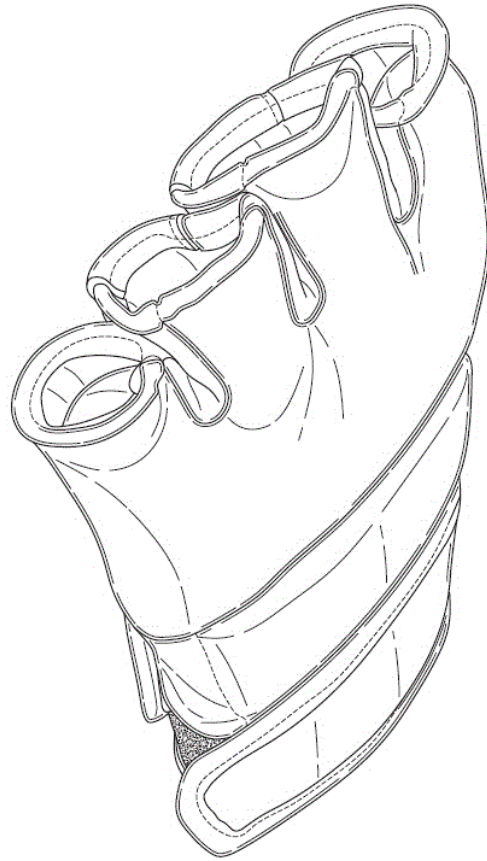


Figure 1  
Three-dimensional view

21: A2024/00854 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part A  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

#### 54: GLOVES

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. An extremity of each finger slot has a thick circumferential rolled hem. The dorsal side has a first strip proximally to which the wrist strap attaches and is adjacent a padded strip. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening, the palm opening with the two flaps and the wrist opening having a thick circumferential rolled hem. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side. The wrist strap has a second strip to attach to the first strip on the dorsal side.

21: A2024/00855 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part A  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

#### 54: GLOVES

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. The dorsal side has the wrist strap adjacent a padded strip. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening, the palm opening with the two flaps and the wrist opening having a thick circumferential rolled hem. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side.

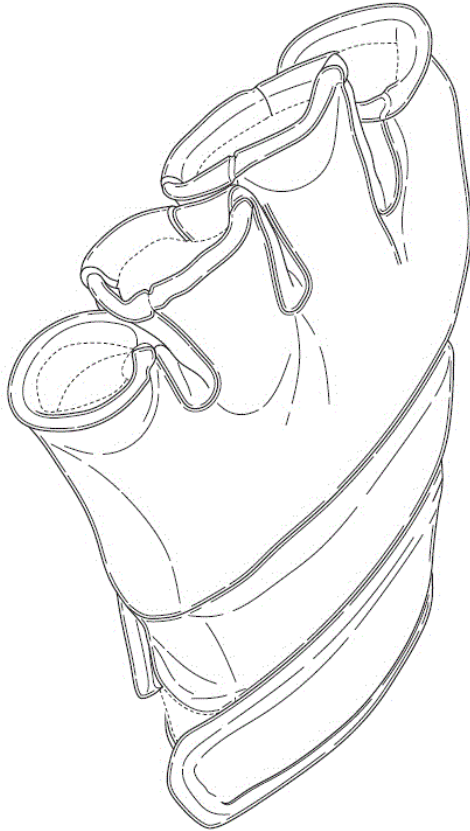


Figure 1  
Three-dimensional view

21: A2024/00856 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part A  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

**54: GLOVES**

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. The dorsal side has the wrist strap adjacent a padded strip. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening, the palm opening with the two flaps and the wrist opening having a thick circumferential rolled hem. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side.

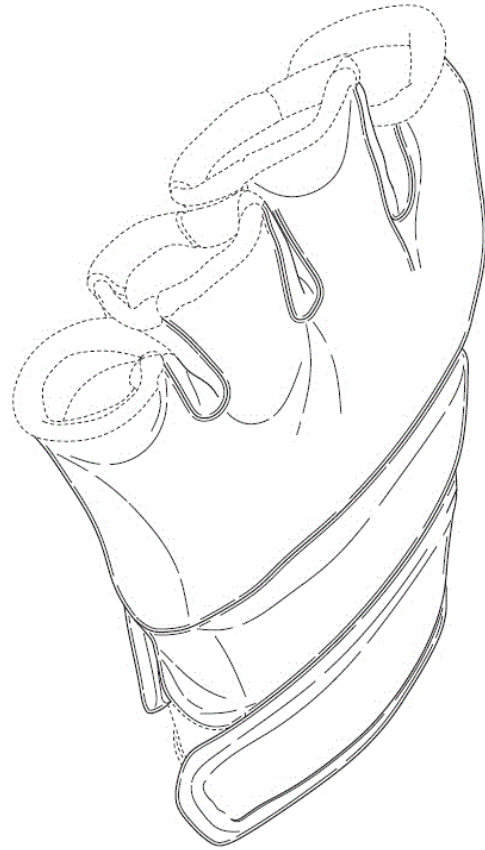


Figure 1  
Three-dimensional view

21: A2024/00857 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part A  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

**54: GLOVES**

57: The design is for a glove having a palmar side, a dorsal side and a wrist opening proximally. The dorsal side has a laterally orientated padded strip medially. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening, the palm opening with the two flaps and the wrist opening having a thick circumferential rolled hem.



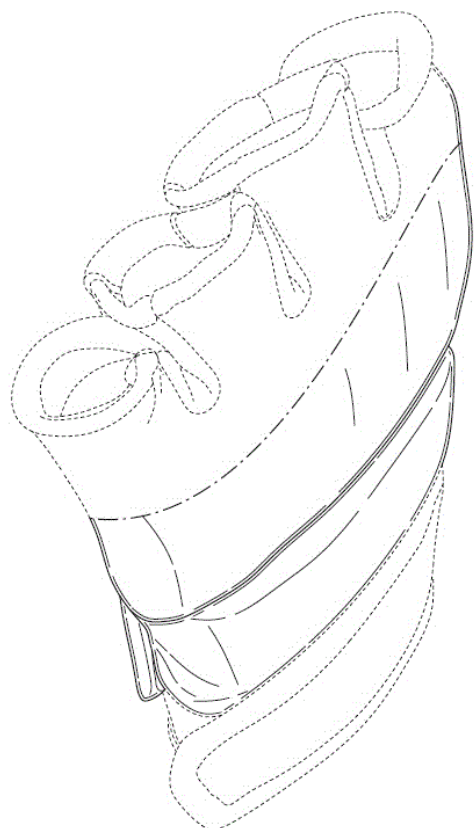


Figure 1  
Three-dimensional view

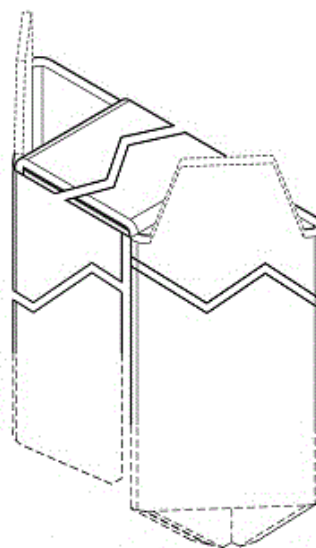
21: A2024/00866 22: 2024-09-03 23:  
43: 2025-04-17

52: Class 9. 24: Part A

71: MPACT LIMITED

**54: Box Connector**

57: The design relates to a box connector. The features of the design are those of shape and/or configuration and/or pattern.



FRONT PERSPECTIVE VIEW FIRST EMBODIMENT

21: A2024/00868 22: 2024-09-03 23:

43: 2025-04-08

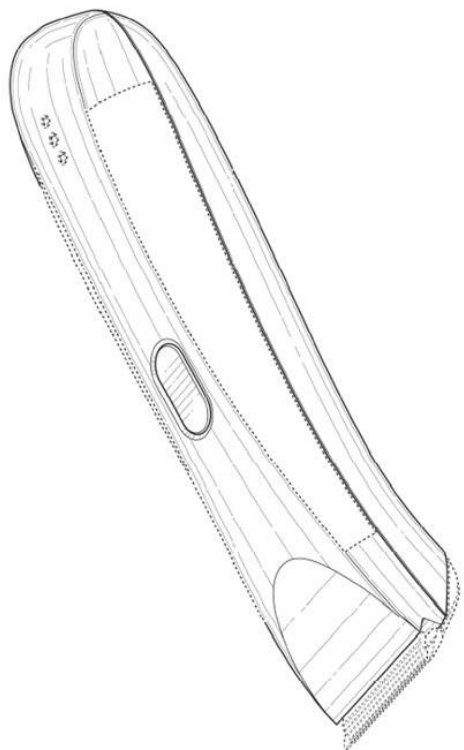
52: Class 28 24: Part A

71: WAHL CLIPPER CORPORATION

33: US 31: 29/935,410 32: 2024-04-01

**54: HAIR TRIMMER**

57: The features of the design for which protection is claimed are those of the shape and/or configuration of a hair trimmer substantially as illustrated in the accompanying drawing. The areas in dotted outline are for illustrative purposes only and do not form part of the design.



21: A2024/00869 22: 2024-09-04 23:

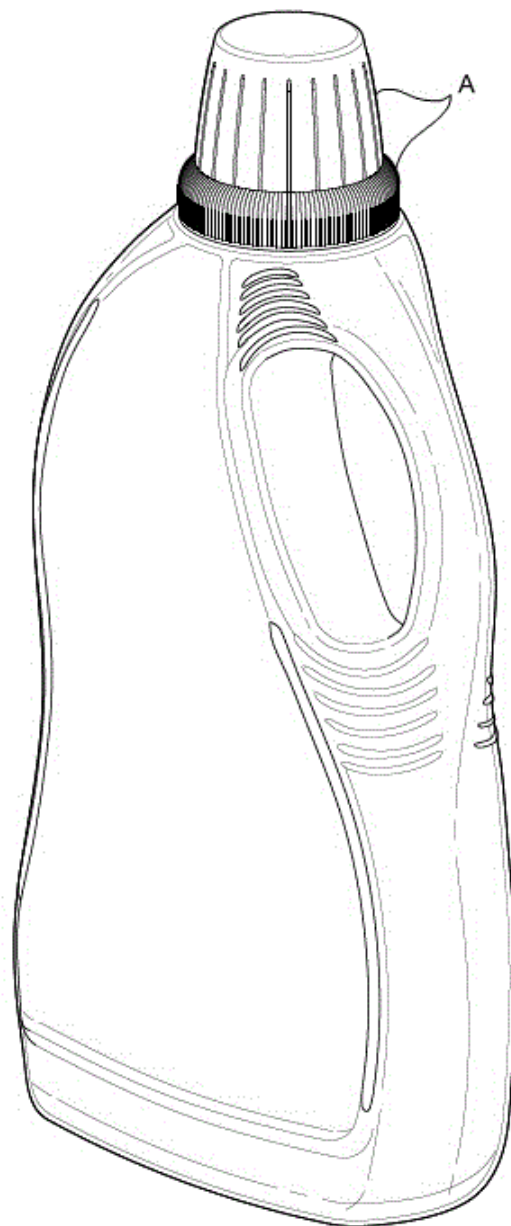
43: 2024-09-04

52: Class 9 24: Part A

71: BLISS BRANDS (PTY) LTD

#### **54: BOTTLES**

57: A bottle has opposite sides that are connected by opposite ends. The sides provide mirrored major side faces, and the ends provide different end faces. The side and end faces bulge convexly. Each side face comprises a major portion that widens from adjacent a top of the bottle to a base of the bottle along waved edges. Both end faces also have waved appearances in side view. One of the end faces provides a handle that defines a roughly oval shaped opening that is bordered by oppositely located pairs of stacks of substantially C-shaped ribs above and below the opening.



21: A2024/00893 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

#### **54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation.

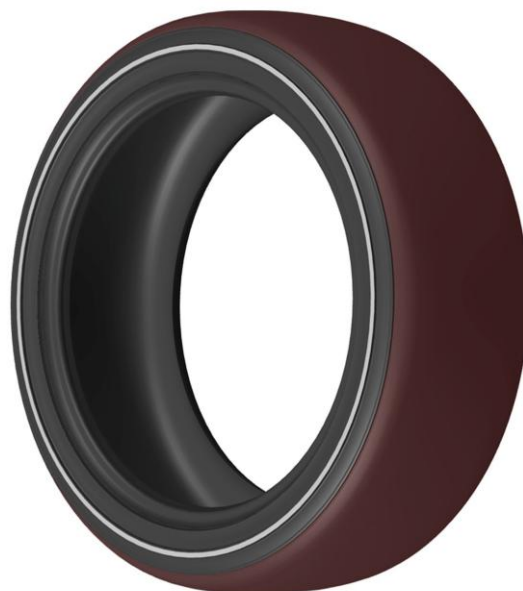


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21: A2024/00894 22: 2024-09-16 23:  
43: 2025-04-08  
52: Class 12 24: Part A  
71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation. The brown colour indicates unclaimed features of the tyre that do not form part of the claimed design.



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21: A2024/00895 22: 2024-09-16 23:  
43: 2025-04-08  
52: Class 12 24: Part A  
71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation. The brown colour indicates unclaimed features of the tyre that do not form part of the claimed design.



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21: A2024/00896 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation.



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21: A2024/00897 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation.



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21: A2024/00898 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation.



21: A2024/00899 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation. The brown colour indicates unclaimed features of the tyre that do not form part of the claimed design.



21: A2024/00900 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation.



21: A2024/00901 22: 2024-09-16 23:

43: 2025-04-08

52: Class 12 24: Part A

71: SAILUN GROUP CO., LTD.

**54: TYRE**

57: The design is applied to a tyre. 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 tyre, substantially as illustrated in the accompanying representation.





52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 015054810-0011 32: 2024-03-26  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**  
57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The shading in the design drawings is intended to show the contours of the designs only and is not intended to show ornamentation, colouration or surface finish.

21: A2024/00903 22: 2024-09-16 23:  
43: 2025-04-08  
52: Class 9. 24: Part A  
71: LOTUS BAKERIES N.V.  
33: EM 31: 015070787-0001 32: 2024-08-29

**54: Jar with a Lid**

57: The design relates to a jar with a lid. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00907 22: 2024-09-17 23:  
43: 2025-04-11



**PERSPECTIVE VIEW**

21: A2024/00908 22: 2024-09-17 23:  
43: 2025-04-11  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 015054810-0012 32: 2024-03-26  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**

57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The broken lines are for illustrative purposes only and form no part of the claimed design and the shading in the design drawings are intended to show the contours of the designs only and are not intended to show ornamentation, colouration or surface finish.



PERSPECTIVE VIEW

21: A2024/00909 22: 2024-09-17 23:  
43: 2025-04-11  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 015054810-0013 32: 2024-03-26  
**54: AEROSOL GENERATING DEVICE, IN  
PARTICULAR TOBACCO HEATING DEVICE**

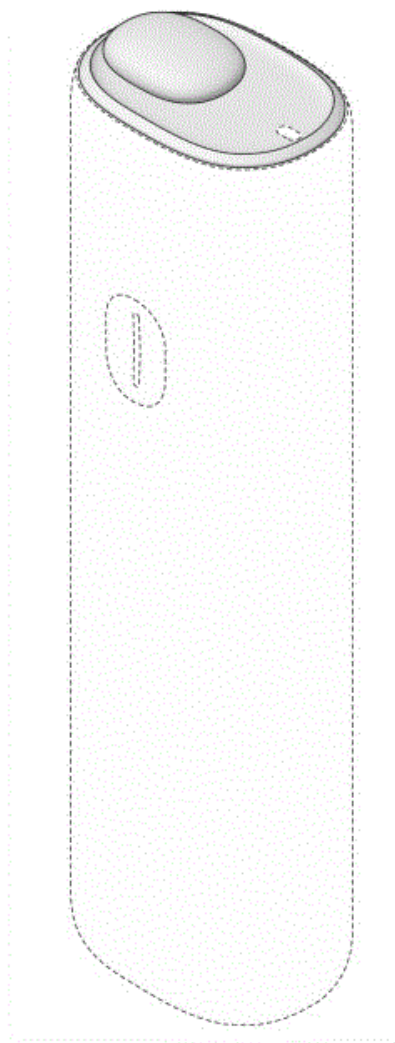
57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The shading in the design drawings are intended to show the contours of the designs only and are not intended to show ornamentation, colouration or surface finish.



PERSPECTIVE VIEW

21: A2024/00910 22: 2024-09-17 23:  
43: 2025-04-11  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 015054810-0014 32: 2024-03-26  
**54: AEROSOL GENERATING DEVICE, IN  
PARTICULAR TOBACCO HEATING DEVICE**  
57: The design is to be applied to an aerosol  
generating device, in particular tobacco heating

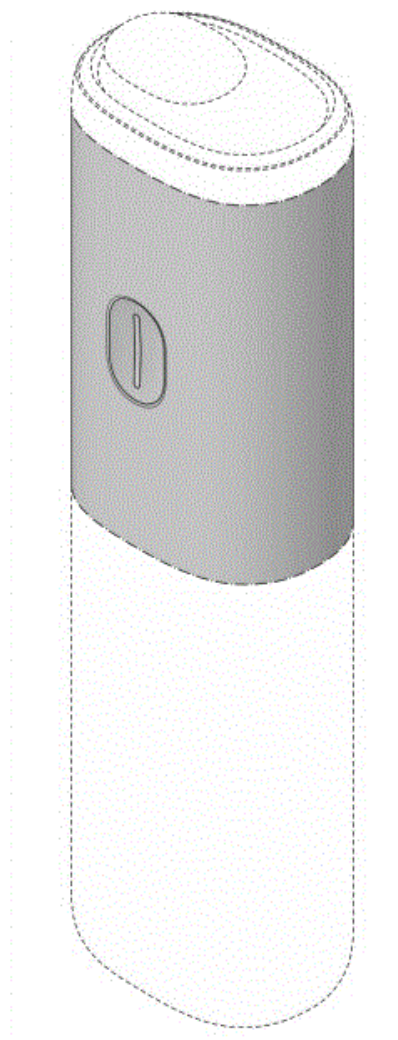
device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The broken lines are for illustrative purposes only and form no part of the claimed design and the shading in the design drawings are intended to show the contours of the designs only and are not intended to show ornamentation, colouration or surface finish.



**PERSPECTIVE VIEW**

21: A2024/00911 22: 2024-09-17 23:  
43: 2025-04-11  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 015054810-0015 32: 2024-03-26  
**54: AEROSOL GENERATING DEVICE, IN  
PARTICULAR TOBACCO HEATING DEVICE**  
57: The design is to be applied to an aerosol  
generating device, in particular tobacco heating

device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The broken lines are for illustrative purposes only and form no part of the claimed design and the shading in the design drawings are intended to show the contours of the designs only and are not intended to show ornamentation, colouration or surface finish.

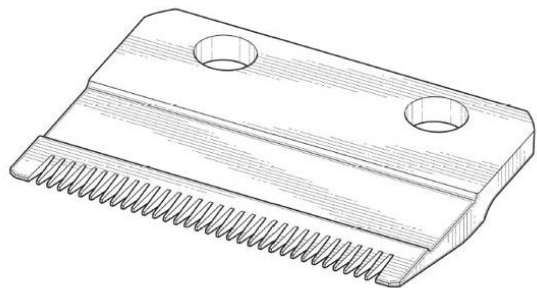


**PERSPECTIVE VIEW**

21: A2024/00915 22: 2024-09-17 23:  
43: 2025-04-11  
52: Class 28 24: Part A  
71: WAHL CLIPPER CORPORATION  
33: US 31: 29/935,333 32: 2024-04-01  
**54: STATIONARY BLADE FOR HAIR CLIPPER**  
57: The features of the design for which protection is  
claimed are those of the shape and/or configuration



of a stationary blade for hair clipper substantially as illustrated in the accompanying drawing. The areas in dotted outline are for illustrative purposes only and do not form part of the design.



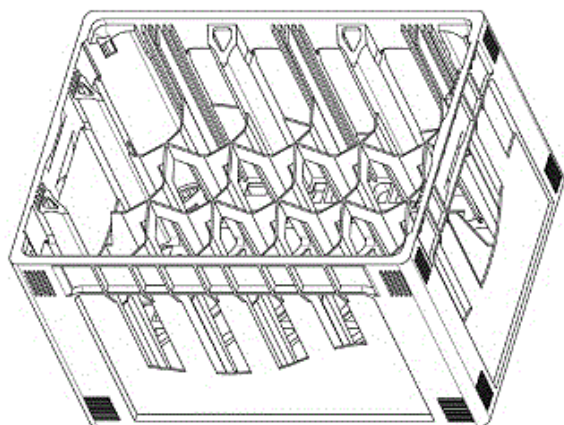
21: A2024/00922 22: 2024-09-18 23:  
43: 2025-04-11

52: Class 9. 24: Part A

71: SCHOELLER ALLIBERT GMBH

**54: Bottle Crate**

57: The design relates to a bottle crate. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**PERSPECTIVE VIEW**

21: A2024/00924 22: 2024-09-19 23:  
43: 2025-04-11

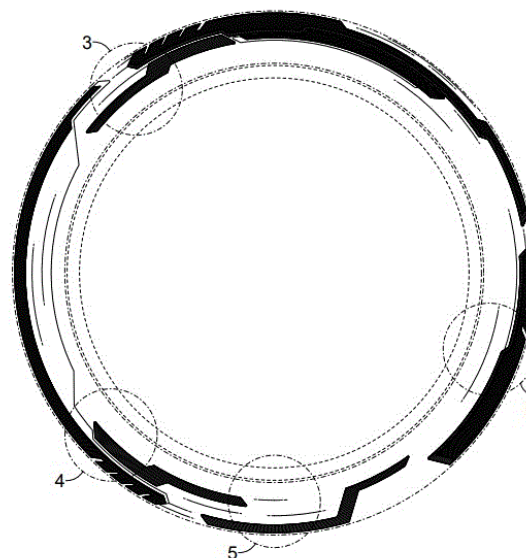
52: Class 12 24: Part A

71: OMNI UNITED (S) PTE LTD

33: US 31: 29/950,204 32: 2024-07-01

**54: TYRE SIDEWALL**

57: The design is to be applied to a tyre sidewall. The features for which protection is claimed are those of shape and/or configuration and/or pattern and/or ornamentation, substantially as shown in the representations. The broken lines are for illustrative purposes only and form no part of the claimed design.



**FRONT VIEW**

21: A2024/00925 22: 2024-09-19 23:  
43: 2025-04-11

52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: EM 31: 015056741-0001 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00926 22: 2024-09-19 23:

43: 2025-04-11

52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: EM 31: 015056741-0002 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00927 22: 2024-09-19 23:

43: 2025-04-11

52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: EM 31: 015056741-0003 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00928 22: 2024-09-19 23:

43: 2025-04-11

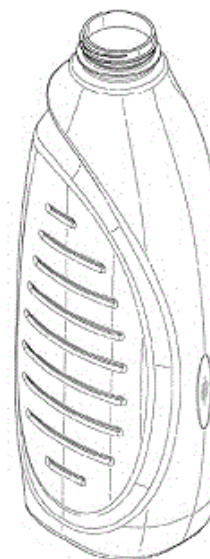
52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: EM 31: 015056741-0004 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00929 22: 2024-09-19 23:

43: 2025-04-11

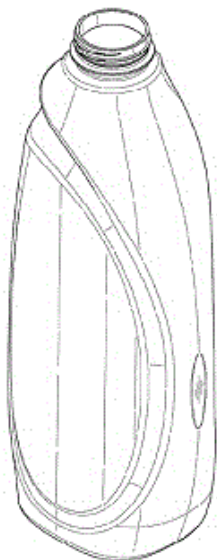
52: Class 9. 24: Part A



71: UNILEVER GLOBAL IP LIMITED  
33: EM 31: 015056741-0005 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

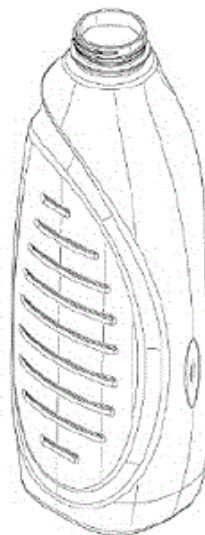


**FRONT PERSPECTIVE VIEW**

21: A2024/00930 22: 2024-09-19 23:  
43: 2025-04-11  
52: Class 9. 24: Part A  
71: UNILEVER GLOBAL IP LIMITED  
33: EM 31: 015056741-0006 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00931 22: 2024-09-19 23:  
43: 2025-04-17  
52: Class 9. 24: Part A  
71: UNILEVER GLOBAL IP LIMITED  
33: EM 31: 015056741-0007 32: 2024-04-09

**54: Bottle**

57: The design relates to a bottle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00932 22: 2024-09-19 23:  
43: 2024-05-28  
52: Class 10 24: Part A  
71: LVMH Swiss Manufactures SA

33: HSIRID 31: DM/238239 32: 2024-05-28

**54: WATCH CASES**

57: The design is for a watch case. The case has four parts: case body, hollowed side, bezel, and case back. The case body features a robust crown at a 3 o'clock position, with buttons above and below. The bezel has numerals.

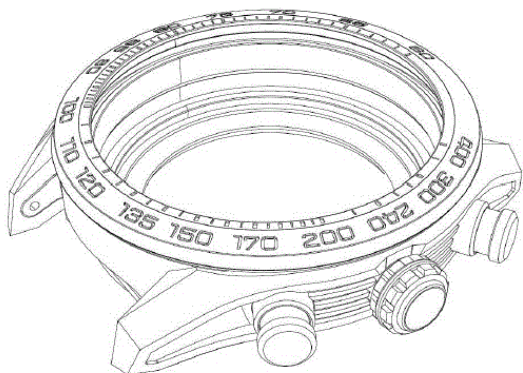


Figure 1  
Three-dimensional view

21: A2024/00933 22: 2024-09-19 23:  
43: 2024-05-28

52: Class 10 24: Part A

71: LVMH Swiss Manufactures SA

33: HSIRID(CH) 31: DM/238237 32: 2024-05-28

**54: DIALS**

57: The design is for an openworked dial. The dial has three sub-dials at 3, 6, and 9 o'clock positions. A periphery of the dial has a track with graduated markings.

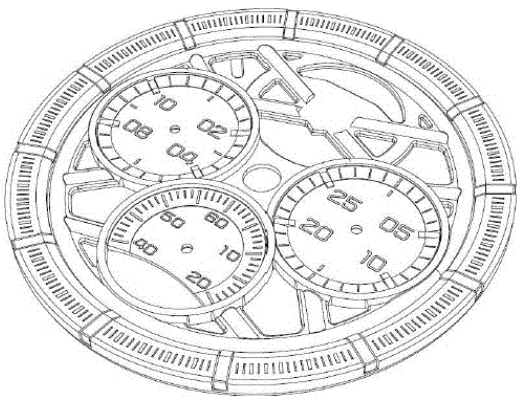


Figure 1  
Three-dimensional view

21: A2024/00934 22: 2024-09-23 23:  
43: 2025-04-11

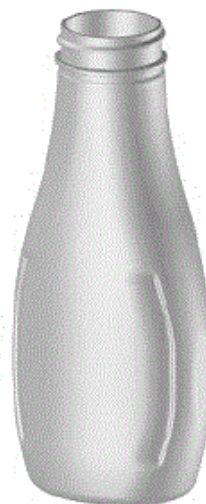
52: Class 9. 24: Part A

71: KEWPIE CORPORATION

33: JP 31: 2024-006544 32: 2024-03-29

**54: Container Bottle**

57: The design relates to a container bottle. The features of the design are those of shape and/or configuration.



FIRST PERSPECTIVE VIEW

21: A2024/00936 22: 2024-09-25 23:  
43: 2025-05-09

52: Class 9 24: Part A

71: Zhao, Yongguo

**54: PACKAGING CANS (LION CAT)**

57: The design relates to a Packaging cans (lion cat). The features of the design are those of shape and/or pattern and/or configuration.



21: A2024/00937 22: 2024-09-25 23:  
43: 2025-04-17

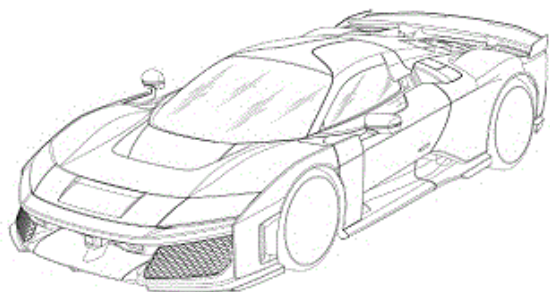
52: Class 12. 24: Part A

71: FERRARI S.P.A.

33: IB 31: 146303 32: 2024-03-27

**54: Car**

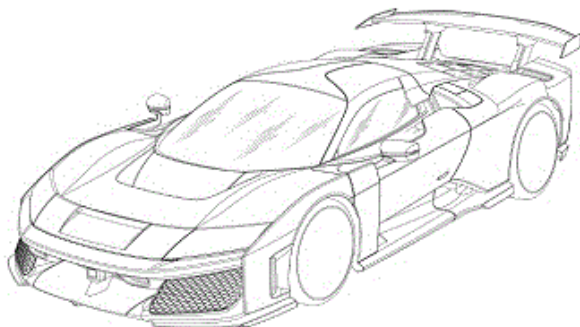
57: The design relates to a car. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**FRONT PERSPECTIVE VIEW**

21: A2024/00938 22: 2024-09-25 23:  
43: 2025-04-17  
52: Class 12. 24: Part A  
71: FERRARI S.P.A.  
33: IB 31: 146303 32: 2024-03-27

**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: A2024/00939 22: 2024-09-25 23:  
43: 2025-04-17  
52: Class 21. 24: Part A  
71: FERRARI S.P.A.  
33: IB 31: 146322 32: 2024-03-27

**54: Toy Car**

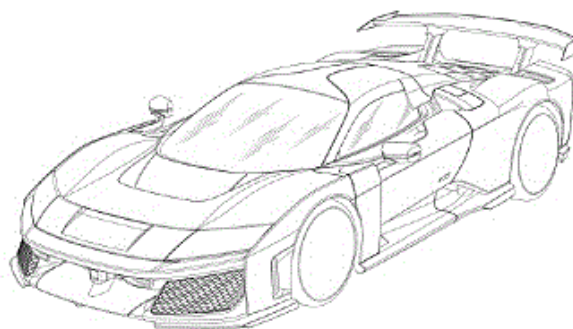
57: The design relates to a toy car. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**FRONT PERSPECTIVE VIEW**

21: A2024/00940 22: 2024-09-25 23:  
43: 2025-04-17  
52: Class 21. 24: Part A  
71: FERRARI S.P.A.  
33: IB 31: 146322 32: 2024-03-27

**54: Toy Car**

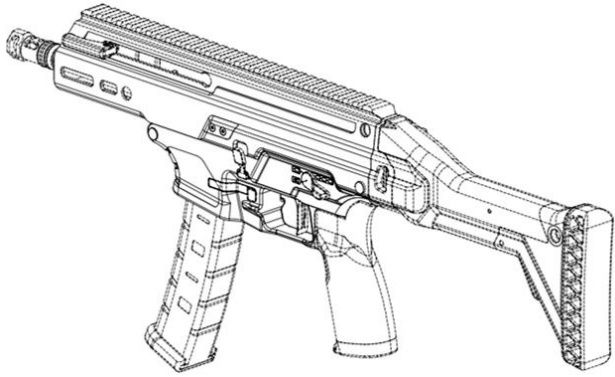
57: The design relates to a toy car. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**FRONT PERSPECTIVE VIEW**

21: A2024/00946 22: 2024-09-26 23:  
43: 2025-04-17  
52: Class 22 24: Part A  
71: HS PRODUKT D.O.O.  
33: HR 31: D20240025A 32: 2024-03-26

**54: FIREARM**

57: The design is applied to a firearm. 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 firearm, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.



21: A2024/00947 22: 2024-09-26 23:  
43: 2024-04-30  
52: Class 10 24: Part A  
71: Turlen Holding SA  
33: CH 31: 2024-00233 32: 2024-04-30

#### 54: WATCHES

57: The design is for a mechanical watch. The watch has a case that has front convex bezel and rear concave back. Each face has parallel top and bottom edges and convex side. On the front are symmetrically located eight prominent screws fixing the bezel, case and back together. At the top and bottom, two additional screws allow the strap to be secured to the watch. A large circular crown is fitted at a three o'clock position. The transparent bezel reveals the mechanical movement including mechanical parts and an intricate arrangement of gears, bearings, and arms to which two elongate watch hands, a long hand and a short hand, are mounted. Each watch hand has a longitudinal opening making the movement even more visible. The inner bezel includes twelve triangular hour markers pointing inwardly and minutes markers evenly spaced.



Figure 7

A first three-dimensional view

21: A2024/00948 22: 2024-09-26 23:  
43: 2024-04-04  
52: Class 23 24: Part A  
71: Turret IP Pty Ltd  
33: AU 31: 202412073 32: 2024-04-04

#### 54: LIQUID INTAKES

57: The design is for a liquid intake. A body of the liquid intake is disc-shaped and spherically compressed with top and bottom covers. A rear of the body defines an inlet port. The bottom cover includes frusto-sector shaped openings for the ingress of liquid into the intake. A series of convex, radially extending, teardrop-shaped ribs are provided on the top cover and smaller, concave teardrop-shaped ribs are provided on the bottom cover.



Figure 1  
Three-dimensional view

21: A2024/00949 22: 2024-09-26 23:



43: 2024-04-30

52: Class 10 24: Part A

71: Turlen Holding SA

33: CH 31: 2024-00233 32: 2024-04-30

**54: WATCHES**

57: The design is for a watch case. The watch case has a case that has front convex bezel and rear concave back. Each face has parallel top and bottom edges and convex side. On the front are symmetrically located eight prominent screws fixing the bezel, case and back together. At the top and bottom, two screws allow the strap to be secured to the watch. A large circular crown is fitted at a three o'clock position. The bezel is skeletonized and has an irregular pattern of openings. The inner bezel includes twelve triangular hour markers pointing inwardly and minutes markers evenly spaced.

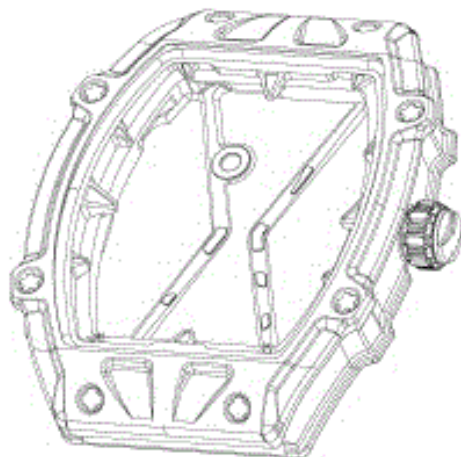


Figure 7

A first three-dimensional view

curved arches extending from either side of the large gear towards an outer rim of the smaller gear at a lower side of the watch mechanism where they meet. The support structure further includes several prominent screws.

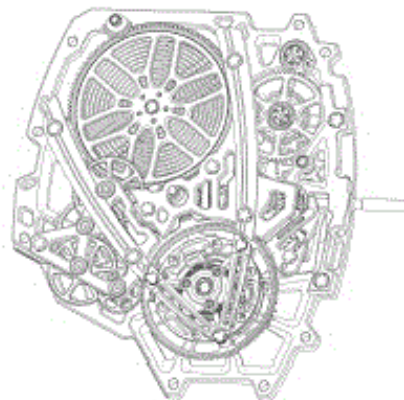


Figure 7

A first three-dimensional view

21: A2024/00953 22: 2024-09-26 23:

43: 2025-04-11

52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: GB 31: 6355600 32: 2024-03-27

**54: Deodorant Stick Container and Dispenser**

57: The design relates to a deodorant stick container and dispenser. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

21: A2024/00950 22: 2024-09-26 23:

43: 2024-04-30

52: Class 10 24: Part A

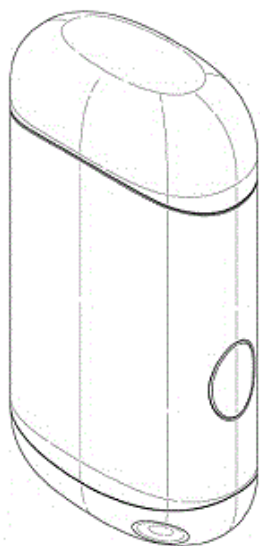
71: Turlen Holding SA

33: CH 31: 2024-00233 32: 2024-04-30

**54: WATCH MECHANISMS**

57: The design is for a watch mechanism. The watch mechanism includes mechanical parts and an intricate arrangement of gears, bearings, and screws on a base plate. The gears include a large skeletonized gear in the top left of the watch mechanism and a smaller gear structure in the bottom right. The support structure includes two



**FRONT PERSPECTIVE VIEW**


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21: A2024/00954 22: 2024-09-26 23:

43: 2025-04-11

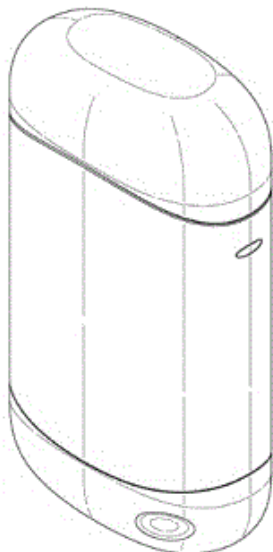
52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: GB 31: 6355601 32: 2024-03-27

**54: Deodorant Stick Container and Dispenser**

57: The design relates to a deodorant stick container and dispenser. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**FRONT PERSPECTIVE VIEW**


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21: A2024/00955 22: 2024-09-26 23:

43: 2025-04-17

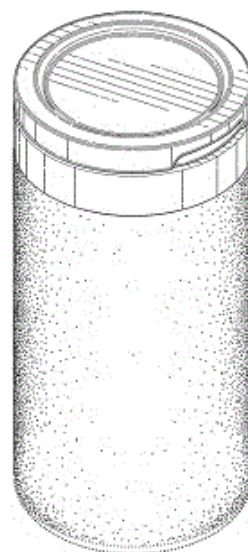
52: Class 7. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,723 32: 2024-03-27

**54: Container**

57: The design relates to a container. The features of the design are those of shape and/or configuration and/or ornamentation.

**TOP FRONT RIGHT PERSPECTIVE VIEW**


---

21: A2024/00956 22: 2024-09-26 23:

43: 2025-04-11

52: Class 7. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,729 32: 2024-03-27

**54: Funnel**

57: The design relates to a funnel. The features of the design are those of shape and/or configuration and/or ornamentation.

**TOP FRONT RIGHT PERSPECTIVE VIEW**

21: A2024/00957 22: 2024-09-26 23:  
43: 2025-04-11

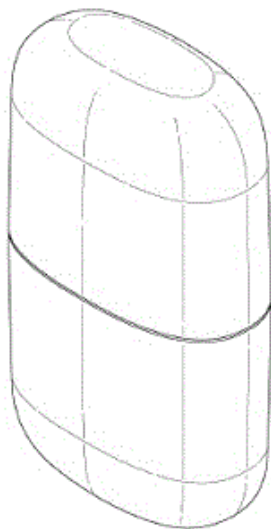
52: Class 9. 24: Part A

71: UNILEVER GLOBAL IP LIMITED

33: GB 31: 6355602 32: 2024-03-27

**54: Deodorant Stick Container and Dispenser**

57: The design relates to a deodorant stick container and dispenser. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2024/00960 22: 2024-09-26 23:  
43: 2025-04-11

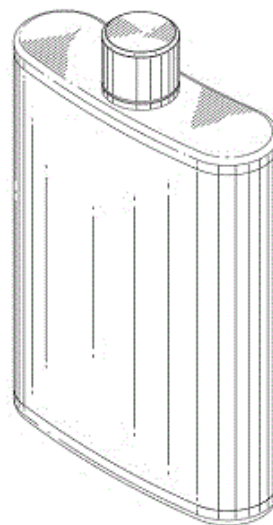
52: Class 9. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,747 32: 2024-03-27

**54: Flask**

57: The design relates to a flask. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP FRONT RIGHT PERSPECTIVE VIEW**

21: A2024/00961 22: 2024-09-26 23:  
43: 2025-04-11

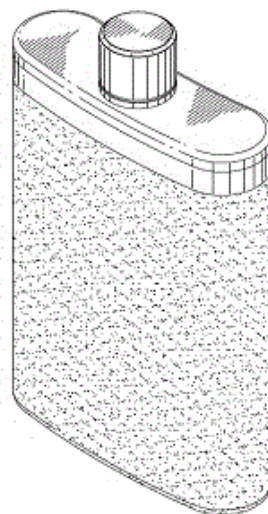
52: Class 9. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,740 32: 2024-03-27

**54: Flask**

57: The design relates to a flask. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP FRONT RIGHT PERSPECTIVE VIEW**

21: A2024/00962 22: 2024-09-26 23:  
43: 2025-04-11

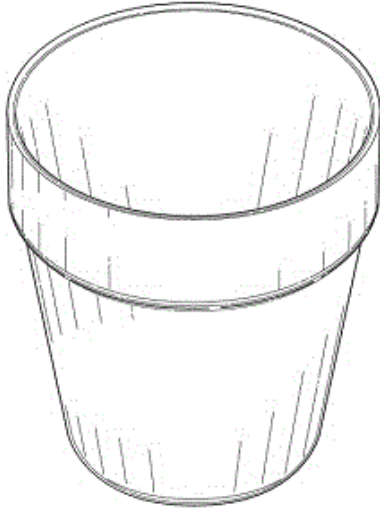
52: Class 7. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,686 32: 2024-03-27

**54: Cup**

57: The design relates to a cup. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP FRONT PERSPECTIVE VIEW**

21: A2024/00963 22: 2024-09-26 23:

43: 2025-04-11

52: Class 7. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,694 32: 2024-03-27

**54: Cup**

57: The design relates to a cup. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP FRONT PERSPECTIVE VIEW**

21: A2024/00964 22: 2024-09-26 23:

43: 2025-04-11

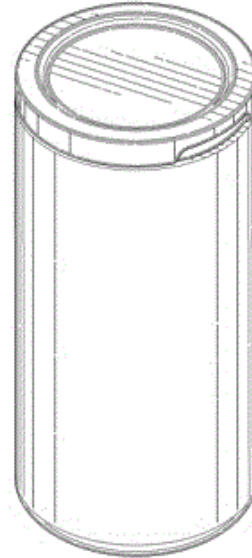
52: Class 7. 24: Part A

71: YETI COOLERS, LLC

33: US 31: 29/934,705 32: 2024-03-27

**54: Container**

57: The design relates to a container. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP FRONT RIGHT PERSPECTIVE VIEW**

21: A2024/00967 22: 2024-09-27 23:

43: 2025-04-11

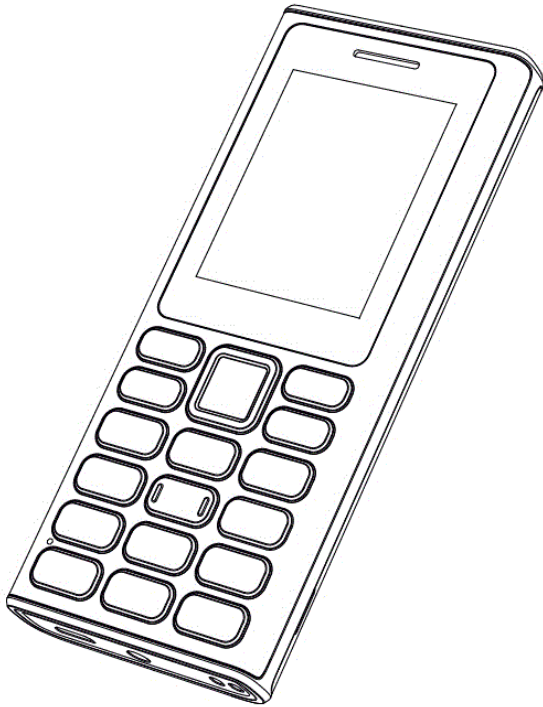
52: Class 14 24: Part A

71: HMD GLOBAL OY

33: EM 31: 015055255 32: 2024-03-28

**54: MOBILE PHONE**

57: The drawing shows a perspective front view of a mobile phone showing the overall appearance thereof.



1.1

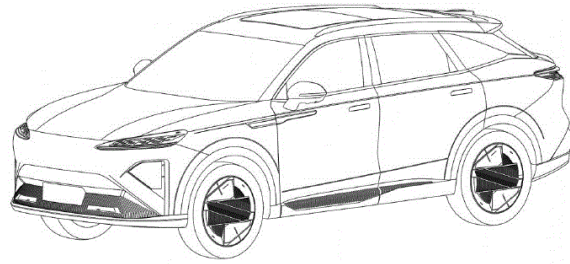


Figure 1

Three-dimensional view

21: A2024/00968 22: 2024-09-27 23:  
43: 2024-03-29  
52: Class 12 24: Part A  
71: Chery Automobile Co., Ltd.  
33: CN 31: 2024301721223 32: 2024-03-29

**54: AUTOMOBILES**

57: The design is for an automobile in the form of a crossover sport utility vehicle. A front fascia of the vehicle includes two willow-leaf shaped headlights laterally positioned and intersecting a bonnet, two sizable aerodynamic vents below the headlights, and a wide front grille at a lower portion of the front fascia, the grille having an arrangement of narrowly spaced vertical slots. Each side of the vehicle includes a waistline extending from the headlights to taillights, door handles which are concealed, and a side skirt with vertical lines, the side skirt echoing the front grille. Wheels of the vehicle have a complex geometric shape. A rear of the vehicle has a boot lid with a continuous taillight design extending across the boot lid onto the vehicle laterally, and a bumper having two horizontally arranged lamp assemblies, the bumper having an appearance resembling an oar.

21: A2024/00969 22: 2024-09-27 23:  
43: 2024-03-29  
52: Class 12 24: Part A  
71: Chery Automobile Co., Ltd.  
33: CN 31: 2024301715059 32: 2024-03-29

**54: AUTOMOBILES**

57: The design provides for an SUV vehicle, the front of which is equipped with an integrated headlight protector housing the headlights, and a light source capable of projecting customized displays. A protruding bumper is installed on the front face of the vehicle, connected to the engine underbody guard. Spotlights are mounted on both sides of the vehicle hood near the A-pillars. The roof rack is also equipped with multiple spotlights. On the vehicle's sides, the protruding front wheel arches connect to the front bumper, and the rear wheel arches connect to the rear bumper. The door handles are exposed and the bottom of the doors include a protruding side skirt, complementing the passenger footboard and reflecting a rugged off-road style. The large rear taillights and bumper at the rear of the vehicle echo the front design, forming a unified design style.

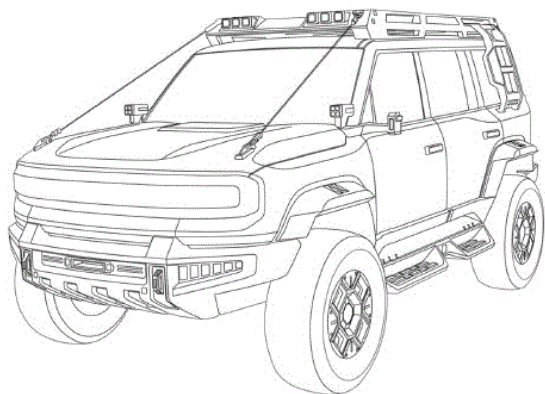
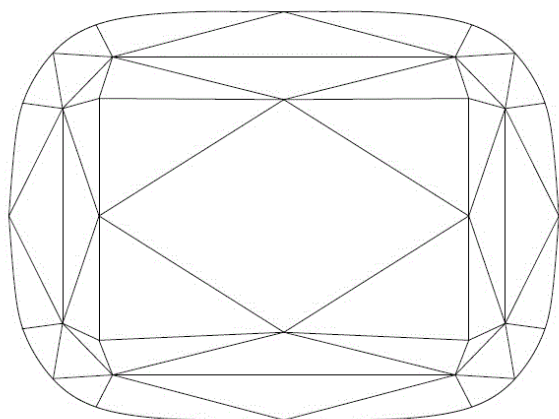


Figure 6  
Three-dimensional view

21: A2024/00971 22: 2024-09-27 23:  
43: 2024-09-27  
52: Class 11 24: Part A  
71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



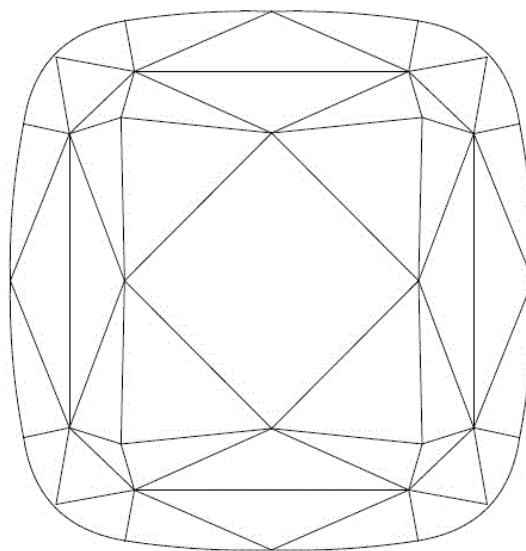
Top plan view

21: A2024/00972 22: 2024-09-27 23:  
43: 2024-09-27  
52: Class 11 24: Part A  
71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include

the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.

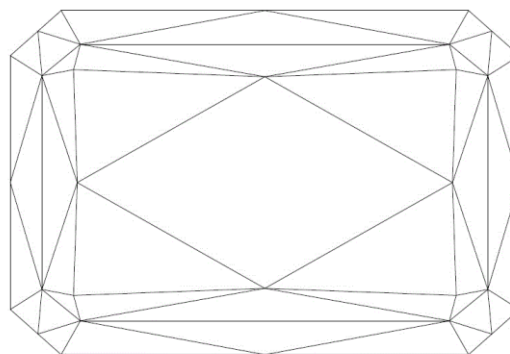


Top plan view

21: A2024/00973 22: 2024-09-27 23:  
43: 2024-09-27  
52: Class 11 24: Part A  
71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00974 22: 2024-09-27 23:  
43: 2024-09-27

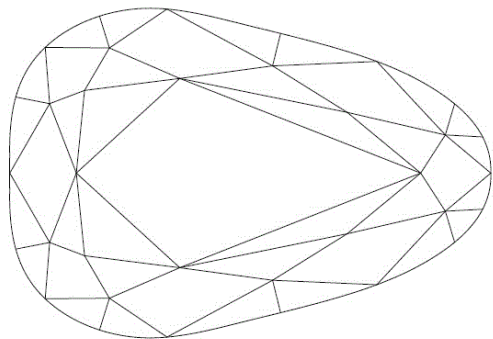


52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

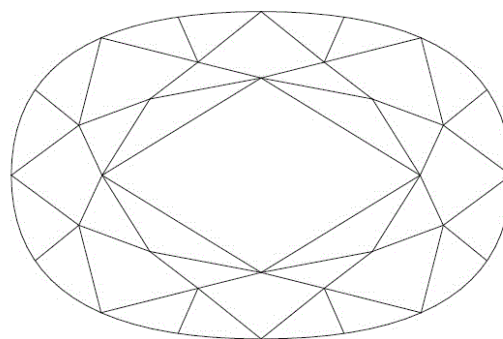
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00975 22: 2024-09-27 23:

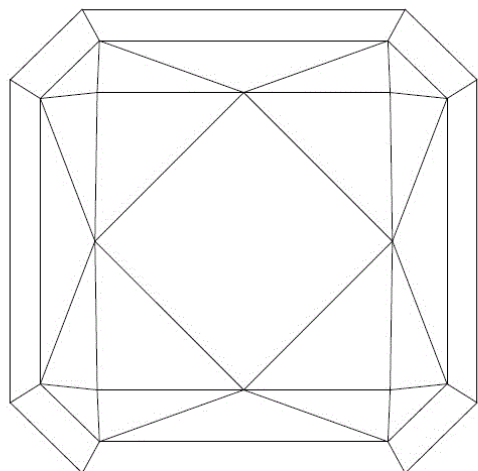
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00977 22: 2024-09-27 23:

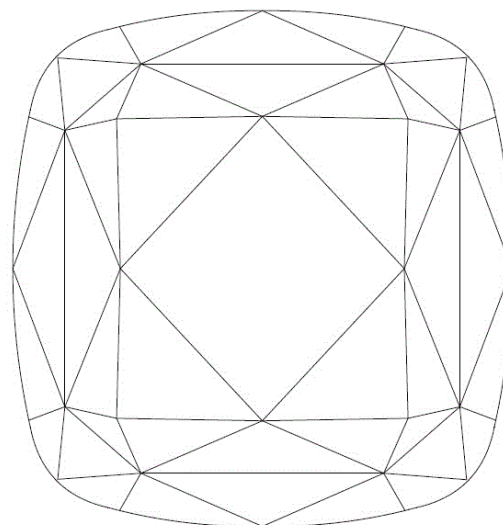
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00976 22: 2024-09-27 23:

21: A2024/00978 22: 2024-09-27 23:

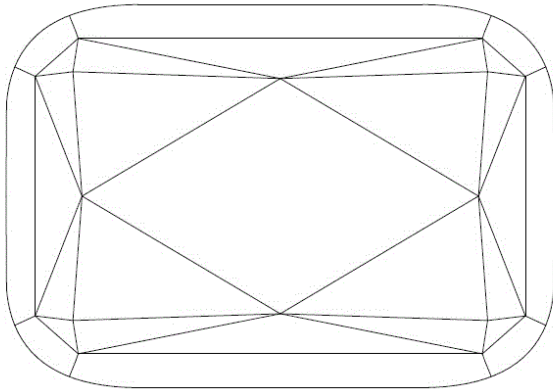
43: 2024-09-27

52: Class 11 24: Part A

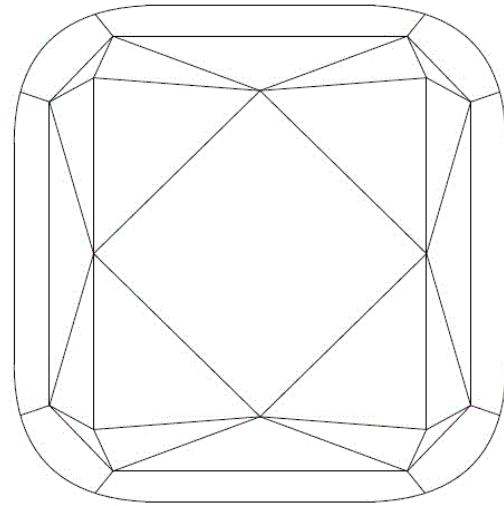
71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view



Top plan view

21: A2024/00980 22: 2024-09-27 23:

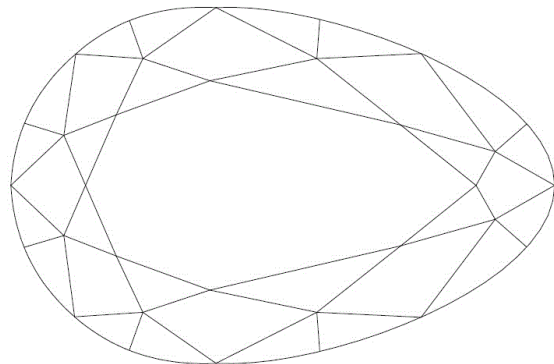
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00981 22: 2024-09-27 23:

43: 2024-09-27

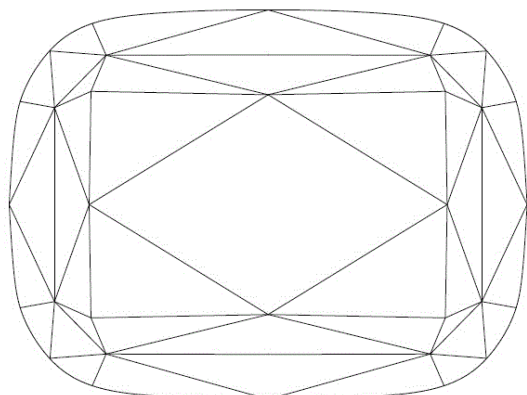
52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and

/ or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00982 22: 2024-09-27 23:

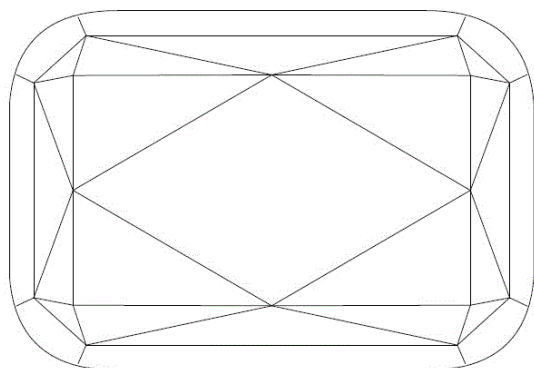
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00983 22: 2024-09-27 23:

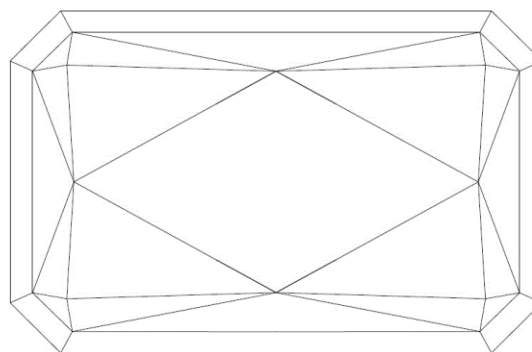
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00984 22: 2024-09-27 23:

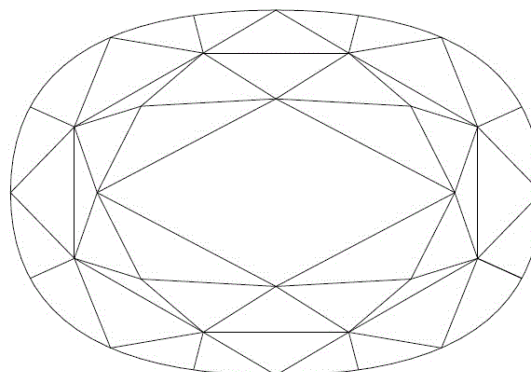
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00985 22: 2024-09-27 23:

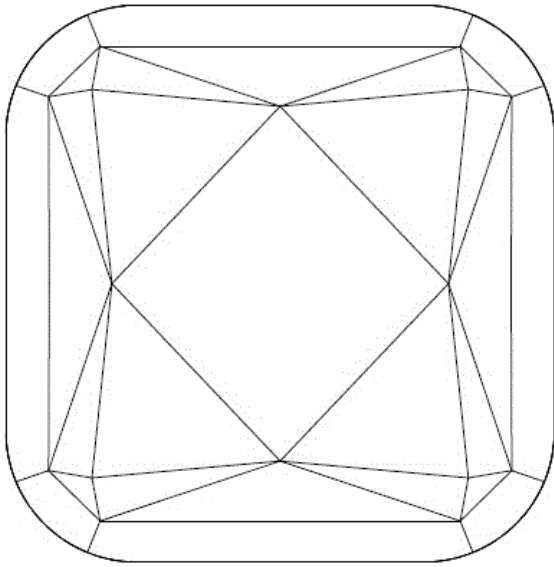
43: 2024-09-27

52: Class 11 24: Part A

71: SHIMANSKY, Yair

**54: GEMSTONES**

57: The design relates to gemstones. The features of the design for which protection is claimed include the shape and / or configuration and / or pattern and / or ornamentation of a gemstone as shown in the accompanying drawings.



Top plan view

21: A2024/00989 22: 2024-09-30 23:  
43: 2025-04-11

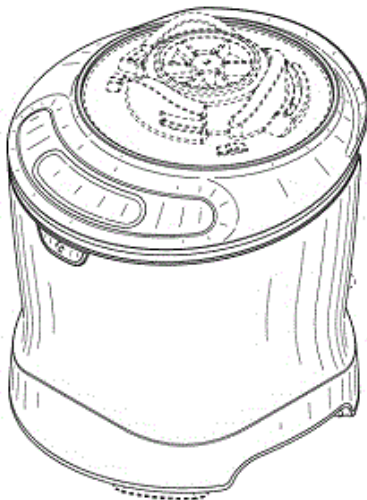
52: Class 31 24: Part A

71: CAPBRAN HOLDINGS, LLC

33: US 31: 29/936,139 32: 2024-04-05

**54: BASE UNIT FOR A FOOD PROCESSOR**

57: The design relates to a base unit for a food processor. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



PERSPECTIVE VIEW

21: A2024/00990 22: 2024-09-30 23:

43: 2025-04-11

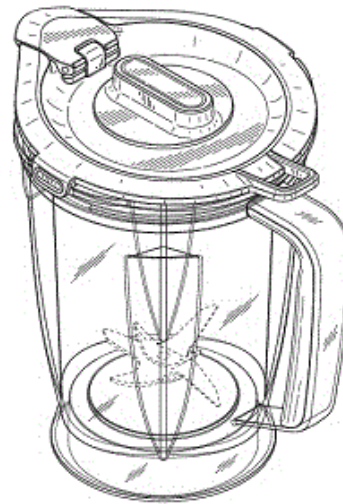
52: Class 31. 24: Part A

71: CAPBRAN HOLDINGS, LLC

33: US 31: 29/936,139 32: 2024-04-05

**54: Pitcher Container for a Food Processor**

57: The design relates to a pitcher container for a food processor. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



PERSPECTIVE VIEW

21: A2024/00991 22: 2024-09-30 23:

43: 2025-04-11

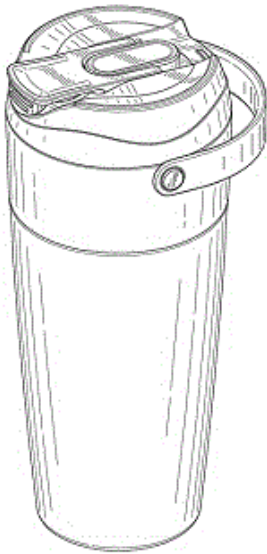
52: Class 31. 24: Part A

71: CAPBRAN HOLDINGS, LLC

33: US 31: 29/946,728 32: 2024-06-11

**54: Portable Blender**

57: The design relates to a portable blender. The features of the design are those of shape and/or configuration and/or ornamentation.

**PERSPECTIVE VIEW**

21: A2024/00992 22: 2024-09-30 23:  
43: 2025-04-11

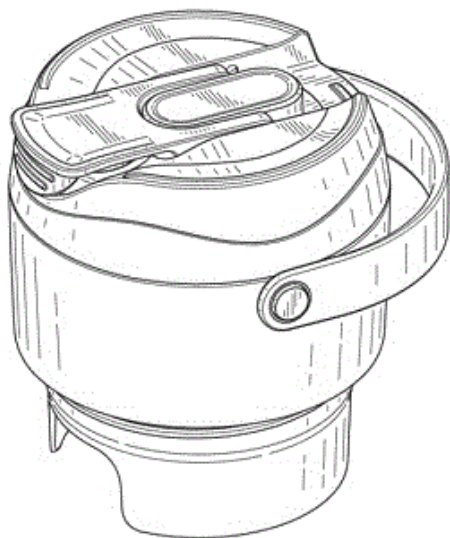
52: Class 31. 24: Part A

71: CAPBRAN HOLDINGS, LLC

33: US 31: 29/946,728 32: 2024-06-11

**54: Blade Assembly for a Portable Blender**

57: The design relates to a blade assembly for a portable blender. The features of the design are those of shape and/or configuration and/or ornamentation.

**TOP PERSPECTIVE VIEW**

21: A2024/00993 22: 2024-09-30 23:  
43: 2024-09-30

52: Class 15 24: Part A

71: Xingmai Innovation Technology (Suzhou) Co., Ltd.

**54: WATER TREATMENT APPARATUSES**

57: This design is for a water treatment apparatus specifically designed for swimming pool cleaners. The water treatment apparatus consists of a housing with a generally rectangular central section and two semi-cylindrical end sections. A protruding, curved handle is located at the front of the housing. At the rear of the housing, there is a cylindrical injection nozzle, positioned approximately at the center of the rear surface. Multiple hidden through-holes are arranged in an array on the rear surface of the housing.

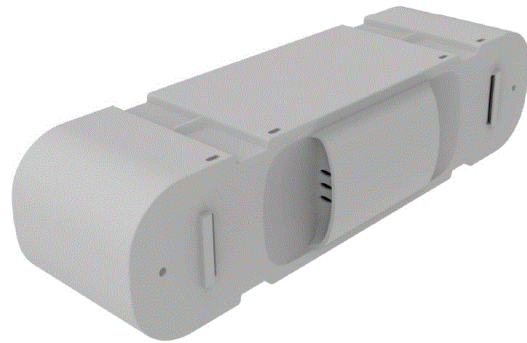


Figure 7

First three-dimensional view

21: A2024/00994 22: 2024-09-30 23:  
43: 2024-04-03

52: Class 14 24: Part A

71: Huawei Technologies Co., Ltd.

33: CN 31: 202430182521.8 32: 2024-04-03

**54: COMMUNICATION EQUIPMENT**

57: The design product is an optical fibre closure, which is mainly used for fibre distribution and connection of pre-connected optical cables. The design point of this design product lies in its overall shape.

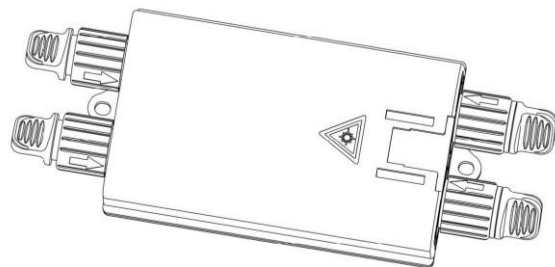


Figure 7

Three-dimensional view

21: A2024/00995 22: 2024-09-30 23:



43: 2024-04-03

52: Class 14 24: Part A

71: Huawei Technologies Co., Ltd.

33: CN 31: 202430182521.8 32: 2024-04-03

**54: COMMUNICATION EQUIPMENT**

57: The design product is an optical fibre closure, which is mainly used for fibre distribution and connection of pre-connected optical cables. The design point of this design product lies in its overall shape.

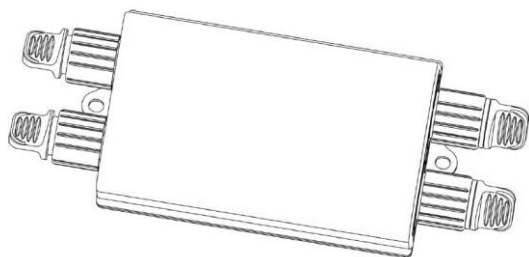


Figure 7

Three-dimensional view

52: Class 14 24: Part A

71: Huawei Technologies Co., Ltd.

33: CN 31: 202430182521.8 32: 2024-04-03

**54: COMMUNICATION EQUIPMENT**

57: The design product is an optical fibre closure, which is mainly used for fibre distribution and connection of pre-connected optical cables. The design point of this design product lies in its overall shape.

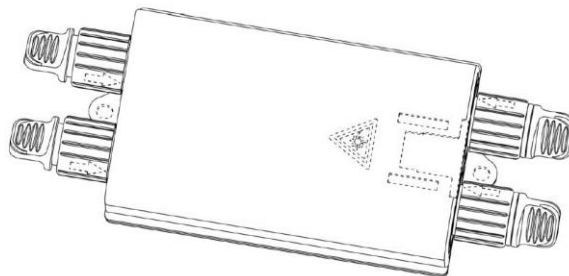


Figure 7

Three-dimensional view

21: A2024/00996 22: 2024-09-30 23:

43: 2024-04-03

52: Class 14 24: Part A

71: Huawei Technologies Co., Ltd.

33: CN 31: 202430182521.8 32: 2024-04-03

**54: COMMUNICATION EQUIPMENT**

57: The design product is an optical fibre closure, which is mainly used for fibre distribution and connection of pre-connected optical cables. The design point of this design product lies in its overall shape or colour.

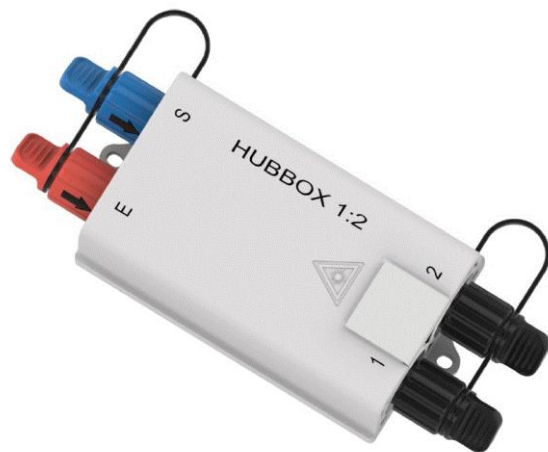


Figure 7

Three-dimensional view

21: A2024/01015 22: 2024-10-08 23:

43: 2025-05-08

52: Class 09 24: Part A

71: SAVERGLASS

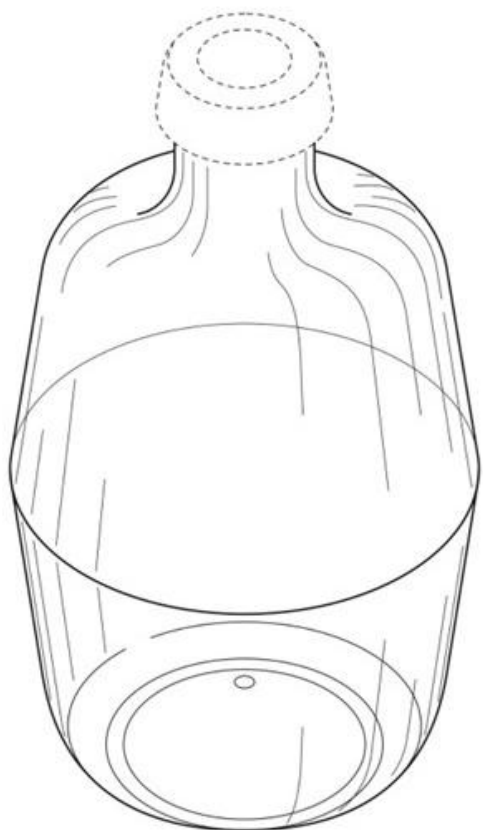
33: EU 31: 015063662-0001 32: 2024-06-14

**54: BOTTLE**

57: The design is applied to a bottle. The features of the design for which protection is claimed are those of the shape and/or configuration of the bottle, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed. Surface lines are included to indicate the surface character and contours of the bottle and such lines do not constitute a surface pattern or ornamentation.

21: A2024/00997 22: 2024-09-30 23:

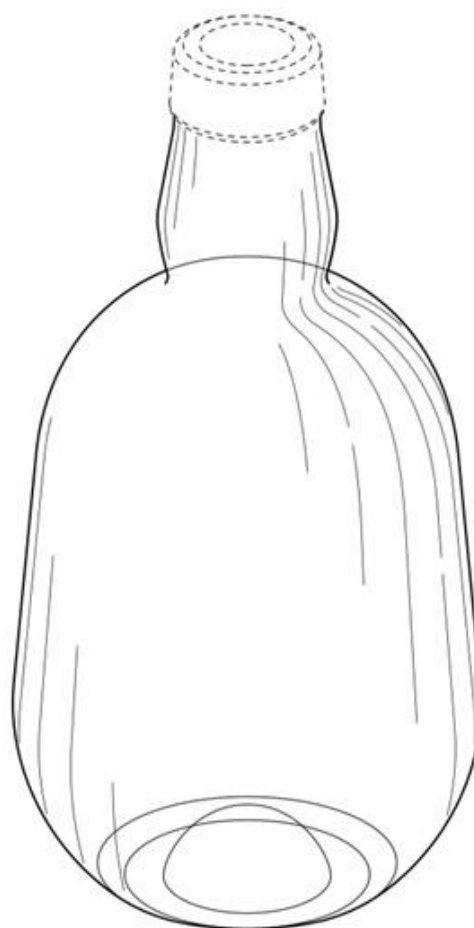
43: 2024-04-03



21: A2024/01016 22: 2024-10-08 23:  
43: 2025-05-08  
52: Class 09 24: Part A  
71: SAVERGLASS  
33: EU 31: 015063791-0001 32: 2024-06-18

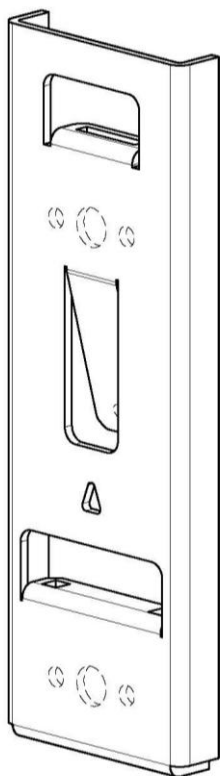
**54: BOTTLE**

57: The design is applied to a bottle. The features of the design for which protection is claimed are those of the shape and/or configuration of the bottle, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed. Surface lines are included to indicate the surface character and contours of the bottle and such lines do not constitute a surface pattern or ornamentation.



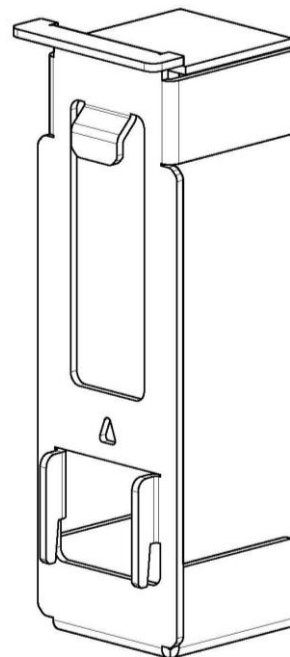
21: A2024/01034 22: 2024-10-10 23:  
43: 2025-05-12  
52: Class 08 24: Part A  
71: EVA-LAST DISTRIBUTORS (PTY) LTD  
**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



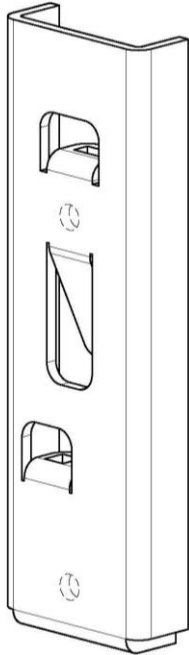
21: A2024/01036 22: 2024-10-10 23:  
43: 2025-05-12  
52: Class 08 24: Part A  
71: EVA-LAST DISTRIBUTORS (PTY) LTD  
**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



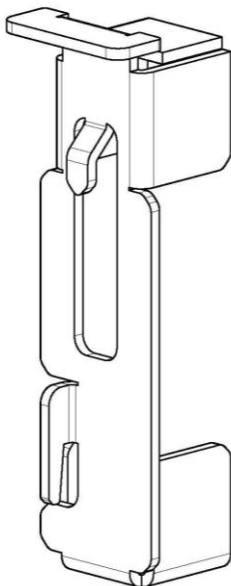
21: A2024/01038 22: 2024-10-10 23:  
43: 2025-05-12  
52: Class 08 24: Part A  
71: EVA-LAST DISTRIBUTORS (PTY) LTD  
**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



21: A2024/01050 22: 2024-10-10 23:  
43: 2025-05-12  
52: Class 08 24: Part A  
71: EVA-LAST DISTRIBUTORS (PTY) LTD  
**54: BRACKET**

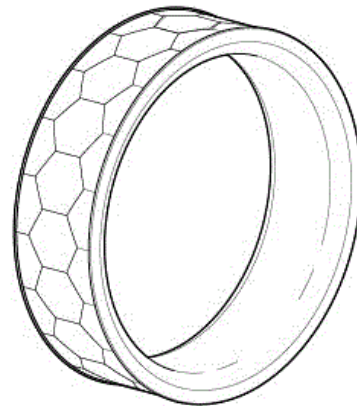
57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



21: A2024/01053 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY) LIMITED

**54: A RING**

57: The design relates to ring. The features of the design for which protection is claimed reside in the shape and/or configuration and/or pattern and/or ornamentation of the ring.

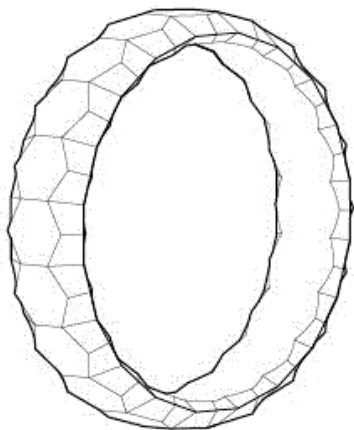


**FIRST PERSPECTIVE VIEW**

21: A2024/01054 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY) LIMITED

**54: A RING**

57: The design relates to a ring.



FIRST PERSPECTIVE VIEW

21: A2024/01055 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY)  
LIMITED

**54: A RING**

57: The design relates to ring. The features of the design for which protection is claimed reside in the shape and/or configuration and/or pattern and/or ornamentation of the ring, irrespective of the features shown in broken lines.

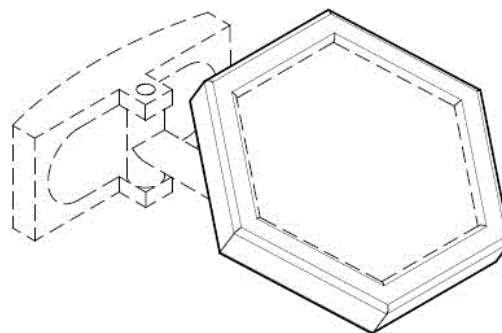


PERSPECTIVE VIEW

21: A2024/01056 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY)  
LIMITED

**54: CUFFLINK**

57: The design relates to a cufflink. The features of the design for which protection is claimed reside in the shape and/or configuration and/or pattern and/or ornamentation of the cufflink, irrespective of the features shown in broken lines.



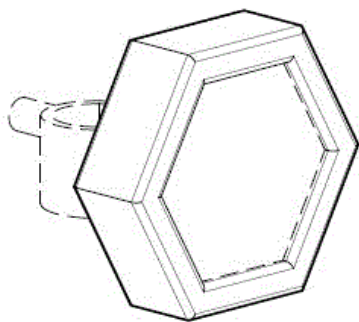
FIRST PERSPECTIVE VIEW

21: A2024/01057 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY)  
LIMITED

**54: AN EARING**

57: The design relates to an earring. The features of the design for which protection is claimed reside in the shape and/or configuration and/or pattern and/or ornamentation of the earring, irrespective of the features shown in broken lines.



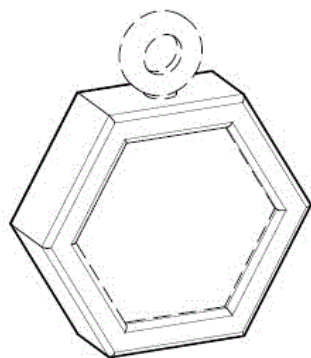


### PERSPECTIVE VIEW

21: A2024/01058 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY)  
LIMITED

#### **54: A PENDANT**

57: The design relates to pendant. The features of the design for which protection is claimed reside in the shape and/or configuration and/or pattern and/or ornamentation of a pendant,



### PERSPECTIVE VIEW

21: A2024/01059 22: 2024-10-14 23:  
43: 2025-05-12  
52: Class 11 24: Part A  
71: BROWNS THE DIAMOND STORE (PTY)  
LIMITED

#### **54: A RING**

57: The design relates to ring. The features of the design for which protection is claimed reside in the

shape and/or configuration and/or pattern and/or ornamentation of the ring.



### PERSPECTIVE VIEW

21: A2024/01092 22: 2024-10-21 23:  
43: 2025-05-08

52: Class 03 24: Part A  
71: GALAGO STUDIOS (PTY) LTD

#### **54: KEYHOLDER**

57: The design is applied to a KEYHOLDER. 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 KEYHOLDER, substantially as illustrated in the accompanying representations.

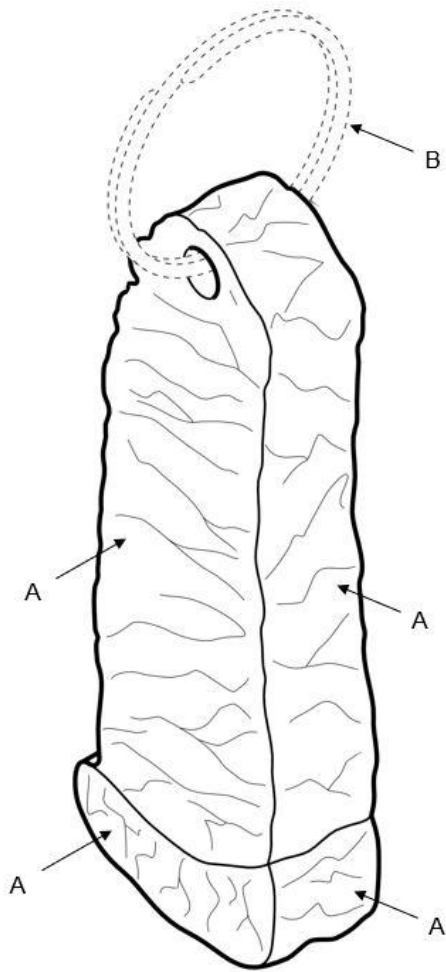


FIG. 1: THREE-DIMENSIONAL VIEW

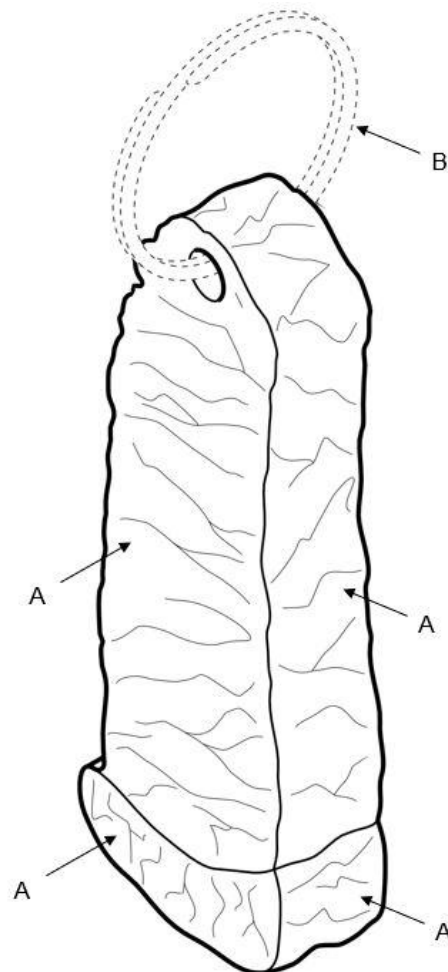


FIG. 1: THREE-DIMENSIONAL VIEW

21: A2024/01093 22: 2024-10-21 23:  
43: 2025-05-08

52: Class 11 24: Part A

71: GALAGO STUDIOS (PTY) LTD

**54: TRINKET**

57: The design is applied to a TRINKET. 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 TRINKET, substantially as illustrated in the accompanying representations

21: A2024/01096 22: 2024-10-22 23:  
43: 2025-05-12

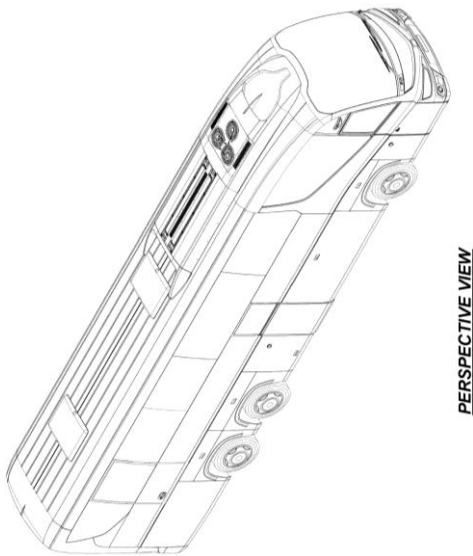
52: Class 12 24: Part A

71: IRIZAR, S. COOP.

33: EU 31: 015063633 32: 2024-06-14

**54: BUS**

57: The design relates to a BUS. The features for which protection is claimed reside in the shape and/or configuration and/or ornamentation of the BUS as shown in the accompanying representations.



43: 2025-05-08  
 52: Class 12 24: Part A  
 71: BYD COMPANY LIMITED  
 33: CN 31: 202430254876.3 32: 2024-04-30

**54: CAR**

57: The design is applied to a car. 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 car, substantially as illustrated in the accompanying representation.



21: A2024/01106 22: 2024-10-23 23:  
 43: 2025-05-08  
 52: Class 12 24: Part A  
 71: SOLVIT ENGINEERING (PTY) LTD

**54: COVER FOR A TOW HITCH**

57: The design is applied to a cover for a tow hitch. 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 cover for a tow hitch, substantially as illustrated in the accompanying representations.



21: A2024/01123 22: 2024-10-30 23:  
 43: 2025-05-09

52: Class 7 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2024/01124 22: 2024-10-30 23:  
 43: 2025-05-09

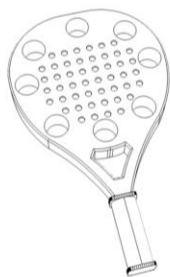
52: Class 7 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle . The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2024/01118 22: 2024-10-29 23:



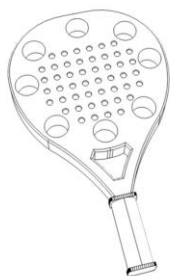
21: A2024/01125 22: 2024-10-30 23:  
43: 2025-05-09

52: Class 21 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



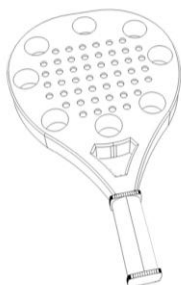
21: A2024/01126 22: 2024-10-30 23:  
43: 2025-05-09

52: Class 7 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



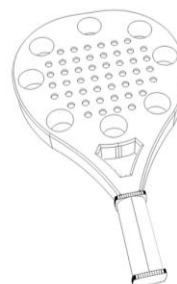
21: A2024/01127 22: 2024-10-30 23:  
43: 2025-05-09

52: Class 21 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2024/01128 22: 2024-10-30 23:  
43: 2025-05-09

52: Class 7 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2024/01129 22: 2024-10-30 23:  
43: 2025-05-09

52: Class 21 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2024/01130 22: 2024-10-30 23:

43: 2025-05-09

52: Class 21 24: Part A

71: Paulo Miguel Pereira LOPES, Jorge Gouveia FERREIRA, Ricardo Jose Pereira LOPES

**54: A SERVING PADDLE**

57: The design relates to a A Serving Paddle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2024/01172 22: 2024-11-20 23:

43: 2025-06-11

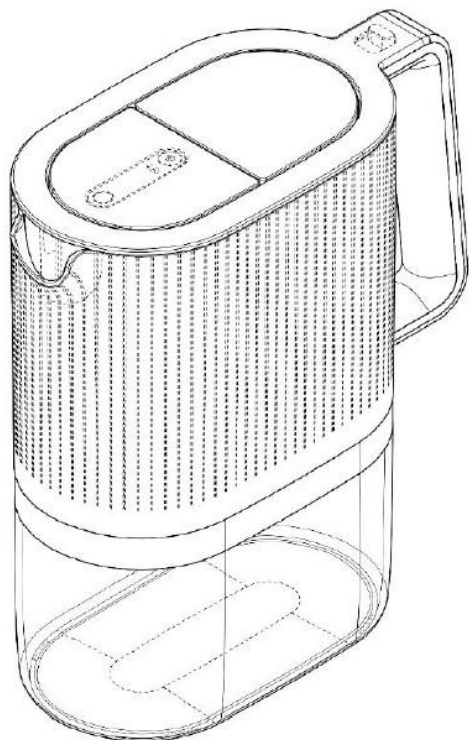
52: Class 07 24: Part A

71: SODASTREAM INDUSTRIES LTD.

33: IL 31: 72577 32: 2024-05-26

**54: WATER FILTER JUGS**

57: The design is for a water filter jug with features as shown in the representations.



PERSPECTIVE VIEW

21: A2024/01173 22: 2024-11-20 23:

43: 2025-06-11

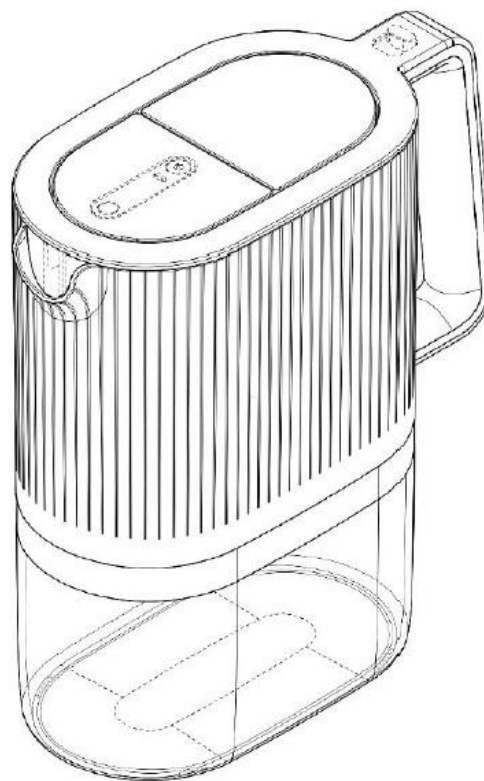
52: Class 07 24: Part A

71: SODASTREAM INDUSTRIES LTD.

33: IL 31: 72576 32: 2024-05-26

**54: WATER FILTER JUGS**

57: The design is for a water jug with features as shown in the representations.



PERSPECTIVE VIEW

21: A2024/01208 22: 2024-11-26 23:

43: 2025-06-11

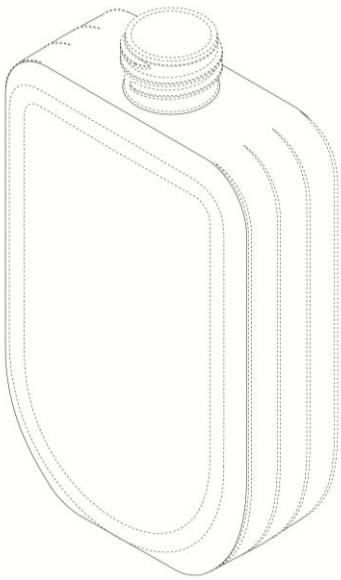
52: Class 09 24: Part A

71: MYCRO KERATIN ISRAEL LTD.

**54: BOTTLE**

57: The design is for a bottle with features as shown in the representations.





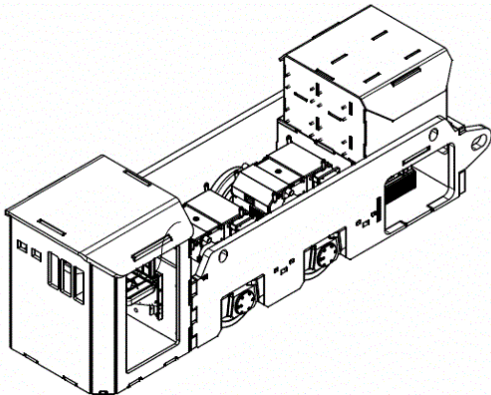
21: A2025/00345 22: 2025-03-26 23:  
43: 2025-05-06

52: Class 12 24: Part A

71: CRESLOW INVESTMENTS PTY LTD t/a  
CRESLOW ENERGY SOLUTIONS

#### **54: LOCOMOTIVE**

57: The design relates to a Locomotive. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: F2024/00033 22: 2024-01-11 23:  
43: 2025-04-17

52: Class 08 24: Part F

71: VAN BERGEN, Duane

#### **54: FASTENING DEVICE**

57: The features for which protection is claimed reside in the shape and/or configuration of a fastening device which includes a first component comprising a head "H" and an elongate element "EE" extending from the head, and a second component

which comprises a fastener "F", substantially as shown in the accompanying drawings. The length of the elongate element "EE" is variable.



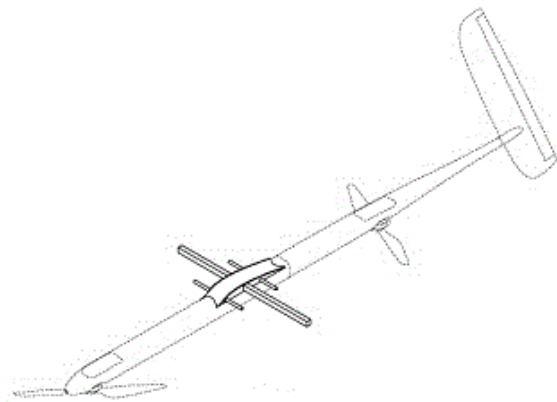
21: F2024/00764 22: 2024-07-31 23:  
43: 2025-04-17

52: Class 12. 24: Part F

71: BEYERS, JOHANNES ALBERTUS LOUBSER

#### **54: Wing Mounting for an Unmanned Aerial Vehicle**

57: The design relates to a wing mounting for an unmanned aerial vehicle. The features of the design are those of shape and/or configuration.



**PERSPECTIVE VIEW MOUNTING**

21: F2024/00858 22: 2024-09-02 23:  
43: 2024-03-06

52: Class 02 24: Part F

71: Zuffa, LLC

33: US 31: 29/931,290 32: 2024-03-06

#### **54: GLOVES**

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. The dorsal side has a first strip proximally to which the

wrist strap attaches and is adjacent a padded strip to provide protection in use. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening through which a thumb extends and to facilitate hand movements in use. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side. The wrist strap has a first strip to attach to the second strip on the dorsal side to secure the glove.

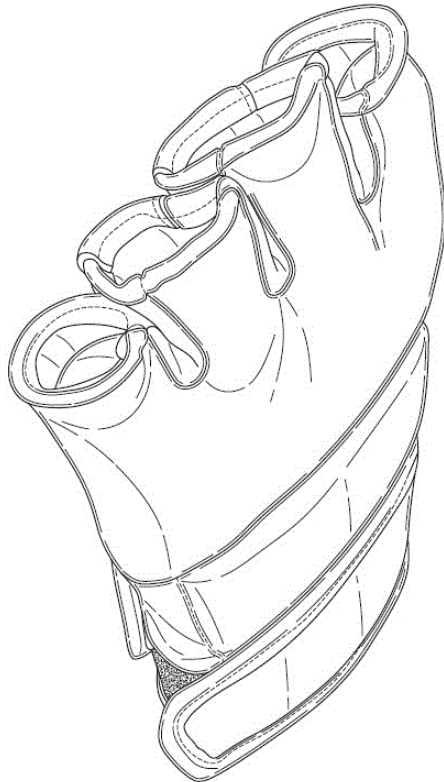


Figure 1  
Three-dimensional view

21: F2024/00859 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part F  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

#### **54: GLOVES**

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. The dorsal side has a first strip proximally to which the wrist strap attaches and is adjacent a padded strip to provide protection in use. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and a substantially oval shaped palm opening through which a thumb extends and to facilitate hand movements in use. The wrist strap is

a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side. The wrist strap has a first strip to attach to the second strip on the dorsal side to secure the glove.

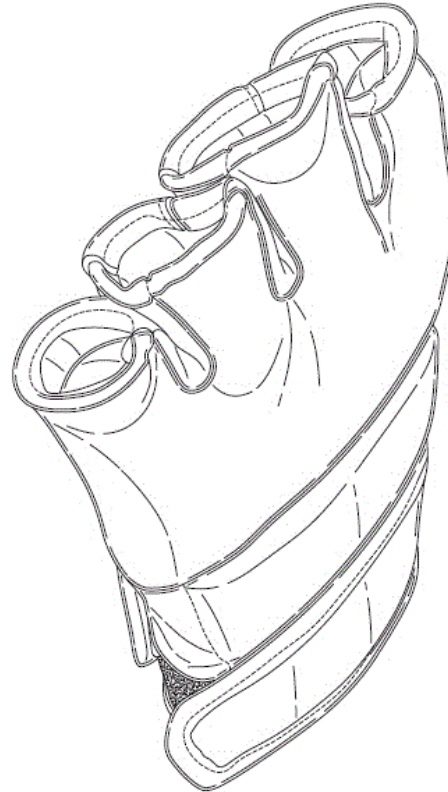


Figure 1  
Three-dimensional view

21: F2024/00860 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part F  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

#### **54: GLOVES**

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. The dorsal side has the wrist strap attaches and is adjacent a padded strip to provide protection in use. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening through which a thumb extends and to facilitate hand movements in use. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side.

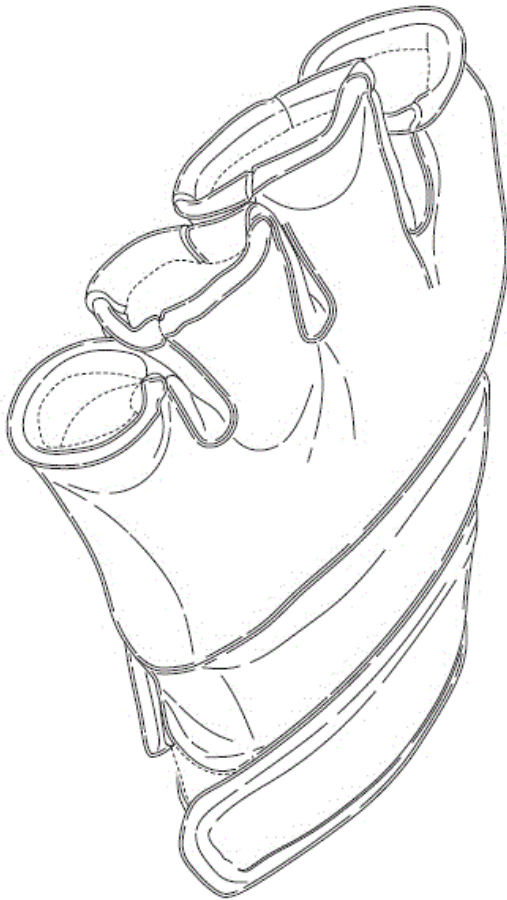


Figure 1  
Three-dimensional view

21: F2024/00861 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part F  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

#### 54: GLOVES

57: The design is for a glove having a palmar side, a dorsal side, four open-ended finger slots distally, and a wrist opening with a wrist strap proximally. The dorsal side has the wrist strap attaches and is adjacent a padded strip to provide protection in use. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening through which a thumb extends and to facilitate hand movements in use. The wrist strap is a longitudinal extension of the underflap passing through a slot in the overflap circumferentially around the wrist to the dorsal side.

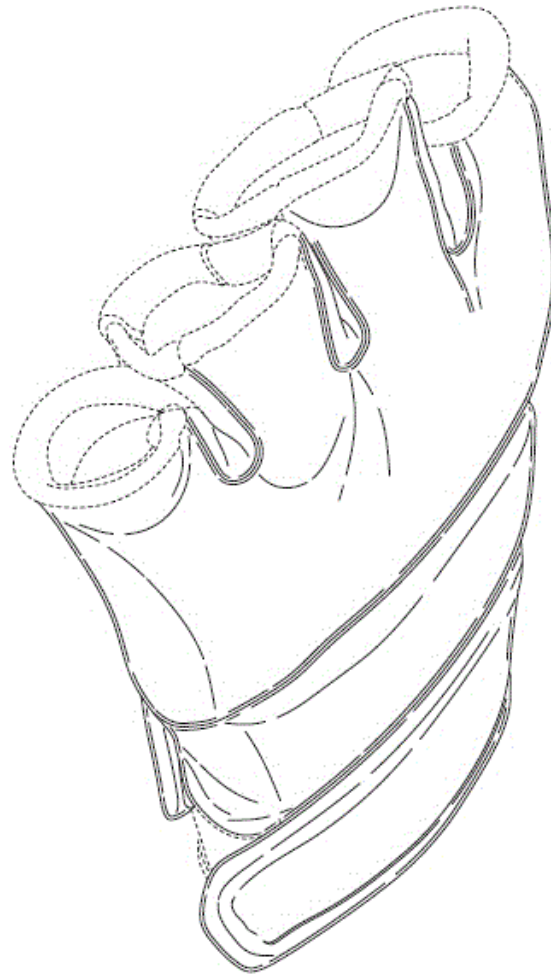


Figure 1  
Three-dimensional view

21: F2024/00862 22: 2024-09-02 23:  
43: 2024-03-06  
52: Class 02 24: Part F  
71: Zuffa, LLC  
33: US 31: 29/931,290 32: 2024-03-06

#### 54: GLOVES

57: The design is for a glove having a palmar side, a dorsal side and a wrist opening proximally. The dorsal side has a laterally orientated padded strip to provide protection in use. The palmar side has two overlapping flaps proximally, an underflap and an overflap, and an oval shaped palm opening through which a thumb extends and to facilitate hand movements in use.

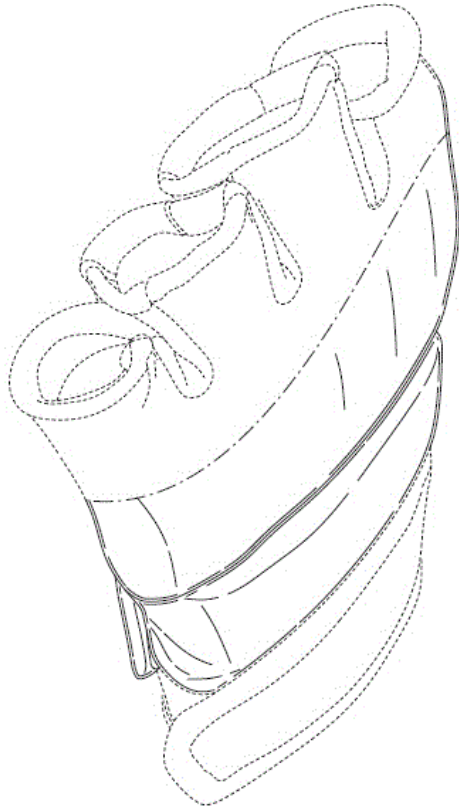
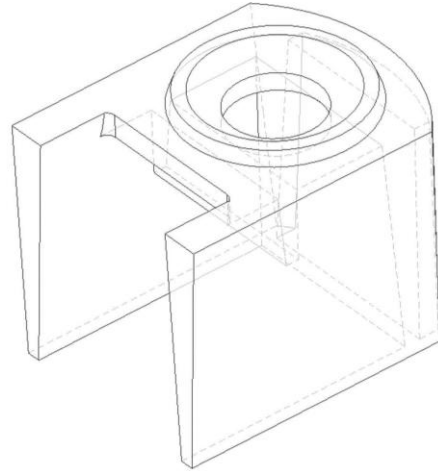


Figure 1  
Three-dimensional view



21: F2024/00865 22: 2024-09-03 23:

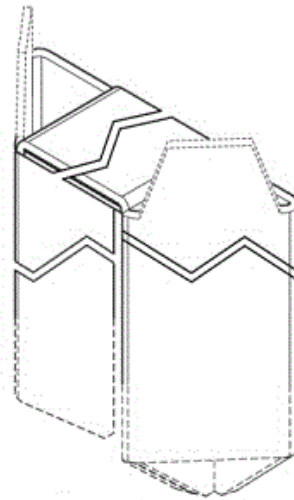
43: 2025-04-17

52: Class 9. 24: Part F

71: MPACT LIMITED

**54: Box Connector**

57: The design relates to a box connector. The features of the design are those of shape and/or configuration and/or pattern.



**FRONT PERSPECTIVE VIEW FIRST EMBODIMENT**

21: F2024/00864 22: 2024-09-03 23:

43: 2024-04-02

52: Class 8 24: Not Applicable

71: Rocbolt Technologies (Pty) Ltd.

33: ZA 31: F2024/00308 32: 2024-04-02

**54: A Structural Spacer Member for a Rock Bolt**

57: The design is for a structural spacer member for a rock bolt. The spacer member has a cuboid, hollow body and defines longitudinally outer and inner ends with a main channel extending longitudinally between the outer and inner ends. The body defines an auxiliary opening at a side of the body and an auxiliary channel extending laterally between the auxiliary opening and the inner end.

21: F2024/00887 22: 2024-09-12 23:

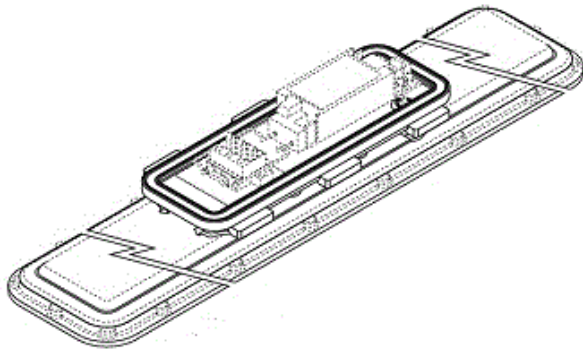
43: 2025-04-08

52: Class 26. 24: Part F

71: ELECTROFLAME MANUFACTURING (PTY) LTD.

**54: Lighting Set**

57: The design relates to a lighting set. The features of the design are those of shape and/or configuration and/or pattern.

**REAR PERSPECTIVE VIEW LIGHT ARRANGEMENT**

21: F2024/00920 22: 2024-09-18 23:  
43: 2025-04-11  
52: Class 15 24: Part F  
71: BATTLEMAX (PTY) LTD

**54: BELT GUARD 1**

57: The novelty of the design resides in the shape or configuration of a belt guard which includes a body with a rear portion and a front cover which is movable relative to the rear portion to allow access to a volume which is defined by the body substantially as shown in the accompanying drawings. A pattern of apertures which is formed in the front cover, and brackets (A), hinges (B), and a handle (C) which are mounted on the body do not form part of the design.

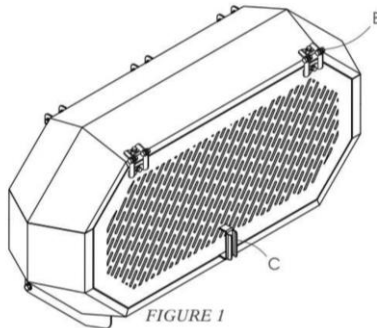


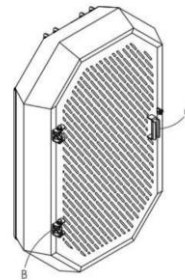
FIGURE 1

21: F2024/00923 22: 2024-09-18 23:  
43: 2025-04-11  
52: Class 15 24: Part F  
71: BATTLEMAX (PTY) LTD

**54: BELT GUARD 3**

57: The novelty of the design resides in the shape or configuration of a belt guard which includes a body with a rear portion, a first closure and a second closure which are respectively movable relative to the rear portion to allow access to a volume which is defined by the body substantially as shown in the accompanying drawings. A pattern of apertures

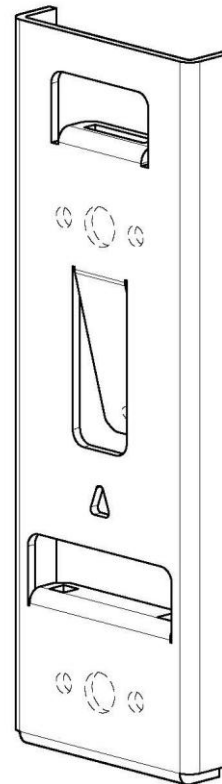
which is formed in the first closure, and brackets (A), hinges (B) and a handle (C) which are mounted on the body do not form part of the design.



21: F2024/01035 22: 2024-10-10 23:  
43: 2025-05-12  
52: Class 08 24: Part F  
71: EVA-LAST DISTRIBUTORS (PTY) LTD

**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



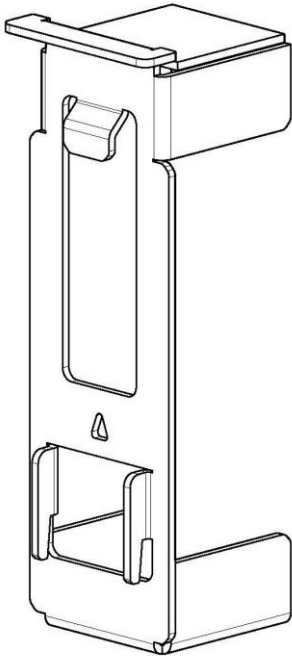
21: F2024/01037 22: 2024-10-10 23:  
43: 2025-05-12  
52: Class 08 24: Part F



71: EVA-LAST DISTRIBUTORS (PTY) LTD

**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



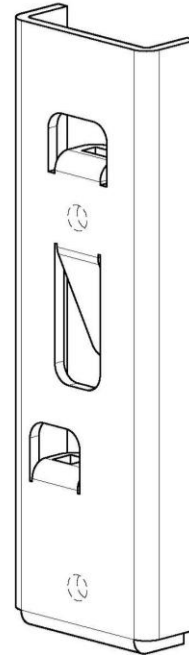
21: F2024/01039 22: 2024-10-10 23:  
43: 2025-05-12

52: Class 08 24: Part F

71: EVA-LAST DISTRIBUTORS (PTY) LTD

**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



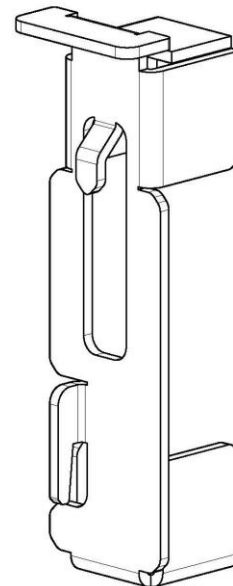
21: F2024/01051 22: 2024-10-10 23:  
43: 2025-05-12

52: Class 08 24: Part F

71: EVA-LAST DISTRIBUTORS (PTY) LTD

**54: BRACKET**

57: The features of the design for which protection is claimed include the shape and/or configuration of a BRACKET substantially as illustrated in the accompanying representations.



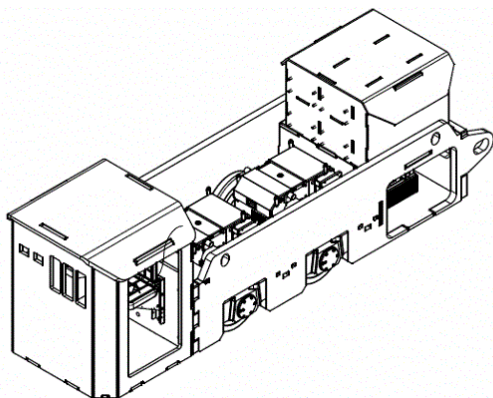
21: F2025/00346 22: 2025-03-26 23:  
43: 2025-05-06

52: Class 12 24: Part F

71: CRESLOW INVESTMENTS PTY LTD t/a  
CRESLOW ENERGY SOLUTIONS

**54: LOCOMOTIVE**

57: The design relates to a Locomotive. The features of the design are those of shape and/or pattern and/or configuration.



**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTICE 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.

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No records available



**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTICE NOTICES**

No records available

## 5. CORRECTION NOTICES

## TRADE MARK CORRECTION NOTICES

No records available

## PATENT CORRECTION NOTICES

The patent application no: **2023/10885** was advertised in the April and May 2025 journal therefore its publication in the May 2025 journal is null and void as a result the **30/04/2025** will be the valid publication date.

The patent application no: **2024/08195** was advertised in the May 2025 journal with incorrect order of applicants and the publication should have appeared as the one below but the publication date will remain the **28/05/2025** will be the valid publication date.

21: 2024/08195. 22: 2024/10/30. 43: 2025/05/02

51: A61G

71: **Nanjing Pukou People's Hospital, Nanjing, China (Jiangsu Province Hospital Pukou Branch), Chuzhou University**

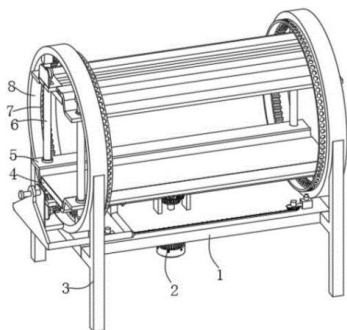
72: CAO, Lihua, XU, Wei, CHEN, Gangling, LI, Chao, WANG, Xiaolei, BAI, Min, SHENG, Weiwei

33: CN 31: 202311697760.8 32: 2023-12-11

54: INTELLIGENT MEDICAL TERMINAL FOR GERIATRIC HEALTH MANAGEMENT

00: -

The present invention discloses an intelligent medical terminal for geriatric health management, including a base plate, where support brackets are fixedly connected to the base plate. A turnover mechanism includes fixing rings, and a plurality of positioning blocks are fixedly connected in an inner cavity of the fixing ring. A positive and negative screw is rotatably connected between two opposing positioning blocks, and third threaded plates are threadedly connected to the positive and negative screw. An installation box is arranged between two third threaded plates, and connecting strips are fixedly connected to the bottom of the mounting box and slidably connected to the third threaded plates. A gear ring is rotatably connected inside the fixing ring. The positive and negative screws are driven by driving motors provided in the positioning blocks so that the adjacent third threaded plates and the installation boxes can approach each other.



The patent amendment below (**2017/01965**) should have been advertised in the **December 2024 journal** unfortunately it was erroneously omitted from the publication list because it was processed on the **27/11/2024** which is the publication day and eventually missed the other journals thereof. However, the publication will be **25/06/2025**.

**Applicant: NOKIA TECHNOLOGIES OY KARAPORTTI 3, 02610 ESPOO, FINLAND.** Request permission to amend the specification of letters patent no: **2017/01965** of **22/03/2017** for **AUDIO PARAMETER QUANTIZATION**.

A copy of the original specification on which the proposed amendment is indicated in red, is now available for public inspection at the Patent Office.

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

**Registrar of Patents**

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#### NOTIFICATION

The notice of acceptance of South African Patent Application No. **2024/02505**, in the name of **Smith & Loveless Inc**, was erroneously published in the Patent Journal of **18 December 2024**. Therefore, its publication in the Patent Journal of 18 December 2024 is **null and void**.

#### 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. **2024/02505**, in the name of **Smith & Loveless Inc**, by deleting the following entries:

- (a) 14/10/2024 Application accepted on 14/10/2024
- (b) 19/12/2024– Patent granted on 18/12/2024
- (c) 19/12/2024- Patent advertised on 18/12/2024

#### DESIGNS CORRECTION NOTICES

No records available

#### COPYRIGHT CORRECTION NOTICES

No records available

## PATENTS

## Advertisement List for June 2025

Number of Advertised Patents: 698

Application Number	Patent Title	Filing Date
2015/09234	ARRANGEMENT FOR CONTROLLING PERCUSSIVE DRILLING PROCESS	2015/12/18
2016/06471	ANTIMITOTIC AMIDES FOR THE TREATMENT OF CANCER AND PROLIFERATIVE DISORDERS	2016/09/20
2017/06384	CHIMERIC ANTIGEN RECEPTORS TARGETING B-CELL MATURATION ANTIGEN	2017/09/21
2017/08367	IMPROVED FREQUENCY BAND EXTENSION IN AN AUDIO SIGNAL DECODER	2017/12/11
2017/08394	PROBIOTIC COMPOSITION AS LEATHER AUXILIARY AGENTS AND USE THEREOF	2017/12/11
2018/01722	TREATMENT OF ALOPECIA AREATA	2018/03/13
2018/02313	IMPROVED ESPRESSO COFFEE MACHINE AND METHOD FOR DISPENSING AN ESPRESSO COFFEE	2018/04/09
2018/02846	DIMERIC CONTRAST AGENTS	2018/04/30
2018/03013	USE OF PYDIFLUMETOFEN FOR THE REDUCTION OF MYCOTOXIN CONTAMINATION IN PLANTS	2018/05/08
2018/04941	MESH HANDLING DEVICE FOR MINING OR TUNNELLING EQUIPMENT	2018/07/23
2018/05576	SLEEVED CONTAINER	2018/08/21
2018/05740	CONCAVE CAN END	2018/08/28
2018/06267	POLYCRYSTALLINE DIAMOND COMPACTS, METHODS OF FORMING POLYCRYSTALLINE DIAMOND, AND EARTH-BORING TOOLS	2018/09/18
2018/07209	A LOCK	2018/10/29
2018/07437	CLOSED CAPSULE WITH OPENING MEANS AND INTEGRAL BARRIER LAYER	2018/11/06
2018/07693	REAL-TIME DATA ACQUISITION AND RECORDING SYSTEM	2018/11/15
2018/07813	RADIO FRAME SENDING AND RECEIVING METHODS AND APPARATUS	2018/11/20
2018/08381	METHODS AND COMPOSITIONS FOR TREATING ADVANCED STAGE	2018/12/12



Application Number	Patent Title	Filing Date
2019/01025	NON-SMALL CELL LUNG CANCER STABLE ELECTROLYTE MATERIAL AND SOLVENT MATERIAL CONTAINING SAME	2019/02/18
2019/01072	DEVICE FOR EJECTING CARTRIDGES AND/OR LINKS FROM A CHAIN OR AMMUNITION STRIP CONNECTED TO A MAIN AND/OR SECONDARY WEAPON	2019/02/19
2019/02546	LOW-VOLTAGE CIRCUIT BREAKER DEVICE	2019/04/23
2019/05051	ANTI- $\beta$ -PD $\beta$ 1 ANTIBODIES FOR TREATMENT OF LUNG CANCER	2019/07/31
2019/05644	METHOD OF MANUFACTURING AND DERMAL FILLER COMPOSITIONS CONTAINING HYALURONIC ACID AND HYDROXYAPATITE	2019/08/27
2019/06360	REMOVAL OF HYDROPHOBIC PARTICLES USING CARBON DIOXIDE	2019/09/26
2019/07031	A FLUIDIZING GAS NOZZLE HEAD AND A FLUIDIZED BED REACTOR WITH MULTIPLE FLUIDIZING GAS NOZZLE HEADS	2019/10/24
2019/07148	HUMAN ANTI-SEMAPHORIN 4D ANTIBODY	2019/10/29
2019/08066	EXPANDABLE SHEATH AND METHODS OF USING THE SAME	2019/12/04
2019/08263	REAL-TIME MONITORING AND PERFORMANCE ADVISORY SYSTEM FOR MULTI-CELL FROTH FLOTATION SYSTEM	2019/12/11
2020/03133	ANTI-TL1A/ANTI-TNF- $\alpha$ BISPECIFIC ANTIGEN BINDING PROTEINS AND USES THEREOF	2020/05/27
2020/04557	MODULATORY POLYNUCLEOTIDES	2020/07/23
2020/04739	AGRICULTURAL FORMULATIONS, USES THEREOF AND PROCESSES FOR PREPARATION THEREOF	2020/07/30
2020/04740	SOLAR CONTROL COATINGS WITH QUADRUPLE METALLIC LAYERS	2020/07/30
2020/04826	BIOLOGICAL FLUID COLLECTION AND STABILIZATION SYSTEM	2020/08/04
2020/05294	ENTERIC SOFTGEL CAPSULES	2020/08/25
2020/05353	MODULAR POINT-OF-SALE DISPLAY	2020/08/27
2020/05387	SOLID IONIC CONDUCTOR FOR RECHARGEABLE ELECTROCHEMICAL BATTERY CELLS	2020/08/28

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2020/05426	NOVEL PYRIDINE AND PYRAZINE COMPOUNDS AS INHIBITORS OF CANNABINOID RECEPTOR 2	2020/08/31
2020/05849	ROOF COVERING ELEMENT, SOLAR ROOF COVERING ELEMENT, ASSEMBLY OF SOLAR ROOF COVERING ELEMENTS, AND METHOD FOR PRODUCING A SOLAR ROOF COVERING ELEMENT	2020/09/21
2020/06507	SPIROPIPERIDINE ALLOSTERIC MODULATORS OF NICOTINIC ACETYLCHOLINE RECEPTORS	2020/10/20
2020/06549	PYRIDAZINONES AS PARP7 INHIBITORS	2020/10/21
2020/06616	PERMANENT STORAGE OF CARBON DIOXIDE	2020/10/23
2020/06650	INPUT COUNT RATE ESTIMATION IN RADIATION PULSE DETECTORS	2020/10/26
2020/06687	URINE-SAMPLING KIT AND METHODS THEREOF	2020/10/27
2020/07785	FORMULATIONS CONTAINING TRIAZINONES AND IRON WITH A LOW AMOUNT OF FREE IRON IONS	2020/12/14
2020/07952	APPARATUS FOR FLY MANAGEMENT	2020/12/18
2021/00024	SECURITY LABEL STOCK AND SYSTEM FOR MANUFACTURING THEREOF	2021/01/04
2021/01118	A SUBSTITUTED AMINO-PYRIMIDINE COMPOUND FOR USE IN A METHOD FOR TREATMENT AND PREVENTION OF MULTIPLE SCLEROSIS	2021/02/18
2021/01258	ANTI-MICA/B ANTIBODIES THAT BLOCK MICA/B SHEDDING AND METHODS OF USE	2021/02/24
2021/01396	A BANKNOTE HANDLING MACHINE	2021/03/01
2021/01475	PROCESS FOR THE ACTIVATION OF OXIDISED CATALYSTS	2021/03/03
2021/01494	IMPROVED ANTI-FLT3 ANTIGEN BINDING PROTEINS	2021/03/04
2021/01648	E-VAPOR DEVICES INCLUDING PRE-SEALED CARTRIDGES	2021/03/11
2021/01798	INSULATABLE, INSULATIVE FRAMEWORK APPARATUS AND METHODS OF MAKING AND USING SAME	2021/03/17
2021/02243	METHOD OF PREPARING A GYPSUM-BASED PRODUCT	2021/04/01
2021/06150	A MUSHROOM PACKAGING SYSTEM	2021/08/25
2021/09498	METHODS FOR PRODUCING C2 TO	2021/11/24

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	C5 PARAFFINS USING A HYBRID CATALYST COMPRISING A HIGH ACIDITY MICROPOROUS COMPONENT	
2021/09965	HARDWARE ACCELERATED K-MER GRAPH GENERATION	2021/12/03
2021/09987	INTEGRATED SYSTEM FOR ASSESSING AND MODELING INTEGRITY OF WHEELS AND RIMS OF OFF THE ROAD VEHICLES	2021/12/03
2021/10360	CIRCUMCISION DEVICE	2021/12/13
2021/10476	COMPOSITION WITH ANTIBACTERIAL AND RE-EPITHELIALIZING ACTION INCLUDING PROBIOTICS	2021/12/15
2022/00181	2-HYDROXYCYCLOALKANE-1-CARBAMOYL DERIVATIVES	2022/01/03
2022/00397	HYBRID CELL LINES FOR HIGH LEVEL PRODUCTION OF PROTEIN FOR USE IN PHARMACEUTICALS AND OTHER COMMERCIAL PRODUCTS	2022/01/07
2022/00827	PRETOMANID COMPOSITIONS	2022/01/18
2022/01713	IMPROVED TREATMENT USING EYP001	2022/02/09
2022/01946	ANTI-BCMA ANTIBODY, ANTIGEN-BINDING FRAGMENT THEREOF AND MEDICAL USE THEREOF	2022/02/15
2022/02027	SYSTEMS AND METHODS FOR TESTING AGRICULTURAL IMPLEMENTS	2022/02/17
2022/02043	MICROBIAL COMPOSITIONS FOR USE WITH PLANTS FOR THE PREVENTION OR REDUCTION OF FUNGAL PATHOGENS	2022/02/17
2022/02044	MICROBIAL COMPOSITIONS FOR THE PREVENTION OR REDUCTION OF GROWTH OF FUNGAL PATHOGENS ON PLANTS	2022/02/17
2022/02129	PROCESS FOR THE PREPARATION OF CARBOXYLIC ACID DERIVATIVES OF 3-BROMO-4,5-DIHYDRO-1H-PYRAZOLES	2022/02/18
2022/02130	RFID-EQUIPPED PRESSURE CHAMBER FOR KEG	2022/02/18
2022/02380	ANTI-HUMAN P40 PROTEIN DOMAIN ANTIBODY AND USE THEREOF	2022/02/24
2022/02922	ANTIPERSPIRANT EMULSION	2022/03/10
2022/03258	ROCK BOLT ASSEMBLY	2022/03/18
2022/03259	UNIFIED ACCESS METHOD APPLYING DIGITAL HUMAN BEING CODECHAIN	2022/03/18

Application Number	Patent Title	Filing Date
2022/05114	IMPROVEMENTS IN AND RELATING TO NITRIFICATION INHIBITORS	2022/05/09
2022/05149	BENZYLAMIDE DERIVATIVES AS INHIBITORS OF TRANSFORMING GROWTH FACTOR-BETA RECEPTOR I/ALK5	2022/05/10
2022/10638	APPLICATIONS OF PI4K INHIBITOR IN INTRACELLULAR PROTEIN MISFOLDING-RELATED DISEASES AND LYSOSOMAL STORAGE DISEASES	2022/09/26
2022/10640	DEUTERATED OXOPHENYLARSINE COMPOUND AND USE THEREOF	2022/09/26
2022/10651	COMPOSITION AND METHOD FOR PRODUCING A COMPOSITION	2022/09/26
2022/10873	USE OF HYDROTREATED SYNTHETIC FISCHER-TROPSCH-WAXES IN POLYOLEFIN-BASED HOT MELT ADHESIVES	2022/10/03
2022/11070	BODY-PROTECTOR	2022/10/10
2022/11264	FILTER ELEMENT FOR AN AIR FILTER DEVICE IN A MOTOR VEHICLE, AND AIR FILTER DEVICE	2022/10/13
2022/11465	TETRAHYDROISOQUINOLINE COMPOUNDS AS NRF2 ACTIVATORS	2022/10/19
2022/12088	AN OPTICAL ELEMENT AND A METHOD OF VISUALLY AUTHENTICATING AN OBJECT	2022/11/04
2022/12146	INHIBITORS OF NEK7 KINASE	2022/11/07
2022/12359	MULTISPECIFIC ANTIBODY	2022/11/11
2022/12405	COLD-ROLLED ENAMEL STEEL FOR DEEP DRAWING INNER CONTAINER AND MANUFACTURING METHOD THEREFOR	2022/11/14
2022/12408	EXTENDED TIME ACTION ACYLATED INSULIN COMPOUNDS	2022/11/14
2022/12450	ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE	2022/11/15
2022/12452	ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE	2022/11/15
2022/12453	ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE	2022/11/15
2022/12454	ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING	2022/11/15

Application Number	Patent Title	Filing Date
	THOSE	
2022/12574	THREAD CLEARANCE	2022/11/17
2022/12637	METHOD OF ROASTING	2022/11/21
2022/12638	PROCESS OF CALIBRATION OF A ROASTING APPARATUS	2022/11/21
2022/12715	PROCESS FOR PRODUCING DICHROIC SECURITY FEATURES FOR SECURING VALUE DOCUMENTS	2022/11/22
2022/13002	AIR COOLER FOR LIQUIDS	2022/11/30
2022/13154	NOVEL HETEROARYL-TRIAZOLE COMPOUNDS AS PESTICIDES	2022/12/05
2022/13419	TEST SYSTEM AND MAIN DEVICE AND ADDITIONAL DEVICE THEREOF FOR TESTING AN ELECTRIC DEVICE	2022/12/12
2022/13507	TERPOLYMERS FOR LIPID NANODISC FORMATION	2022/12/14
2022/13569	METHOD OF PERFORMING AT LEAST ONE ANALYTICAL MEASUREMENT BY USING A MOBILE DEVICE	2022/12/14
2023/01503	POSITIONING METHOD, DEVICE AND SYSTEM FOR TRANSMITTING DEVICE, AND STORAGE MEDIUM AND ELECTRONIC DEVICE	2023/02/06
2023/01575	NICOTINE ELECTRONIC VAPING DEVICES HAVING NICOTINE PRE-VAPOR FORMULATION LEVEL DETECTION AND AUTO SHUTDOWN	2023/02/08
2023/01766	BROAD BAND DIRECTIONAL ANTENNA	2023/02/14
2023/01913	TRIGGER DISPENSING DEVICE	2023/02/16
2023/01914	POLYVINYL ALCOHOL COATED CELLULOSIC PRODUCTS	2023/02/16
2023/01938	IMAGE ENCODING/DECODING METHOD AND DEVICE	2023/02/02
2023/02156	PATIENT TRANSPORT APPARATUS	2023/02/21
2023/02160	TRANSFORMING OPERATIONS OF A COMPUTER PROGRAM FOR EXECUTION AT A DATABASE	2023/02/21
2023/02557	BIOBASED MATERIAL FOR CONSUMER GOODS PACKAGING	2023/02/24
2023/02894	INTERACTIVE PARTS DRAWINGS WITH A REAL-TIME BILL OF MATERIALS	2023/02/27
2023/02895	SUSTAINED RELEASE FORMULATIONS USING NON-AQUEOUS MEMBRANE EMULSIFICATION	2023/02/27
2023/03415	METHOD AND AIRCRAFT FOR	2023/03/08



Application Number	Patent Title	Filing Date
	MONITORING OPERATIONAL STATES AND FOR DETERMINING OUTAGE PROBABILITIES OF CURRENT-CARRYING LINE SYSTEMS	
2023/03481	PURIFICATION OF 2,5-FURANDICARBOXYLIC ACID, DIMETHYL ESTER AND OTHER ESTERIFIED PRODUCTS	2023/03/10
2023/03485	METHOD FOR CRACKING AMMONIA	2023/03/10
2023/03502	BOOM ADJUSTMENT SYSTEM	2023/03/10
2023/03567	AIR CART WITH MODULAR METERING SYSTEM	2023/03/14
2023/03595	SYSTEMS AND METHODS FOR INCREASING THE HYDROGEN PERMEANCE OF HYDROGEN-SEPARATION MEMBRANES IN SITU	2023/03/15
2023/03596	APPARATUS AND METHOD FOR CONVERTING THERMAL ENERGY	2023/03/15
2023/03607	A BABY CARRIER FOR CARRYING AND DEVELOPING A BABY ON A BODY OF A PERSON; USE OF A BABY CARRIER FOR WEARING THE BABY CARRIER ON A BODY OF A PERSON	2023/03/15
2023/03637	ELECTRONIC VAPING DEVICE AND COMPONENTS THEREOF	2023/03/16
2023/05239	AN AERO ACOUSTIC PROCESSING APPARATUS AND PROCESS FOR PROCESSING WASTE	2023/05/12
2023/07679	PASSIVE SUB-AUDIBLE ROOM PATH LEARNING WITH NOISE MODELING	2023/08/03
2023/08141	FOOD PRODUCT DISPENSER WITH REMOVABLE MODULE	2023/08/23
2023/08354	A Guard Car for a Locomotive Train	2023/08/30
2023/08355	A Cage Assembly for a Mining Elevator	2023/08/30
2023/08364	A TRANSACTION SYSTEM AND METHOD	2023/08/30
2023/08453	MULTI-THICKNESS ORE UNLOADING MAT	2023/09/01
2023/08457	METHOD AND SYSTEM FOR REDACTING UNDESIRABLE DIGITAL CONTENT	2023/08/31
2023/08620	THERMAL STORAGE AIR CONDITIONING	2023/09/08
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2023/08733	CORYNEBACTERIUM GLUTAMICUM VARIANT HAVING IMPROVED L-LYSINE PRODUCTION ABILITY, AND	2023/09/13

Application Number	Patent Title	Filing Date
	METHOD FOR PRODUCING L-LYSINE BY USING SAME	
2023/09140	WATER HEATING DEVICE	2023/09/28
2023/09255	AROMA-INFUSED COFFEE BEANS	2023/10/03
2023/09284	MINE MATERIAL PROCESSING APPARATUS INCLUDING GAS SPRING WHEEL ASSEMBLIES AND RELATED METHODS	2023/10/04
2023/09285	A METHOD FOR MANUFACTURING CELLULOSE PRODUCTS AND A PRODUCT FORMING UNIT FOR MANUFACTURING CELLULOSE PRODUCTS	2023/10/04
2023/09311	A METHOD OF FRACTIONATING A LIPID CONTAINING MATERIAL OBTAINED FROM AN INSECT SOURCE	2023/10/05
2023/09347	METHOD AND PLANT FOR STEAM CRACKING	2023/10/06
2023/09419	A component for supporting a wind turbine and a method for manufacturing the component	2023/10/09
2023/09543	SYSTEMS AND METHODS FOR DAMAGE DETECTION	2023/10/12
2023/09587	PRODUCING ETHYLENE BY OXIDATIVELY DEHYDROGENATING ETHANE	2023/10/13
2023/09640	APPARATUS AND METHOD FOR CONTROLLING FLUSHING IN ROCK DRILLING	2023/10/16
2023/09722	METHOD FOR UPDATING A DATABASE OF A GEOLOCATION SERVER	2023/10/18
2023/09781	WATER-SOLUBLE TOPICAL OPHTHALMIC PREPARATION CONTAINING LUTEIN AND PRODUCTION METHOD THEREOF	2023/10/19
2023/09958	METHOD AND DEVICE FOR MANUFACTURING SODIUM HYPOCHLORITE SOLUTION	2023/10/25
2023/09993	METHOD AND APPARATUS FOR SEPARATING VALUABLE MINERALS FROM ORE	2023/10/26
2023/10026	DECARBONATION PROCESS OF CARBONATED MATERIALS IN A MULTI-SHAFT VERTICAL KILN	2023/10/26
2023/10049	PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING FIBROSIS	2023/10/27
2023/10050	PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING FIBROSIS	2023/10/27

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2023/10108	PANEL AND METHOD FOR MANUFACTURING THEREOF	2023/10/30
2023/10160	TOOTHBRUSH WITH REPLACABLE BRUSH HEAD	2023/10/31
2023/10316	FLUOROALKYL-OXADIAZOLES AND USES THEREOF	2023/11/06
2023/10335	UNIT DOSE DRY POWDER INHALER	2023/11/06
2023/10374	ENVELOPING WORM GEAR GEARBOX FOR MECHANIZED IRRIGATION MACHINES	2023/11/07
2023/10450	SENSOR ASSEMBLY FOR USE BETWEEN A GROUND ENGAGING TOOL AND A BUCKET	2023/11/09
2023/10511	POWER DISTRIBUTION WITHIN AN ELECTRIC MACHINE WITH RECTIFIED ROTOR WINDINGS	2023/11/13
2023/10683	SILICIC ACID IN AQUACULTURE	2023/11/17
2023/10728	VEHICLE WARNING SYSTEM	2023/11/20
2023/10866	ADAPTIVE BILATERAL MATCHING FOR DECODER SIDE MOTION VECTOR REFINEMENT	2023/11/24
2023/10905	ADENOVIRAL VECTORS ENCODING HEPATITIS B VIRAL ANTIGENS FUSED TO HERPES VIRUS GLYCOPROTEIN D AND METHODS OF USING THE SAME	2023/11/27
2023/11066	GRAPHICAL USER INTERFACE SYSTEM	2023/11/30
2023/11201	ACTIVITY LEVELS FOR DIFFUSING ALPHA-EMITTER RADIATION THERAPY	2023/12/05
2023/11206	SPRINKLER	2023/12/05
2023/11272	STRUCTURAL SLIDING BEARING AND STRUCTURAL BEARING SYSTEM	2023/12/07
2023/11644	METHOD, ARRANGEMENT AND MACHINE FOR FULL FACE REAMING	2023/12/19
2023/11714	SYSTEMS AND METHODS FOR SOUNDING REFERENCE SIGNAL ENHANCEMENT	2023/12/20
2023/11768	INCREASING RELIABILITY OF THE GEOLOCATION OF A TERMINAL BASED ON ONE OR MORE IDENTIFIERS OF NEIGHBOURING TRANSMITTING DEVICES	2023/12/21
2024/00117	BENZOTHIA(DI)AZEPINE COMPOUNDS AND THEIR USE AS BILE ACID MODULATORS	2024/01/02
2024/00123	A REUSABLE TEST DEVICE	2024/01/02
2024/00197	SYSTEMS AND METHODS FOR ASSOCIATING COMPOUNDS WITH	2024/01/04

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	PHYSIOLOGICAL CONDITIONS USING FINGERPRINT ANALYSIS	
2024/00326	PHARMACEUTICAL COMPOSITION FOR PREVENTION OR TREATMENT OF SYSTEMIC SCLEROSIS	2024/01/09
2024/00388	AZELAIC ACID ESTERS IN THE TREATMENT OR PREVENTION OF DYSLIPIDEMIA AND ASSOCIATED CONDITIONS	2024/01/11
2024/00441	EDUCATIONAL APPARATUSES AND METHODS OF TEACHING	2024/01/12
2024/00462	CAPILLARY BLOOD COLLECTION DEVICE	2024/01/12
2024/00463	SYSTEMS AND METHODS FOR ASSOCIATING COMPOUNDS WITH PROPERTIES USING CLIQUE ANALYSIS OF CELL-BASED DATA	2024/01/12
2024/00624	COMPOSITIONS FOR EMBOLIZATION	2024/01/18
2024/00687	PIPE FOR TRANSPORTING FLUIDS WITH CONTROL OF THE BUCKLING OF THE INTERNAL ANTI-CORROSION LINER	2024/01/19
2024/00755	SEED UNIT COMPRISING PLANT CHARCOAL AND POLYMERIC SUPERABSORBENT	2024/01/22
2024/00817	RANDOM ACCESS IN A WIRELESS COMMUNICATION NETWORK	2024/01/24
2024/00991	GAS VALVE FOR A VENTILATION APPARATUS AND A CIRCUIT FOR A VENTILATION SYSTEM	2024/01/30
2024/00999	GRID BEAM SYSTEM FOR SLAB FORMWORK	2024/01/30
2024/01130	AEROSOL-FORMING SUBSTRATE WITH EXPANDED GRAPHITE	2024/02/05
2024/01131	AEROSOL-FORMING SUBSTRATE WITH IMPROVED THERMAL CONDUCTIVITY	2024/02/05
2024/01132	THERMALLY ENHANCED AEROSOL-FORMING SUBSTRATE	2024/02/05
2024/01133	IMPROVED AEROSOL-FORMING SUBSTRATE	2024/02/05
2024/01232	PLANAR CONSUMABLE FOR AEROSOL-GENERATING DEVICE	2024/02/08
2024/01402	TRAY, STACK OF TRAYS AND METHOD FOR LOADING/UNLOADING TRAYS	2024/02/15
2024/01403	STRETCH-BLOW-MOLDED PLASTIC CONTAINER AND METHOD FOR PRODUCING SAME	2024/02/15
2024/01405	COMPOSITIONS AND METHODS FOR ANTI-PACAP ANTIBODIES	2024/02/15

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2024/01408	SYNOVIAL EXTRACELLULAR MATRIX-SPECIFIC CHIMERIC ANTIGEN RECEPTOR FOR TARGETING REGULATORY T CELLS TO TREAT AUTOIMMUNE DISEASES	2024/02/15
2024/01409	HYDROGEN PERMEABLE MEMBRANE INCLUDING PDCU ALLOY AND METHOD FOR PURIFYING HYDROGEN WITH HYDROGEN PERMEABLE MEMBRANE	2024/02/15
2024/01428	ELECTRONIC DEVICE COMPRISING ANTENNA	2024/02/16
2024/01433	PROCESS FOR REMOVING SELENIUM FROM WASTEWATER USING BIOLOGICAL REDUCTION AND SURFACE COMPLEXATION	2024/02/16
2024/01466	TRANSFORM-BASED IMAGE CODING METHOD AND DEVICE THEREFOR	2024/02/19
2024/01473	METHOD FOR PREPARING GLUFOSINATE OR ANALOG THEREOF	2024/02/19
2024/01475	A DOOR ARRANGEMENT	2024/02/19
2024/01478	PREPARATION METHOD FOR GLUFOSINATE-AMMONIUM	2024/02/19
2024/01503	FOLDABLE ELECTRONIC DEVICE	2024/02/20
2024/01504	LIPID-BASED COMPOSITION FOR ORAL ADMINISTRATION OF BRADYKININ B2-RECEPTOR ANTAGONISTS	2024/02/20
2024/01505	DETERGENT COMPOSITION	2024/02/20
2024/01506	DETERGENT COMPOSITION	2024/02/20
2024/01507	A CONCENTRATED CLEANING COMPOSITION	2024/02/20
2024/01508	FILMS AND CAPSULES	2024/02/20
2024/01509	USE OF A DETERGENT COMPOSITION	2024/02/20
2024/01510	DETERGENT COMPOSITION	2024/02/20
2024/01511	PROCESS FOR PREPARING A SPRAY DRIED DETERGENT PARTICLE	2024/02/20
2024/01512	A TOPICAL COMPOSITION FOR PROVIDING ENERGIZING GLOW ON SKIN	2024/02/20
2024/01513	FILMS AND CAPSULES	2024/02/20
2024/01528	APPARATUS AND METHOD FOR DRYING AND STYLING HAIR	2024/02/21
2024/01546	ELECTRONIC DEVICE HAVING WATERPROOF STRUCTURE APPLIED THERETO	2024/02/21
2024/01552	METHOD FOR THE ELECTROLYSIS	2024/02/21



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	OF WATER AT VARIABLE CURRENT DENSITIES	
2024/01553	EXERCISE SYSTEM AND CLIMBING SIMULATOR	2024/02/21
2024/01567	RING-MODIFIED PROLINE SHORT PEPTIDE COMPOUND AND USE THEREOF	2024/02/22
2024/01585	MULTI-STAGE FALLING PARTICLE RECEIVER	2024/02/22
2024/01586	ANTI-THEFT LOCKING BOLT ASSEMBLY	2024/02/22
2024/01605	CRYSTALLINE FORM OF N-[4-[4-(4-MORPHOLINYL)-7H-PYRROLO[2,3-D]PYRIMIDIN-6-YL]PHENYL]-4-[[3(R)-[(1-OXO -2-PROPEN-1-YL)AMINO]-1-PIPERIDINYL]METHYL]-2-PYRIDINECARBOXAMIDE, AN IRREVERSIBLE MENIN-MLL INHIBITOR FOR THE TREATMENT OF CANCER	2024/02/23
2024/01607	NON-VOLATILE RESISTIVE RANDOM-ACCESS MEMORY AND A MANUFACTURING METHOD THEREOF	2024/02/23
2024/01608	IMPROVED FLOW SYNTHESIS	2024/02/23
2024/01645	USE OF AN ACID WHEY TO STIMULATE THE GERMINATION OF A PLANT POLLEN GRAIN	2024/02/26
2024/01685	CRYSTALLIZATION PROCESS FOR THE SEPARATION OF METALS	2024/02/27
2024/01690	AIR COOLED SIFTING DEVICE	2024/02/27
2024/01719	COMPOSITE WEAR COMPONENT	2024/02/28
2024/01759	ADAPTER FOR A WORK IMPLEMENT WITH THRU-HOLE AND RAIL	2024/02/29
2024/01760	TIP WITH THRU-HOLE AND PIN RETAINING GEOMETRY	2024/02/29
2024/01763	EMULSIFIER COMPOSITIONS	2024/02/29
2024/01784	OXADIAZASPIRO COMPOUNDS FOR USE IN THE TREATMENT OF MOTONEURON DEGENERATION OR IN NEUROPROTECTION	2024/02/29
2024/01786	COMPOSITIONS AND METHODS FOR TREATING POST-COVID CONDITIONS OF FATIGUE	2024/02/29
2024/01799	METHOD FOR PRODUCING A PLASTIC GRANULATE	2024/03/01
2024/01869	STATION FOR THE CONVEYANCE AND MEASUREMENT OF HORTICULTURAL PRODUCTS	2024/03/05
2024/01888	MICROBIAL-BASED PROCESS FOR IMPROVED QUALITY PROTEIN	2024/03/06

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	CONCENTRATE	
2024/01892	STRAIN FOR PRODUCING HIGH CONCENTRATION L-GLUTAMIC ACID AND METHOD FOR PRODUCING L-GLUTAMIC ACID USING THE SAME	2024/03/06
2024/01899	HOOHAH DEVICE AND IMPROVED CONSUMABLE POD	2024/03/06
2024/01901	MOBILE ELECTRONIC LOCK	2024/03/06
2024/01939	PROCESS FOR PREPARING A SPRAY DRIED DETERGENT PARTICLE	2024/03/07
2024/01940	HEAVY OLIGOMER COMPOSITIONS OF A SELECTIVE 1-HEXENE AND 1-OCTENE CATALYST	2024/03/07
2024/01941	FUCAN AND MODIFIED FUCAN COMPOSITIONS FOR THE TREATMENT OF CONDITIONS RELATED TO CAPSULAR CONTRACTURE AND TO INHIBITING FIBROUS GROWTH AROUND OR ON TRANSPLANTS	2024/03/07
2024/01942	BUTADIENE NITRILE LATEX, LATEX COMPOSITION FOR DIP-MOLDING, AND DIP-MOLDED ARTICLE	2024/03/07
2024/01945	CONDITIONING SHAMPOO COMPOSITION	2024/03/07
2024/01966	TRANSMISSION METHOD AND APPARATUS FOR MIMO SYSTEM	2024/03/08
2024/01973	SOLID WASTE PROCESSING APPARATUS	2024/03/08
2024/01975	HYBRID HIGH STRENGTH LOW ALLOY COLD-ROLLED AND ANNEALED STEEL STRIP AND METHOD FOR PRODUCING IT	2024/03/08
2024/01976	CONTROLLER OF CRUSHING SYSTEM, CRUSHING SYSTEM, AND METHOD OF CONTROLLING THE SAME	2024/03/08
2024/01978	PRODUCTION AMOUNT DETECTOR, PRODUCTION AMOUNT DETECTION SYSTEM INCLUDING THE SAME, AND PRODUCTION AMOUNT DETECTION METHOD	2024/03/08
2024/02034	CAIX TARGETING IL-12 FUSION PROTEINS AND METHODS OF USE THEREOF	2024/03/12
2024/02036	DRILL STEEL COUPLING, ROD AND DRILL STEEL INCLUDING SAME	2024/03/12
2024/02093	TROPICAL ROOT-KNOT NEMATODE RESISTANT CARROT PLANT	2024/03/13

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2024/02148	VAPOUR NOZZLE FOR PVD	2024/03/18
2024/02150	SURFACE PREPARATION FOR JVD	2024/03/18
2024/02162	NOVEL YhhS VARIANT AND METHOD FOR PRODUCING O-PHOSPHOSERINE, CYSTEINE, AND DERIVATE OF CYSTEINE USING SAME	2024/03/18
2024/02266	MAGNETIC EARTH CLAMP FOR OVERHEAD LINE EQUIPMENT STRUCTURES	2024/03/20
2024/02269	SYSTEM AND METHOD FOR EXECUTING COMPILED USER DEFINED FUNCTIONS IN VECTORIZED DATABASES	2024/03/20
2024/02471	CORYNEBACTERIUM GENUS MICROORGANISM PRODUCING L-ARGININE, AND METHOD FOR PRODUCING L-ARGININE USING SAME	2024/03/27
2024/02472	CHILD RESISTANT ZIPPER CLOSURE, SLIDER, RECLOSABLE POUCH & METHODS	2024/03/27
2024/02613	USE OF ANTI-CD6 MONOCLONAL ANTIBODIES IN THE PREVENTION OF CELLULAR AND ORGAN DAMAGE RESULTING FROM HYPER- INFLAMMATORY RESPONSE	2024/04/04
2024/02855	COLD ROLLED AND HEAT TREATED STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF	2024/04/12
2024/03370	SPECIFIC CONJUGATION FOR AN ANTIBODY-DRUG CONJUGATE	2024/04/30
2024/03371	SPECIFIC CONJUGATION OF AN ANTIBODY	2024/04/30
2024/03454	METHOD FOR MEASURING THE THICKNESS OF A VARNISH LAYER	2024/05/06
2024/03527	APPARATUS AND METHOD FOR SOLUTION SYNTHESIS REACTION WITHOUT OXYGEN AND AT CONSTANT TEMPERATURE	2024/05/08
2024/03670	UNDERGROUND SPACE CONNECTING AND FIXING DEVICE AND METHOD	2024/05/13
2024/03671	IMPROVEMENTS TO DEVICES AND METHODS FOR DELIVERY OF SUBSTANCES TO ANIMALS	2024/05/13
2024/03725	CONTINUOUS FLOW CYCLIC-OPERATING WASTEWATER TREATMENT PLANT AND PROCESS FOR GROWING, SELECTING AND MAINTAINING AEROBIC GRANULAR	2024/05/14

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	SLUDGE WHILE TREATING WASTEWATER	
2024/03726	METHOD FOR MANAGING COATING GLOSS ON A COIL-COATING LINE	2024/05/14
2024/04033	AEROSOL-GENERATING ARTICLE WITH TAGGANT	2024/05/23
2024/04087	ELECTROLYSIS APPARATUS FOR THE PRODUCTION OF IRON WITH AN IMPROVED IRON OXIDE SUPPLY DEVICE	2024/05/24
2024/04128	APPARATUS FOR PRODUCTION OF IRON METAL BY ELECTROLYSIS	2024/05/27
2024/04189	TILE AND TILING SYSTEM	2024/05/28
2024/04228	LOW DENSITY HOT ROLLED STEEL, METHOD OF PRODUCTION THEREOF AND USE OF SUCH STEEL TO PRODUCE VEHICLE PARTS	2024/05/30
2024/04229	LOW DENSITY HOT ROLLED STEEL, METHOD OF PRODUCTION THEREOF AND USE OF SUCH STEEL TO PRODUCE VEHICLE PARTS	2024/05/30
2024/04334	METHOD FOR EVALUATING THE HYDROGEN CONTENT IN A STEEL SHEET	2024/06/03
2024/04675	DEVICE FOR THE MANUFACTURE OF AN UNCONSOLIDATED TEXTILE ELONGATE MEMBER	2024/06/14
2024/05533	NOVEL SUBSTITUTED FUSED BICYCLIC PYRIDINE CARBOXAMIDE COMPOUNDS FOR COMBATING PHYTOPATHOGENIC FUNGI	2024/07/16
2024/05797	MULTI-SUBSTITUTED URACIL DERIVATIVE AND PREPARATION METHOD THEREFOR AND APPLICATION THEREOF	2024/07/26
2024/05870	KIND OF WORM TEA OF UNCARIA RHYNCHOPHYLLA AND ITS PREPARATION METHOD	2024/07/30
2024/05887	INTEGRATED CUSHION FOR POOL TABLE	2024/07/30
2024/06389	BENZOPYRIMIDINE COMPOUNDS AND USE THEREOF	2024/08/20
2024/06414	METHOD FOR PROCESSING DAIRY BOTTLE RECYCLATE IN A NEW PRODUCTION OF DAIRY BOTTLES (CLOSED-LOOP, BOTTLE-TO-BOTTLE) AND PRODUCT OBTAINED FROM IT	2024/08/21
2024/06420	CONTACT LENS PRODUCT AS WELL AS PACKAGING CASE	2024/08/21

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	THEREOF AND TEST METHOD THEREFOR	
2024/06710	EXTENSIBLE BLANKET	2024/08/30
2024/06811	DEEP DESULFURIZATION ADSORBENT AND ITS PREPARATION METHOD AND APPLICATION	2024/09/04
2024/06897	RECIRCULATING HYDRO-PNEUMATIC IMPULSE TURBINE	2024/09/06
2024/06917	AZOLE COMPOUND AND ANTIFUNGAL AGENT	2024/09/09
2024/06943	A FIXED MECHANISM FOR ROTATING DISPLAY OF INDUSTRIAL PRODUCTS	2024/09/10
2024/07091	SUPPORTING STRUCTURE OF BEAM-COLUMN TYPE BRACKET FOR BRIDGE CONSTRUCTION	2024/09/13
2024/07103	PREFABRICATED BUILDING UNIT	2024/09/16
2024/07131	COOLING ARRANGEMENT FOR A BEVERAGE DISPENSING SYSTEM	2024/09/17
2024/07197	GEOMETRIC CONFIGURATIONS FOR GASTRIC RESIDENCE SYSTEMS	2024/09/20
2024/07219	METHOD FOR DETERMINING THE WEAR VOLUME OF A SLIDING-RING SEAL IN SINGULAR WEAR EVENTS BY MEANS OF HIGH-TEMPORAL-RESOLUTION TEMPERATURE MEASUREMENT	2024/09/20
2024/07244	INTELLIGENT FERMENTATION INTEGRATED MACHINE	2024/09/23
2024/07251	A METHOD FOR THE STORAGE OR TRANSPORT OF PYROLYSIS OIL	2024/09/23
2024/07298	DRONE WITH EXTENDABLE AND ROTATABLE WINGS AND MULTIPLE ACCESSORY SECURING PANEL	2024/09/25
2024/07319	END-FIRE CIRCULARLY POLARIZED ANTENNA BASED ON COMPLEMENTARY DIPOLES	2024/09/25
2024/07362	MULTILEVEL PARKING GARAGE	2024/09/27
2024/07378	WATER AND QUALITY MANAGEMENT OF OIL-BASED WOOD PRESERVATIVES	2024/09/27
2024/07390	IN-PROCESS &#39;DRYING&#39; FOR OIL BASED TIMBER TREATMENT	2024/09/27
2024/07448	ORTHODONTIC SELF-LIGATING BRACKET WITH CONTROLLABLE ARCHWIRE TORQUE AND SYSTEM	2024/09/30
2024/07503	METHODS FOR TREATING AND/OR PREVENTING GRAFT-VERSUS-HOST DISEASE AND/OR DIFFUSE	2024/10/02



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	ALVEOLAR HEMORRHAGE AND/OR VENO-OCCLUSIVE DISEASE ASSOCIATED WITH HEMATOPOIETIC STEM CELL TRANSPLANT	
2024/07506	METHOD FOR ROOM TEMPERATURE DEPOLYMERIZATION OF TEREPHTHALIC POLYESTERS TO TEREPHTHALATE ESTERS	2024/10/02
2024/07511	COMMUNICATION METHOD AND APPARATUS	2024/10/02
2024/07531	MAIZE POLLEN STORAGE AND CARRIERS	2024/10/03
2024/07548	A METHOD OF MANUFACTURING A STATOR FOR A SLOTLESS ELECTRIC MOTOR	2024/10/04
2024/07549	A METHOD OF MANUFACTURING A STATOR FOR A SLOTLESS ELECTRIC MOTOR	2024/10/04
2024/07568	COMPOSITIONS AND METHODS FOR TREATING LIVER DISEASES WITH SIRNAS TARGETING CIDEB	2024/10/04
2024/07571	COOKER OPERATED BY ELECTRIC HEATING AND GAS BURNER	2024/10/04
2024/07589	URACIL DERIVATIVE HAVING VIRAL GROWTH INHIBITORY ACTIVITY AND PHARMACEUTICAL COMPOSITION CONTAINING SAME	2024/10/07
2024/07596	CANCER TREATMENTS USING MTA-COOPERATIVE PRMT5 INHIBITORS	2024/10/07
2024/07631	WIND TURBINE TOWER DETACHABLE SELF ERECTING SYSTEM FOR ALL WIND TURBINE COMPONENTS	2024/10/08
2024/07632	WIND TURBINE BLADE ASSEMBLY DEVICE FOR EASY INSTALLATION AND REMOVAL IN VERTICAL POSITION	2024/10/08
2024/07641	A Blast-Resistant Safe	2024/10/09
2024/07672	A SEISMIC NODE AND A METHOD FOR PRODUCING A SEISMIC NODE	2024/10/09
2024/07678	A POLICY DATA INFORMATION COLLECTION SYSTEM FOR INTERNET DATABASE	2024/10/10
2024/07686	METHOD FOR OXIDATIVE LEACHING OF VANADIUM AND CHROMIUM BY USING ULTRASONIC EXTERNAL FIELD COMBINED WITH MICROBUBBLES	2024/10/10
2024/07696	METHOD FOR MANUFACTURING	2024/10/10

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	EXHAUST GAS PURIFICATION CATALYST DEVICE	
2024/07702	A TRAINING METHOD, PREDICTION METHOD, AND DEVICE FOR ROLLING FORCE PREDICTION MODEL	2024/10/11
2024/07747	INFRARED MOXIBUSTION THERAPY DEVICE	2024/10/14
2024/07753	A SKINCARE COMPOSITION	2024/10/14
2024/07804	A LIVESTOCK STALL DIVERTER SYSTEM	2024/10/15
2024/07817	CONFERRING CYTOPLASMIC MALE STERILITY	2024/10/15
2024/07830	TYROSINE KINASES INHIBITORS AND USES THEREOF	2024/10/16
2024/07835	FRICITION CONVEYANCE DEVICE AND PAPER SHEET CONVEYANCE DEVICE	2024/10/16
2024/07872	COMPENSATED CONCRETE LINING OF TUNNEL FOR PREVENTING ARCH CAVITIES AND APPLICATION PROCESS THEREOF	2024/10/17
2024/07941	ARGINASE INHIBITORS AND METHODS OF USE THEREOF	2024/10/21
2024/07950	NEW TECHNOLOGY FOR MANUFACTURING LOW VISCOSITY EMULSIONS	2024/10/21
2024/07955	METHOD FOR THE ELUTION OF ALUMINUM IONS AND/OR ZINC IONS	2024/10/21
2024/07972	DEVICE AND METHOD FOR ROBOTISED PRIMING	2024/10/22
2024/07983	ANTIBODY AGAINST C-MET AND USE THEREOF	2024/10/22
2024/07999	SPLIT-CORE CURRENT TRANSFORMER	2024/10/23
2024/08004	NON-TARGETED SCREENING METHOD FOR SUBSTANCES IN CATEGORIES OF PHARMACEUTICAL AND PERSONAL CARE PRODUCTS (PPCPS) IN BEEF MUSCLE	2024/10/23
2024/08009	O-ACETYL HOMOSERINE-PRODUCING MICROORGANISM AND METHOD FOR PRODUCING O-ACETYL HOMOSERINE OR L-METHIONINE USING SAME	2024/10/23
2024/08012	O-ACETYL HOMOSERINE-PRODUCING MICROORGANISM AND METHOD FOR PRODUCING O-ACETYL HOMOSERINE OR L-METHIONINE USING SAME	2024/10/23

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2024/08030	TRICYCLIC HETEROCYCLIC DERIVATIVES, COMPOSITIONS AND USES THEREOF	2024/10/23
2024/08036	ALUMINUM ALLOY MATERIAL CONTINUOUS CONVEYING APPARATUS	2024/10/24
2024/08037	DYNAMIC CLOSED SEEPAGE SIMULATION TEST APPARATUS FOR FISSURES OF MINING-FRACTURED ROCK MASSES	2024/10/24
2024/08039	ROCK-SOIL BODY DEFORMATION TEST APPARATUS UNDER VEHICLE LOAD ACTION	2024/10/24
2024/08040	PRESSURE STABILIZING DEVICE	2024/10/24
2024/08045	NANO ULTRASOUND CONTRAST AGENT (UCA) FOR ENHANCING IMMUNOTHERAPY AND PREPARATION METHOD AND APPLICATION THEREOF	2024/10/24
2024/08049	PROCESS FOR ABSORBING CARBON DIOXYDE BY PHOSPHOGYPSUM	2024/10/24
2024/08051	OPTIMIZATION METHOD OF LOCAL MICRO-SCALE CONTROLLED COOLING	2024/10/24
2024/08052	METHOD OF HE-NE LASER THERAPY BASED ON SELF-ADAPTIVE BEAM FOCUSING AND APPLICATION THEREOF	2024/10/24
2024/08110	A SAMPLING APPARATUS AND A CYCLONE	2024/10/28
2024/08111	FLAME OUT CANDLE SYSTEM AND METHOD	2024/10/28
2024/08121	ANTI-HUMAN IL-4RA ANTIBODY AND APPLICATION THEREOF	2024/10/28
2024/08147	COMBINED TICKETLESS FLOW-THRU FACIAL RECOGNITION FOR MASS PARTICIPATION EVENT ENTRY AND ITEM FULFILLMENT	2024/10/29
2024/08148	METHOD FOR DIAMOND DETECTION	2024/10/29
2024/08175	OPENABLE CURTAINSIDER SYSTEM	2024/10/29
2024/08238	METHOD FOR PRODUCING DECORATIVE ELEMENTS	2024/10/31
2024/08240	METHOD FOR DETERMINING ROCK MASS SHEAR STRENGTH BASED ON INTEGRATED LINEAR FOREST AND WHILE-DRILLING PARAMETERS	2024/10/31
2024/08243	SPRING CLIP FOR PHOTOVOLTAIC MODULE MOUNTING	2024/10/31

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2024/08244	BAG TRANSFORMABLE INTO A GAMING STUMP	2024/10/31
2024/08245	ELECTRICAL ADAPTER AND METHOD	2024/10/31
2024/08278	SELF-LEVELING DEVICE AND METHOD FOR INSTALLING A COMPOSITE PLATE	2024/11/01
2024/08279	VERTICAL ROTATION CONSTRUCTION METHOD OF STEEL ARCH FRAME OF REINFORCED CONCRETE ARCH BRIDGE	2024/11/01
2024/08287	KIT FOR DETECTING NIPAH VIRUS NUCLEOPROTEIN ANTIBODY AND APPLICATION THEREOF	2024/11/01
2024/08292	PENDULUM IMPACT TESTING MACHINE	2024/11/01
2024/08314	COMPOSITION FOR ISOTHERMAL AMPLIFICATION DETECTION OF NIPAH VIRUS, METHOD AND KIT THEREOF	2024/11/04
2024/08317	AN INTEGRATED MICROWAVE PHOTONIC DEVICE PACKAGING SHELL AND ITS USAGE METHOD	2024/11/04
2024/08328	ACS ALLOY AND PREPARATION METHOD AND APPLICATION THEREOF	2024/11/04
2024/08329	ASA RESIN AND PREPARATION METHOD THEREOF	2024/11/04
2024/08330	METHOD FOR SYNTHESIZING LARGE-PARTICLE POLYBUTADIENE LATEX	2024/11/04
2024/08347	A MICROWAVE PHOTONIC FILTER WITH A HEAT DISSIPATION FUNCTION	2024/11/05
2024/08353	METHOD FOR IMPROVING ANTI-OXIDATION AND NUTRIENT TRANSPORT CAPABILITIES OF PLACENTAL TISSUES OF FEMALE LIVESTOCK	2024/11/05
2024/08376	A CORNELIAN CHERRY EXTRACT, ITS PREPARATION METHOD, AND ITS APPLICATION IN FRUIT PRESERVATION.	2024/11/06
2024/08377	PREPARATION METHOD OF PHYCOERYTHRIN AND RED ALGAE ACTIVE PEPTIDE AND APPLICATION THEREOF IN PREPARING FACIAL MASK	2024/11/06
2024/08398	SYSTEM AND METHOD FOR RECOVERING VANADIUM FROM A CHROMIUM REMOVAL	2024/11/06

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	UNDERFLOW OF SODIUM VANADIUM SOLUTION	
2024/08399	THERMOSTAT FOR A HOT WATER CYLINDER	2024/11/06
2024/08416	BINDER COMPOSITION FOR IRON ORE AGGLOMERATION	2024/11/06
2024/08419	IDENTIFICATION AND EVALUATION SYSTEM OF PEOPLE'S CONCENTRATION BASED ON MACHINE VISION	2024/11/06
2024/08425	METHOD FOR CREATING A DATABASE OF TEXT RECORDS OF A HIERARCHICAL CLASSIFIER WITH SEVERAL LEVELS OF NESTING	2024/11/07
2024/08435	A DEVICE FOR GENERATING A LIST OF TEXT RECORDS USING A DATABASE OF TEXT RECORDS OF A HIERARCHICAL CLASSIFIER WITH SEVERAL LEVELS OF NESTING	2024/11/07
2024/08437	EXTENDED POLYPHASE (E-P4) CODE FOR HIGH PERFORMANCE MODERN RADAR SYSTEMS	2024/11/07
2024/08444	A METHOD FOR CORRECTING NODE LOCATION ERRORS IN UNDERWATER ACOUSTIC SENSOR NETWORKS COMBINED WITH SOUND VELOCITY INVERSION	2024/11/07
2024/08468	A CANTILEVER BEAM SPECIMEN CRACK PROPAGATION DEVICE AND ITS METHOD	2024/11/08
2024/08521	CULTIVATION METHOD OF U-SHAPED HIGH RIDGING AND COVERING WIDE ROWS AND DENSE PLANTS IN SALINE-ALKALI LAND	2024/11/11
2024/08526	METAL OXIDE SEMICONDUCTOR GAS SENSOR	2024/11/11
2024/08528	AUXILIARY DEVICE FOR COLORECTAL SURGERY	2024/11/11
2024/08540	ACID AND ALKALI RESISTANT GLASS AND PREPARATION METHOD THEREOF	2024/11/11
2024/08559	FILM AND FILM PASTING ASSEMBLY	2024/11/11
2024/08570	INTELLIGENT CITY RENEWAL DESIGN SYSTEM AND METHOD	2024/11/12
2024/08571	TEST DEVICE AND METHOD FOR MEASURING WATER VAPOR MIGRATION IN UNSATURATED SOIL	2024/11/12
2024/08572	ICE COIL TRACK TYPE STACKING CONSTRUCTION METHOD FOR LARGE ICE STORAGE TANK	2024/11/12



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2024/08573	PORTABLE ENERGY EFFICIENCY DETECTION AND ANALYSIS SYSTEM FOR REFRIGERATION MACHINE ROOM	2024/11/12
2024/08574	LIGHTING DEVICE PLACED ON A VERTICAL SURFACE AND CONTROLLED BY MEANS OF A BRACKET	2024/11/12
2024/08575	CHINESE MEDICINAL COMPOSITION FOR PROMOTING BLOOD CIRCULATION AND REMOVING BLOOD STASIS AND APPLICATION IN INTERVENING IN ATHEROSCLEROSIS THEREOF	2024/11/12
2024/08578	METHOD AND APPLICATION FOR PREPARING FILM FROM WASTE TEXTILES	2024/11/12
2024/08579	METHOD FOR PREPARING BIOMASS FIBRE BASED ON WASTE COTTON TEXTILES AND APPLICATION	2024/11/12
2024/08580	METHOD FOR RESTORING DEGRADED WETLAND AT TAIL OF RESERVOIR BASED ON PHRAGMITES AUSTRALIS VEGETATION	2024/11/12
2024/08581	PREPARATION PROCESS AND APPLICATION OF REGENERATED CELLULOSE FILM BASED ON NMMO METHOD	2024/11/12
2024/08582	METHOD FOR PREPARING BIOMASS FIBRES BASED ON WASTE COTTON TEXTILES	2024/11/12
2024/08586	SALINE-ALKALI LAND IMPROVEMENT APPARATUS	2024/11/12
2024/08610	BRACKET WITH FERROMAGNETIC ELEMENT FOR A PRODUCT OR DEVICE PLACED ON A VERTICAL SURFACE	2024/11/13
2024/08611	A SET COMPRISING A PRODUCT OR A DEVICE PLACED ON A VERTICAL SURFACE WITH A BASE WITH MAGNETIC OR FERROMAGNETIC ELEMENT AND A BRACKET WITH MAGNETIC OR FERROMAGNETIC ELEMENT FOR IT	2024/11/13
2024/08612	A SET COMPRISING A SCRATCHING POST TO BE PLACED ON A VERTICAL SURFACE WITH A MAGNETIC ELEMENT AND A BRACKET FOR IT	2024/11/13
2024/08613	EXTERNAL CONTROL DEVICE FOR	2024/11/13

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	A DEVICE FOR ACTUATING A PENDULUM MECHANISM	
2024/08614	BRACKET FOR A PRODUCT OR DEVICE PLACED ON A VERTICAL SURFACE	2024/11/13
2024/08615	DOPED REGENERATED WASTE LITHIUM IRON PHOSPHATE ANODE MATERIAL AND PREPARATION METHOD THEREOF	2024/11/13
2024/08616	HOLLOW-CORE ANTI-RESONANT FIBER NARROWBAND POLARIZATION FILTER	2024/11/13
2024/08617	WATER TROUGH CLEANING DEVICE AND CLEANING METHOD THEREFOR	2024/11/13
2024/08619	A NEW URBANIZATION PUBLICITY AND DISPLAY BOARD	2024/11/13
2024/08622	VEHICLE SPEED PREDICTION AND CONTINUOUS POSITIONING METHOD BASED ON VISION	2024/11/13
2024/08634	PROGESTIN/TESTOSTERONE TRANSDERMAL GEL	2024/11/13
2024/08636	VETERINARY VACCINES AND METHODS FOR THE TREATMENT OF PASTEURILLA MULTOCIDA INFECTIONS IN FOOD PRODUCTION ANIMALS	2024/11/13
2024/08644	WASTE HEAT RECOVERY DEVICE FOR ENERGY-SAVING GAS BOILER	2024/11/13
2024/08648	METHOD FOR CONTROL OF AN ELECTRONIC DEVICE PLACED ON A VERTICAL SURFACE	2024/11/14
2024/08649	BRACKET FOR AN ELECTRONIC DEVICE PLACED ON A VERTICAL SURFACE	2024/11/14
2024/08650	FERMENTED GANODERMA SHEEP MILK YOGURT AND PREPARATION METHOD THEREOF	2024/11/14
2024/08651	METHOD FOR CONTROL OF AN ACOUSTIC DEVICE PLACED ON A VERTICAL SURFACE	2024/11/14
2024/08652	METHOD FOR CONTROL OF A LIGHTING DEVICE PLACED ON A VERTICAL SURFACE	2024/11/14
2024/08653	METHOD FOR CALCULATING THE THREE-DIMENSIONAL COORDINATES OF THE RAILS TO BE MEASURED ON THE LEFT AND RIGHT SIDES OF THE RAILWAY UNDER THE SAME MILEAGE BY UTILIZING THE THREE-DIMENSIONAL COORDINATES OF	2024/11/14

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	THE SHOULDER DEFORMATION MONITORING POINTS AT THE LEFT AND RIGHT ENDS OF THE ROADBED	
2024/08654	OXIDE SEMICONDUCTOR-BASED GAS DETECTION DEVICE	2024/11/14
2024/08655	MACHINE LEARNING-BASED MEDICAL DEVICE DISINFECTION MONITORING SYSTEM	2024/11/14
2024/08656	A MATRIX-STYLE FULL-BODY RECLINING MASSAGER	2024/11/14
2024/08658	IOT DEVICE PLACED ON A VERTICAL SURFACE AND CONTROLLED BY MEANS OF A BRACKET	2024/11/14
2024/08659	MESSAGE DEVICE WITH AN INTERMEDIATE ELEMENT WITH CONTROLLED MOVABLE MESSAGE MODULE	2024/11/14
2024/08660	IMAGE OUTPUT DEVICE PLACED ON A VERTICAL SURFACE AND CONTROLLED BY MEANS OF A BRACKET	2024/11/14
2024/08672	TRACK WIDENER FOR INFLATING/DEFLATING TYRES OF A VEHICLE	2024/11/14
2024/08680	ROBOTIC TAPPING SYSTEM FOR ELECTRIC ARC FURNACE	2024/11/14
2024/08683	DIPHENYL ETHER HERBICIDE DEGRADING BACTERIUM OFF-3, MICROBIAL INOCULUM AND ENZYME PREPARATION DERIVED THEREFROM, AND APPLICATIONS	2024/11/15
2024/08685	DEVICE FOR PRESSURE BANDAGING AFTER GREAT SAPHENOUS VEIN STRIPPING SURGERY	2024/11/15
2024/08686	LUNG CLEARING AND SPUTUM REMOVAL DEVICE FOR RESPIRATORY MEDICINE	2024/11/15
2024/08688	METHOD AND DEVICE FOR AUTOMATED MASS OF THE WEIGHT CALCULATION TRANSPORTED BY A CONVEYOR	2024/11/15
2024/08689	A METHOD AND SYSTEM FOR AUTOMATED DETERMINATION OF THE OCCURRENCE OF AN ABNORMAL SOURCE OF CONCENTRATED RESISTANCE TO THE MOVEMENT OF A CONVEYOR BELT BY TENSION	2024/11/15
2024/08690	A METHOD AND SYSTEM FOR	2024/11/15

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	AUTOMATED DETERMINATION OF THE OCCURRENCE OF AN ABNORMAL SOURCE OF CONCENTRATED RESISTANCE TO THE MOVEMENT OF A CONVEYOR BELT USING AN OFFSET	
2024/08692	LARGE RIDGE TILLAGE METHOD FOR CORN PLANTING	2024/11/15
2024/08693	A METHOD AND SYSTEM FOR AUTOMATED DETERMINATION OF AN ABNORMAL SOURCE OF CONCENTRATED RESISTANCE TO THE MOVEMENT OF A CONVEYOR BELT BY TEMPERATURE DISTRIBUTION	2024/11/15
2024/08694	A ROADWAY SUPPORT STRUCTURE AND ITS CONSTRUCTION METHOD	2024/11/15
2024/08713	TREHALOSE-BASED SURFACTANTS	2024/11/15
2024/08716	MERIDIAN MASSAGE DEVICE	2024/11/15
2024/08727	WIND POWER GENERATION DEVICE WITH AUTOMATIC AIRFLOW BOOSTING	2024/11/18
2024/08728	METHOD FOR CONTROLLING SOLDERED JOINTS ON A BOARD USING A DEVICE WITH A TRANSMITTER	2024/11/18
2024/08729	DEVICE FOR GENERATING AND/OR MEASURING A SIGNAL	2024/11/18
2024/08730	METHOD FOR MEASURING SIGNALS	2024/11/18
2024/08731	KIT FOR MEASURING SIGNALS	2024/11/18
2024/08732	KIT FOR CONTROLLING SOLDERED JOINTS ON A BOARD	2024/11/18
2024/08733	SYSTEM FOR CONTROLLING SOLDERED JOINTS ON A BOARD	2024/11/18
2024/08734	MACHINE READABLE MEDIUM FOR A DEVICE FOR CONTROLLING SOLDERED JOINTS ON A BOARD	2024/11/18
2024/08735	DEVICE FOR CONTROLLING SOLDERED JOINTS ON A BOARD	2024/11/18
2024/08736	METHOD FOR CONTROLLING SOLDERED JOINTS ON A BOARD	2024/11/18
2024/08737	DEVICE FOR CONTROLLING SOLDERED JOINTS ON A BOARD WITH A TRANSMITTER	2024/11/18
2024/08738	MACHINE READABLE MEDIUM FOR A DEVICE FOR CONTROLLING SOLDERED JOINTS ON A BOARD WITH A TRANSMITTER	2024/11/18
2024/08739	METHOD FOR TRAINING A	2024/11/18

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2024/08740	MACHINE LEARNING MODEL METHOD FOR DETERMINING PERMISSIBLE SPEED OF A VEHICLE	2024/11/18
2024/08742	MICROBIAL PREPARATION FOR PROMOTING ORYZA SATIVA ROOTING AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF	2024/11/18
2024/08743	FISH PROTEIN FOLIAR BIO-ORGANIC FERTILIZER AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF	2024/11/18
2024/08744	REVERSE GRAVEL PACKING APPARATUS AND METHOD	2024/11/18
2024/08745	SAMPLING DEVICE FOR NON-SOLID FOOD	2024/11/18
2024/08746	MULTI-HEAD ELECTRIC TEST TUBE BRUSH CAPABLE OF ADJUSTING DISTANCE BETWEEN BRUSHES	2024/11/18
2024/08747	EXOSKELETON REHABILITATION ROBOT FOR REHABILITATION ENGINEERING AND USING METHOD THEREFOR	2024/11/18
2024/08748	ECOLOGICAL REGULATION SYSTEM FOR RICE PESTS	2024/11/18
2024/08749	THE INVENTION OF A FRUIT AND VEGETABLE PRESERVATIVE AND THE PREPARATION METHOD	2024/11/18
2024/08750	THE INVENTION OF A MIXED BACTERIAL SOLUTION AND THE PREPARATION METHOD AND ITS APPLICATION	2024/11/18
2024/08752	FRUIT AND VEGETABLE SORTING AND CONVEYING DEVICE AND FRUIT AND VEGETABLE SORTING APPARATUS	2024/11/18
2024/08757	AN IMAGE PROCESSING OPTIMIZATION DEVICE BASED ON RISC-V SOC	2024/11/18
2024/08769	MULTIPLEX GENE EDITING METHOD BASED ON CRISPR/CAS9	2024/11/18
2024/08773	METHOD FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE WITH ADJUSTING PLAYBACK	2024/11/19
2024/08774	METHOD FOR CONTROL OF AN IOT DEVICE PLACED ON A VERTICAL SURFACE	2024/11/19
2024/08775	WALL DRILLING MACHINE FOR BUILDING DECORATION	2024/11/19
2024/08776	AN INTELLIGENT ELDERLY CARE	2024/11/19



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	WEARABLE DEVICE	
2024/08777	A METHOD FOR MODIFYING DIETARY FIBER POWDER OF GINGER PEEL RESIDUE FOR INCREASING ITS SOLUBLE DIETARY FIBER CONTENT	2024/11/19
2024/08778	DEVICE FOR SIMULATING OPERATION OF COMPRESSED AIRENERGY STORAGE SYSTEM IN MINE	2024/11/19
2024/08779	A RADIATION WARNING PEN FOR NUCLEAR MEDICINE MEDICAL PERSONNEL TO PROTECT RADIOACTIVE SUBSTANCES	2024/11/19
2024/08783	A TEMPERATURE CONTROL SYSTEM AND METHOD FOR A PLANT FACTORY BASED ON WASTE HEAT RECOVERY	2024/11/19
2024/08784	DEVICE FOR STORING HUMAN ANATOMY SPECIMEN CONVENIENT FOR ADJUSTMENT AND VIEWING	2024/11/19
2024/08787	SINGLE-PILE VERTICAL STATIC LOAD TEST DEVICE	2024/11/19
2024/08799	METHOD FOR ACTUATING A PENDULUM MECHANISM	2024/11/20
2024/08800	COPPER-CONTAINING HEAVY METAL WASTEWATER TREATMENT DEVICE	2024/11/20
2024/08801	CHITOSAN-BASED INTUMESCENT FLAME RETARDANT AND PREPARATION METHOD AND APPLICATION THEREOF	2024/11/20
2024/08802	ADAPTIVE BEAM FOCUSING DEVICE	2024/11/20
2024/08803	ADENOSINE DERIVATIVE AND PHARMACEUTICAL COMPOSITION COMPRISING THE SAME	2024/11/20
2024/08807	SELF-STARTING RAIN INCREASING AND DECREASING DEVICE	2024/11/20
2024/08808	FACIAL RECOGNITION BASED REAL TIME LITTER SURVEILLANCE SYSTEM	2024/11/20
2024/08809	MOBILE USER DEVICE FOR GENERATING XR SCENE USING WEB ENVIRONMENT	2024/11/20
2024/08810	SYSTEM FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE	2024/11/20
2024/08811	METHOD FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE	2024/11/20
2024/08814	LATERAL MOVEMENT FLEXIBLE	2024/11/20

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	TRANSFER BED AND TRANSFER METHOD THEREOF	
2024/08822	BEAM-FABRICATION ENTABLEMENT BASE STRUCTURE FOR PRECAST BEAMS AND DESIGN METHOD THEREOF	2024/11/20
2024/08825	PEST DETECTION SYSTEMS AND METHODS	2024/11/20
2024/08849	A LIMB TRAINING DEVICE FOR THE REHABILITATION OF RHEUMATISM PATIENT	2024/11/21
2024/08850	DEVICE FOR EFFECTIVELY CONTROLLING BIOCHEMICAL SLUDGE BULKING	2024/11/21
2024/08851	A METHOD FOR RAPIDLY IDENTIFYING FRUIT STORABILITY OF RED FLESH APPLE AND SPECIFIC PRIMER PAIRS USED THEREOF	2024/11/21
2024/08852	METHOD FOR COLLECTING MACHINE LEARNING DATA USING A VEHICLE FOR COLLECTING DATA	2024/11/21
2024/08853	FREE COMBAT REACTION TRAINING DEVICE	2024/11/21
2024/08854	FREE COMBAT STRENGTH TRAINING DEVICE	2024/11/21
2024/08855	SYSTEM AND METHOD FOR DIRECTLY FILLING OLD EMPTY ROADWAY BY USING ROADWAY-DIGGING COAL BODY	2024/11/21
2024/08856	HEAVY METAL WASTEWATER SEDIMENTATION TANK	2024/11/21
2024/08858	METHOD FOR INCREASING GERMINATION RATE OF CORN SEEDS UNDER SALT STRESS	2024/11/21
2024/08859	METHOD FOR MEASURING SURFACE STRESS OF FRACTURED ROCK MASS	2024/11/21
2024/08861	AN ELECTRONIC COMMUNICATION TERMINAL	2024/11/21
2024/08873	PERSONAL NOISEMAKER FAN DEVICES	2024/11/21
2024/08884	WATER IMPURITY-REMOVAL WATER-SAVING PURIFICATION DEVICE	2024/11/22
2024/08885	ECOLOGICAL REGULATION SYSTEM FOR RICE PESTS USING BASIL AS NECTAR SOURCE PLANT	2024/11/22
2024/08887	METHOD FOR CONSTRUCTING SPATIAL SAMPLE OF DIRECT ECONOMIC LOSS OF TYPHOON FLOOD DISASTER	2024/11/22

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2024/08888	MULTI-SCENE COLD WAVE PREVENTION AND HEAT PRESERVATION DEVICE FOR FRUIT TREES	2024/11/22
2024/08890	MULTISPECTRAL COUPLING METHOD FOR ONLINE DETECTION OF PULP COMPONENTS IN MINERAL DRESSING TECHNOLOGICAL PROCESS	2024/11/21
2024/08891	CONVERSION OF POLYURETHANE IN A TAPERED REACTOR	2024/11/22
2024/08895	LIBS SYSTEM BASED ON DUAL-MODE SPECTRAL ACQUISITION	2024/11/22
2024/08908	METHOD AND SYSTEM FOR THE UNEQUIVOCAL CHARACTERIZATION OF A PRODUCT BY MEANS OF AN INTELLIGENT PAINT	2024/11/22
2024/08909	HIGH-TEMPERATURE WATER SOURCE HEAT PUMP UNIT FOR RECOVERING WASTE HEAT FROM HIGH-TEMPERATURE WASTEWATER	2024/11/22
2024/08910	PHARMACEUTICAL COMPOSITION COMPRISING A CAP-DEPENDENT ENDONUCLEASE INHIBITOR	2024/11/22
2024/08919	BONE MARROW BIOPSY SAMPLING DEVICE	2024/11/25
2024/08920	METHOD FOR CONSTRUCTING DATABASE OF E-COMMERCE PLATFORM SEARCH ENGINE	2024/11/25
2024/08921	AUTOMATIC SPRAYING DEVICE FOR FOREST PESTS AND DISEASES	2024/11/25
2024/08922	CONTROL METHOD FOR HIGH-STRESS STRONG-RHEOLOGY ROADWAY FLOORS BASED ON STRESS REGULATION AND REINFORCEMENT OF SURROUNDING ROCKS	2024/11/25
2024/08923	PLC CONTROL-BASED FREEZE-THAW CYCLE EXPERIMENT DEVICE AND METHOD	2024/11/25
2024/08924	VERIFICATION METHOD, DEVICE AND APPARATUS FOR EMBEDDED SYSTEM	2024/11/25
2024/08925	MACHINE READABLE MEDIUM FOR GENERATING XR SCENE USING WEB ENVIRONMENT OF MOBILE USER DEVICE	2024/11/25
2024/08926	A SYSTEM FOR PIXEL DATA MANAGEMENT	2024/11/25

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2024/08927	RUNOFF PREDICTION METHOD, DEVICE, APPARATUS AND MEDIUM	2024/11/25
2024/08928	AN ULTRASONIC SENSOR BASED SYSTEM FOR DETECTING OBJECTS AND DISTANCE MEASUREMENT	2024/11/25
2024/08929	A WASTE DETECTION SYSTEM FOR GARBAGE SEGREGATION	2024/11/25
2024/08930	DAMPING DEVICE FOR MECHANICAL ENGINEERING EQUIPMENT	2024/11/25
2024/08931	AN ARTIFICIAL INTELLIGENCE BASED EVENT AND TASK MANAGEMENT SYSTEM	2024/11/25
2024/08932	AN AUTOMATIC NUMBER PLATE RECOGNITION SYSTEM FOR PARKING ALLOTMENT	2024/11/25
2024/08933	A SYSTEM FOR DATA SECURITY	2024/11/25
2024/08934	A SYSTEM FOR SIGN LANGUAGE RECOGNITION	2024/11/25
2024/08935	A QR CODE AND GPS BASED BUS TICKET SYSTEM	2024/11/25
2024/08936	A HAND GESTURE RECOGNITION SYSTEM FOR ENHANCING HUMAN-COMPUTER INTERACTION	2024/11/25
2024/08937	A SYSTEM FOR HANDWRITTEN TO TEXT CONVERSION AND PLAGIARISM CHECKING	2024/11/25
2024/08938	STORAGE DEVICE FOR STATISTICAL COLLECTION OF COMPUTER BIG DATA	2024/11/25
2024/08939	DEVICE FOR COLLECTING SOIL BASED ON LAND CONSOLIDATION	2024/11/25
2024/08940	GROUND LEVELLING DEVICE USED FOR LAND CONSOLIDATION	2024/11/25
2024/08966	MEAT PRODUCT COLD-CHAIN LOGISTICS MONITORING SYSTEM	2024/11/26
2024/08967	INTELLIGENT FULL-AUTOMATIC PHOSPHOGYPSUM PAPERMAKING SYSTEM AND PAPERMAKING METHOD	2024/11/26
2024/08968	INTELLIGENT TEACHING EVALUATION SYSTEM BASED ON VOICEPRINT DETECTION AND EMOTION ANALYSIS	2024/11/26
2024/08970	AGRICULTURAL DRUM-TYPE YACON CLEANING MACHINE	2024/11/26
2024/08971	A BROADLY APPLICABLE FRESHWATER PEARL MUSSEL SMART ECOLOGICAL AQUACULTURE SYSTEM	2024/11/26
2024/08976	A SYSTEM FOR AGRICULTURAL	2024/11/26

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	INSURANCE CLAIM SETTLEMENT	
2024/08977	A MACHINE LEARNING-BASED SYSTEM FOR CONGESTION PREVENTION IN WIRELESS SENSOR NETWORKS	2024/11/26
2024/08978	AN IOT-BASED INTELLIGENT SYSTEM FOR UNHEALTHY ORGAN PREDICTION	2024/11/26
2024/08979	AN AUTOMATED JEWELLERY SECURITY SYSTEM FOR SHOPS	2024/11/26
2024/08980	A METHOD FOR OPTIMIZING ROUTING IN HETEROGENEOUS WIRELESS SENSOR NETWORKS	2024/11/26
2024/08981	PREPARATION METHOD FOR NANOMETER TiO <sub>2</sub> ASPHALT MIXTURE FOR CATALYTIC DEGRADATION OF AUTOMOBILE EXHAUST GAS	2024/11/26
2024/08982	ROBOT FOR FIRE SCENE DETECTION AND RESCUE	2024/11/26
2024/08983	ANTI-EXTRAVASATION CHEMOTHERAPY MEDICINE DELIVERY DEVICE FOR CLINICAL USE	2024/11/26
2024/08984	ITERATIVE CALCULATION METHOD FOR DATA COMPRESSION	2024/11/26
2024/08985	COMMUNICATION CABINET FOR ELECTRONIC INFORMATION ENGINEERING	2024/11/26
2024/08986	MULTI-INTERFACE CONTROLLER FOR COMPUTER NETWORK SECURITY	2024/11/26
2024/08987	MASSAGE DEVICE WITH A CARRIER ELEMENT WITH A CONTROLLED MOVABLE MASSAGE MODULE	2024/11/26
2024/08988	MASSAGE DEVICE WITH A CARRIER ELEMENT AS A BASE WITH A CONTROLLED MOVABLE MASSAGE MODULE	2024/11/26
2024/09012	RECYCLABLE SHIPPING PACK AND METHOD OF AND APPARATUS FOR FORMING A SHIPPING PACK FOR LOOSE-FILL PRODUCE	2024/11/26
2024/09019	HYPOLIPIDEMIC AND HYPOGLYCEMIC TRADITIONAL CHINESE MEDICINE AND PREPARATION METHOD AND USE THEREOF	2024/11/27
2024/09020	REGENERATION AND REPAIR METHOD OF GRAPHITE ANODE SHEET OF WASTE LITHIUM-ION	2024/11/27



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	BATTERIES	
2024/09021	AUTOMOTIVE SUSPENSION STRENGTH TESTING DEVICE	2024/11/27
2024/09022	METHOD FOR EXTRACTING FLOOD BASED ON FUSION OF OPTICAL AND SAR REMOTE SENSING IMAGES AND SYSTEM	2024/11/27
2024/09023	NOVEL COPPER OXIDE MODIFIED PEANUT SHELL BIOCHAR PREPARATION METHOD AND ITS APPLICATION	2024/11/27
2024/09024	ANTICORROSION METHOD FOR FUEL CELL ENGINE AND THERMAL MANAGEMENT SYSTEM	2024/11/27
2024/09025	SPECKLE REDUCTION METHOD FOR SAR IMAGES BASED ON FREQUENCY DOMAIN DEEP LEARNING NETWORK	2024/11/27
2024/09026	METHOD AND SYSTEM FOR MONITORING ROCK FAILURE PROCESS	2024/11/27
2024/09027	NAME PREDICTION SYSTEM	2024/11/27
2024/09028	LOCKING DEVICE FOR DOUBLE-LENGTH FLYING SHEAR CRANKSHAFT AND ROTATING KNIFE HOLDER	2024/11/27
2024/09029	COAXIAL REVERSING DEVICE FOR THE AIRCRAFT	2024/11/27
2024/09030	A DEVICE FOR REAL TIME MONITORING AND REGULATING TEMPERATURE IN CONTINUOUS RENAL REPLACEMENT THERAPY	2024/11/27
2024/09036	A SYSTEM FOR SMART HOME AUTOMATION	2024/11/27
2024/09037	A FACIAL RECOGNITION SYSTEM FOR SMART HOME AUTOMATION	2024/11/27
2024/09038	A DATA ANALYTICS SYSTEM FOR IDENTIFICATION AND AUTHENTICATION THROUGH SINGLE SMART CARD	2024/11/27
2024/09039	METHOD FOR MICROBIAL REMEDIATION OF HEAVY METAL POLLUTION	2024/11/27
2024/09040	ENERGY DISSIPATION AND SHOCK ABSORBER	2024/11/27
2024/09041	TARGET-ENHANCED SINGLE PULSE-DUAL BEAM LASER-INDUCED BREAKDOWN SPECTROSCOPY SIGNAL ENHANCEMENT METHOD AND SYSTEM THEREOF	2024/11/27
2024/09042	ELECTRICAL AUTOMATIC	2024/11/27

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	PROCESSING APPARATUS	
2024/09043	UNIVERSAL STEERING ROD FOR VEHICLES	2024/11/27
2024/09044	INDOOR LIGHTING CONTROL SYSTEM AND INDOOR LIGHTING CONTROL METHOD	2024/11/27
2024/09045	NEW ENERGY WATER QUALITY TESTING SYSTEM AND TESTING METHOD THEREFOR	2024/11/27
2024/09046	HYDROPONIC DEVICE FOR PLANT SEEDLING CULTIVATION AND ROOT OBSERVATION	2024/11/27
2024/09047	BOS GRUNNIENS FORMULA MILK POWDER FOR MIDDLE-AGED AND ELDERLY PEOPLE AND PREPARATION METHOD THEREFOR	2024/11/27
2024/09048	DESIGN METHOD OF SHAFT TYPE INLET AND OUTLET STRUCTURE AND SHAFT TYPE INLET AND OUTLET STRUCTURE	2024/11/27
2024/09051	MULTI-MODAL PREDICTION AND IDENTIFICATION SYSTEM FOR POSTOPERATIVE SUBSYNDROMAL DELIRIUM IN ELDERLY PATIENTS UNDER GENERAL ANESTHESIA	2024/11/27
2024/09052	AN AUXILIARY MAINTENANCE EQUIPMENT FOR AN AUTOMOBILE MOTOR CONTROLLER	2024/11/27
2024/09053	TABLE TENNIS PLAYING ROBOT FOR SPORTS AND FITNESS	2024/11/27
2024/09054	METHOD SYSTEM AND EQUIPMENT FOR TREATING LOW VISIBILITY METEOROLOGICAL DISASTERS BASED ON IMAGE PROCESSING	2024/11/27
2024/09055	SELF-CLEANING AND ANTIBACTERIAL MASK BASED ON PHOTOCATALYTIC COMPOSITE FIBERS	2024/11/27
2024/09056	METHOD FOR PREPARING TNF/TPU COMPOSITE FIBER WITH HIGH TENSILE STRENGTH	2024/11/27
2024/09057	TYPE OF AUTOMATIC FEED DEVICE FOR SHEEP FARMING	2024/11/27
2024/09077	MULTIFUNCTIONAL LOGISTICS SORTING DEVICE BASED ON INTERNET OF THINGS	2024/11/28
2024/09078	ARTIFICIAL WETLAND TREATMENT DEVICE	2024/11/28
2024/09079	METHOD FOR DETECTING BENZENE SERIES IN ARCHITECTURAL COATINGS	2024/11/28

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2024/09080	METHOD FOR DETECTING VOCS IN BUILDING DECORATION MATERIALS	2024/11/28
2024/09081	METHOD FOR CONTROLLING A VEHICLE	2024/11/28
2024/09082	SYSTEM FOR MATCHING HUMAN FACES AND NAMES	2024/11/28
2024/09086	SCREENING MECHANISM FOR POTATOES	2024/11/28
2024/09087	SYSTEM AND METHOD FOR AVOIDING BACTERIA CONTAMINATION DURING INOCULATION BY MICROBIAL FERMENTATION	2024/11/28
2024/09088	DECORATIVE PLATE WITHOUT REMOVING FORMWORK AND STRUCTURE FOR EXTERIOR WALL OF BUILDING	2024/11/28
2024/09089	FLOATING SHOCK-ABSORBING ELECTRICAL DEVICE FOR ELECTRONIC INFORMATION ENGINEERING	2024/11/28
2024/09090	METHOD FOR IDENTIFYING PRE-EXISTING STRUCTURES CONTROLLING PORPHYRY METALLOGENIC SYSTEM BASED ON NEURAL NETWORK MODEL	2024/11/28
2024/09091	ADJUSTING MECHANISM FOR LIFTING SPEED BUMP	2024/11/28
2024/09092	LOCALIZATION METHOD FOR CONCEALED METALLOGENETIC ROCK AND ORE BODY BASED ON ROCK- AND ORE-CONTROLLING PREEXISTING STURCTURAL MODEL	2024/11/28
2024/09093	DRIVE DEVICE FOR HORIZONTAL ROTARY RAKE	2024/11/28
2024/09093	DRIVE DEVICE FOR HORIZONTAL ROTARY RAKE	2024/11/28
2024/09094	DEVICE FOR GRANULATING BLAST FURNACE SLAG AND METHOD THEREFOR	2024/11/28
2024/09095	SEMI-GLOSS ART PAINT WITH HIGH HARDNESS AND UNIVERSAL USE OF MUTIPLE SUBSTRATES AND PREPARATION METHOD THEREFOR	2024/11/28
2024/09099	INITIAL SUPPORT FLATNESS CONTROL DEVICE AND CONTROL METHOD THEREOF	2024/11/28
2024/09100	TUNNEL SNOW-PROOF SHED WITH A FULLY AUTOMATIC SNOW	2024/11/28

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	REMOVAL DEVICE	
2024/09101	METHOD FOR ESTABLISHING A SLOPE BLASTING PREDICTION MODEL BASED ON THE RF-WOA-ELM MODEL	2024/11/28
2024/09102	A POTATO GERMINATION INHIBITOR AND PREPARATION METHOD THEREOF	2024/11/28
2024/09106	TRADITIONAL CHINESE MEDICINE CIGARETTE AND PREPARATION METHOD THEREOF	2024/11/28
2024/09114	MODULATORS OF THR- $\alpha$ 1; AND METHODS OF USE THEREOF	2024/11/28
2024/09116	APPLICATION OF ASTRAGALOSIDE IV (ASIV) IN PREPARATION OF DRUGS FOR ALLEVIATING DEOXYNIVALENOL-INDUCED TOXIC INJURY	2024/11/28
2024/09153	REMOTE SENSING FINE EXTRACTION METHOD FOR SURFACE WATER IN AFRICA BASED ON GLI-MFUNET	2024/11/29
2024/09154	PROCESSING DEVICE AND PROCESSING TECHNOLOGY OF BLACK CARP FEED	2024/11/29
2024/09157	FREQUENCY-BAND-EXPANSION POROUS MATERIAL LAYER SOUND ABSORBER AND DESIGN METHOD THEREOF	2024/11/29
2024/09184	MODULAR RELAY STRUCTURE HAVING HIGH UNIVERSALITY AND HIGH COMPATIBILITY FOR PARTS	2024/11/29
2024/09196	A STRAIN OF LACTOBACILLUS PLANTARUM QL01 WITH ANTIOXIDANT CAPACITY AND ITS APPLICATION	2024/12/02
2024/09198	MODIFIED ARAMID FIBER FABRIC, AND PREPARATION METHOD AND APPLICATION THEREOF	2024/12/02
2024/09199	BLENDED HIGH-DENSITY FLAME-RETARDANT FABRIC, AND PREPARATION METHOD AND APPLICATION THEREOF	2024/12/02
2024/09200	SEGMENTED CONTROL DEVICE FOR CONCRETE COOLING SYSTEM	2024/12/02
2024/09201	CARBON FIBER FELT PHASE CHANGE ENERGY STORAGE MATERIAL AND PREPARATION METHOD AND APPLICATION	2024/12/02
2024/09202	DESERTIFICATION MONITORING METHOD AND SYSTEM, AND ELECTRONIC DEVICE AND MEDIUM	2024/12/02

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2024/09203	CROSS-BORDER E-COMMERCE GOODS TROLLEY	2024/12/02
2024/09204	INTEGRATED SEWAGE TREATMENT DEVICE	2024/12/02
2024/09205	MYCOPLASMA MUTANT STRAIN AND PREPARATION METHOD THEREFOR, AND APPLICATIONS	2024/12/02
2024/09210	A DRONE DETECTION SYSTEM FOR COUNTERING POTENTIAL MISUSE OF DRONES	2024/12/02
2024/09211	A MACHINE LEARNING SYSTEM FOR DISEASE PREDICTION	2024/12/02
2024/09212	A LOGISTIC REGRESSION SYSTEM FOR PERSONALITY PREDICTION	2024/12/02
2024/09213	A HOME AUTOMATION SYSTEM WITH MULTIPLE CONTROL ACCESS USING IOT AND RTC MODULE	2024/12/02
2024/09214	A MACHINE LEARNING SYSTEM FOR CRICKET WIN PREDICTION	2024/12/02
2024/09215	COMPOUND HEAVY METAL PASSIVATING AGENT AND APPLICATION THEREOF	2024/12/02
2024/09219	A SYSTEM FOR REDUCTION OF SINGLE USE PLASTIC WASTE THROUGH REFILL STATIONS	2024/12/02
2024/09220	AN ALCOHOL DETECTION SYSTEM WITH ALERT NOTIFICATION FOR PREVENTION OF ROAD ACCIDENTS	2024/12/02
2024/09221	A PREDICTIVE ANALYTICAL SYSTEM FOR STOCK PRICE PREDICTION	2024/12/02
2024/09222	A DETECTION SYSTEM FOR PARTIAL SHADING IN PHOTOVOLTAIC (PV) CELL	2024/12/02
2024/09223	AN IMAGE PROCESSING SYSTEM FOR IDENTIFICATION AND ANALYSIS OF SOLAR HOTSPOTS	2024/12/02
2024/09224	A WEB-BASED SYSTEM FOR MATHEMATICAL ANIMATION	2024/12/02
2024/09242	SLEEVE-TYPE MULTI-MODE HEATING RADIATOR	2024/12/03
2024/09244	METHOD FOR PLANNING DELIVERY PATH OF UNMANNED GROUND VEHICLE	2024/12/03
2024/09245	ENERGY-SAVING HEATING DEVICE COUPLED WITH SOLAR ENERGY AND BIOGAS	2024/12/03
2024/09246	SHOCK-ABSORBING STRUCTURE FOR ENHANCING SEISMIC RESISTANCE CAPACITY OF TUNNELS	2024/12/03



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2024/09247	TITANIUM DIOXIDE AIR JET MILL	2024/12/03
2024/09249	MULTI-TYPE COMBINED NOISE GENERATION METHOD BASED ON VISUAL FEATURE DETECTION	2024/12/03
2024/09256	A REAL TIME VEHICLE TRACKING SYSTEM	2024/12/03
2024/09257	A TEXT-TO-SPEECH CONVERSION SYSTEM FOR VISUALLY IMPAIRED INDIVIDUALS	2024/12/03
2024/09258	AN ACCIDENT REPORTING AND EMERGENCY RESPONSE SYSTEM	2024/12/03
2024/09259	A TUMOR DETECTION SYSTEM FOR ACCURATE DIAGNOSIS	2024/12/03
2024/09260	AN IMAGE FORGERY DETECTION SYSTEM FOR IDENTIFICATION OF AUTHENTIC IMAGES	2024/12/03
2024/09261	AN AI ENABLED ATTENDANCE SYSTEM	2024/12/03
2024/09262	A PYTHON EMBEDDED BRAIN TUMORS AND ALZHEIMER'S DETECTING SYSTEM	2024/12/03
2024/09263	A SIGN LANGUAGE RECOGNITION SYSTEM USING ACTION RECOGNITION WITH PYHTON	2024/12/03
2024/09264	A BUS MANAGEMENT AND CROWD CONTROL SYSTEM	2024/12/03
2024/09265	AN AI BASED MENTAL HEALTH THERAPIST CHATBOT SYSTEM	2024/12/03
2024/09266	A NOVEL WIND CUM SOLAR ENERGY GENERATION AND STORAGE SYSTEM WITH SOLAR TRACKING	2024/12/03
2024/09267	A GESTURE-BASED VOLUME CONTROL SYSTEM USING COMPUTER VISION AND AUDIO PROCESSING	2024/12/03
2024/09268	A SMART TRAFFIC REGULATION SYSTEM	2024/12/03
2024/09271	STRAW DECOMPOSITION AGENT FOR IMPROVING SALINE-ALKALI LAND AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF	2024/12/03
2024/09289	METHOD FOR REGULATING VARIANT VOLUME FRACTION OF SUPERALLOY, SYSTEM AND MEDIUM	2024/12/04
2024/09290	INTELLIGENT UNDERWATER ROBOT AND MOTION CONTROL METHOD	2024/12/04
2024/09291	A RADIOTHERAPY POSITIONING FRAME PLATE AND A	2024/12/04

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	RADIOTHERAPY POSITIONING METHOD	
2024/09292	A PRECISE RADIOTHERAPY FIXATION DEVICE FOR THE BODY AND ITS METHOD OF USE	2024/12/04
2024/09294	AFFORESTATION METHOD FOR PROMOTING EARLY MATURITY AND HIGH YIELD OF BAMBUSA CHANGNINGENSIS YI ET B.X.LI	2024/12/04
2024/09296	SLUDGE TREATMENT DEVICE FOR MUD CIRCULATION OF DRILLING ENGINEERING	2024/12/04
2024/09297	CLAMPING DEVICE FOR LAPAROSCOPIC SURGERY TROCAR	2024/12/04
2024/09298	MODIFIED LITHIUM MANGANATE ELECTRODE MATERIAL AND MODIFICATION METHOD THEREOF	2024/12/04
2024/09313	INSULATOR DETECTION METHOD BASED ON IMPROVED YOLOV8	2024/12/05
2024/09314	AMORPHOUS FILLER METAL LASER BRAZING FIXTURE	2024/12/05
2024/09315	SELF-COMPACTING CONCRETE AND PREPARATION METHOD THEREOF	2024/12/05
2024/09316	DIRECT-CURRENT CHARGING GUN FOR NEW ENERGY ELECTRIC VEHICLE AND USE METHOD THEREOF	2024/12/05
2024/09317	TEMPERATURE-CONTROLLED CHARGING SOCKET FOR GENERATING ELECTRICITY BY USING WATER IN HEATING PIPELINE	2024/12/05
2024/09318	REHABILITATION PHYSIOTHERAPY INSTRUMENT FOR CHRONIC DISEASE WITH INTELLIGENT CONTROL OVER EXERCISE RESISTANCE IN CHINESE MEDICINE LIQUID	2024/12/05
2024/09319	UAV CLUSTER TASK EXECUTION METHOD BASED ON DISTRIBUTED COMPUTING	2024/12/05
2024/09322	A MACHINE LEARNING BASED DISEASE PREDICTION SYSTEM	2024/12/05
2024/09323	A SMART SYSTEM FOR ENHANCING ACCESS TO ORGAN DONORS	2024/12/05
2024/09324	AN ADAPTIVE TRAFFIC CONTROL SYSTEM	2024/12/05
2024/09325	AN AUTOMATED VACANCY DETECTION IN A PARKING-LOT	2024/12/05

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	USING IMAGE PROCESSING AND REMOTE ACCESS TO REAL TIME STATE	
2024/09326	AN ADVANCED 2D PLOTTER SYSTEM FOR PRECISION GEOMETRIC DRAWING	2024/12/05
2024/09327	A TRAFFIC SIGNALLING PATTERN SYSTEM	2024/12/05
2024/09328	A TV SHOW POPULARITY ANALYSIS SYSTEM USING DATA MINING	2024/12/05
2024/09329	A SECURE CLOUD STORAGE SYSTEM FOR MEDICAL DOCUMENTS	2024/12/05
2024/09330	A BLOCKCHAIN BASED JUDICIAL PETITION FILING SYSTEM	2024/12/05
2024/09331	A SMART STEALTH CRUISER SYSTEM	2024/12/05
2024/09332	A DIMENSIONAL MEASUREMENT SYSTEM USING CANNY EDGE DETECTION	2024/12/05
2024/09333	AN EMERGENCY SUPPORT SYSTEM	2024/12/05
2024/09334	A SMART AQUAPONICS SYSTEM	2024/12/05
2025/00832	METHOD AND SYSTEM FOR RAPIDLY DETECTING ALUMINUM CONTENT IN BAUXITE BASED ON NEAR-INFRARED SPECTRA	2025/01/24
2025/00956	METHODS FOR INHIBITING ANGIOGENESIS IN A SUBJECT IN NEED THEREOF	2025/01/29
2025/00957	MOUNTING BRACKET	2025/01/29
2025/01274	PLEUROTUS PULMONARIUS STRAIN FOR DECOLORIZATION AND COD DEGRADATION IN SEWAGE AND USE THEREOF	2025/02/11
2025/01308	GENE THERAPY VECTORS FOR TREATING HEART DISEASE	2025/02/12
2025/01309	GENE THERAPY VECTORS FOR TREATING HEART DISEASE	2025/02/12
2025/01799	RECOMBINANT NUCLEIC ACIDS ENCODING COSMETIC PROTEIN(S) FOR AESTHETIC APPLICATIONS	2025/02/27
2025/02475	TNF ALPHA AND INTERLEUKIN-2 COMBINATION THERAPY FOR NON-MELANOMA SKIN CANCER	2025/03/20
2025/02649	INTELLIGENT PLANT MAINTENANCE METHOD, SYSTEM, DEVICE AND MEDIUM	2025/03/27
2025/02650	ENERGY STORAGE PRODUCT FOR HYBRID POWER GENERATION	2025/03/27
2025/03004	GRINDING AND POLISHING	2025/04/09

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	INTEGRATED METHOD AND APPARATUS FOR DIAMOND WAFER	
2025/03073	COOPERATIVE PROCESSING ROBOT FOR WELDING SURFACE OF WELDED PARTS	2025/04/11
2025/03277	WELDING DEVICE OF REINFORCEMENT CAGES FOR CONSTRUCTION	2025/04/17
2025/03320	ROAD-TRAFFIC CARBON EMISSION PREDICTION METHOD AND APPARATUS BASED ON DEEP LEARNING	2025/04/17
2025/03359	MULTI-PATH INTERNALLY-MICROPOROUS EFFICIENT REFRIGERATION METHOD AND DEVICE FOR FROZEN SAND MOLD	2025/04/17
2025/03360	EARLY-STAGE BRIDGE DEFORMATION IDENTIFICATION METHOD AND SYSTEM BASED ON INSAR TECHNOLOGY	2025/04/21
2025/03410	SOLIDIFICATION TREATMENT DEVICE FOR FLY ASH	2025/04/23
2025/03494	ADAPTIVE DUST COLLECTION CONTROL SYSTEM AND APPLICATION FOR VACUUM SWEEPER	2025/04/24
2025/03552	METHOD AND APPARATUS FOR PASSIVE MIXING OF MULTIPHASE FLOW	2025/04/25
2025/03553	APPARATUS FOR PASSIVE MIXING OF MULTIPHASE FLOW	2025/04/25
2025/03560	TREATMENT METHOD FOR SUPER-LARGE KARST CAVE CAVITY BEHIND TUNNEL WALL	2025/04/25
2025/03641	IMAGE PROCESSING METHOD AND SYSTEM FOR REMOTE-SENSING UNMANNED AERIAL VEHICLE FOR INTELLIGENT TRANSPORTATION CONSTRUCTION DATA COLLECTION	2025/04/29
2025/03826	FASTENER CONNECTOR DISASSEMBLY DEVICE AND CONTROL METHOD THEREFOR	2025/05/06
2025/03865	ALBINO MUTANT STRAIN WHITE BRAIN FUNGUS OF AURICULARIA POLYTRICHA AND ARTIFICIAL CULTIVATION METHOD THEREFOR	2025/05/07
2025/03967	ANCHOR DEPLOYMENT AND RETRIEVAL SYSTEM FOR CATAMARANS	2025/05/09
2025/04045	MAGNETICALLY CONTROLLED ALGAL MICROROBOT FOR CELL-	2025/05/13

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	TARGETED DELIVERY, PREPARATION METHOD AND APPLICATION	
2025/04055	APPARATUS AND METHOD FOR TRACKING HAND-HELD SURGICAL TOOLS	2025/05/13
2025/04133	APPARATUS FOR PASSIVE MIXING OF MULTIPHASE FLOW THROUGH SPLITTING	2025/05/15
2025/04282	TEMPORARY REINFORCEMENT DEVICE FOR BRICK MASONRY COLUMN OF HISTORICAL BUILDING	2025/05/20
2025/04698	A SOLAR ERUPTION ACTIVITY PREDICTION AND ANALYSIS SYSTEM BASED ON MACHINE LEARNING	2025/06/02

## DESIGNS

## Advertisement List for June 2025

Number of Advertised Designs: 134

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A2023/01250	COVER FOR ELECTRONIC DEVICE	2023/11/21
A2024/00704	CATAMARAN	2024/07/18
A2024/00705	CATAMARAN	2024/07/18
A2024/00706	CATAMARAN	2024/07/18
A2024/00853	GLOVES	2024/09/02
A2024/00854	GLOVES	2024/09/02
A2024/00855	GLOVES	2024/09/02
A2024/00856	GLOVES	2024/09/02
A2024/00857	GLOVES	2024/09/02
A2024/00866	Box Connector	2024/09/03
A2024/00868	HAIR TRIMMER	2024/09/03
A2024/00869	BOTTLES	2024/09/04
A2024/00893	TYRE	2024/09/16
A2024/00894	TYRE	2024/09/16
A2024/00895	TYRE	2024/09/16
A2024/00896	TYRE	2024/09/16
A2024/00897	TYRE	2024/09/16
A2024/00898	TYRE	2024/09/16
A2024/00899	TYRE	2024/09/16
A2024/00900	TYRE	2024/09/16
A2024/00901	TYRE	2024/09/16
A2024/00903	Jar with a Lid	2024/09/16
A2024/00907	AEROSOL GENERATING DEVICE, IN	2024/09/17



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	PARTICULAR TOBACCO HEATING DEVICE	
A2024/00908	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2024/09/17
A2024/00909	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2024/09/17
A2024/00910	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2024/09/17
A2024/00911	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2024/09/17
A2024/00915	STATIONARY BLADE FOR HAIR CLIPPER	2024/09/17
A2024/00922	Bottle Crate	2024/09/18
A2024/00924	TYRE SIDEWALL	2024/09/19
A2024/00925	Bottle	2024/09/19
A2024/00926	Bottle	2024/09/19
A2024/00927	Bottle	2024/09/19
A2024/00928	Bottle	2024/09/19
A2024/00929	Bottle	2024/09/19
A2024/00930	Bottle	2024/09/19
A2024/00931	Bottle	2024/09/19
A2024/00932	WATCH CASES	2024/09/19
A2024/00933	DIALS	2024/09/19
A2024/00934	Container Bottle	2024/09/23
A2024/00936	PACKAGING CANS (LION CAT)	2024/09/25
A2024/00937	Car	2024/09/25
A2024/00938	Car	2024/09/25
A2024/00939	Toy Car	2024/09/25
A2024/00940	Toy Car	2024/09/25
A2024/00946	FIREARM	2024/09/26
A2024/00947	WATCHES	2024/09/26
A2024/00948	LIQUID INTAKES	2024/09/26
A2024/00949	WATCHES	2024/09/26
A2024/00950	WATCH MECHANISMS	2024/09/26
A2024/00953	Deodorant Stick Container and Dispenser	2024/09/26
A2024/00954	Deodorant Stick Container and Dispenser	2024/09/26
A2024/00955	Container	2024/09/26
A2024/00956	Funnel	2024/09/26
A2024/00957	Deodorant Stick Container and Dispenser	2024/09/26
A2024/00960	Flask	2024/09/26
A2024/00961	Flask	2024/09/26
A2024/00962	Cup	2024/09/26
A2024/00963	Cup	2024/09/26
A2024/00964	Container	2024/09/26

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A2024/00967	MOBILE PHONE	2024/09/27
A2024/00968	AUTOMOBILES	2024/09/27
A2024/00969	AUTOMOBILES	2024/09/27
A2024/00971	GEMSTONES	2024/09/27
A2024/00972	GEMSTONES	2024/09/27
A2024/00973	GEMSTONES	2024/09/27
A2024/00974	GEMSTONES	2024/09/27
A2024/00975	GEMSTONES	2024/09/27
A2024/00976	GEMSTONES	2024/09/27
A2024/00977	GEMSTONES	2024/09/27
A2024/00978	GEMSTONES	2024/09/27
A2024/00979	GEMSTONES	2024/09/27
A2024/00980	GEMSTONES	2024/09/27
A2024/00981	GEMSTONES	2024/09/27
A2024/00982	GEMSTONES	2024/09/27
A2024/00983	GEMSTONES	2024/09/27
A2024/00984	GEMSTONES	2024/09/27
A2024/00985	GEMSTONES	2024/09/27
A2024/00989	BASE UNIT FOR A FOOD PROCESSOR	2024/09/30
A2024/00990	Pitcher Container for a Food Processor	2024/09/30
A2024/00991	Portable Blender	2024/09/30
A2024/00992	Blade Assembly for a Portable Blender	2024/09/30
A2024/00993	WATER TREATMENT APPARATUSES	2024/09/30
A2024/00994	COMMUNICATION EQUIPMENT	2024/09/30
A2024/00995	COMMUNICATION EQUIPMENT	2024/09/30
A2024/00996	COMMUNICATION EQUIPMENT	2024/09/30
A2024/00997	COMMUNICATION EQUIPMENT	2024/09/30
A2024/01015	BOTTLE	2024/10/08
A2024/01016	BOTTLE	2024/10/08
A2024/01034	BRACKET	2024/10/10
A2024/01036	BRACKET	2024/10/10
A2024/01038	BRACKET	2024/10/10
A2024/01050	BRACKET	2024/10/10
A2024/01053	A RING	2024/10/14
A2024/01054	A RING	2024/10/14
A2024/01055	A RING	2024/10/14
A2024/01056	CUFFLINK	2024/10/14
A2024/01057	AN EARING	2024/10/14
A2024/01058	A PENDANT	2024/10/14
A2024/01059	A RING	2024/10/14
A2024/01092	KEYHOLDER	2024/10/21
A2024/01093	TRINKET	2024/10/21
A2024/01096	BUS	2024/10/22
A2024/01106	COVER FOR A TOW HITCH	2024/10/23
A2024/01118	CAR	2024/10/29
A2024/01123	A SERVING PADDLE	2024/10/30
A2024/01124	A SERVING PADDLE	2024/10/30
A2024/01125	A SERVING PADDLE	2024/10/30

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A2024/01126	A SERVING PADDLE	2024/10/30
A2024/01127	A SERVING PADDLE	2024/10/30
A2024/01128	A SERVING PADDLE	2024/10/30
A2024/01129	A SERVING PADDLE	2024/10/30
A2024/01130	A SERVING PADDLE	2024/10/30
A2024/01172	WATER FILTER JUGS	2024/11/20
A2024/01173	WATER FILTER JUGS	2024/11/20
A2024/01208	BOTTLE	2024/11/26
A2025/00345	LOCOMOTIVE	2025/03/26
F2024/00033	FASTENING DEVICE	2024/01/11
F2024/00764	Wing Mounting for an Unmanned Aerial Vehicle	2024/07/31
F2024/00858	GLOVES	2024/09/02
F2024/00859	GLOVES	2024/09/02
F2024/00860	GLOVES	2024/09/02
F2024/00861	GLOVES	2024/09/02
F2024/00862	GLOVES	2024/09/02
F2024/00864	A Structural Spacer Member for a Rock Bolt	2024/09/03
F2024/00865	Box Connector	2024/09/03
F2024/00887	Lighting Set	2024/09/12
F2024/00920	BELT GUARD 1	2024/09/18
F2024/00923	BELT GUARD 3	2024/09/18
F2024/01035	BRACKET	2024/10/10
F2024/01037	BRACKET	2024/10/10
F2024/01039	BRACKET	2024/10/10
F2024/01051	BRACKET	2024/10/10
F2025/00346	LOCOMOTIVE	2025/03/26