গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
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নং-৩৬.০৮.০০০০.২০০.১৬.০০১.২২.৩০২৯ তারিখঃ ১০/১২/২০২৫ খ্রি.

বিষয়ঃ দাখিলকৃত পেটেন্ট আবেদনসমূহ ওয়েবসাইটে প্রকাশ।

বাংলাদেশ পেটেন্ট আইন, ২০২৩ এর ধারা ১৭ অনুযায়ী ডিপিডিটিতে ২০২৪ সালে দাখিলকৃত পেটেন্ট আবেদন নং ৯১-১০০, ১০৬-১০৯, ১১২-১৩৭, ১৪২-১৪৪, ১৪৬-১৪৯, ১৫১-১৫২, ১৫৬-১৫৮, ১৬০ মোট ৫৩ (তিপ্পান্ন) টি আবেদন নিম্নবর্ণিত তথ্যাদি সহ অধিদপ্তরের ওয়েবসাইটে (www.dpdt.gov.bd) প্রকাশ করা হল।

(ক) উদ্ভাবনের শিরোনাম;
(খ) পেটেন্ট আবেদনকারী ও উদ্ভাবকের নাম;
(গ) আবেদন দাখিলের তারিখ ও নম্বর;
(ঘ) অগ্রাধিকার নম্বর ও তারিখ, যদি থাকে;
(ঙ) পেটেন্ট এর শ্রেণিবিন্যাস;
(চ) উদ্ভাবনের মূল উপাদান চিত্রায়িত করে এইরূপ অংকন, যদি থাকে;
(ছ) বিষয়বস্তুর সার-সংক্ষেপ।

সংযুক্তিঃ ৫৩ (তিপ্পান্ন) পাতা।

১০/১২/২৫
মোঃ হাবিবুর রহমান
উপ-পরিচালক (পেটেন্ট)

অনুলিপিঃ
১। পরিচালক (সকল), পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর, ঢাকা।
২। সিস্টেম এনালিস্ট, পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর। (ওয়েবসাইটে প্রকাশের জন্য)
৩। উপ-পরিচালক (পেটেন্ট) (সকল), পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর, ঢাকা।
৪। মহাপরিচালক মহোদয়ের ব্যক্তিগত সহকারী, পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর, ঢাকা।

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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date , **(21) Appl. No.** BD-P-2024-91 **(22) Filed:** 01/04/2024
(23) Priority Data:
(71) Applicant: Md. Alomgir Hossain of Vill-panch Shato Kura Tiki Kata, P/o- Tiki Kata Madrasha U/Z-Mathbaria, Dist-Pirojpur, Nationality -Bangladesh
(72) Inventors: (0) Md. Alomgir Hossain of Vill-panch Shato Kura Tiki Kata, P/o- Tiki Kata Madrasha U/Z-Mathbaria, Dist-Pirojpur, Bangladesh Nationality -Bangladesh
(51) INT. CL. : A47C 1/028
(54) Invention Title: Ayesh Easy Clamp
(57) Abstract

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-92
(22) Filed: 04/04/2024

(23) Priority Data:
European Patent Office (EPO), Number :231673252, Date : 11-04-2023.

(71) Applicant: SICPA HOLDING SA of Avenue de Florissant 41 1008 Prilly, Nationality -Switzerland

(72) Inventors: (0) HARDMAN Daniel of Route des Areneys 13, 1806 St. Légier-La Chiésaz , Switzerland Nationality -United States of America

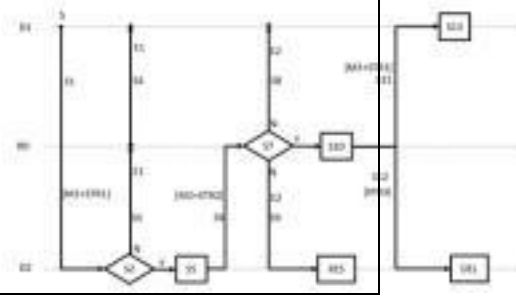
(74) Agent : Advanced IP Law Firm, Suite#9/C (9th Floor), Fahima Tower, 42-43, Purana Paltan, Dhaka-1000, Bangladesh

(51) INT. CL. : B65H 69/00

(54) Invention Title: METHOD AND SYSTEM FOR CONTROLLING INTERCONNECTED DEVICES OPERATING IN AN UNTRUSTED ENVIRONMENT

(57) Abstract

The invention relates to a method and corresponding system for controlling operations performed by a plurality of devices owned by different entities and operating in an untrusted, possibly hostile environment, in order to perform an assigned task, wherein the devices are equipped with processing and communication means and are operable to exchange data securely with each other via wired or wireless communication network so that intrusion in the process of execution of the operations necessary to perform the task and theft, or unauthorized use or removal, of critical data is prevented.



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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-93
(22) Filed: 04/04/2024

(23) Priority Data:
Japan, Number :2023062999, Date : 07-04-2023.

(71) Applicant: TOYO ENGINEERING CORPORATION of 1-1, Nishi-Shimbashi 1-chome, Minato-ku, Tokyo 105-0003, Nationality -Japan

(72) Inventors: (0) Takahiro YANAGAWA of c/o Toyo Engineering Corporation, 2-8-1, Akanehama, Narashino-shi, Chiba 275-0024, Japan Nationality -Japan, (1) Yasuhiko KOJIMA of c/o Toyo Engineering Corporation, 2-8-1, Akanehama, Narashino-shi, Chiba 275-0024, Japan Nationality -Japan, (2) Hiroo KUNII of c/o Toyo Engineering Corporation, 2-8-1, Akanehama, Narashino-shi, Chiba 275-0024, Japan Nationality -Japan

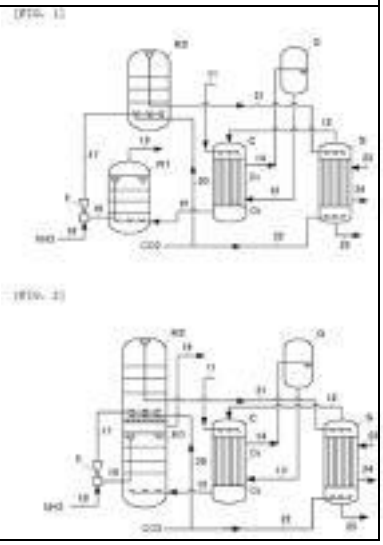
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : C07C 273/04

(54) Invention Title: UREA SYNTHESIS APPARATUS, UREA SYNTHESIS METHOD, AND METHOD FOR IMPROVING EXISTING UREA SYNTHESIS APPARATUS

(57) Abstract

Provided is a urea synthesis apparatus enabling the facilitation of apparatus maintenance, the facilitation of apparatus design or fabrication, and/or the acceleration of a urea reaction. The present invention is a urea synthesis apparatus for reacting ammonia and carbon dioxide to produce urea, and includes a first urea synthesis reactor (R1), a second urea synthesis reactor (R2), a condenser (C), a stripper (S) and means (E) for supplying a first urea synthesis liquid. The condenser (C) is a device for condensing a mixed gas into an absorbing medium to obtain a condensed liquid by allowing a process fluid to pass through a tube (Ct) and cooling it with a cooling medium passing through a shell (Cs) side, the condenser (C) being a device separate from the first urea synthesis reactor (R1) and the second urea synthesis reactor (R2), the first urea synthesis reactor (R1) is a device for obtaining the first urea synthesis liquid from the condensed liquid obtained in the condenser (C), and the second urea synthesis reactor (R2) is a device for obtaining a second urea synthesis liquid from the first urea synthesis liquid.



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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-94
(22) Filed: 04/04/2024

(23) Priority Data:
United States of America, Number :63494455, Date : 05-04-2023.

(71) Applicant: CTC GLOBAL CORPORATION of 2026 McGaw Avenue, Irvine, California 92614, Nationality - United States of America

(72) Inventors: (0) Kevin CORBALIS of 2026 McGaw Avenue, Irvine, California 92614, United States of America Nationality -United States of America, (1) Eric BOSZE of 2026 McGaw Avenue, Irvine, California 92614, United States of America Nationality -United States of America, (2) David GOEKJIAN of 2026 McGaw Avenue, Irvine, California 92614, United States of America Nationality -United States of America

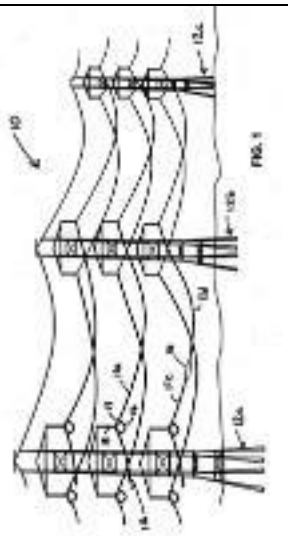
(74) Agent : MUNSHI & ASSOCIATES, Pritom Zaman Tower (Level-10), 37/2 Box Culvert Road, Purana Paltan, Dhaka-1000, Bangladesh

(51) INT. CL. : B60L 50/53

(54) Invention Title: SYSTEMS AND METHODS FOR OPERATING AN OVERHEAD ELECTRICAL LINE

(57) Abstract

Systems and methods for the operation of an electrical line, such as an electrical line in an electrical transmission or distribution grid. The systems and methods may include the use of sensors such as distributed sensors and non-distributed sensors to collect data about the electrical line and utilize that data for taking action with respect to the electrical line, such as to improve transmission efficiencies and to mitigate outages.



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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-95
(22) Filed: 04/04/2024

(23) Priority Data:
India, Number :202311025504, Date : 04-04-2023.

(71) Applicant: Sidhivinayak Chemtech Private Limited of Office no. 202, second floor, Shivlok house-1, Plot no. A-2, commercial complex, Karampura, New Delhi-110015, Nationality -India

(72) Inventors: (0) Sahila Sethi of #415/5 Gali No.4, Kirti Nagar, Sirsa-125055, Haryana, India Nationality -India

(74) Agent : Shahid & Alliance, 30/3 B C Das Street, Lalbagh, Dhaka-1205, Bangladesh

(51) INT. CL. : C04B 14/02

(54) Invention Title: SYNERGISTIC GRANULAR INSECTICIDAL COMPOSITION

(57) Abstract

The present invention relates to a synergistic granular insecticidal composition and manufacturing method thereof. More specifically, it relates to a synergistic granular insecticidal composition comprising A) at least one anthranilic diamide insecticide or its agrochemically acceptable salts, esters and derivatives; B) Fipronil or its agrochemically acceptable salts, esters and derivatives and C) Emamectin or its agrochemically acceptable salts, esters and derivatives. The present invention also relates to a process for preparation of such synergistic granular insecticidal composition for foliar spray treatment of plants and soil application treatment for synergistic and efficacious control of insect pests and improved plant yield.

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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-96
(22) Filed: 04/04/2024

(23) Priority Data:
Japan, Number :2023026867, Date : 21-07-2023.

(71) Applicant: YKK CORPORATION of 1, Kanda Izumi-cho, Chiyoda-ku, Tokyo 101-8642, Nationality -Japan

(72) Inventors: (0) SHO, Yoshiyuki of C/o YKK CORPORATION KUROBE., 200, Yoshida, Kurobe-shi, Toyama 938-8601, Japan Nationality -Japan, (1) YASUDA, Nao of C/o YKK CORPORATION KUROBE., 200, Yoshida, Kurobe-shi, Toyama 938-8601, Japan Nationality -Japan

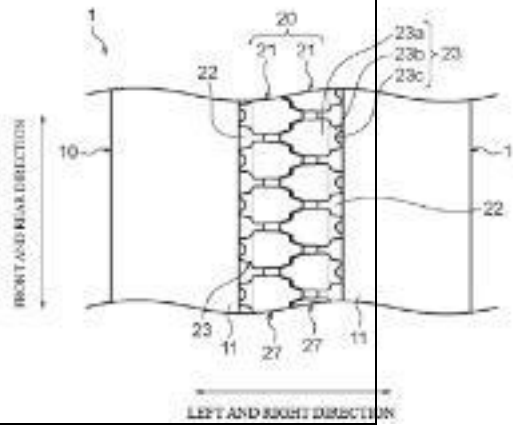
(74) Agent : H & H COMPANY, Shareef Mansion (Second Floor), 56-57, Motijheel C/A, Dhaka-1000, Bangladesh

(51) INT. CL. : B21F 45/08

(54) Invention Title: SLIDE FASTENER-ATTACHED PRODUCT AND FASTENER STRINGER

(57) Abstract

A slide fastener-attached product includes a fastener stringer (21, 41) and a fastener-attached member (10). The fastener stringer (21, 41) is attached to a stringer attachment edge (11) with a sewn portion (12). The sewn portion (12) includes a plurality of interlaced portions (13) that penetrate through the stringer attachment edge (11) and a fastener tape (22) and in which an upper thread and a lower thread are interlaced. Each fastener element (23, 43) has an element recess portion (23c, 43c) having a shape recessed inward of the fastener element (23, 43). At least one of the interlaced portions (13) is disposed in at least a part of a formation area in which the element recess portion (23c, 43c) is formed and an adjacent area adjacent to the formation area. Thus, exposure of the fastener tape (22) in a region between the fastener-attached member (10) and the fastener elements (23, 43) can be prevented or reduced.



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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-97
(22) Filed: 04/04/2024
(23) Priority Data:

(71) Applicant: Cloud Latitude Co., Ltd. of 12F.-1, No. 257, Sec. 1, Wuquan W. Rd., West Dist., Taichung City, Chinese Taipei, Nationality -China
(72) Inventors: (0) WU, Hsien Cheng of 12F.-1, No. 257, Sec. 1, Wuquan W. Rd., West Dist., Taichung City, Chinese Taipei, China Nationality -China, (1) CHEN, Wei of 12F.-1, No. 257, Sec. 1, Wuquan W. Rd., West Dist., Taichung City, Chinese Taipei, China Nationality -China
(74) Agent : Rana & Associates, Nipobon Asgar Garden, 462, Green Way, Flat No. A/2, (2nd Floor), Moghbazar, Dhaka-1217, Bangladesh

(51) INT. CL. : B60R 25/30

(54) Invention Title: VALUATION SYSTEM OF GAME EVENTS AND VALUATION METHOD PERFORMED THEREBY

(57) Abstract
The present invention is a valuation system of game events and a valuation method performed thereby, and in order to provide a contest game for a plurality of players to play, the valuation system includes a data storage unit, an item selection unit, a plurality of user units, a data calculation unit and a central processing unit; and a program of the valuation method includes a creating contest program, a joining contest program, a creating rating item program, a selecting member program, a waiting contest program, an acquiring data program, and a calculating ranking program.

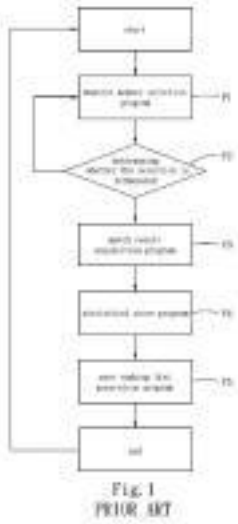
Fig. 1
PRIOR ART

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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-98
(22) Filed: 08/04/2024

(23) Priority Data:
European Patent Office (EPO), Number :231677550, Date : 13-04-2023.

(71) Applicant: SICPA HOLDING SA of Avenue de Florissant 41 1008 Prilly, Nationality -Switzerland

(72) Inventors: (0) VEYA, Patrick of Ruelle du Bout-du-Coin 6a, 1123 Aclens, Switzerland Nationality -Switzerland, (1) LOPEZ SANCHEZ, Lazaro of Rue des Fontaines 17, 1412 Valeyres-sous-Ursins, Switzerland Nationality - Switzerland

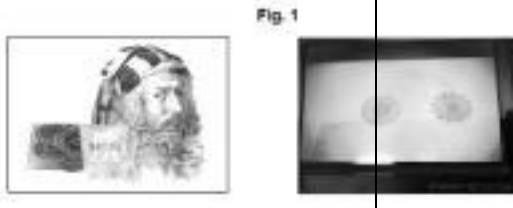
(74) Agent : Advanced IP Law Firm, Suite#9/C (9th Floor), Fahima Tower, 42-43, Purana Paltan, Dhaka-1000, Bangladesh

(51) INT. CL. : B60P 7/06

(54) Invention Title: SECURITY INKS AND MACHINE READABLE SECURITY FEATURES

(57) Abstract

The present invention relates to the field of security inks suitable for printing machine readable security features on substrate. security documents or articles as well as machine readable security feature made from said security inks. and security documents comprising a machine readable security feature made from said security inks. In particular. the invention provides security inks comprising one or more IR absorbing materials wherein said security ink allows the production of a machine readable security feature



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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-99
(22) Filed: 08/04/2024

(23) Priority Data:
China, Number :2023208330273, Date : 14-04-2023.

(71) Applicant: LAKSHMI MACHINE WORKS LTD of Perianaickenpalayam, SRK Vidyalaya Post, Coimbatore-641020, Tamil Nadu, Nationality -India

(72) Inventors: (0) Pasupathy, Jeganathan of No.19, Karumariamman Layout, Ondipudur, Coimbatore - 641016, Tamil Nadu, India Nationality -India, (1) Ashwin, Venkataraman of No. 27, Vasantha Nagar Road, Sowripalayam, Coimbatore-641028 Tamil Nadu, India Nationality -India

(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : F16L 47/32

(54) Invention Title: A Yarn Lead-in Device for Automatic Piecing Units.

(57) Abstract

The present utility model discloses a yarn lead-in device for automatic piecing units, belongs to the field of textile equipment. The yarn lead-in device comprises a horizontal drive unit arranged on a mounting plate. The horizontal drive unit drives a vertical drive unit to move horizontally. The vertical drive unit drives a rotary drive unit to move vertically. The rotary drive unit drives a rocker arm to rotate. The yarn lead-in device designed in the present application can ensure that the rocker arm moves in the direction of the spindle through the horizontal drive unit during operation, while using the vertical drive unit to move in the vertical direction and using the rotary drive unit to piece yarns. At the same time, the improved installation layout of the rocker arm of the yarn lead-in device provides a higher positioning accuracy for automatic yarn piecing, and also provides an improved rigid support for the rocker arm without any overhang length, thus to piece yarns quickly and accurately through the device to improve the piecing efficiency of the automatic piecing unit.

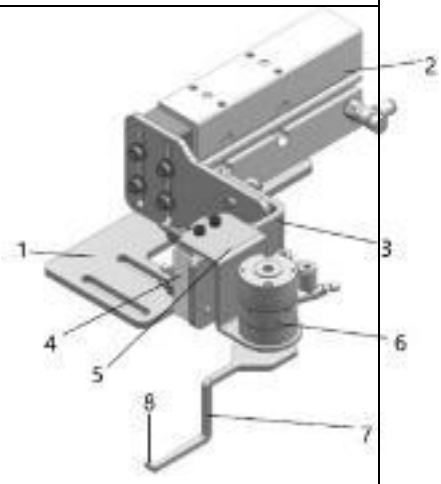

Figure 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
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www.dpdt.gov.bd

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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-100
(22) Filed: 08/04/2024

(23) Priority Data:
United States of America, Number :63457914, Date : 07-04-2023.

(71) Applicant: Telefonaktiebolaget LM Ericsson (Publ) of SE-164 83 Stockholm, Nationality -Sweden

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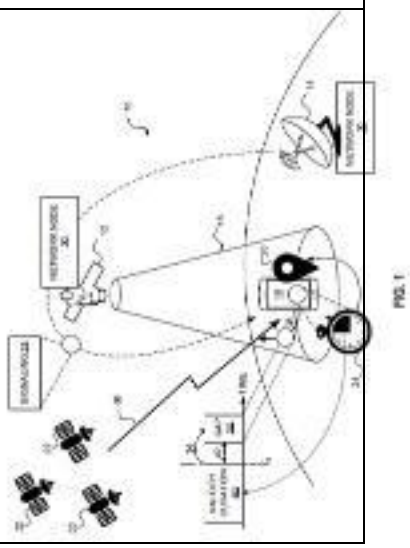
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : G01S 5/02

(54) Invention Title: GEOPOSITIONING MEASUREMENT GAPS

(57) Abstract
A communication device (18) is configured for use in a communication network (10). The communication device (18) performs a geopositioning measurement (38) during a geopositioning measurement gap (50) triggered by expiration of a validity duration (40) for which a geopositioning fix (20) or timing advance of the communication device (18) is valid. The communication device (18) obtains a geopositioning fix (20) of the communication device (18) using a result of the geopositioning measurement (38).



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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-106
(22) Filed: 16/04/2024

(23) Priority Data:
India, Number :202311027881, Date : 17-04-2023.

(71) Applicant: CLICKZY CREATIVE TECHNOLOGIES PRIVATE LIMITED of B-92, Vallabh Nagar, Kota-324007, Rajasthan, Nationality -India

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(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : G01P 3/50

(54) Invention Title: Communicable Linear Measurement Device with Precision

(57) Abstract

A linear measurement device (100) comprising a printed circuit assembly (180) having a plurality of navigation buttons (200), a display (155), a computer program residing in a micro-controller, the printed circuit assembly (180) disposed in a cover (160), a casing (110) having an integrated bobbin shaft (120) and a rim (119), a measuring strip (102), the linear measuring device (100) measures a linear dimension in a first measurement manner and in a second measurement manner, wherein, the first measurement manner is a linear measurement and the second measurement means is an angular measurement, the linear measurement device (100) is configured to display and communicate a linear measure by the fist measurement manner between any two markers and an angular measure by the second measurement manner between every two markers, the linear measurement device (100) is configured for a 2-way communication and configurable to form a group mesh.

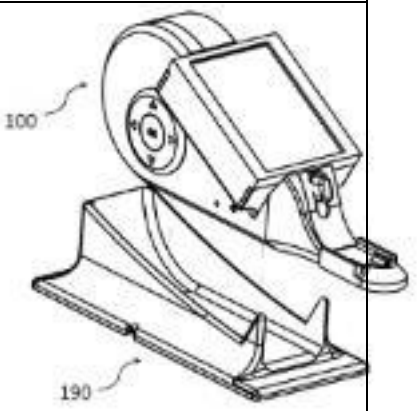

Figure 1

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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-107
(22) Filed: 16/04/2024

(23) Priority Data:
Republic of Korea, Number :1020230051258, Date : 19-04-2023.

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(51) INT. CL. : C12P 13/22

(54) Invention Title: MICROORGANISM FOR PRODUCING L-TRYPTOPHAN AND METHOD FOR PRODUCING L-TRYPTOPHAN USING THE SAME

(57) Abstract

The present disclosure relates to a microorganism of the genus Corynebacterium having an L-tryptophan-producing ability, into which pyruvate, phosphate dikinase derived from Komagataeibacter xylinus or a polynucleotide encoding the same is introduced; a method for producing L-tryptophan, comprising culturing the microorganism in a medium; a composition for producing L-tryptophan, comprising the microorganism, a culture product of the microorganism, a fermented product of the microorganism, or a combination of two or more thereof; and the use of the microorganism for the production of L-tryptophan.

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Publication of Filed Patent Application
Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-108
(22) Filed: 18/04/2024

(23) Priority Data:

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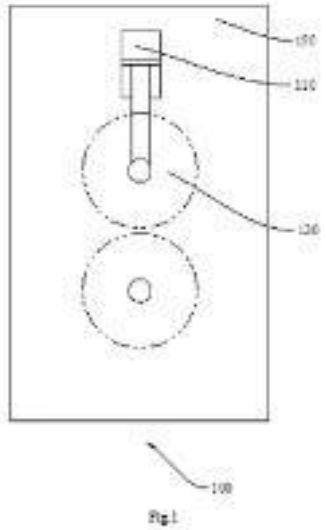
(51) INT. CL. : E01C 19/29

(54) Invention Title: Structure for Applying Pressure on Pressing Rollers and Roll-press Apparatus

(57) Abstract

Provided in the present invention is a structure for applying pressure on pressing roller, including two pressing rollers, oppositely provided on the frame, at least one pressing roller being slidably provided relative to the frame; a first pressing-roller base and a second pressing-roller base, the first pressing-roller base provided on one pressing roller, the second pressing-roller base provided on another pressing roller; and a compacting cylinder, including a cylinder provided on the first pressing-roller base and a piston rod slidably provided on the cylinder, the piston rod extending out of the cylinder to connect to the second pressing-roller base. In such a setup, the structure may provide power for the movement of pressing rollers and apply a pressure to two pressing rollers; the pressure may not be transferred to the frame directly, which reduces the requirements of structural strength of the frame, so as to reduce the processing difficulty and the cost of the frame, thereby reducing the fluctuation of pressure between two pressing rollers, wherein the relative gap between two pressing rollers may also be adjusted. Provided further in the present invention is a roll-press apparatus, including a frame and the structure for applying pressure on pressing roller mentioned above, wherein the frame not adopting integral process also suffices the requirements of the structural strength, so as to lead to a more convenient installation of pressing rollers.



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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-109
(22) Filed: 18/04/2024

(23) Priority Data:

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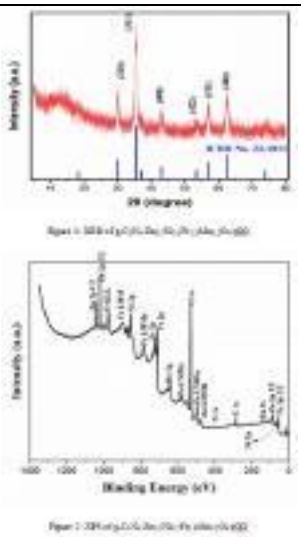
(51) INT. CL. : G01N 21/81

(54) Invention Title: Fabrication of novel g-C3N4/Zn0.5Ni0.5Fe1.8Mn0.2O4/rGO ternary nanocomposite for humidity sensing

(57) Abstract
This research focuses on the fabrication of novel g-C3N4/Zn0.5Ni0.5Fe1.8Mn0.2O4/rGO ternary nanocomposites with a weight ratio 3:10:1 for humidity sensing applications. The integration of graphene-based nanomaterials (rGO), mixed spinel ferrite nanoparticles (Zn0.5Ni0.5Fe1.8Mn0.2O4), and carbon nitride (g-C3N4) in a ternary configuration aims to exploit their distinct properties synergistically, enhancing humidity sensing capabilities. The study involves the synthesis process, structural characterization, and evaluation of humidity sensing performance. The fabricated nanocomposites exhibit promising results, showing sensitivity to varying humidity levels (RH 11-98%). The investigation into the nanoscale interactions between different components seeks to elucidate the mechanisms underlying the enhanced sensing properties, with potential applications in environmental monitoring, healthcare, and consumer electronics.



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-112
(22) Filed: 18/04/2024

(23) Priority Data:
India, Number :202341033306, Date : 11-05-2023.

(71) Applicant: Nokia Technologies Oy of Karakaari 7, 02610 Espoo, Nationality -Finland

(72) Inventors: (0) Nihar Ranjan JENA of 1007, C-Block, Desai Radiant Apartment, 4th Cross Ambedkar Nagar, Whitefield, Bangalore, 560066, India Nationality -India, (1) Umur KARABULUT of Murnauer str. 122a, Munich, 81379, Germany Nationality -Turkey, (2) Srinivasan SELVAGANAPATHY of Manyata Embassy Business Park, Bangalore, 560045, India Nationality -India, (3) Prasna Kumar SAHU of House No 1, 3rd B Cross, Gururaja Layout, Doddanekkundi, Bangalore, 560037, India Nationality -India

(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : H04W 48/18

(54) Invention Title: CELL CHANGE INCELLULAR COMMUNICATION NETWORKS

(57) Abstract

According to an example aspect of the present disclosure, there is provided a method comprising, receiving a reference configuration from a wireless network node, wherein the reference configuration is for an intra secondary node cell change and for an inter secondary node cell change, performing the intra secondary node cell change using the reference configuration and an intra secondary node cell change delta configuration and performing the inter secondary node cell change using the reference configuration and an inter secondary node cell change delta configuration.

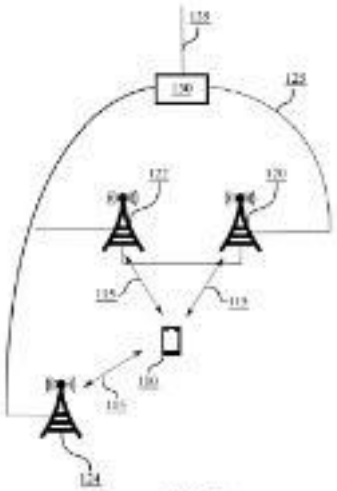

FIG. 1

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(11) Patent registration No and date , **(21) Appl. No.** BD-P-2024-113 **(22) Filed:** 18/04/2024
(23) Priority Data: India, Number :202311028697, Date : 20-04-2023.
(71) Applicant: KANIKA KHURANA of 418/8, Julaha Chowk, salara mohalla, Rohtak, Haryana 124001, Nationality - India
(72) Inventors: (0) KANIKA KHURANA of 418/8, Julaha Chowk, salara mohalla, Rohtak, Haryana 124001, India Nationality -India
(74) Agent : IP Conservator, Ka-211/1A, Boatghat Namapara, Khilkhet, Dhaka-1229, Bangladesh
(51) INT. CL. : C09D 5/14
(54) Invention Title: SYNERGISTIC INSECTICIDAL COMPOSITION
(57) Abstract The present invention relates to a synergistic insecticidal composition comprising (A) Isoxazoline insecticide selected from Fluxametamide or Isocycloseram or its agrochemically acceptable salts, esters or its derivatives; (B) Flonicamid or its agrochemically acceptable salts, esters or its derivatives; (C) Abamectin or its agrochemically acceptable salts, esters or its derivatives. The present invention further relates to process of preparing said synergistic insecticidal composition and formulations thereof.

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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-114
(22) Filed: 21/04/2024

(23) Priority Data:
United Kingdom, Number :23061575, Date : 26-04-2023.

(71) Applicant: B Medical Systems S.à r.l. of 17, op der Hei, L - 9809 Hosingen, Nationality -Luxembourg

(72) Inventors: (0) Simone Antonio BRUNO of 17, op der Hei, L - 9809 Hosingen, Luxembourg Nationality -Italy, (1) Mario LENTZ of 17, op der Hei, L - 9809 Hosingen, Luxembourg Nationality -Belgium

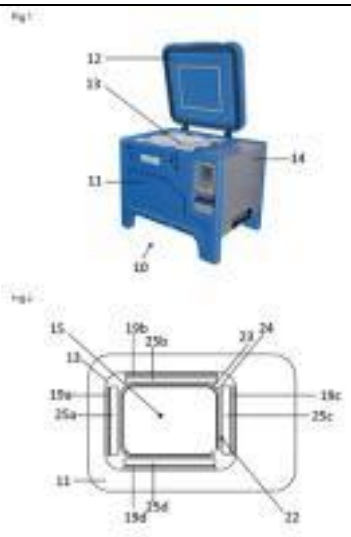
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : F25D 3/00

(54) Invention Title: COLD STORAGE DEVICE

(57) Abstract

An RFID enabled cold storage device, notably a vaccine storage device, has a cold storage compartment separated from an ice lining by a thermal barrier. The thermal barrier comprises a layer of thermal insulation material and a planar temperature distributing metal sheet, with the planar temperature distributing metal sheet providing an RFID antenna.



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-115
(22) Filed: 22/04/2024

(23) Priority Data:
Switzerland, Number :4192023, Date : 22-04-2023. and Switzerland, Number :4382023, Date : 26-04-2023.

(71) Applicant: UHCS Property SA of Ch de Champ-au-Rey 11Rue, 1673, Switzerland

(72) Inventors: (0) Ustinov Igor of Champ-au-Rey 11,1673 Fribourg, Switzerland Nationality -Switzerland

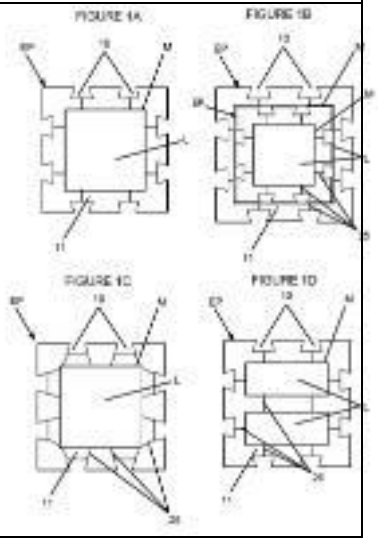
(74) Agent : H & H COMPANY, Shareef Mansion (Second Floor), 56-57, Motijheel C/A, Dhaka-1000, Bangladesh

(51) INT. CL. : E04B 1/348

(54) Invention Title: Building construction system with assemblable hollow load-bearing elements and manufacturing method

(57) Abstract

The invention proposes a building construction system, with assemblable hollow load-bearing elements, comprising a plurality of load-bearing elements, as beams, posts, joists, each load-bearing element having a polyhedral shape, extending along a longitudinal axis between two open ends defining a peripheral wall comprising four side faces in the shape of parallelograms, two of the four side faces include two recesses longitudinal in the form of grooves extending parallel to the longitudinal axis between two open ends, said recesses having dimensions outside of said peripheral wall which are less than their dimensions inside the peripheral wall, to form female means capable of accommodating male means of another element of a construction system, said load-bearing element comprising a housing extending from one of said open ends to the other to form a sleeve capable of accommodating at least one other structural or reinforcing element of the construction system.



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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-116
(22) Filed: 23/04/2024

(23) Priority Data:
China, Number :2023094061, Date : 12-05-2023.

(71) Applicant: Nokia Technologies Oy of Karakaari 7, 02610 Espoo, Nationality -Finland

(72) Inventors: (0) Lei DU of Xianglinjun 5-1-501, Haidian District,, Beijing,100085, China Nationality -China, (1) Lars DALSGAARD of Torpantie 56, Oulu, 90230, Finland Nationality -Denmark, (2) Petri Juhani VASENKARI of Vesivuotavantie 4, Turku, 20250, Finland Nationality -Finland, (3) Yue Ji CHEN of TaiyangGuoji Gongyu 3-1-710, Weiye Road, Binjiang District,, Hangzhou, 310051, China Nationality -China

(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : H04W 36/36

(54) Invention Title: USER EQUIPMENT ARCHITECTURE ADAPTATION FOR INTRA-BAND SCENARIOS.

(57) Abstract

Embodiments of the present disclosure relate to devices, methods, apparatuses and computer readable storage media ofuser equipment (UE) architecture adaptation for intra-band scenarios. The method comprises determining, at a terminal device, an operating architecture type of the terminal device, wherein the terminal device is served by a first cell and at least one second cellin an intra-band operation; and applying at least one Radio Resource Management (RRM) requirement based on the determined operating architecture type of the terminal device.

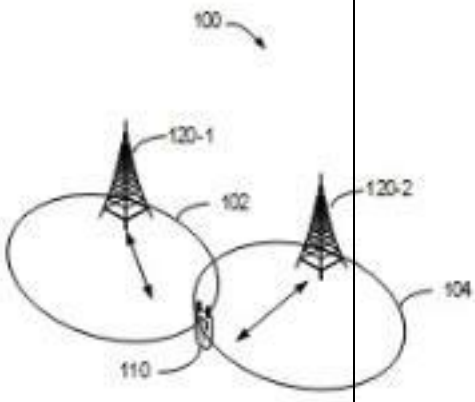

FIG. 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-117
(22) Filed: 23/04/2024

(23) Priority Data:

(71) Applicant: BANGLADESH COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (BCSIR) of DR. QUDRAT-I-KHUDA ROAD, DHANMONDI, DHAKA-1205, Nationality -Bangladesh

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(51) INT. CL. : A61K 9/00

(54) Invention Title: Production of Low-fat and Nutrient Rich Jam, Jelly and Pickle from S.apetala Fruit

(57) Abstract
The invention reveal nutritional, vitamin, and mineral content in Sonneratia apetala's jam, jelly, and pickles from Nijhum Dwip in Hatiya upazila, Noakhali district. Jam, jelly, pickles, and S. apetala fruits products were analyzed using the APHA 2018 technique. The invention contained Na, Mg, K, Ca, Mn, Fe, Cu, and Zn. Minerals are vital for human nutrition. Each sample was evaluated for salinity, pH, and vitamin C. The taste and preservation of the products depend on salinity and pH. Trace quantities of Cd, Cr, Pb, and Hg were found to be substantially below safe consumption limits. The F-, Cl-, SO42-, soluble and total PO43- concentrations were found below safety limits. The moisture, ash, protein, fat, fiber, pectin, sugar, carbohydrate, and calories value reveal the dietary benefits and energy content of these products. The invention revealed higher vitamin C and mineral levels in Sonneratia apetala jam, jelly, and pickles compared to other citrus fruits. All parameters met safe consumption limits, ensuring the safety of the products. These products were tested for total coliform, faecal coliform, E. coli, Vibrio sp., Salmonella sp., and Shigella sp. to guarantee their safety. The one-year shelf life also improved product quality. Applying this technology to grassroots jam, jelly, and pickle making has the potential to boost the local economy by attracting many people.

FIG.1: Inventive steps of Jam production without seeds

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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-118
(22) Filed: 24/04/2024

(23) Priority Data:

(71) Applicant: YANG, Hyun Min of 105-703, 11, Yulha 5-ro, Gimhae-si Gyeongsangnam-do 51023, Nationality - Republic of Korea, YANG, Ji Seong of 678-31, Gujeol-ro, Donghae-myeon, Goseong-gun, Gyeongsangnam-do 52918, Nationality -Republic of Korea, ROC CO., LTD of 100-74, Gwahaksandan 2-ro 19beon-gil, Gangseo- gu, Busan 45742, Nationality -Republic of Korea

(72) Inventors: (0) YANG, Hyun Min of 105-703, 11, Yulha 5-ro, Gimhae-si Gyeongsangnam-do 51023, Republic of Korea Nationality -Republic of Korea, (1) YANG, Ji Seong of 678-31, Gujeol-ro, Donghae-myeon, Goseong-gun, Gyeongsangnam-do 52918, Republic of Korea Nationality -Republic of Korea

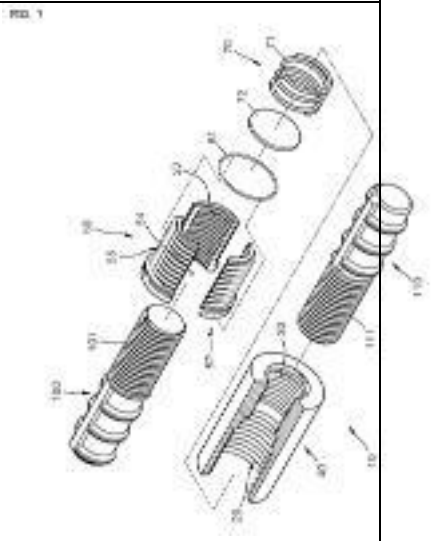
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : B23G 3/10

(54) Invention Title: ONE-TOUCH THREADED REBAR COUPLER WITH THREAD PITCH ALIGNMENT

(57) Abstract

A one-touch threaded rebar coupler capable of thread pitch alignment according to the present invention includes a coupler main body in which a first main body threaded portion is formed on an inner peripheral surface on one side of a hollow part formed in a longitudinal direction of the coupler main body and a second main body threaded portion is formed on an inner peripheral surface on the other side of the hollow part; anda first screw phase difference correction unit including a plurality of first phase difference correction pieces arranged in a circumferential direction,wherein a first rebar coupling portion in which a first rebar threaded portion of a first rebar is inserted and screw-engaged is formed by the first phase difference correction pieces, andwherein outer peripheral surfaces of the first phase difference correction pieces are formed with first outer correction threaded portions configured to couple with the first main body threaded portion and formed to have a pitch relatively larger than a pitch of threads of the first rebar threaded portion so that when coupling the first rebar coupling portion and the first rebar threaded portion, the first phase difference correction pieces are expanded to enable insertion by insertion of the first rebar threaded portion, and then, the first phase difference correction pieces are brought into close contact with the first rebar threaded portion for screw engagement by an elastic support means installed in the coupler main body.



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-119
(22) Filed: 25/04/2024

(23) Priority Data:
India, Number :202341045515, Date : 06-07-2023.

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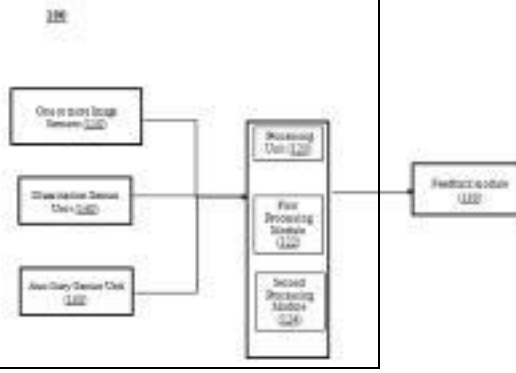
(74) Agent : Rana & Associates, Nipobon Asgar Garden, 462, Green Way, Flat No. A/2 (2nd Floor), Moghbazar, Dhaka-1217., Bangladesh

(51) INT. CL. : B60W 10/08

(54) Invention Title: A System for Monitoring a Wearable Safety Gear in a Vehicle and a Method thereof

(57) Abstract

The present invention provides a system (100) and a method (200) for monitoring a wearable safety gear in a vehicle. The system (100) comprises one or more image sensors (110) configured to capture real time images of a user riding the vehicle; and a processing unit (120) configured to receive the real time images of the user. The processing unit has one or more processing modules configured to determine one or more conditions of a user in relation to the wearable safety gear. The system (100) has a feedback module (130) configured to receive an input from the processing unit (120) if any one of the conditions of the user in relation to the wearable safety gear is true, and the feedback module (130) being configured to generate an output command.



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-120
(22) Filed: 25/04/2024

(23) Priority Data:
Brazil, Number :1020230078532, Date : 25-04-2023. and Brazil, Number :1020240079035, Date : 22-04-2024.

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(74) Agent : Associate Intellectual Property Law Firm (AIPLF), Chameli bagh no-1, 9th floor, Romna, Shantinagar, Dhaka , Bangladesh

(51) INT. CL. : F27B 1/00

(54) Invention Title: ORE REDUCTION AND SMELTING PROCESS, REACTOR, AND GAS DEFLECTOR AND LOAD DESCENT REGULATOR

(57) Abstract

The present invention pertains to a reactor and a process for producing metals and alloys from their natural or residual compounds in the form of self-reducing briquettes of oxidized metallic compounds, such as those of the metals chromium, nickel, iron, copper, manganese, etc., plus appropriately dosed carbonaceous reducers, also containing fluxes for the gangue of metallic compounds, and binders to provide resistance to the reduction temperature of each metal or alloy. Carbonaceous briquettes of different degrees of carbonization, of fossil origin or biomass, planted or from industrial, agricultural, or urban waste, will generate energy for the process. The reactor has a cylindrical casing with a load distributor at the top. A vertical loading column takes the carbonaceous briquettes for burning through at least one lower circle of tuyeres, injecting preheated air or not, with up to 100% O2 or not, plus solid, liquid, or gaseous fuels, or not, and may or not to inject solids, liquids, or gases of any nature.

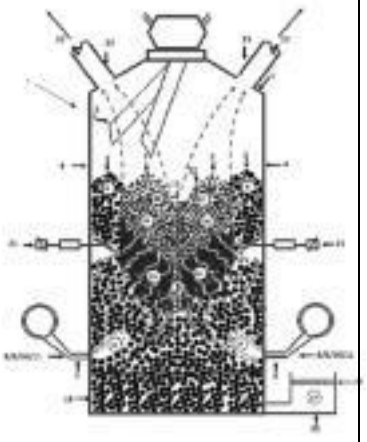

Fig 1

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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-121
(22) Filed: 28/04/2024

(23) Priority Data:
United States of America, Number :63462699, Date : 28-04-2023.

(71) Applicant: CleanKore, LLC of 616 Dover Center Road, Suite 104, Bay Village, Ohio 44140, Nationality -United States of America

(72) Inventors: (0) Darryl J. COSTIN, JR of 186 Plymouth Drive Bay Village, OH 44140, United States of America Nationality -United States of America, (1) Alpesh PATEL of C 302, Sahjanand Avenue, Near A. E. C. Office Sola Road, Naranpura, Ahmedabad, Gujarat, 380013, India Nationality -India

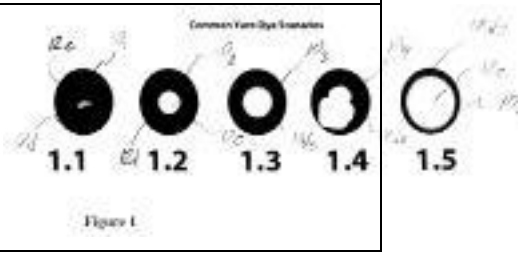
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : D06P 1/22

(54) Invention Title: IMPROVED INDIGO AND RING DYEING PROCESS USING SULFUR DYE AS BARRIER, AND MATERIAL PRODUCED THEREBY.

(57) Abstract

A method of ring dyeing a yarn includes the steps of providing a cellulosic yarn chosen from the group consisting of open-end yarns and ring yarns. The yarn is immersed in only one sulfur dye box, the sulfur dye box having a sulfur concentration of 1 to 50 grams/liter. The yarn is skyed for less than 30 seconds after removal from the sulfur dye box. The yarn is rinsed in water after skying. The yarn is dyed in an indigo dye bath, with the indigo dye bath maintained at a pH of 10.8 and 12.8. The yarn is skyed after removal from the indigo dye box.



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Publication No: 26 & Date: 10 December 2025

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-122
(22) Filed: 28/04/2024

(23) Priority Data:
United States of America, Number :63462699, Date : 28-04-2023.

(71) Applicant: CleanKore, LLC of 616 Dover Center Road, Suite 104, Bay Village, Ohio 44140, Nationality -United States of America

(72) Inventors: (0) Darryl J. COSTIN, JR of 186 Plymouth Drive Bay Village, OH 44140, United States of America Nationality -United States of America, (1) Alpesh PATEL of C 302, Sahjanand Avenue, Near A. E. C. Office Sola Road, Naranpura, Ahmedabad, Gujarat, 380013, India Nationality -India

(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : D06P 1/22

(54) Invention Title: IMPROVED INDIGO AND RING DYEING PROCESS USING HIGH CONCENTRATION OF CAUSTIC AND MATERIAL PRODUCED THEREOF

(57) Abstract

A method of ring dyeing a yarn comprisesa series of steps, including providing a yarn chosen from the group consisting of open-end yarns and ring yarns. The yarn is immersed for between 7 to 40 seconds in a caustic bath having a caustic concentration of 50 to 175 g/l. The yarn is skyed after removal from the caustic bath. The yarn isrinsed in water after skying. The yarn is chosen from one of open-end yarn and ring yarn and is dyed in only one sulfur dye box when the yarn is open-end yarn and ring yarn or is dyed at least one indigo dye box when the yarn is open-end yarn. The yarn is washed in water after the dyeing step and thereafter the dyed yarn is dried.

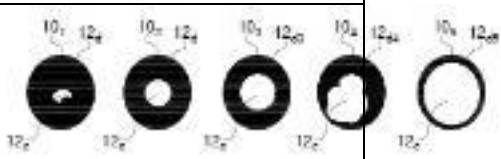

FIG. 1

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China, Number :2023104785128, Date : 28-04-2023. and China, Number :2023107988745, Date : 30-06-2023.

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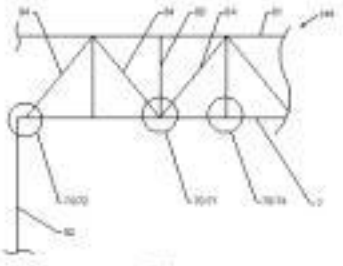
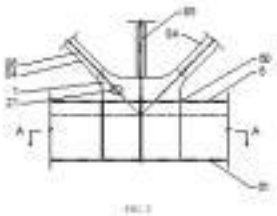
(74) Agent : BENGAL IP SERVICES, Ka-14/1,Kalachandpur,Gulshan,Dhaka-1212, Bangladesh

(51) INT. CL. : E04H 5/06

(54) Invention Title: CRANE TRUSS, MILL BUILDING STRUCTURE, AND LARGE-COLUMN-SPACING MILL BUILDING STRUCTURE

(57) Abstract
The invention provides a crane truss, a mill building structure and a large-column-spacing mill building structure. The crane truss includes an upper chord, a lower chord and a diagonal web member. The lower chord has a box-shaped cross section. The lower chord with the box-shaped cross section includes a lower-chord box-shaped wall plate, an upper flange plate, and a lower flange plate. A lower end of the diagonal web member is connected to a web member joint of the lower chord, and the web member joint includes at least two vertical joint plates extending along the lower-chord box-shaped wall plate. The upper flange plate is provided with a joint slot, and the vertical joint plates are inserted into the joint slot. The at least two vertical joint plates are spaced apart and a joint connecting cavity is provided therebetween. An end of the diagonal web member is extended into and fixedly connected to the joint connecting cavity.





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(21) Appl. No. BD-P-2024-124
(22) Filed: 02/05/2024

(23) Priority Data:

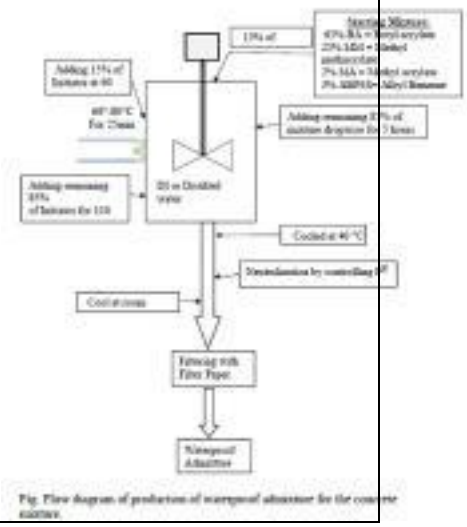
(71) Applicant: Bangladesh Council of Scientific and Industrial Research (BCSIR) of Dr. Qudrat-i-Khuda Road, Dhanmondi, Dhaka – 1205, Nationality -Bangladesh

(72) Inventors: (1) Dr. Umme Sarmeen Akhtar, Senior Scientific Officer of IGCRT, BCSIR, Dhaka-1205, Bangladesh Nationality -Bangladesh, (2) Md. Sagirul Islam, Senior Scientific Officer of IGCRT, BCSIR, Dhaka-1205, Bangladesh Nationality -Bangladesh

(51) INT. CL. : A41D 31/102

(54) Invention Title: Development of Waterproofing admixture for cement and concrete

(57) Abstract
The invention alms to develop waterproofing admixtures for cement and concrete to improve their water resistance and durability. Concrete's porous nature allows water to penetrate, leading to deterioration, corrosion, and damage from freeze-thaw cycles. Various methods exist to address water permeability, but these have limitations, environmental hazards, and increased costs. The ideal admixture should offer improved water resistance, durability, compatibility, cost -effectiveness, and sustainability. The invention presents a novel waterproofing admixture that employs a unique mechanism to reduce concrete permeability, providing superior water resistance and long-lasting durability. It is cost-efficient, compatible with various cement types and concrete mix designs, and uses environmentally friendly materials. The resulting waterproofing admixture exhibits excellent water resistance when integrated into concrete, reducing water absorption and penetration significantly. The process involves a polymerization process involving butyl acrylate, methyl methacrylate, methyl acrylate, and alkyl benzene polyether sodium sulphonate.



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(11) Patent registration No and date ,

(21) Appl. No. BD-P-2024-125

(22) Filed: 02/05/2024

(23) Priority Data:

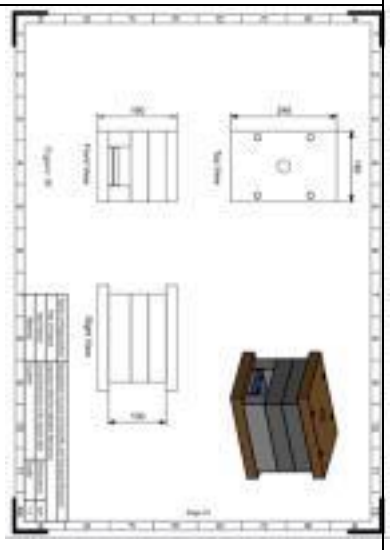
(71) Applicant: Bangladesh Council of Scientific and Industrial Research (BCSIR) of Dr. Qrdarat-1-Khada Road, Dhaika-1205, Nationality -Bangladesh

(72) Inventors: (1) Muhammad Ali Zinnah, Senior Engineer of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (2) Rajata Suvra Chakrovorty, Senior Engineer, PP & PDC of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (3) Md. Forhad Hossain, Senior Engineer, PP & PDC of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (4) Md. Faruk Hossen, Senior Engineer, PP & PDC of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (5) Dr. Most. Hosney Ara Begum, Director, PP & PDC of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (6) Nahid Sharmin, Director of Laboratories, of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (7) Md. Shofiqul Islam, Scientific Officer, PP & PDC of Bangladesh Council of Scientific and Industrial Research, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh

(51) INT. CL. : G01N 30/16

(54) Invention Title: Injection Mold for Metallic Memento

(57) Abstract
Metal craft is an ancient art-skill that has been handed down from generation to generation. It is a distinct kind of art where elegant and complex designs are made by shaping metals, which usually uses different metal crafting processes like forging, casting, enameling, etching, welding etc. Although these methods of metalworking to produce decorative and precious memento, souvenir, and other related products are still relevant today, they are however involved with a various number of drawbacks. For instance, to produce a high number of identical delicate components would results in less repeatability, provide less density which ultimately compromises the load-bearing capacity, provide poor dimensional consistency and accuracy, and poor working environment with high temperature, dust, and high labor intensity are some of the major limitations of these methods. As a matter of fact, any alternate but effective method that can eliminate these disbenefits would be a blessing for such kind of exquisite works. Bangladesh Council of Scientific and Industrial Research (BCSIR) has developed an injection mold that has some unique functionalities to produce flawless and accurate memento, souvenir, and related metal products. It allows to produce bulk quantities of identical products maintaining high accuracy, utmost density that provides a product to be rigid and durable, high repeatability which provides the guaranties of exact dimensional consistency and accuracy throughout the production process. The developed injection mold also drastically reduces the lead production time while it requires very limited human interactions due to its automatic injection, cooling and ejection processes manipulated by an automatic injection molding machine. After completing the production of each of the components from the developed mold, however, it is possible to enhance the quality and beautify them by implementing various methods of post processing.



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Australia, Number :2023901301, Date : 02-05-2023. and Australia, Number :2023051140, Date : 10-11-2023.

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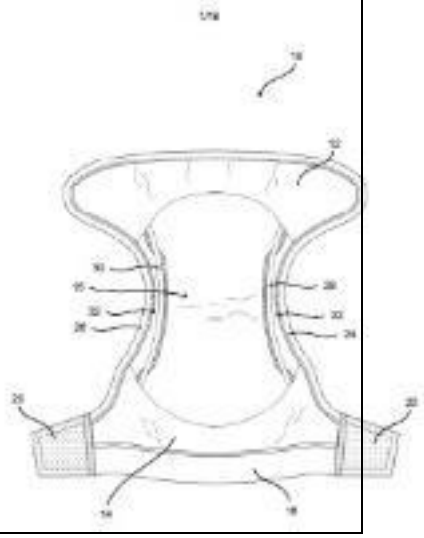
(51) INT. CL. : A41D 1/00

(54) Invention Title: ABSORBENT GARMENT

(57) Abstract

A reusable absorbent garment (10) includes an absorbent substrate comprised of a plurality of absorbent layers (36) comprised substantially of a non-woven material of absorbent fibres, wherein each absorbent layer has a body region and a peripheral region bordering the body region. The body region of each absorbent layer (36) incorporates needleworked thread portions (55) formed from an absorbent material and distributed across at least the body region thereof, independently from the thread portions (55) in a body region of an adjacent absorbent layer (36).



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(23) Priority Data:
European Patent Office (EPO), Number :231713157, Date : 03-05-2023.

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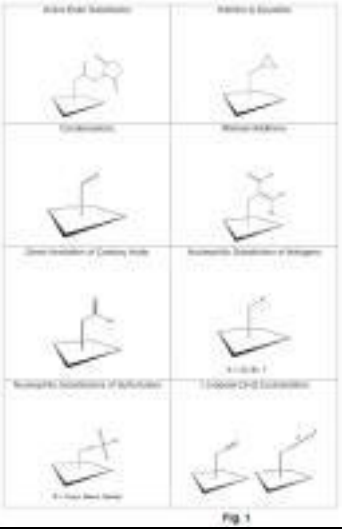
(51) INT. CL. : C07C 211/09

(54) Invention Title: Covalently bound diamines and their use

(57) Abstract

The invention provides a product of formula (I) with a diamine backbone, in particular a 1,3-diamino propane backbone, covalently bound to a substrate via a linker. The covalent bonding is via a primary or an acyclic secondary amino group of the diamine backbone, preferably of the 1,3-diamino propane backbone. The invention also relates to its preparation starting from a compound of formula (II) and the use of the product of formula (I) for interfering with the function and/or the structure of a polypeptide, preferably an enzyme. Preferably, the coupled diamine still provides biocidal activity. The products of formula (I) allow for an advantageous long-term stability and thus a reduced risk of leaching and undesired rinse-off of the diamine backbone and biocides, respectively.



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(21) Appl. No. BD-P-2024-128
(22) Filed: 05/05/2024

(23) Priority Data:
Japan, Number :2023021417, Date : 08-06-2023.

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(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : B21D 53/50

(54) Invention Title: FASTENER PART

(57) Abstract

A fastener part whose base material is pure zinc or a zinc alloy, which has practical corrosion resistance, has a small environmental burden, and is easy to recycle is provided. A fastener part includes a base material made of pure zinc or a zinc alloy, and a zirconium oxide coating covering at least a part of a surface of the base material.

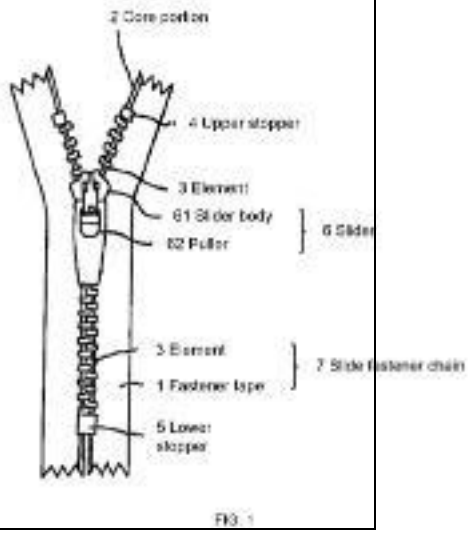

FIG. 1

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(21) Appl. No. BD-P-2024-129
(22) Filed: 05/05/2024

(23) Priority Data:
Japan, Number :2023033443, Date : 13-09-2023.

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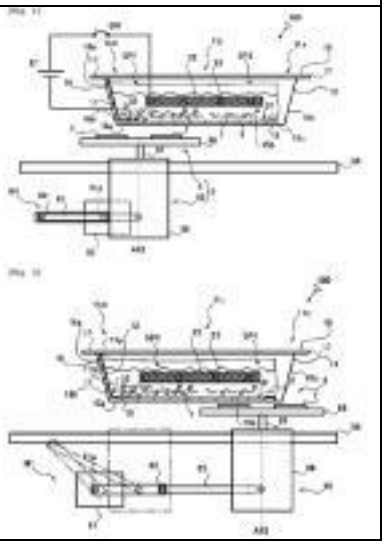
(51) INT. CL. : C25D 17/00

(54) Invention Title: ELECTROPLATING APPARATUS AND METHOD THEREOF, PRODUCTION METHOD OF PLATED ARTICLE, AND PLATING TANK

(57) Abstract

Electroplating apparatus (100) includes a plating tank (10) in which an insulating coat (12) is formed at least onto a top surface (15a) of a bottom portion (15) of a conductive tank body (11); and a magnetic polishing unit (5) that agitates and polishes a multiplicity of plated articles (1) in an electrolytic solution stored in the plating tank (10) by using a multiplicity of magnetic polishing members (2). The coat (12) includes a slit (31) formed like a thread and with a depth reaching the top surface (15a) of the bottom portion (15), and one or more magnetic polishing members (2) of the multiplicity of magnetic polishing members (2) are electrically connectable to the tank body (11) via an exposed surface (15b) of the top surface (15a) of the bottom portion (15) exposed by the slit (31).



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-130
(22) Filed: 07/05/2024

(23) Priority Data:

(71) Applicant: Bangladesh Council of Scientific and Industrial Research (BCSIR) of Dr. Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Nationality -Bangladesh

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(51) INT. CL. : C08G 63/183

(54) Invention Title: A METHOD FOR PRODUCING NOVEL MOLECULAR SALT OF TEREPHTHALIC ACID RESULTING FROM RECYCLED PET BOTTLE

(57) Abstract

The invention discloses an 1:1 electrolytic salt of waste PET derived terephthalic acid (TA) with in-situ generated salicylaldehyde hydrazone (SALH) Schiff base obtained by crystallization methods in solution rather than evaporation. Mass spectroscopy (LCMS) of SALH:TA confirmed the formation of salt by the transfer of an acidic proton from one of the carboxylic acidic groups of terephthalic acid (TA) to the terminal amino group of the chain moiety (N2-nitrogen atom) of the SALH molecules. The molecular formula of the complex is , wherein TA refers to terephthalic acid, and C7H8N2O refers to a compound, salicylaldehyde hydrazone (SALH) Schiff base. Moreover, structural characterization of SALH:TA molecular salt was carried out using FTIR, powder X-ray diffraction techniques, elemental analysis,13C&1HNMR spectroscopic technique. The synthesis of the new molecular salt in this invention is straightforward, convenient, reproducible, with excellent product crystallinity, and stable.

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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-131
(22) Filed: 07/05/2024

(23) Priority Data:

(71) Applicant: Leather Research Institute, BCSIR of Nayarhat, Savar, Dhaka-1350, Nationality -Bangladesh

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(51) INT. CL. : C14C 9/02

(54) Invention Title: Extraction Rubber seed oil for retanning leather and develop a natural fatliquor having antimicrobial ability and application composition for leather processing

(57) Abstract

Fatliquor is one of the most important leather processing chemicals which plays an important role in making leather more flexible and protected against cracking. Seed oils are one of the prominent sources of leather fat liquors. Lab-extracted Hevea brasiliensis L. seed oil was studied. Both the unsulphonated and sulphonated oils were characterized by some physicochemical and spectrophotometric techniques such as FT-IR, 1H NMR, 13C NMR, and 13C NMR DEPT. Using conventional techniques, the sulphonated RSO fat liquor was applied to goatskin and contrasted with a commercial sulphated fat liquor in the manufacturing of shoe upper leather. The commercial and synthesized fat liquors had the following average results for tensile strength, double edge tear, elongation, and softness: 18.91 N/mm2; 18.71 N/mm2, 60.82 N; 56.38 N, 44.68%; 38.62%, 1.87; 1.82. In addition, morphological texture of the treated leather was observed by the scanning electron microscope (SEM) images. Furthermore, the antimicrobial activity of sulphonated RSO and finished leather processed with the prepared fatliquored was investigated. The studied fatliquor showed better activity against Staphylococcus aureus compared to Bacillus subtilis and Bacillus cereus. The fatliquor applied finished leather also exhibited the similar findings.

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(21) Appl. No. BD-P-2024-132
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(23) Priority Data:

(71) Applicant: Bangladesh Council of Scientific and Industrial Research (BCSIR) of Dr. Qudrat-I-Khuda Road, Dhanmondi, Dhaka-1205, Nationality -Bangladesh

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(51) INT. CL. : G01R 31/317

(54) Invention Title: BCSIR Digital Arsenic Test Kit

(57) Abstract
Drinking water or potable water is essential for survival and the basic needs of life. It should be arsenic and other toxic elements freethat is directly benefits our health. But, water pollution is a common phenomenon around the world. Groundwater, the only source of potable water for millions of people in Bangladesh during dry season, is often contaminated with arsenic (As).A survey conducted in Bangladesh (BGS/DPHE, 2001) projected that nearly 27% of shallow tubewells are contaminated with arsenic above the Bangladesh drinking water limit of 50 µg/L. Approximately five million of an estimated 10–11 million tubewells in Bangladesh (and more are being constructed) have been tested using arsenic field test kits (FTKs) and millions more have yet to be tested.To diagnose the arsenic in water there are several processes available in the world. Arsenic field kit test one of them. In the context of Bangladesh commercial arsenic test kits are costly. Though,it's used only for qualitative analysis.On the other hand, quantitatively arsenic analysis techniques are too much costly. Based on the situation, developed low cost, dual system, robust and reliable arsenic test kit.

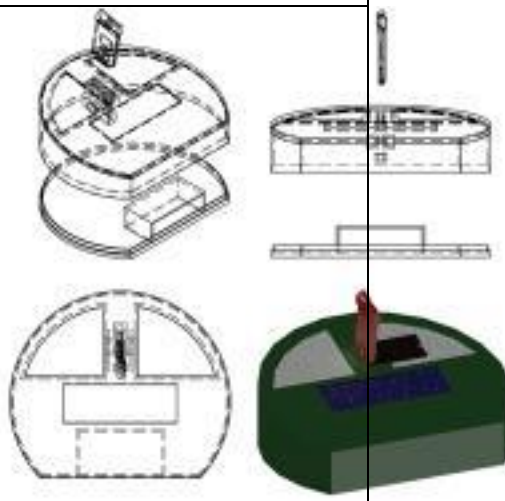

Figure 02: Schematic diagram of digital arsenic test kit

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(21) Appl. No. BD-P-2024-133
(22) Filed: 09/05/2024

(23) Priority Data:
India, Number :202311033564, Date : 12-05-2023.

(71) Applicant: SUNITA MALHOTRA of House No. 1989, Sector -1, Housing Board Rohtak, Rohtak, Haryana-124001, Nationality -India, SURENDER KUMAR of House No. 1989, Sector -1, Rohtak, Haryana-124001, Nationality -India

(72) Inventors:

(74) Agent : IP Conservator, Ka-211/1A, Boatghat Namapara, Khilkhet, Dhaka-1229, Bangladesh

(51) INT. CL. : C04B 35/117

(54) Invention Title: SYNERGISTIC HERBICIDAL COMPOSITION FOR WEED CONTROL

(57) Abstract

The present invention relates to a synergistic herbicidal composition for weeds control in preemergence, early post emergence to late post emergence weed stage. More particularly, the present invention relates to a synergistic herbicidal composition comprising bioactive amounts of Haloxyfop or its agrochemically acceptable salts, ester or derivatives, Pyrithiobac or its agrochemically acceptable salts, ester or derivatives, and at least one another herbicide selected from Fenoxaprop, Oxyfluorfen and Propaquizafop or their agrochemically acceptable salts, ester or derivatives for control of undesirable vegetation including broad-leaved weeds, gramineous weeds, sedges and grasses in various crops. The present invention also relates to process for preparing the said composition and its use as herbicide.

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(22) Filed: 12/05/2024

(23) Priority Data:
India, Number :202321033309, Date : 11-05-2023.

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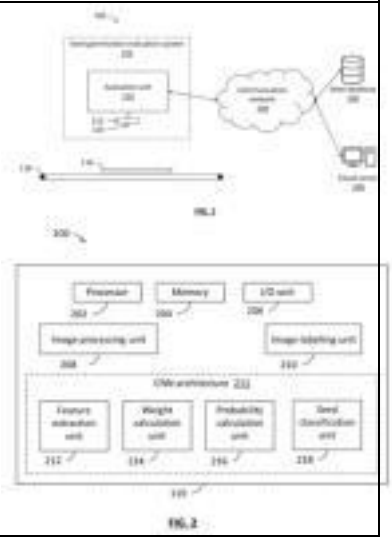
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : A21D 2/38

(54) Invention Title: SEED GERMINATION EVALUATION SYSTEM AND METHOD THEREOF

(57) Abstract

The present invention provides an automated seedling evaluation system (100) that evaluates germination percentage for seeds/seedlings and categorizations the seeds/seedlings into normal, abnormal and other types of seeds/seedlings. The automated seedling evaluation system (100) includes a seed germination evaluation system (102) that receives an image of the seeds/seedlings, identifies features in the image, identifies one or more seeds/seedlings based on the identified features, labels the regions of interest, determines one or more bounding boxes around the identified seeds/seedlings based on the labels, calculates confidence scores for the bounding boxes, and determines a germination percentage based on the seed/seedling featured inside the bounding boxes and the corresponding confidence scores. Features facilitate estimation of vigor index (combination of average seedling length and germination percentage) and uniformity of the seed/seedlings. The seed germination evaluation system (102) operates independently without requiring any manual intervention. The seed germination evaluation system (102) provides consistent and reliable results with improved accuracy.



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(22) Filed: 12/05/2024

(23) Priority Data:
United States of America, Number :18316144, Date : 11-05-2023.

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(51) INT. CL. : H04W 74/08

(54) Invention Title: IMPROVED PHYSICAL DOWNLINK CONTROL CHANNEL (PDCCH) ORDERED PHYSICAL RANDOM-ACCESS CHANNEL (PRACH) TRANSMISSION IN LOWER-LAYER TRIGGERED MOBILITY (LTM)

(57) Abstract

Embodiments of the present disclosure provide a method for improved physical downlink control channel (PDCCH) ordered physical random-access channel (PRACH) transmission in lower-layer triggered mobility (LTM). The method includes receiving a PDCCH order to initiate a PRACH transmission to at least one cell. The method also includes decoding a PRACH transmission index value, where the PRACH transmission index value describes whether the PRACH transmission is an initial transmission or a retransmission, and where the PRACH transmission index value is associated with a target downlink (DL) reference signal (RS). The method also includes determining a random access (RA) preamble power ramping counter value. The method also includes transmitting, based in part on a PRACH transmission power level, the PRACH transmission to the at least one cell, where the PRACH transmission power level is determined based in part on the RA preamble power ramping counter value.

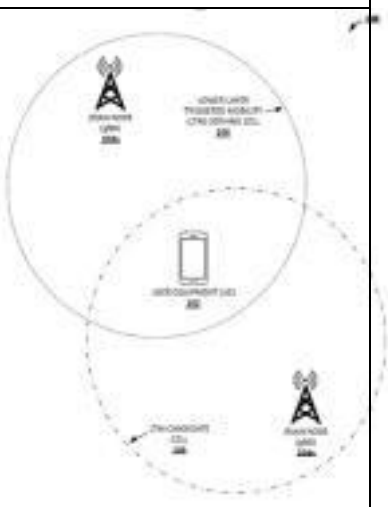

FIG. 1

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(21) Appl. No. BD-P-2024-136
(22) Filed: 14/05/2024

(23) Priority Data:
European Patent Office (EPO), Number :233824606, Date : 17-05-2023.

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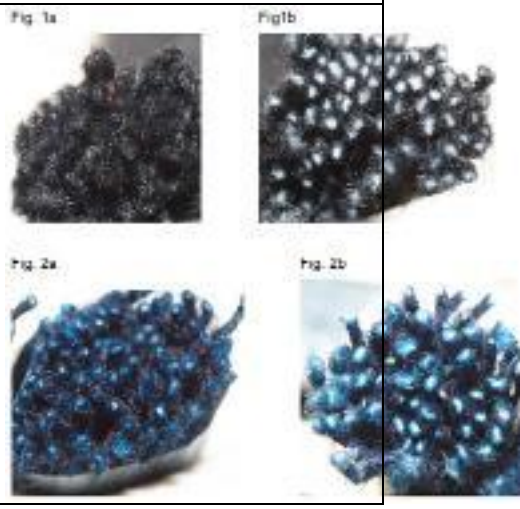
(74) Agent : REMFRY & SON LIMITED, 56, NEW ESKATON ROAD 4TH FLOOR, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : D06B 7/04

(54) Invention Title: Use of Polyelectrolytes in Textile treatment, and in the Mercerization and/or Dyeing operative phase.

(57) Abstract

An aqueous polyelectrolyte composition for (pre-)treating textile material, its preparation and application as well as therefrom produced textiles, as for example denim textiles. It was found that textile material pre-treated with said aqueous polyelectrolyte composition possess improved properties in terms of subsequent steps as for example in mercerization or dyeing since said subsequent steps are more superficial on pre-treated textile material. This allows e.g. a ring-dyeing of pre-treated textile-material and thus more sustainable techniques.



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(22) Filed: 14/05/2024

(23) Priority Data:
United States of America, Number :18478563, Date : 29-09-2023. and United States of America, Number :63502302, Date : 15-05-2023.

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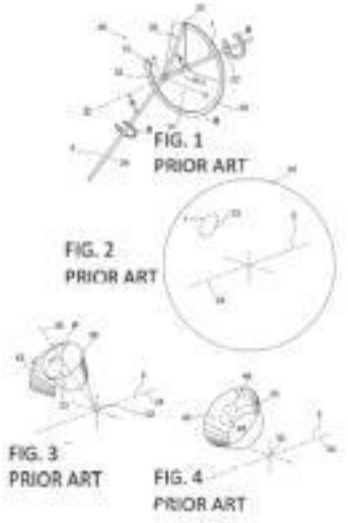
(51) INT. CL. : F04D 11/00

(54) Invention Title: ROTARY POSITIVE DISPLACEMENT DEVICE

(57) Abstract
A rotary positive displacement device comprises a housing having low and high pressure ports; first and second rotors each having a frusto-spherical outer surface, an axial surface, a shaft and a rotational axis. The axial surfaces comprise a teardrop surface and an involute surface together defining a lobe and a corresponding valley. High and low pressure openings each extend between the first and second rotors and the corresponding high and low pressure ports. The first and second rotors intermesh so that the at least two chambers are separated by the axial surfaces of the first and second rotors, each chamber having a variable volume as the first and second rotors rotate about their respective rotational axes. A lower edge of the high pressure opening is positioned along an outer diameter of the outer surface of the second rotor and between the second rotor shaft and the first rotor valley.



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(22) Filed: 19/05/2024

(23) Priority Data:

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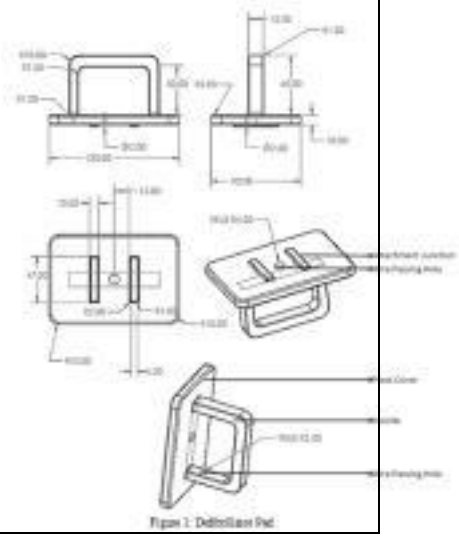
(51) INT. CL. : A61N 1/39

(54) Invention Title: User Specified & Weight Based Manual And Automatic External Defibrillator

(57) Abstract

The present invention relates to an innovative external defibrillator system designed to enhance treatment efficacy and reliability in cardiac emergencies. The system comprises two primary components: a novel algorithm for shock delivery based on patient body weight and a dual-mode circuit design with uninterrupted power supply (UPS) integration. The algorithm dynamically adjusts shock intensity to deliver personalized treatment, improving patient outcomes and reducing risks associated with conventional fixed-shock algorithms. The dual-mode circuit design ensures seamless switching between power sources, enabling continuous operation during power disruptions. Overall, the invention offers a comprehensive solution for external defibrillation, addressing critical needs in medical emergency response and patient care.



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-143
(22) Filed: 20/05/2024

(23) Priority Data:
Switzerland, Number :5422023, Date : 22-05-2023.

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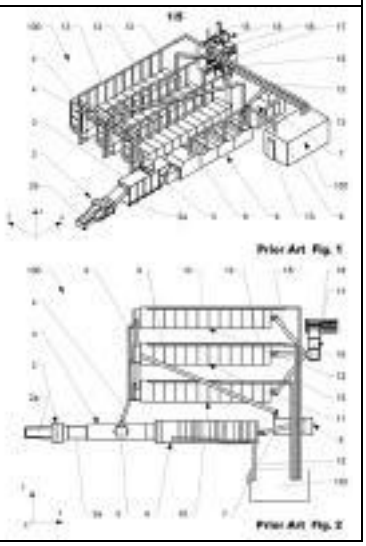
(74) Agent : MUNSHI & ASSOCIATES, 194/D/1, Tejkunipara,Tejgaon, Dhaka-1215, Bangladesh

(51) INT. CL. : B21D 22/14

(54) Invention Title: Integrated Textile Recycling and Spinning Machine

(57) Abstract

The present invention relates to an integrated recycling and spinning machine (300) and method for manufacturing yarn directly from textile waste, comprising: a recycling unit (301) that is configured to recycle textile waste material into recycled fiber material and is integrated with a drawing unit (302) and spinning unit (303) that are configured to manufacture a recycled fiber sliver and therefrom a yarn containing the recycled fiber material. The invention also relates to a method for integrated recycling and spinning of textile waste materials into a yarn by using the integrated recycling and spinning machine (300) as disclosed herein.



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(21) Appl. No. BD-P-2024-144
(22) Filed: 20/05/2024

(23) Priority Data:
Switzerland, Number :5512023, Date : 24-05-2023.

(71) Applicant: Säntis Textiles AG of c/o Christian Eschler Europe AG, Bleichelistrasse 22, 9055 Bühler, Nationality - Switzerland

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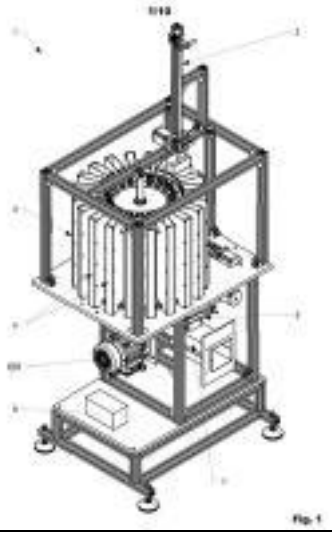
(74) Agent : MUNSHI & ASSOCIATES, 194/D/1, Tejkunipara,Tejgaon, Dhaka-1215, Bangladesh

(51) INT. CL. : B28B 21/92

(54) Invention Title: Fiber Dosing Apparatus and Method

(57) Abstract

The present invention relates to a fiber dosing apparatus (1) and method for precision-dosing of fiber material, comprising: a fiber feeding system (2, 3, 4), a fiber drafting and opening system (5, 6) and a fiber output channel (7), wherein the fiber feeding system (2, 3, 4) comprises a plurality of fiber-dosing cassettes (4) for intermediate storage of portioned amounts of initial fiber material, a fiber-forwarding device (2) for controlled releasing of the initial fiber material from a first cassette (4) to the fiber drafting and opening system (5, 6), and a cassette-forwarding device (3) for removing the first cassette (4) after at least partial depletion and positioning a second filled cassette (4) at the fiber-forwarding device (2) for further controlled releasing of the initial fiber material to the fiber drafting and opening system (5, 6) and therefrom as fiber flow material to the fiber output channel (7).



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-146
(22) Filed: 23/05/2024

(23) Priority Data:
Japan, Number :2023026849, Date : 21-07-2023.

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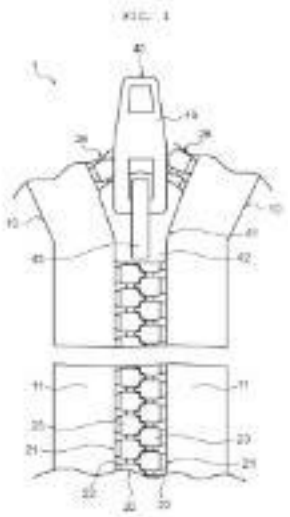
(51) INT. CL. : B21D 53/54

(54) Invention Title: SLIDE FASTENER-ATTACHED PRODUCT

(57) Abstract

A slide fastener-attached product (1) includes a fastener stringer (21) and a fastener-receiving member (10). The fastener stringer (21) is attached to a stringer attachment edge (11) of the fastener-receiving member (10) with a sewn portion (12). The stringer attachment edge (11) includes a double-layer portion (14) including a first strip portion (15), a bent portion (16), and a second strip portion (17). The sewn portion (12) is disposed away from a plurality of fastener elements (23), and the bent portion (16, 56, 76, 96) is disposed in contact with or closer to the fastener elements (23). A waterproof region is formed between the sewn portion (12) and the fastener elements (23). In the slide fastener-attached product (1), exposure of the fastener tape (22) in the region between the fastener-receiving member (10) and the fastener elements (23) can be prevented or reduced.



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-147
(22) Filed: 23/05/2024

(23) Priority Data:
India, Number :202321037650, Date : 31-05-2023.

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(74) Agent : Munshi & Associates, 194/D-1, Tejkunipara, Tejgaon, Dhaka-1215, Dhaka, Bangladesh

(51) INT. CL. : B41B 21/32

(54) Invention Title: Multi-layered Device with Self-Adhering Film

(57) Abstract

The present invention relates to novel multi-layered device comprising environment friendly, PVC free and VOC free self-adhering film capable of being transferred onto diverse substrates, without the use of solvents and extensive pre-working of surfaces as is essential in conventional painting/printing applications. The multilayered device comprises at least four layers, a first “Base layer” (A), a second “Release Layer” (B) on the “Base Layer” (A), a third “Pressure Sensitive Adhesive (PSA) Layer” (C) on the “Release Layer” (B), followed by a fourth “Top Coat Layer” (D) on the “PSA Layer” (C). The combination of Layers (A) and (B) forms the Release Liner . The combination of Layers (C) and (D) forms the self-adhering film of 15GSM to 300 GSM and is separable from the Release liner [(A)(B)].

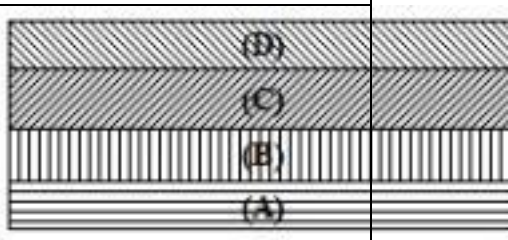

Fig. 1

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(21) Appl. No. BD-P-2024-148
(22) Filed: 23/05/2024

(23) Priority Data:
India, Number :202321037651, Date : 31-05-2023.

(71) Applicant: CAN IMAGE MEDIA TECH LLP of 302, 3Rd Floor, Solitaire Building, 80 S V Road, Santacruz West, Mumbai -400054, Nationality -India

(72) Inventors: (1) Ketan Arvind Desai of E-103, Amazon Building, Jayraj Nagar, Near Don Bosco school, Borivali(West) Mumbai - 400 091, Maharashtra, India Nationality -India, (2) Karunesh Kumar Mishra of 10/703, Brahmand Phase-5, Ghod Bunder Road, Azad Nagar, Thane (West) – 400 607, Maharashtra, India Nationality -India

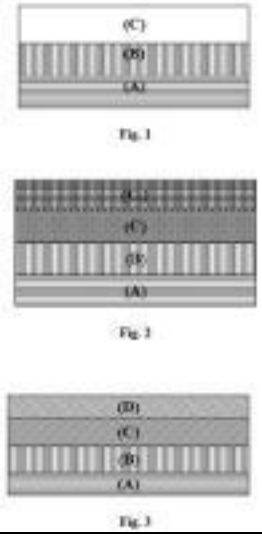
(74) Agent : MUNSHI & ASSOCIATES, 194/D/1, Tejkunipara,Tejgaon, Dhaka-1215, Bangladesh

(51) INT. CL. : B41B 21/32

(54) Invention Title: Multi-Layered Device with Water Activable Self-Adhering Film

(57) Abstract

The present invention relates to a multi-layered device of the present invention comprises at least three layers, a first “Base Layer” (A), a second “Release Layer” (B) on the “Base layer” (A), a third “Water-activable Base Coat Layer” (C) which is activable with water without the use of any co-solvent, optionally coated with additional layers on the “Water-activable Base Coat Layer” (C), wherein the combined layers (A) and (B) form the Release Liner and the combined layer (C) and the optionally coated additional layers to form a Film of 15 GSM to 300 GSM. The Film is separable form “Release Liner [(A)(B)]. The Layer (C) comprises hydrophilic & hydrophobic polymers wherein the ratio of hydrophilic to hydrophobic polymers is in the range of 1: 0 to 1:10. The Film is water activable, printable and may be pigmented, transferable, and self-adhering on any surface.



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(22) Filed: 23/05/2024

(23) Priority Data:
Russian Federation, Number :2023114863, Date : 06-06-2023.

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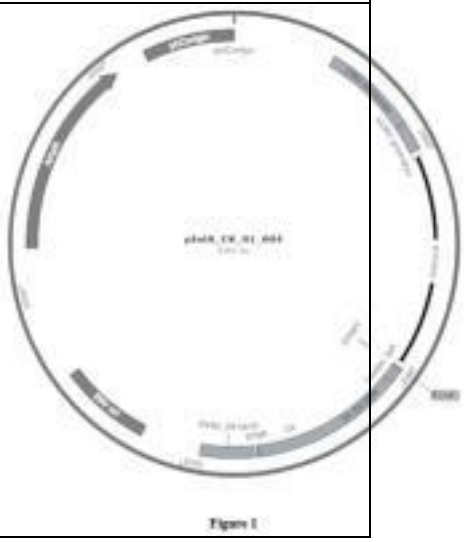
(51) INT. CL. : C07K 16/28

(54) Invention Title: Monoclonal antibody or antigen-binding fragment thereof that specifically binds to AXL, and use thereof

(57) Abstract

The present invention relates to the field of biotechnology and medicine, in particular to a monoclonal antibody or antigen-binding fragment thereof that specifically binds to AXL. The invention further relates to nucleic acids encoding said antibody, expression vectors, host cells and methods for producing same, methods for producing the antibodies according to the invention, pharmaceutical compositions comprising the antibody according to the invention, pharmaceutical compositions comprising the antibody according to the invention and other therapeutically active compounds, methods for treating AXL-mediated diseases or disorders, uses of the antibodies or pharmaceutical compositions thereof for treating AXL-mediated diseases or disorders, and uses of the antibodies and other therapeutically active compounds for treating AXL-mediated diseases or disorders.



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United States of America, Number :18472814, Date : 22-09-2023. and United States of America, Number :63508791, Date : 16-06-2023.

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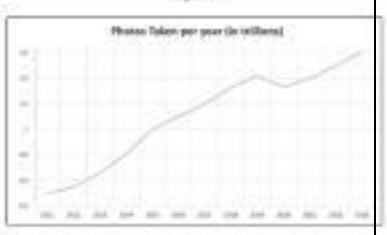
(51) INT. CL. : H04L 67/06

(54) Invention Title: METHOD AND APPLICATION FOR FAST SHARING OF IMAGES BETWEEN MOBILE ELECTRONIC DEVICES USING AN INNOVATIVE PLATFORM AND ARTIFICIAL INTELLIGENCE

(57) Abstract

The present disclosure relates to a method and application for capturing, sharing, and uploading images and other media content from mobile electronic devices and between mobile electronic devices using an innovative platform and artificial intelligence. In particular, the present disclosure provides a method, software, e.g., an “application,” and/or a device that integrate the functionalities of media content capturing and fast sharing with a reduced set of required user actions, such as down to one touch, using artificial intelligence.



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(23) Priority Data:
United States of America, Number :18472900, Date : 22-09-2023. and United States of America, Number :63508749, Date : 16-06-2023.

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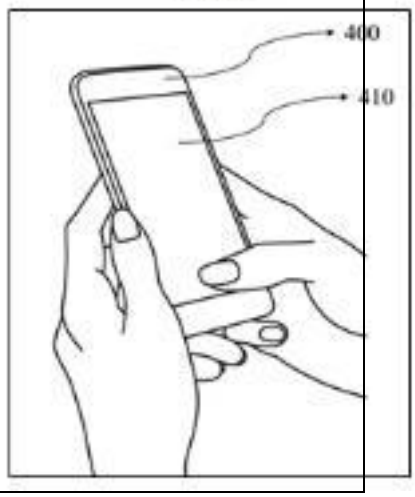
(51) INT. CL. : H04B 10/116

(54) Invention Title: MULTI-SELECTION SHUTTER CAMERA APP THAT SELECTIVELY SENDS IMAGES TO DIFFERENT ARTIFICIAL INTELLIGENCE AND INNOVATIVE PLATFORMS THAT ALLOW FOR FAST SHARING AND INFORMATIONAL PURPOSES

(57) Abstract

The present inventions relates to a method and application that provides for a multi-selection shutter camera application in an electronic device, and which selectively sends the images and other media content captured with the application to different innovative platforms based on artificial intelligence, and that presents a series of options based on the selected shutter and the image type and information (such as geolocation, time of capture, content, among others), such as for fast sharing purposes and/or informational purposes, among other uses.

Figure 1



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(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-156
(22) Filed: 29/05/2024

(23) Priority Data:

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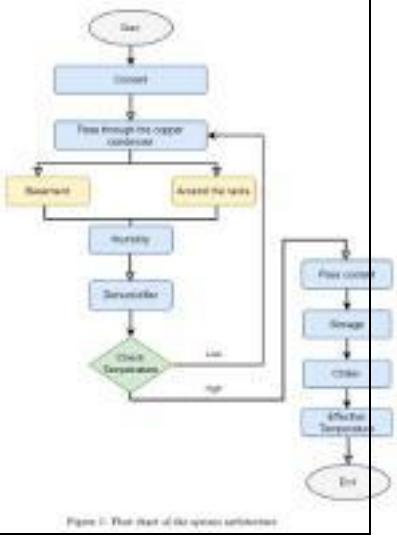
(51) INT. CL. : H05K 7/20

(54) Invention Title: Design of an Innovative Cooling Management System for a Data Center

(57) Abstract
Globally, there is an increasing demand for data processing and storage, which has a negative influence on the environment. We concentrate on cooling strategy for data centers. So, we have provided an innovative approach, conceptualized an environmentally conscious data center, including efficient cooling systems. Our cooling systems are based on the thermodynamics properties of the coolant being used to reduce heat and energy waste. Our cooling technology is 80% more effective than existing systems and our energy efficiency is 99%. Finally, the proposed innovative cooling approach for a green data center.



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(22) Filed: 29/05/2024

(23) Priority Data:
Japan, Number :2023090262, Date : 31-05-2023.

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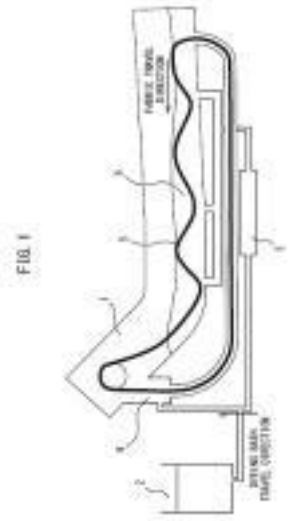
(74) Agent : MUNSHI & ASSOCIATES, 194/D/1, Tejkunipara,Tejgaon, Dhaka-1215, Bangladesh

(51) INT. CL. : F28D 15/02

(54) Invention Title: DYEING METHOD FOR CELLULOSE FIBER PRODUCT

(57) Abstract

A dyeing method, including the steps of feeding water of a first temperature region of 5□C or higher and lower than 30□C or a second temperature region of 30□C or higher and lower than 40□C to a dyeing bath and introducing cellulose fibers or a fiber product containing cellulose fibers thereto, under the proviso that the water-feeding and the introducing are performed in any order, raising the temperature from the first temperature region to a second temperature region of 30□C or higher and lower than 40□C and from the second temperature region to a third temperature region of 40□C or higher and lower than 70□C, or alternatively, raising the temperature from the second temperature region to the third temperature region of 40□C or higher and 70□C or lower, maintaining a third temperature within the third temperature region for a predetermined period of time, introducing a reactive dye at a temperature higher than the first temperature region; and introducing a mixture of an inorganic salt and an alkaline agent in three or more divided portions separately from introducing the reactive dye at a temperature equal to or higher than the second temperature region.



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(22) Filed: 29/05/2024

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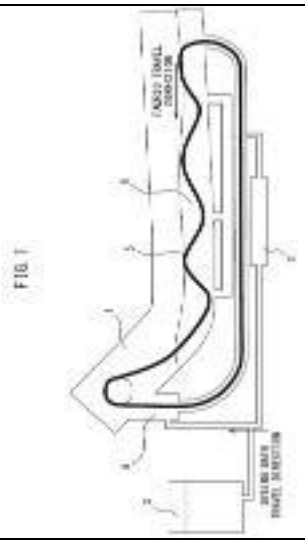
(51) INT. CL. : F28D 15/02

(54) Invention Title: DYEING METHOD FOR CELLULOSE FIBER PRODUCT

(57) Abstract

Provided is a novel dyeing method with which it is possible to obtain cellulose fiber products dyed with a reactive dye that have high color fastness and do not undergo hydrolysis due to an alkali treatment while reducing CO2 emissions by using an alkaline washing under specific temperature and pH conditions. The present invention relates to a dyeing method for cellulose fibers or a fiber product containing cellulose fibers, the dyeing method being batch type or continuous type and including: a dyeing reaction step in which cellulose fibers or a fiber product containing cellulose fibers are reacted with a reactive dye in a dyeing liquid; an alkaline washing step in which all or part of the dyeing liquid is discharged, and then the dyed fibers or fiber product are washed with an alkaline washing liquid having a pH of 10 to 14 and a temperature of 15 to 70□C; and a post-alkaline washing step of discharging the alkaline washing liquid and then washing with water.



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(21) Appl. No. BD-P-2024-160
(22) Filed: 30/05/2024

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France, Number :2305572, Date : 02-06-2023.

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(51) INT. CL. : F02F 5/00

(54) Invention Title: Hooking device between a heddle frame and a lever and method of lubricating such a device

(57) Abstract

A hooking device comprising a fastener (8) configured to be rigidly attached to a heddle frame, and including two flanges (12, 12'), an inner ring (16) mounted between the flanges, and provided with orthoradial slots (16C) formed on the outer peripheral surface (16B), and a polygonal profile ring (14) comprising a grease nipple (24) and a bore (15) for being rotatably mounted about the inner ring. The hooking device comprises a hook, with a locking member apt to hold the hook in cooperation with the polygonal profile ring. According to the invention, the polygonal profile ring (14) has grooves (30) for receiving a lubricant, provided on the surface (15A) of the bore (15) thereof.