গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

নং-৩৬.০৮.০০০০.২০০.১৬.০০১.২২.৩৮৯ তারিখঃ ০৬/০৭/২০২৬ খ্রি.

বিষয়ঃ দাখিলকৃত পেটেন্ট আবেদনসমূহ ওয়েবসাইটে প্রকাশ।

বাংলাদেশ পেটেন্ট আইন, ২০২৩ এর ধারা ১৭ অনুযায়ী ডিপিডিটিতে ২০২১ সালে দাখিলকৃত পেটেন্ট আবেদন নং ৩৯৪ এবং ২০২৪ সালে দাখিলকৃত পেটেন্ট আবেদন নং ৩৫৫-৩৫৭, ৩৬১-৩৬৬, ৩৬৮-৩৮৪, ৩৮৬-৩৮৯ মোট ৩১ (একত্রিশ) 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 ৩১ (একত্রিশ) পাতা।

০৬/০৭/২৬
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।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date , **(21) Appl. No.** BD-P-2021-394 **(22) Filed:** 29/11/2021
(23) Priority Data: N/A
(71) Applicant: Bangladesh Council of Scientific and Industrial Research (BCSIR) of Dr.Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Nationality -Bangladesh
(72) Inventors: (0) Shahin Sultana of Dr.Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (1) Lutfun Naher Hilary of Dr.Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (2) Md. Khabir Uddin Sarker of Dr.Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh, (3) Dr. Mohammad Majedul Haque of Dr.Qudrat-i-Khuda Road, Dhanmondi, Dhaka-1205, Bangladesh Nationality -Bangladesh
(51) INT. CL. : C04B 28/02
(54) Invention Title: A process for the production of waste poly(vinyl chloride) based solvent cement for PVC pipes jointing and fittings
(57) Abstract The present invention relates to a process of solvent cement made by waste PVC fill material recyc1ates for bonding of PVC pipes and other molded objects. The present invention relates to an improved and new method for production of waste PVC based solvent cement which comprises mechanically recycled waste PVC rec elates, minor amount of virgin PVC and solvents mixture. The recycled product will bring economic and environmental benefits and it is stable at room temperature at air tight condition and storage life is one year.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-355
(22) Filed: 02/12/2024

(23) Priority Data:
United States of America, Number :63609784, Date : 13-12-2023.

(71) Applicant: Monsanto Technology LLC of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, Nationality -United States of America

(72) Inventors: (1) BROWN, Sarah of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (2) ELLIS, Christine of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -Canada, (3) GAETA, Robert of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (4) GOODWIN, Zane of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (5) HOHORST, Diane of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (6) LARUE, Clayton Tyler of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (7) RYMARQUIS, Linda of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (8) SHI, Xiaohong of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (9) WEIHE, Janice of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America, (10) YE, Xudong of 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, United States of America Nationality -United States of America

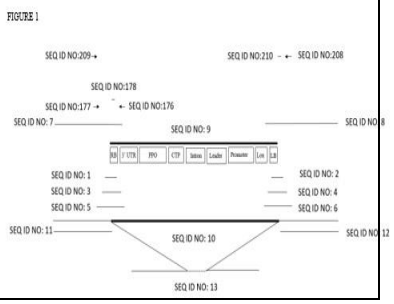
(74) Agent : Rana & Associates, Nipobon Asgar Garden, 462, Green Way, Flat No. A/2 (2nd Floor), Moghbazar, Dhaka-1217, Bangladesh

(51) INT. CL. : C12Q 1/6895

(54) Invention Title: TRANSGENIC SOYBEAN EVENT GM_CSM63717 AND COMPOSITIONS AND METHODS FOR DETECTION AND USES THEREOF

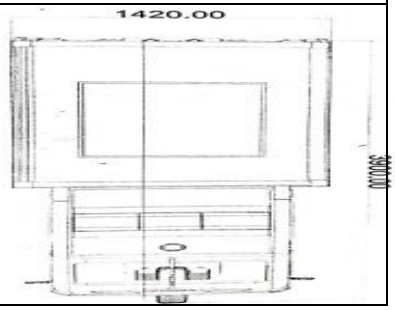
(57) Abstract

A transgenic soybean event, Gm_CSM63717, is provided. Transgenic plant cells, plant parts, plants, seeds, progeny plants, and agricultural and commodity products containing event Gm_CSM63717 are also provided. Recombinant DNA molecules unique to the event Gm_CSM63717, and methods of using and detecting Gm_CSM63717 are also provided.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date , **(21) Appl. No.** BD-P-2024-356 **(22) Filed:** 02/12/2024
(23) Priority Data: N/A
(71) Applicant: Engr. Md. Fazle Rabbe of Fare Complex 2nd Floor, 11/8/E Free School Street, Panthapath, Dhaka-1205, Nationality -Bangladesh, Abdul Jabbar Masud of Fare Complex 2nd Floor, 11/8/E Free School Street, Panthapath, Dhaka-1205, Nationality -Bangladesh
(72) Inventors: (0) Engr. Md. Fazle Rabbe of Fare Complex 2nd Floor, 11/8/E Free School Street, Panthapath, Dhaka-1205, Bangladesh Nationality -Bangladesh, (1) Abdul Jabbar Masud of Fare Complex 2nd Floor, 11/8/E Free School Street, Panthapath, Dhaka-1205, Bangladesh Nationality -Bangladesh
(51) INT. CL. : B60R 16/03
(54) Invention Title: Electric Vehicles (EV) Ambulance (E-Ambulance) on Three-Wheeler
(57) Abstract 

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-357
(22) Filed: 02/12/2024

(23) Priority Data:
Russian Federation, Number :2023135304, Date : 26-12-2023.

(71) Applicant: JOINT STOCK COMPANY "BIOCAD" of 198515, Saint Petersburg, vn. ter. g. poselok Strelna, ul. Svyazi, d. 38, str. 1, pomeshch. 89, Nationality -Russian Federation

(72) Inventors: (1) Morozov Dmitry Valentinovich of 190000, Saint Petersburg, Admiraltejskij r-n, ul. Pochtamtskaya, d. 20, kv. 3, Russian Federation Nationality -Russian Federation, (2) Niskanen Sergei Andreevich of 199106, Saint Petersburg, 26 liniya Vasilevskogo ostrova, d. 7 str. 1, kv. 184, Russian Federation Nationality -Russian Federation, (3) Satish Anakha of 143616, Moskovskaya oblast, rayon Volokolamskiy, derevnya Boriskovo, d. 10, Russian Federation Nationality -Russian Federation, (4) Lebed Kseniia Andreevna of 188502, Leningradskaya oblast, Lomonosovsky raion, der. Starye Zavody, d. 23, Russian Federation Nationality -Russian Federation, (5) Koshkareva Kira Aleksandrovna of 198510, Saint Petersburg, Petergof, Parkovaya d. 16, korp. 5, kv. 148, Russian Federation Nationality -Russian Federation, (6) Kakhanava Vera Iurevna of 188507, Leningradskaya Oblast, Lomonosovsky raion, gp. Novosel'e, Krasnosel'skoye shosse, d. 6, kv. 430, Russian Federation Nationality -Russian Federation, (7) Trofimov Mikhail Andreevich of 173021, Velikij Novgorod, ul. Popova, d. 15, korp. 1, kv. 85, Russian Federation Nationality -Russian Federation, (8) Kkhedri Faisel of 196641, Saint-Petersburg, Kolpinsky raion, pos. Metallostroy, ul. Sadovaya, d. 21, korp. 3, kv. 21, Russian Federation Nationality -Russian Federation, (9) Kondinskaia Diana Aleksandrovna of 193318, Saint Petersburg, ul. Badaeva, d. 8/1, kv. 394, Russian Federation Nationality -Russian Federation, (10) Slavkina Natalia Aleksandrovna of 198095, Saint Petersburg, ul. Shvecova, d. 19, kv. 1, Russian Federation Nationality -Russian Federation, (11) Sidina Elena Igorevna of 603043, Nizhny Novgorod, ul. Chelyuskintsev, d. 11, kv. 28, Russian Federation Nationality -Russian Federation, (12) Kharatian, Nina Grachyaevna of 188507, Leningradskaya Oblast, Lomonosovsky raion, pos. Novoselye, ul. Nevskaya, d. 1, kv. 174, Russian Federation Nationality -Russian Federation

(74) Agent : SUPREMEiP Law Firm, 121 Motijheel C/A (1st Floor), Dhaka-1000, Bangladesh

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

(54) Invention Title: Monoclonal antibody or antigen-binding fragment thereof that specifically binds to TNF-like ligand 1A (TL1A), 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 TNF-like ligand 1A (TL1A). 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 or antigen-binding fragment thereof according to the invention, as well as to pharmaceutical compositions comprising the antibody or antigen-binding fragment thereof according to the invention and other therapeutically active compounds; to methods for treating TL1A-mediated diseases or disorders, to use of the antibody or antigen-binding fragment thereof or pharmaceutical composition thereof for treating TL1A-mediated diseases or disorders, and to use of the antibody or antigen-binding fragment thereof according to the invention and other therapeutically active compounds for treating TL1A-mediated diseases or disorders.

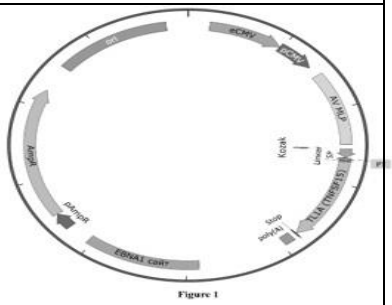


Figure 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-361
(22) Filed: 05/12/2024

(23) Priority Data:
China, Number :2024086654, Date : 08-04-2024.

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

(72) Inventors: (1) Lei DU of Xianglinjun 5-1-501, Haidian District, Beijing, 100085, China Nationality -China, (2) Lars DALSGAARD of Torpantie 56, Oulu, 90230, Finland Nationality -Denmark, (3) Parham KAZEMI of Karakaari 13, Espoo, 02610, Finland Nationality -Iran (Islamic Republic of)

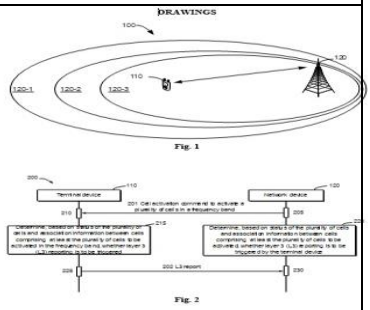
(74) Agent : REMFRY & SON, PATENT & TRADE MARK ATTORNEYS, 56, NEW ESKATON ROAD, 4TH FLOOR, G.P.O BOX NO-855, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : H01L 31/0463

(54) Invention Title: CELL ACTIVATION TRIGGERED LAYER 3 REPORTING

(57) Abstract

Embodiments of the present disclosuredisclosedevices, methodsandapparatuses for cell activation triggered layer 3 (L3) reporting. In an aspect, a terminal device receives a cell activation command to activate a plurality of cells in a frequency band. Based on status of the plurality of cells and association information between cells comprising at least the plurality of cells to be activatedin the frequency band, the terminal device determines whether L3 reporting is to be triggered. Based on determining that the L3 reporting is to be triggered, the terminal device transmits an L3 report. By considering the cell status e.g. known/unknown, and the association information among the cells on the same band, the terminal device may determine if L3 reporting is to be triggered for cells on different frequency bands, for example, on frequency range 1(FR1) and frequency range 2(FR2), respectively, and hence achieves a faster cell activation.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-362
(22) Filed: 10/12/2024

(23) Priority Data:
United States of America, Number :63608801, Date : 11-12-2023.

(71) Applicant: LanzaTech, Inc. of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, Nationality -United States of America

(72) Inventors: (1) James CLOMBURG of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (2) Sean SIMPSON of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -New Zealand, (3) Timothy POLITANO of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (4) Jonathan Henry MASSEY of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America

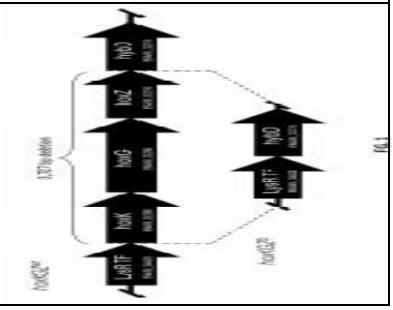
(74) Agent : MUNSHI & ASSOCIATES, 194/D/1, Tejkunipara,Tejgaon, Dhaka-1215, Bangladesh

(51) INT. CL. : C12N 9/02

(54) Invention Title: NOVEL STRAINS AND METHODS FOR THE CONTINUOUS PRODUCTION OF PRODUCTS BY GAS FERMENTATION

(57) Abstract

Methods and a recombinant C1- fixing microorganism for the continuous production of products from gaseous substrates. Further, the gaseous substrate comprises CO2 and an energy source. The recombinant C1-fxing microorganism has a disruptive mutation in a membrane bound hydrogenase gene. The C1-fixing microorganism having the disruptive mutation minimizes the H2:CO2 uptake ratio.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-363
(22) Filed: 10/12/2024

(23) Priority Data:
United States of America, Number :63608786, Date : 11-12-2023.

(71) Applicant: LanzaTech, Inc. of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, Nationality -United States of America

(72) Inventors: (1) James CLOMBURG of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (2) Sean SIMPSON of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -New Zealand, (3) Alex CHOU of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (4) Natalie GAYNER of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (5) Stephanie JONES of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (6) Timothy POLITANO of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America

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

(51) INT. CL. : C12N 11/16

(54) Invention Title: SINGLE CELL PROTEIN WITH ENHANCED DIGESTIVE ENZYME CONTENT

(57) Abstract

The present disclosure relates to single cell protein (SCP) products obtained from Cupriavidus necator that has been engineered to produce digestive enzymes. The biomass produced by the C. necator and the SCP products that include it contain digestive enzymes that are not naturally produced by C. necator.

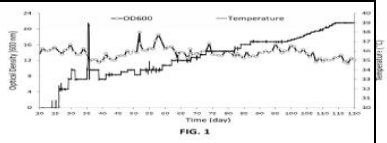


FIG. 1

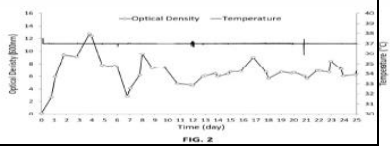


FIG. 2

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-364
(22) Filed: 10/12/2024

(23) Priority Data:
United States of America, Number :63608793, Date : 11-12-2023.

(71) Applicant: LanzaTech, Inc. of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, Nationality -United States of America

(72) Inventors: (1) James CLOMBURG of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (2) Sean SIMPSON of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -New Zealand, (3) Timothy POLITANO of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America

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

(51) INT. CL. : C12N 1/20

(54) Invention Title: NOVEL STRAINS AND METHODS FOR THE CONTINUOUS PRODUCTION OF A NUTRITIVE COMPOSITION

(57) Abstract

Methods and non-naturally occurring strains for the continuous production of single-cell protein (SCP) from gaseous substrates. Further, the gaseous substrate comprises CO2 and an energy source. The non-naturally occurring strains are capable of continuously growing autotrophically at up to about 40° C. SCP can be used as an ingredient in food or feed.

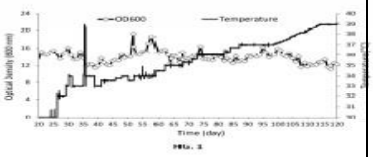


Fig. 1

Run #	1	2	3	4	5
Strain	DSM 541	DSM 541	DSM 541	DSM 541	DSM 34774
Plate growth (°C)	30	30	37	37	37
Inoculum growth (°C)	30	30	37	37	37
Reactor startup (°C)	30	37	37	30	37
Successful startup?	Yes	Yes	No	Yes	Yes

Fig. 2

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-365
(22) Filed: 10/12/2024

(23) Priority Data:
United States of America, Number :63608784, Date : 11-12-2023.

(71) Applicant: LanzaTech, Inc. of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, Nationality -United States of America

(72) Inventors: (1) James CLOMBURG of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (2) Sean SIMPSON of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -New Zealand, (3) Alex CHOU of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (4) Timothy POLITANO of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America, (5) Scott KLEESPIES of 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077, United States of America Nationality -United States of America

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

(51) INT. CL. : C12P 7/6427

(54) Invention Title: SINGLE CELL PROTEIN WITH ENHANCED POLYUNSATURATED FATTY ACID CONTENT

(57) Abstract

The present disclosure relates to single cell protein (SCP) products obtained from Cupriavidus necator that has been engineered to produce a favorable fatty acid profile. The biomass produced by the C. necator and the SCP products that include it contain unsaturated fatty acids that are not naturally produced by C. necator.

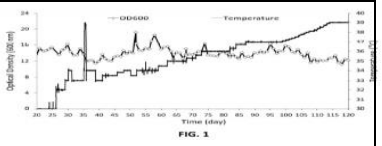


FIG. 1

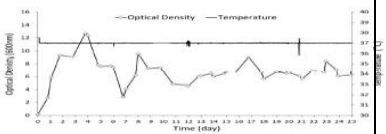


FIG. 2

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-366
(22) Filed: 11/12/2024

(23) Priority Data:
N/A

(71) Applicant: Yudhishtir Chandra Biswas of House-29, Road-02, Block-B, Mirpur-13, Dhaka, Nationality - Bangladesh

(72) Inventors: (0) Yudhishtir Chandra Biswas of House-29, Road-02, Block-B, Mirpur-13, Dhaka, Bangladesh Nationality -Bangladesh

(51) INT. CL. : C12M 1/00

(54) Invention Title: Carbon Tree

(57) Abstract

Carbon Tree is a solar-powered micro-algae bioreactor designed for urban air purification. It immediately absorbs CO_2 and releases O_2, providing a scalable solution to improve air quality in cities with limited green space. The system is IoT-enabled to offer real-time monitoring of environmental data, making it a sustainable solution for urban spaces.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-368
(22) Filed: 12/12/2024

(23) Priority Data:
China, Number :2023139811, Date : 19-12-2023.

(71) Applicant: SICPA HOLDING SA of Avenue de Florissant 41 1008 Prilly, Nationality -Switzerland, China Banknote Printing and Minting Corporation of No. Jia 143, Xizhimen Wai Avenue, Xicheng District, Beijing 100044, Nationality -China

(72) Inventors: (2) RITTER Gebhard of Chemin Auguste-Pidou 3, 1007 Lausanne , Switzerland Nationality - Switzerland

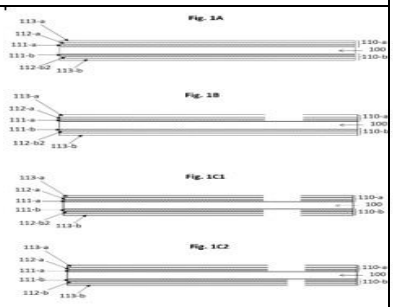
(74) Agent : Advanced IP Law Firm, Suite#9/C (9th Floor), Fahima Tower, 42-43, Purana Paltan, Dhaka-1000, Bangladesh

(51) INT. CL. : B81C 1/00

(54) Invention Title: OPACIFYING SYSTEMS FOR POLYMERIC TRANSPARENT SUBSTRATES

(57) Abstract

The present invention relates to the field of improved opacified polymeric transparent substrates (x00) for use in making security documents such as banknotes, said substrates (x00) combining good mechanical performance and that can be easily handled for subsequent multi-step security printing processes. In particular, the present invention provides kits for manufacturing an opacifying system (x10) either on one side or on both sides of a polymeric transparent substrate (xx0), said kit comprising a) a first composition for manufacturing an opacifying layer (x11), b) a second composition for manufacturing a conductive layer (x12), and c) a third layer composition for manufacturing an acceptance layer (x13), wherein the first, second and third compositions comprise i) water, ii) a water-soluble or water-dispersible resin, iii) a white pigment, iv) a wax, wherein at least one of the first, second and third compositions comprises an anti-static agent, and wherein at least two of said first, second and third compositions comprise a mica compound.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-369
(22) Filed: 12/12/2024

(23) Priority Data:
Italy, Number :2023000026868, Date : 15-12-2023.

(71) Applicant: NEXTCHEM TECH S.p.A. of Via di Vannina n. 88/94 00156 Roma, Nationality -Italy

(72) Inventors: (0) ORSETTI, Andrea of c/o Via di Vannina n. 88/94 00156 Roma, Italy Nationality -Italy, (1) FELICI, Paolo of c/o Via di Vannina n. 88/94 00156 Roma, Italy Nationality -Italy, (2) FERRARI, Fabio Enrico Gianfranco of c/o Via di Vannina n. 88/94 00156 Roma, Italy Nationality -Italy, (3) DISARO', Edoardo of c/o Via di Vannina n. 88/94 00156 Roma, Italy Nationality -Italy

(74) Agent : REMFRY & SON, PATENT & TRADE MARK ATTORNEYS, 56, Nnew Eskaton Road, 4th Floor, G.P.O BOX NO-855, Dhaka-1000, DHAKA, Bangladesh

(51) INT. CL. : F24F 110/70

(54) Invention Title: METHOD AND SYSTEM FOR CARBON DIOXIDE LIQUEFACTION

(57) Abstract

Disclosed is a method and system to for liquefying carbon dioxide. Herein a CO2 gas stream comprising, calculated on the basis of non-condensable matter, at least 90mole % of CO2 is fed to a compression section, and compression so as to provide a liquid or supercritical fluid CO2 stream. The latter stream is divided intoa CO2process fluid, which is subjected to liquefaction, and a CO2 refrigerant fluid, which is subjected to a refrigeration cycle. The liquefaction comprises flashing the CO2process fluid followed by separation of gaseous and liquid CO2. The latter is subjected to stripping with CO2. The former is liquefied, together with used CO2 stripping gas, by condensation. The cooling thereby required, is provided by vaporization of the CO2 refrigerant fluid. The gaseous CO2resulting therefrom is returned as a feed to the compression stage.

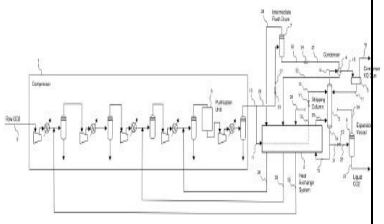


FIG.1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-370
(22) Filed: 12/12/2024

(23) Priority Data:
Malaysia, Number :2024001253, Date : 27-02-2024.

(71) Applicant: BIORISM HOLDINGS SDN. BHD. of Unit 6, Level 4, SetiaWalk Mall (Blh K), Setiawalk, Persiaran Wawasan Pusat Bandar Puchong, 47160, Selangor, Nationality -Malaysia

(72) Inventors: (1) Isabel Maria Ferreri de Gusmão e Silva of Success Gadget, Rua Filipa Borges 1245, 4750-823 Barcelos, Portugal Nationality -Portugal, (2) Rui Samuel Dias da Costa of Success Gadget, Rua Filipa Borges 1245, 4750-823 Barcelos, Portugal Nationality -Portugal, (3) Moisés Barbosa Vieira of Success Gadget, Rua Filipa Borges 1245, 4750-823 Barcelos, Portugal Nationality -Portugal

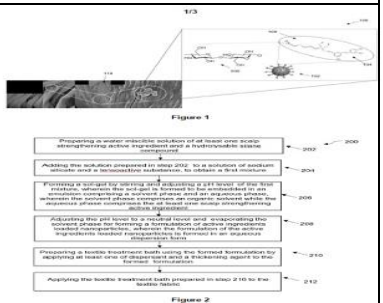
(74) Agent : Rasheduzzaman Khokon, Advocate, Flat: G, Plot:638, Road:09, Avn: 03, Mirpur DOHS, Dhaka-1216, Bangladesh

(51) INT. CL. : C08K 3/36

(54) Invention Title: FORMULATION AND NANOPARTICLES OF SILICA FOR SCALP STRENGTHENING, SCALP STRENGTHENING TEXTILE FABRIC AND A METHOD OF MANUFACTURING THEREOF

(57) Abstract

The present invention discloses a formulation of a compound having scalp-strengthening active ingredient, R2 embedded onto a cellulose-based textile fabric, R1. The present invention further discloses a scalp-strengthening textile fabric (100) comprising a composition of nanoparticles (102) formed through a sol-gel process, at least one scalp strengthening active ingredient (104), and a cellulose polymer (106) based textile fabric (110). Moreover, the present invention also discloses a method (200) for producing a scalp strengthening textile fabric. The method (200) involves preparing a water miscible solution of the active ingredient and hydrolysable silane, forming a sol-gel embedded in an emulsion, adjusting pH, and evaporating the solvent to yield active ingredient-loaded nanoparticles. This formulation is applied to the textile fabric, creating a durable scalp-strengthening textile fabric with covalent linkages between the cellulose polymer and active ingredient-loaded nanoparticles.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-371
(22) Filed: 15/12/2024

(23) Priority Data:
European Patent Office (EPO), Number :232186429, Date : 20-12-2023.

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

(72) Inventors: (1) BENNINGER, Nathalie of Rue du Premier-Août 37, 2300 La Chaux-de-Fonds, 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. : B05D 5/06

(54) Invention Title: PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS

(57) Abstract
The invention relates to the field of the protection of security documents such as for example banknotes and identity documents against counterfeit and illegal reproduction. In particular, the present invention provides processes for producing optical effect layers (OELs) comprising at least a first motif and a second motif, each of said motifs independently comprising platelet-shaped magnetic or magnetizable pigment particles oriented according to a specific magnetic pattern, wherein said first motif and second motif have different magnetic orientation patterns and are at least partially adjacent and in proper register.

Fig. 1

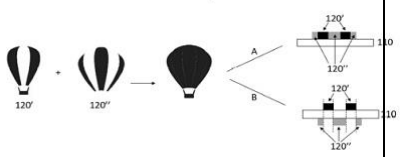


Fig. 2

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-372
(22) Filed: 15/12/2024

(23) Priority Data:
European Patent Office (EPO), Number :232186411, Date : 20-12-2023.

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

(72) Inventors: (1) DESPLAND, Claude-Alain of Chemin de Prael 11b, 1030 Bussigny, Switzerland Nationality -Switzerland, (2) CALLEGARI, Andrea of Rue de Bassenges 47b, 1024 Ecublens, Switzerland Nationality -Switzerland, (3) BENNINGER, Nathalie of Rue du Premier-Août 37, 2300 La Chaux-de-Fonds, Switzerland Nationality -Switzerland

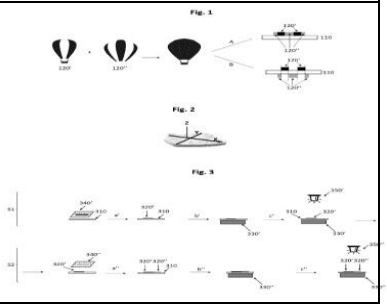
(74) Agent : Advanced IP Law Firm, Suite#9/C (9th Floor), Fahima Tower, 42-43, Purana Paltan, Dhaka-1000, Bangladesh

(51) INT. CL. : B05D 3/00

(54) Invention Title: PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS

(57) Abstract

The invention relates to the field of the protection of security documents such as for example banknotes and identity documents against counterfeit and illegal reproduction. In particular, the present invention provides processes for producing optical effect layers (OELs) comprising at least a first motif and a second motif, each of said motifs independently comprising platelet-shaped magnetic or magnetizable pigment particles oriented according to a specific magnetic pattern, wherein said first motif and second motif have a different color and exhibit in combination a dynamic motion upon tilting said OEL.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-373
(22) Filed: 15/12/2024

(23) Priority Data:
European Patent Office (EPO), Number :232186395, Date : 20-12-2023.

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

(72) Inventors: (1) DESPLAND, Claude-Alain of Chemin de Prael 11b, 1030 Bussigny, Switzerland Nationality -Switzerland, (2) CALLEGARI, Andrea of Rue de Bassenges 47b, 1024 Ecublens, Switzerland Nationality -Switzerland, (3) BENNINGER, Nathalie of Rue du Premier-Août 37, 2300 La Chaux-de-Fonds, 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. : B42D 25/369

(54) Invention Title: PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS

(57) Abstract

The invention relates to the field of the protection of security documents such as for example banknotes and identity documents against counterfeit and illegal reproduction. In particular, the present invention provides processes for producing optical effect layers (OELs) comprising at least a first motif and a second motif being at least partially adjacent to each other, each of said motifs independently comprising magnetically oriented platelet-shaped magnetic or magnetizable pigment particles.

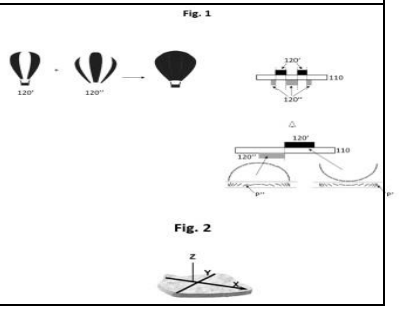


Fig. 2

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-374
(22) Filed: 15/12/2024

(23) Priority Data:
Japan, Number :2024027125, Date : 30-07-2024.

(71) Applicant: YKK CORPORATION of 1, Kanda Izumi-cho, Chiyoda-ku, Tokyo 1018642, Nationality -Japan

(72) Inventors: (1) HIROMI, Chikako of C/o YKK CORPORATION KUROBE., 200, Yoshida, Kurobe-shi, Toyama 938-8601, Japan Nationality -Japan, (2) AKITSU, Kazuya of C/o YKK CORPORATION KUROBE., 200, Yoshida, Kurobe-shi, Toyama 938-8601, Japan Nationality -Japan, (3) KIRITA, Yuji of C/o YKK CORPORATION KUROBE., 200, Yoshida, Kurobe-shi, Toyama 938-8601, Japan Nationality -Japan

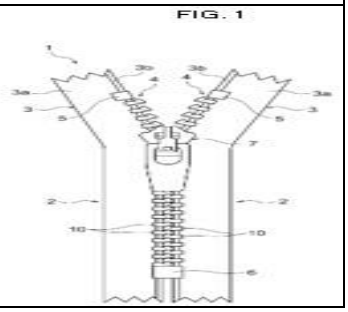
(74) Agent : H & H COMPANY, Shareef Mansion (Second Floor), 56-57, Motijheel C/A, Dhaka-1000, Bangladesh

(51) INT. CL. : B21F 45/18

(54) Invention Title: FASTENER ELEMENT AND FASTENER STRINGER

(57) Abstract

A metal fastener element (10) of the present invention includes a coupling head portion (20) having a projection portion (22) and a recess portion (23). The proportion of the overall width (Wo) in the overall length (Lo) of the fastener element (10) is 40% or more and 50% or less, and the proportion of the overall width (Wo) in the overall thickness (Do) of the fastener element (10) is 130% or more and 145% or less. According to the fastener element (10) of the present invention, it is possible to reduce the manufacturing cost of the slide fastener (1). Furthermore, the weight of the slide fastener (1) can be reduced.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-375
(22) Filed: 19/12/2024

(23) Priority Data:
European Patent Office (EPO), Number :241785211, Date : 28-05-2024. and India, Number :202311087600, Date : 21-12-2023.

(71) Applicant: SYNGENTA CROP PROTECTION AG of Rosentalstrasse 67, 4058 Basel, Nationality -Switzerland

(72) Inventors: (1) STOLLER, Andre of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (2) MUEHLEBACH, Michel of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (3) JEANGUENAT, André of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (4) KILARU, Jagadeesh Prathap of Syngenta Biosciences Pvt. Ltd, Santa Monica Plant, Corlim, Ilhas, Goa 403 110, India Nationality -India, (5) SCARBOROUGH, Christopher Charles of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (6) FERNANDES, Rushil of Syngenta Biosciences Pvt. Ltd, Santa Monica Plant, Corlim, Ilhas, Goa 403 110, India Nationality -India

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

(51) INT. CL. : C07D 413/14

(54) Invention Title: PESTICIDALLY ACTIVE QUINAZOLINE COMPOUNDS

(57) Abstract
Compounds of formula (I) (I) wherein the substituents are as defined in claim 1, and the agrochemically acceptable salts, stereoisomers, enantiomers, tautomers and N-oxides of those compounds, can be used as insecticides.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-376
(22) Filed: 19/12/2024

(23) Priority Data:
European Patent Office (EPO), Number :241785906, Date : 28-05-2024. and India, Number :202311087602, Date : 21-12-2023.

(71) Applicant: SYNGENTA CROP PROTECTION AG of Rosentalstrasse 67, 4058 Basel, Nationality -Switzerland

(72) Inventors: (1) STOLLER, Andre of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (2) MUEHLEBACH, Michel of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (3) JEANGUENAT, André of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (4) SCARBOROUGH, Christopher Charles of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -United States of America, (5) KILARU, Jagadeesh Prathap of Syngenta Biosciences Pvt. Ltd, Santa Monica Plant, Corlim, Ilhas, Goa 403 110, India Nationality -India, (6) WEISS, Matthias of Syngenta Crop Protection AG, Schaffhauserstrasse, 4332 Stein, Switzerland Nationality -Switzerland, (7) FERNANDES, Rushil of Syngenta Biosciences Pvt. Ltd, Santa Monica Plant, Corlim, Ilhas, Goa 403 110, India Nationality -India

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

(51) INT. CL. : C07D 413/14

(54) Invention Title: PESTICIDALLY ACTIVE QUINAZOLINE COMPOUNDS

(57) Abstract
Compounds of formula (I) (I) wherein the substituents are as defined in claim 1, and the agrochemically acceptable salts, stereoisomers, enantiomers, tautomers and N-oxides of those compounds, can be used as insecticides.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-377
(22) Filed: 19/12/2024

(23) Priority Data:
Japan, Number :2024000618, Date : 05-01-2024.

(71) Applicant: TOYO ENGINEERING CORPORATION of 1-1 Nakase, Mihama-ku, Chiba-shi, Chiba 261-8601, Nationality -Japan

(72) Inventors: (1) Yasuhiko KOJIMA of c/o TOYO ENGINEERING CORPORATION, 1-1 Nakase, Mihama-ku, Chiba-shi, Chiba 261-8601, Japan Nationality -Japan, (2) Takahiro YANAGAWA of c/o TOYO ENGINEERING CORPORATION, 1-1 Nakase, Mihama-ku, Chiba-shi, Chiba 261-8601, Japan Nationality -Japan, (3) Shogo KAWATA of c/o TOYO ENGINEERING CORPORATION, 1-1 Nakase, Mihama-ku, Chiba-shi, Chiba 261-8601, Japan Nationality -Japan

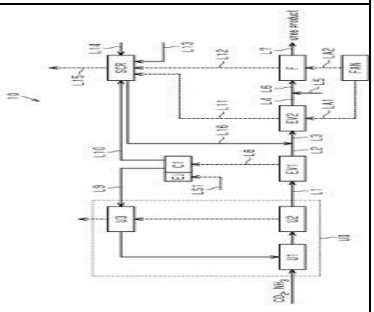
(74) Agent : Munshi & Associates, 194/D/1, Tejkunipara, Tejgaon, Dhaka-1215 , Bangladesh

(51) INT. CL. : B29C 49/12

(54) Invention Title: UREA PRODUCTION APPARATUS, METHOD FOR MODIFYING UREA PRODUCTION APPARATUS, AND METHOD FOR PRODUCING UREA

(57) Abstract

A urea production apparatus (10) includes a first evaporator (EV1) obtaining a first off-gas and a concentrated urea solution from a urea solution, a condenser (C1) cooling the first off-gas to obtain condensate water, a second evaporator (EV2) obtaining a second off-gas and a highly concentrated urea solution from the concentrated urea solution, a granulator (F) obtaining the solid urea product from the highly concentrated urea solution, a scrubber (SCR) contacting the second off-gas and a third off-gas discharged from the granulator (F) with the cleaning solution to obtain a cleaning-processed recovered solution containing a clean gas, ammonium salt, and urea, and a recovery pipe configured to supply the cleaning-processed recovered solution to a second evaporator (EV2). The second evaporator (EV2) obtains the highly concentrated urea solution and the second off-gas from a mixture of the concentrated urea solution and the cleaning-processed recovered solution.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-378
(22) Filed: 19/12/2024

(23) Priority Data:
N/A

(71) Applicant: Md Rezaul Karim, PhD, Professor of Department of Biotechnology and Genetic Engineering, Jahangimagar University, Savar, Dhaka-1342, Nationality -Bangladesh

(72) Inventors: (0) Md Rezaul Karim, PhD, Professor of Department of Biotechnology and Genetic Engineering, Jahangimagar University, Savar, Dhaka-1342, Bangladesh Nationality -Bangladesh

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

(54) Invention Title: Green Synthesis of Silver Nanoparticles Using Sulphated Polysaccharides from Gracilaria tenuistipitata

(57) Abstract

The invention presents an environmentally friendly method for producing silver nanopartic1es (AgNP) using sulfated polysaccharides from G. tenuistipitata. This green synthesis approach eliminates the need for harmful chemicals, making it suitable for a wide range of industrial, biomedical, and environmental uses. The resulting AgNPs are stable, uniform in size, and show significant bioactivity. Advanced characterization techniques, such as UV-Vis spectroscopy, FT-IR, FE-SEM, EDX, and XRD, confirm the nanopartic1es' high stability and bioactivity, highlighting their potential for various applications without relying on hazardous substances.

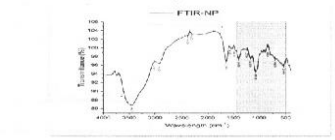


Fig 1: Functional group and compound presence in SF and AgNP

Figure 2

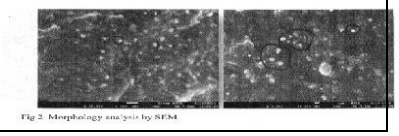


Fig 2: Morphology analysis by SEM

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-379
(22) Filed: 19/12/2024

(23) Priority Data:
N/A

(71) Applicant: Md. Rezaul Karim, Ph.D., Professor of Department of Biotechnology and Genetic Engineering, Jahangirnagar University, Savar, Dhaka-1342, Nationality -Bangladesh

(72) Inventors: (0) Md. Rezaul Karim, Ph.D., Professor of Department of Biotechnology and Genetic Engineering, Jahangirnagar University, Savar, Dhaka-1342, Bangladesh Nationality -Bangladesh

(51) INT. CL. : A61K 36/04

(54) Invention Title: Isolation of Sulphated Polysaccharides from the Seaweed Gracilaria tenuistipitata Cultivated in Cox's bazar, Bangladesh

(57) Abstract
The invention discloses a method for isolating sulfated polysaccharides from Gracilaria tenuistipitata. The method includes collection of sample, sample processing, extraction of sulphated polysaccharides, characterization using spectroscopic techniques and estimation of total carbohydrate and sulphate content to confirm structural and functional properties to yield high-purity sulphated polysaccharides with preserved bioactivity.

Figure 1

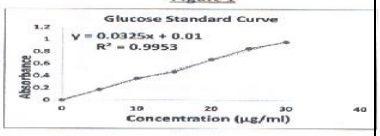
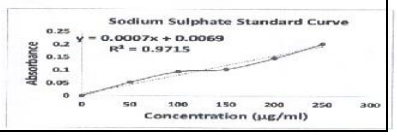


Figure 2



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-380
(22) Filed: 19/12/2024

(23) Priority Data:
Italy, Number :2023000027294, Date : 20-12-2023.

(71) Applicant: LONATI S.P.A of Via Francesco Lonati, 3 25124 Brescia, Nationality -Italy

(72) Inventors: (1) Ettore LONATI of Via Furlan Olga, 9/c 25082 Botticino, Italy Nationality -Italy, (2) Fausto LONATI of Via Mediana, 12 25123 Brescia, Italy Nationality -Italy, (3) Francesco LONATI of Via S. Giovanni 23 25010 San Felice Del Benaco, Italy Nationality -Italy

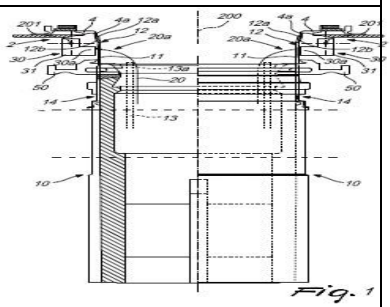
(74) Agent : REMFRY & SON, PATENT & TRADE MARK ATTORNEYS, 56, NEW ESKATON ROAD, 4TH FLOOR, G.P.O BOX NO-855, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : D04B 9/40

(54) Invention Title: METHOD AND APPARATUS FOR EXECUTING THE CLOSING OF A KNITTED TUBULAR MANUFACTURE AT AN AXIAL END THEREOF, AT THE END OF ITS PRODUCTION CYCLE ON A CIRCULAR KNITTING MACHINE FOR HOSIERY OR THE LIKE

(57) Abstract

A method for executing the transfer of a knitted tubular manufacture (20), at the end of its production cycle, to a sewing or linking station (50), which comprises: - an initial step of production of the manufacture (20) up until the execution of the last course of knitting; - a step of translating the knitting loops, which were previously held in the head (12) of the corresponding needle, along the shank (11) of the needle (12), until they are brought below the corresponding latch (12a) in the “dropped” position; - positioning, coaxially to the needle cylinder (14), an annular pickup device (2) provided with pickup elements (4) which have an engagement portion (4a) which extends downward; - transferring, by means of pusher elements (30) associated with the pickup device (2), the knitting loops from the "dropped" position toward the respective engagement portion (4a) of the pickup elements (4); - a step of positioning the manufacture (20) held by the engagement portions (4a) and by the pushing and holding portions (30a) of the pickup device (2) at the sewing or linking station (50); - a step of individually transferring the knitting loops from the engagement portions (4a) to spikes (41) of an annular handling device (40); - a step of turning the manufacture (20) inside out; - a step of disengaging the pushing and holding portions (30a) from the respective sinker loops or linking loops; - a step of disengaging the engagement portions (4a) from the respective knitting loops.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date , **(21) Appl. No.** BD-P-2024-381 **(22) Filed:** 23/12/2024
(23) Priority Data: N/A
(71) Applicant: MD. HASHIBUL ISLAM, PRINCIPAL of SCIENTIFIC OFFICER, BANGLADESH OCEANOGRAPHIC RESEARCH INSTITUTE, COX'S BAZAR, Nationality -Bangladesh
(72) Inventors: (0) MD. HASHIBUL ISLAM, PRINCIPAL of SCIENTIFIC OFFICER, BANGLADESH OCEANOGRAPHIC RESEARCH INSTITUTE, COX'S BAZAR, Bangladesh Nationality -Bangladesh
(51) INT. CL. : C09H 5/00
(54) Invention Title: BoB glue
(57) Abstract

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-382
(22) Filed: 23/12/2024

(23) Priority Data:
India, Number :202323088412, Date : 23-12-2023.

(71) Applicant: AGASHE Mandar of 242, Chandrashekhar, Shaniwar Peth, Pune-411030, Maharashtra, Nationality - India

(72) Inventors:

(74) Agent : REMFRY & SON, PATENT & TRADE MARK ATTORNEYS, 56, NEW ESKATON ROAD, 4TH FLOOR, G.P.O BOX NO-855, DHAKA-1000, DHAKA, Bangladesh

(51) INT. CL. : G06Q 20/40

(54) Invention Title: A SYSTEM FOR SECURE TRANSACTION PROCESSING AND A METHOD THERE OF.

(57) Abstract

The present disclosure discloses a system (100) and method (200) for secure transaction processing. The system(100) comprises a server (102) implements a payment application (104) having a user interface (106) to allow users to register financial accounts for carrying out secure payment transactions and further having a merchant interface (108) to provide merchant details, a tokenization module (112) to tokenize said financial accounts by means of said set of tokenization rules; a scanning and extracting module (114) to scan a static hypepay QR code by means of an electronic device (116) and extract said registered merchant's details for secure payment transactions; a transaction module (116) to open said merchant interface (108) for processing transactions, and enter the transaction amount and generate a verification code/PIN for transaction; and a verification module (118) to verify the transaction for secure transaction with transaction ID by means of said set of verification rules.

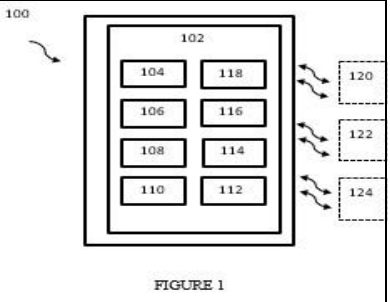


FIGURE 1

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-383
(22) Filed: 23/12/2024

(23) Priority Data:
Japan, Number :2023217893, Date : 25-12-2023.

(71) Applicant: SHIN-ETSU CHEMICAL CO., LTD. of 4-1, Marunouchi l-chome, Chiyoda-ku, Tokyo 1000005, Nationality -Japan

(72) Inventors: (1) Tetsuya Kume of c/o MMRC, Shin-Etsu Chemical Co., Ltd., 1-5, Kitago 2-chome, Echizen-shi, Fukui 9158515, Japan Nationality -Japan, (2) Hiroto Sugahara of c/o MMRC, Shin-Etsu Chemical Co., Ltd., 1-5, Kitago 2-chome, Echizen-shi, Fukui 9158515, Japan Nationality -Japan

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

(51) INT. CL. : F25C 1/02

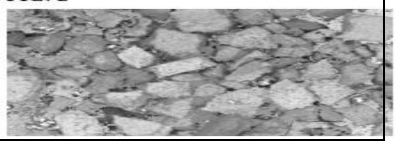
(54) Invention Title: METHOD FOR PRODUCING MAGNETIC REFRIGERATION MATERIAL

(57) Abstract

To provide a method for producing a magnetic refrigeration material, the method being capable of producing a magnetic refrigeration material that hardly undergoes deterioration in characteristics and has high corrosion resistance in a productive manner. The method for producing a magnetic refrigeration material of the present invention is characterized by including subjecting a powder of a magnetic refrigeration material containing a powder having a particle size of 150 μm or more and 500 μm or less to Cu electroplating in a plating liquid having a liquid temperature of 30°C or lower.

FIG. 1

FIG. 2



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-384
(22) Filed: 23/12/2024

(23) Priority Data:
China, Number :2023142872, Date : 28-12-2023.

(71) Applicant: NOVOZYMES A/S of Krogshoejvej 36 , Bagsvaerd DK-2880, Nationality -Denmark

(72) Inventors: (1) WANG, Chu of 14 Xinxi Road, Shangdi Zone, Haidian District, Beijing 100085, China Nationality -China, (2) XIAO, Hong of 14 Xinxi Road, Shangdi Zone, Haidian District, Beijing 100085, China Nationality -China, (3) DONG, Lipan of 14 Xinxi Road, Shangdi Zone, Haidian District, Beijing 100085, China Nationality -China

(74) Agent : MENTOR IP LAW FIRM, 501, Concord Tower, 113 Kazi Nazrul Islam Avenue, Dhaka-1000., Bangladesh

(51) INT. CL. : B32B 27/36

(54) Invention Title: A METHOD OF TREATING A TEXTILE COMPRISING A POLYESTER WITH LOW CRYSTALLINITY

(57) Abstract

The present invention relates to a method for treating a textile comprising a polyester with low crystallinity by contacting the textile with a cutinase, as well as a textile produced by such method.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-386
(22) Filed: 26/12/2024

(23) Priority Data:
Finland, Number :20245110, Date : 02-02-2024.

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

(72) Inventors: (0) Samuli Heikki TURTINEN of Salongintie 15, Ii, 91100, Finland Nationality -Finland, (1) Timo KOSKELA of Suojuoksuntie 2 B 7, Oulu, 90670, Finland Nationality -Finland, (2) Endrit DOSTI of Tietäjäntie 3 A24,, Espoo, 02130, Finland Nationality -Albania

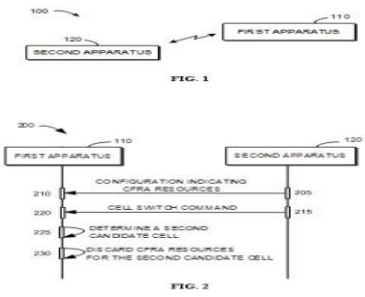
(74) Agent : REMFRY & SON, PATENT & TRADE MARK ATTORNEYS, 56, New Eskaton Road, 4th Floor, G.P.O BOX NO-855, Dhaka-1000, DHAKA, Bangladesh

(51) INT. CL. : H04W 36/00

(54) Invention Title: RESOURCE HANDLING IN CELL SWITCH

(57) Abstract

Example embodiments of the disclosure relate to methods, apparatuses, and a computer readable storage medium for handling contentionfree random access (CFRA) resources in a cell switch. In a method, a first apparatus, receives, from a second apparatus, a configuration indicating CFRA resources for at least one candidate cell. The first apparatus receives, from the second apparatus, a cell switch command towards a first candidate cell.In accordance with a determination that a first cell switch to the first candidate cell fails, the first apparatus determines a second candidate cell for a second cell switch. The second candidate cell being one of the at least one candidate cell. Then the first apparatus discards CFRA resources for the second candidate cell.



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-387
(22) Filed: 26/12/2024

(23) Priority Data:
United States of America, Number :24025637, Date : 23-02-2024.

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

(72) Inventors: (0) Samantha CAPORAL DEL BARRIO of Flintevej 16, Aalborg, 9000, Denmark Nationality -France, (1) Paolo BARACCA of Franziskanerstrasse 38, Munich, 81669, Germany Nationality -Italy, (2) Keeth Saliya Jayasinghe LADDU of Antreantie 22 C, Espoo, 02140, Finland Nationality -Sri Lanka, (3) Mihai ENESCU of Haukilahdenkatu 1A 164, Espoo, 02200, Finland Nationality -Romania

(74) Agent : REMFRY & SON, PATENT & TRADE MARK ATTORNEYS, 56, New Eskaton Road, 4th Floor, G.P.O BOX NO-855, Dhaka-1000, DHAKA, Bangladesh

(51) INT. CL. : H04B 7/06

(54) Invention Title: SELECTION OF DL-RSs FOR UE-INITIATED REPORTING

(57) Abstract

Inter-alia, an apparatus is disclosed, the apparatus comprising: means for receiving a channel state information, CSI, reporting configuration indicating a first set of downlink reference signals, DL-RSs, to monitor for CSI reporting, the first set of DL-RSs being configured as source RSs of a first set of transmission configuration indicator, TCI, states; means for monitoring the first set of DL-RSs; means for receiving a UE-initiated reporting configuration indicating a second set of DL-RSs to monitor for UE-initiated reporting, the second set of DL-RSs being configured as source RSs of a second set of TCI states, and having at least one element not belonging to the first set of DL-RSs; means for monitoring the second set of DL-RSs in addition to the first set of DL-RSs; and means for autonomously reporting information related to one or more preferred DL-RSs selected from the second set of monitored DL-RSs. Further apparatuses as well as corresponding methods, computer programs and computer-readable storage media are disclosed.

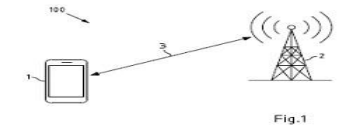


Fig.1

Fig.2

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-388
(22) Filed: 29/12/2024

(23) Priority Data:
Republic of Korea, Number :1020240003475, Date : 09-01-2024.

(71) Applicant: KOREA ZINC CO., LTD. of 33, Jong-ro, Jongno-gu, Seoul 03159, Nationality -Republic of Korea

(72) Inventors: (1) KANG, Sung Moon of 103-1010, 18 Seoyeongnam 1-gil, Ulju-gun, Ulsan 45003, Republic of Korea Nationality -Republic of Korea, (2) BYUN, Seong Jin of 404-401, 18 Nuwon-ro, Nowon-gu, Seoul 01601, Republic of Korea Nationality -Republic of Korea, (3) JEONG, Chan Ki of 202-213, 18 Choansan-ro 1-gil, Nowon-gu, Seoul 01882, Republic of Korea Nationality -Republic of Korea

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

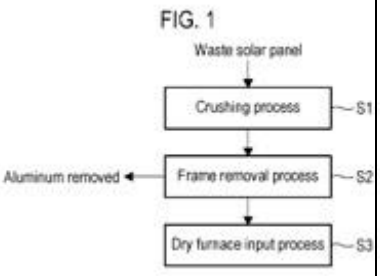
(51) INT. CL. : B09B 101/15

(54) Invention Title: METHOD FOR RECYCLING WASTE SOLAR PANEL

(57) Abstract

According to the one embodiment of the present invention, a method of recycling a waste solar panel including a glass substrate, solar cells, an adhesive layer provided between the glass substrate and the solar cells to bond the glass substrate and the solar cells, and a metal frame configured to fix a laminated structure of the glass substrate, the adhesive layer, and the solar cells, the method comprising: a crushing process of crushing the waste solar panel into a predetermined size or less; a frame removal process of sorting and removing the frame contained in the crushed material crushed by the crushing process; and a dry furnace input process of inputting a final crushed material from which the frame has been removed into a dry furnace of a smelting process.

FIG. 1



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্কস অধিদপ্তর
শিল্প মন্ত্রণালয়
৯১, মতিঝিল বা/এ, ঢাকা-১০০০
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 34 & Date: 6 July 2026

(11) Patent registration No and date ,
(21) Appl. No. BD-P-2024-389
(22) Filed: 29/12/2024

(23) Priority Data:
Republic of Korea, Number :1020240003540, Date : 09-01-2024.

(71) Applicant: KOREA ZINC CO., LTD. of 33, Jong-ro, Jongno-gu, Seoul 03159, Nationality -Republic of Korea

(72) Inventors: (1) KANG, Sung Moon of 103-1010, 18 Seoyeongnam 1-gil, Ulju-gun, Ulsan 45003, Republic of Korea Nationality -Republic of Korea, (2) BYUN, Seong Jin of 404-401, 18 Nuwon-ro, Nowon-gu, Seoul 01601, Republic of Korea Nationality -Republic of Korea, (3) JEONG, Chan Ki of 202-213, 18 Choansan-ro 1-gil, Nowon-gu, Seoul 01882, Republic of Korea Nationality -Republic of Korea

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

(51) INT. CL. : B09B 101/15

(54) Invention Title: METHOD FOR RECYCLING WASTE SOLAR PANEL

(57) Abstract
According to the one embodiment of the present invention, a method of recycling a waste solar panel including a glass substrate, solar cells, an adhesive layer provided between the glass substrate and the solar cells to bond the glass substrate and the solar cells, and a metal frame configured to fix a laminated structure of the glass substrate, the adhesive layer, and the solar cells, the method comprising: a first crushing process of crushing the waste solar panels to a predetermined size or less; a frame removal process of sorting and removing the frame contained in a first crushed material crushed by the first crushing process; a second crushing process of crushing the first crushed material from which the frame has been removed by the frame removal process to a predetermined size or less; a roasting process of removing the adhesive layer between the glass substrate and the solar cells by inputting a second crushed material crushed by the second crushing process into a roasting furnace and heating the second crushed material; a classification process of separating the second crushed material that has undergone the roasting process into the glass substrate and the solar cells, and removing the glass substrate; and a dry furnace input process of inputting a final crushed material from which the glass substrate has been removed into a dry furnace of a smelting pro

FIG. 1