ORGANISATION AFRICAINE DE LA PROPRIETE INTELLECTUELLE
OAPI

# Bulletin Officiel de la Propriété Industrielle (BOPI)

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## Brevets d'Invention

www.oapi.int

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# PREMIERE PARTIE : GENERALITES

**Extrait de la norme ST.3 de l'OMPI**

**Code normalisé à deux lettres, recommandé pour la représentation des pays ainsi que d'autres entités et des organisations internationales délivrant ou enregistrant des titres de propriété industrielle.**

| | |
|---|---|
| Afghanistan | **AF** |
| Afrique du Sud | **ZA** |
| Albanie | **AL** |
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| Ghana | **GH** |
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| Guinée-Bissau* | **GW** |
| Guinée Equatoriale* | **GQ** |
| Guyana | **GY** |

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| Chili | CL |
| Chine | CN |
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| Colombie | CO |
| Comores* | KM |
| Congo* | CG |
| Congo (Rép. Démocratique) | CD |
| Iran (République Islamique d') | IR |
| Iraq | IQ |
| Irlande | IE |
| Islande | IS |
| Israël | IL |
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| Kirghizistan | KG |
| Kiribati | KI |
| Koweït | KW |
| Laos | LA |
| Lesotho | LS |
| Lettonie | LV |
| Liban | LB |
| Libéria | LR |
| Libye | LY |
| Liechtenstein | LI |
| Lituanie | LT |
| Luxembourg | LU |
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| Macédoine | MK |
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| Mali* | ML |
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| Maroc | MA |
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| Îles Vierges (Britanniques) | VG |
| Inde | IN |
| Indonésie | ID |
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| Oman | OM |
| Ouganda | UG |
| Ouzbékistan | UZ |
| Pakistan | PK |
| Palaos | PW |
| Panama | PA |
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| Saint-Marin (Partie Néerlandaise) | SX |
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| Mongolie | MN |
| Monténégro | ME |
| Montserrat | MS |
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| Myanmar (Birmanie) | MM |
| Namibie | NA |
| Nauru | NR |
| Népal | NP |
| Nicaragua | NI |
| Niger* | NE |
| Nigéria | NG |
| Thaïlande | TH |
| Timor Oriental | TP |
| Togo* | TG |
| Tonga | TO |
| Trinité-et-Tobago | TT |
| Tunisie | TN |
| Turkménistan | TM |
| Turks et Caïques, Îles | TC |
| Turquie | TR |
| Tuvalu | TV |

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**ORGANISATIONS INTERNATIONALES DELIVRANT OU ENREGISTRANT DES TITRES DE PROPRIETE INDUSTRIELLE**

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| Bureau Benelux des marques et des dessins et modèles industriels | BX |
| Office Communautaire des variétés végétales (Communauté Européenne (OCVV) | QZ |
| Office de l'harmonisation dans le marché intérieur (Marque, dessins et modèles) | EM |
| Office des Brevets du conseil de Coopération des Etats du Golf (CCG) | GC |
| Office Européen des Brevets (OEB) | EP |
| Organisation Mondiale de la Propriété Intellectuelle (OMPI) | WO |
| Bureau International de l'OMPI | IB |
| Organisation Africaine de la Propriété Intellectuelle (OAPI) | OA |
| Organisation Eurasienne des Brevets (OEAB) | EA |
| Organisation Régionale Africaine de la Propriété Industrielle (ARIPO) | AP |

***Etats membres de l'OAPI**

## CODES UTILISES EN MATIERE DE DOCUMENTATION DES BREVETS D'INVENTION ET DES MODELES D'UTILITE

(11) Numéro de publication.
(12) Désignation du type de document.
(19) Identification de l'office qui publie le document.
(21) Numéro d'enregistrement ou de dépôt.
(22) Date de dépôt.
(24) Date de délivrance.
(30) Pays dans lequel (lesquels) la(les) demande(s) de priorité a (ont) été déposée(s).
Date(s) de dépôt de la (des) demande(s) de priorité.
(43) Date de publication de la demande.

**(le cas échéant)**

Numéro(s) attribué(s) à la (aux) demande(s) de priorité.
(51) Classification internationale des brevets (CIB).
(54) Titre de l'invention.
(57) Abrégé.
(60) Références à d'autres documents apparentés (le cas échéant).
(71) Nom(s) du ou des demandeur(s).
(72) Nom de l'inventeur (le cas échéant) suivi éventuellement du nom de la société d'appartenance.
(73) Nom(s) du ou des titulaire(s) le cas échéant.
(Ce code n'apparaît que sur la première page du brevet délivré)
(74) Nom du mandataire en territoire OAPI (le cas échéant).

## CODES UTILISES EN MATIERE D'INSCRIPTIONS DANS LE REGISTRE SPECIAL DES BREVETS D'INVENTION ET DES MODELES D'UTILITE

(1) Numéro de délivrance.
(2) Numéro de dépôt.
(3) Numéro et date de la demande d'inscription.
(4) Nature de l'inscription.
(5) Numéro et date de l'inscription.
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(11) Cessionnaire.
(12) Apporteur.
(13) Bénéficiaire.
(14) Dénomination avant.
(15) Dénomination après.
(16) Concédant.
(17) Titulaire.
(18) Ancienne adresse.
(19) Nouvelle adresse.
(20) Constituant du nantissement.
(21) Créancier nanti.

# CLARIFICATION DU REGLEMENT RELATIF A L'EXTENSION DES DROITS SUITE A UNE NOUVELLE ADHESION A L'ACCORD DE BANGUI

**RESOLUTION N°47/32**

**LE CONSEIL D'ADMINISTRATION**
**DE L'ORGANISATION AFRICAINE DE LAPROPRIETE INTELLECTUELLE**

Vu L'accord portant révision de l'accord de Bangui du 02 Mars
1977 instituant une Organisation Africaine de la Propriété
Intellectuelle et ses annexes ;

Vu Les dispositions des articles 18 et 19 dudit Accord relatives
Aux attributions et pouvoirs du Conseil d'Administration ;

**ADOPTE** la clarification du règlement du 04 décembre 1988 relatif à l'extension des droits suite à une nouvelle adhésion à l'Accord de Bangui ci-après :

**Article 1er** :

Le Règlement du 04 décembre 1988 relatif à l'extension des droits suite à une nouvelle adhésion à l'Accord de Bangui est réaménagé ainsi qu'il suit :

«**Article 5 (nouveau)** :

Les titulaires des titres en vigueur à l'Organisation avant la production des effets de l'adhésion d'un Etat à l'accord de Bangui ou ceux dont la demande a été déposée avant cette date et qui voudront étendre la protection dans ces Etats doivent formuler une demande d'extension à cet effet auprès de l'Organisation suivant les modalités fixées aux articles 6 à 18 ci-dessous.
Le renouvellement de la protection des titres qui n'ont pas fait l'objet d'extension avant l'échéance dudit renouvellement entraine une extension automatique des effets de la protection à l'ensemble du territoire OAPI».

Le reste sans changement.

**Article 2 :**

La présente clarification, qui entre en vigueur à compter du 1 er janvier 2008, s'applique aussi aux demandes d'extension en instance et sera publiée au Bulletin Officiel de l'Organisation.

Fait à Bangui le 17 décembre 2007

## Siège social

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Site web : www.oapi.int / Email : oapi@oapi.int

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Fax.: (226) 50 33 05 63
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B.P. 41 Moroni
Tél : (269) 33 10 703
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Fax: (235) 22 52 21 79/68 84 84 18
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*Sécuriser les investissements étrangers est notre affaire. Développer l'Afrique par la propriété intellectuelle est notre vision*

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B.P. 2339 Lomé Tel. :
(228) 22 22 10 08 Fax :
(228) 222 44 70
**(Ministère du Commerce, de l'Industrie, de la Promotion du secteur privé et du Tourisme)**

# DEUXIEME PARTIE :
# DELIVRANCE DES BREVETS D'INVENTION

**selon l'Accord de Bangui, Acte de 1999**

# A
# REPERTOIRE NUMERIQUE
# Du N° 22356 au N° 22375

(11) **22356**

Consulter le mémoire

(51) B63B 35/44 (2019.01)

(21) **1202400093 - PCT/RU2022/000226**

(22) 14/07/2022

(30) **RU n° 021122903 du 30/07/2021**

(54) **Method for preparing an integrated production complex on a gravity-based structure.**

(72) MIKHELSON, Leonid Viktorovich (RU); RETIVOV, Valeriy Nikolaevich (RU) et SOLOVYEV, Sergey Gennadyevich (RU)

(73) **PUBLICHNOE AKTSIONERNOE OBSHCHESTVO ‘‘NOVATEK’’**, ul Pobedy, 22a Purovskiy r-n, Tyumenskaya obi., Yamalo-Nenetskiy avtonomnyy okrug, g. Tarko-Sale, 629850, Russian Federation (RU)

(74) **AMINOU NDALA TITA – NAT AFRICA, SCI Express Résidence, 3ème étage Bloc A, 307 Quartier Intendance, Rue 5 Mvog Fouda Ada (en face de l’Etat-Major de l’Armée de Terre), YAOUNDE (CM).**

(57)
The invention pertains to construction of production facilities and can be used as a part of construction of production complexes intended for hydrocarbon processing, storage, and offloading of the processed products (including, but not limited to, natural gas liquefaction plants, ammonia plants, hydrogen plants, as well as power plants) on gravity-based structures (GBS). Topside modules are fabricated at a production site. A gravity-based structure (GBS), which can stay afloat during transportation by water, is used as a foundation for the modules installation. Modules fabrication includes the following stages: At Stage I, components are fabricated; at Stage II, nodes are fabricated from the components; at Stage III, sub-assemblies are fabricated from the nodes; at Stage IV, assemblies are shotblasted and painted; and at Stage V, modules are assembled from the assemblies. Then modules transportation, movement to their seats on the GBS and their integration include the following Stages. At Stage VI, the modules are moved to an area near the dock with the help of self-propelled vehicles. At Stage VII, each module is moved onto guides of a lifting system installed in a dry dock. At Stage VIII, each module is lifted until lilting system guides are connected with guides of the GBS top slab. At Stage IX, each module is moved to its seat on the GBS, installed on theGBS and integrated with other modules and the GBS. The invention allows establishing a GBS production complex which can withstand ice impact in ice conditions, fully fabricate the production complex at a specialized production site with dry dock(s), provides better maneuverability during movement of individual topside modules at the fabrication yard and eliminate the need for special bridge structures to move topside modules on the GBS.

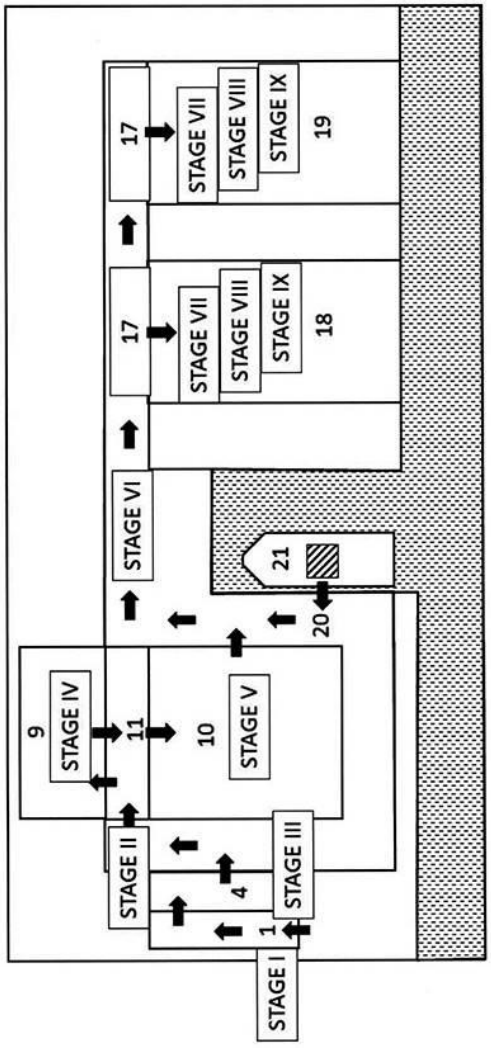



FIG. 1

Fig. 1

(11) **22357**

Consulter le mémoire

(51) A01N 25/04 (2023.01);
A01N 25/30 (2023.01);
A01N 63/30 (2023.01) ;
A01P 7/04 (2023.01)

(21) **1202500285 - PCT/IB2024/053011**

(22) 28/03/2024

(30) **EP n° 23305428.7 du 28/03/2023**

(54) **A stable non-aqueous biopesticide.**

(72) LECOLLINET Gregory (FR);
BESSE Samantha (FR) et
BURTON Robert (GB)

(73) **1-UPL Mauritius Limited**, 6th Floor, Suite 157B, Harbor Front Building, President John Kennedy Street, PORT LOUIS (MU) et

**2-UPL Europe Supply Chain GmbH**, Suurstoffi 37, 6343 ROTKREUZ /RISCH (CH)

(74) **Cabinet ÉKÉMÉ LYSAGHT SARL, B.P. 6370, YAOUNDE (CM).**

(57)
The present invention relates to a biopesticide formulation of an entomopathogenic fungus or spores thereof. The present invention particularly discloses an oil dispersion comprising an entomopathogenic fungus or spores thereof, in particular Beauveria bassiana. The present invention also relates to the methods of preparation of the said formulation and uses thereof.

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(11) **22358**

Consulter le mémoire

(51) A61K 31/65 (2023.01);
A61K 31/7048 (2023.01);
A61K 33/30 (2023.01);
A61K 39/395 (2023.01);
A61K 9/00 (2023.01);
A61K 9/70 (2023.01);
A61P 31/14 (2023.01);
C07K 16/18 (2023.01) ;
C07K 16/22 (2023.01)

(21) **1202500292 - PCT/AU2024/050228**

(22) 15/03/2024

(30) **US n° 63/452,399 du 15/03/2023**

(54) **Products of manufacture and therapeutic compositions for treating, ameliorating or preventing viral infections and methods for making and using them.**

(72) BORODY, Thomas Julius (AU)

(73) **Topelia Aust Limited**, Level 1,229 Great North Road, FIVE DOCK, New South Wales 2046 (AU)

(74) **Cabinet ÉKÉMÉ LYSAGHT SARL, B.P. 6370, YAOUNDE (CM).**

(57)
In alternative embodiments, provided are pharmaceutical compositions and therapeutic combinations of drugs, including products of manufacture and kits, for treating, preventing or ameliorating (for example, decreasing the symptoms of, or decreasing the mortality of) a viral infection, for example, a coronavirus infection such as a COVID-19 or variant thereof, and methods for making and using same. In alternative embodiments, provided are products of manufacture and kits for delivering pharmaceutical compositions and therapeutic combinations of drugs as provided herein, for example provided are transdermal delivery devices such as patches that can have multiple compartments for delivering transdermally different drugs at the same time.

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(11) **22359**

Consulter le mémoire

(51) B42D 25/30 (2023.01)

(21) **1202500365 - PCT/CN2024/095658**

(22) 28/05/2024

(30) **CN n° 202311220343.4 du 20/09/2023**

(54) **Anti-counterfeiting element and article having anti-counterfeiting element.**

(72) YANG, Dong, (CN)
(73)
**1-ZHONGCHAO SPECIAL SECURITY TECHNOLOGY CO., LTD**, No. 6 Xinghuo Road, Science City, Fengtai District, Beijing 100070, BEIJING (CN) et

**2-CHINA BANKNOTE PRINTING AND MINTING CORP.**, Jia 143, Xizhimenwai Street, Xicheng District, Beijing 100044, BEIJING (CN)

(74) **FORCHAK IP & LEGAL ADVISORY, ''LAW FIRM HOUSE'', No.11488 Manga Williams Avenue, Down Beach, B.P. 370, LIMBE (CM).**

(57)
Disclosed are an anti-counterfeiting element and an article having an anti-counterfeiting element. The anti-counterfeiting element comprises: a base material (4), wherein a feature region (5) is provided on a surface of the base material, and the feature region comprises a plurality of curved surface structures (6); and the curved surface structures have a first direction (1) and a second direction (2), which are parallel to the surface of the base material, the curved surface structures are arranged in a bent manner in the first direction, and the bending degree of each curved surface structure in the second direction is less than the bending degree of the curved surface structure in the first direction. By means of providing the plurality of curved surface structures in the feature region and arranging each curved surface structure in a bent manner in the first direction, under incident light in a predetermined direction, emergent light from the curved surface structures can be emitted within a fan-shaped direction range, and the angle distribution of the emergent light is uniform, thus achieving a dynamic effect with a higher resolution, and also achieving a finer and more stable appearance pattern and widening the range of viewing angles.

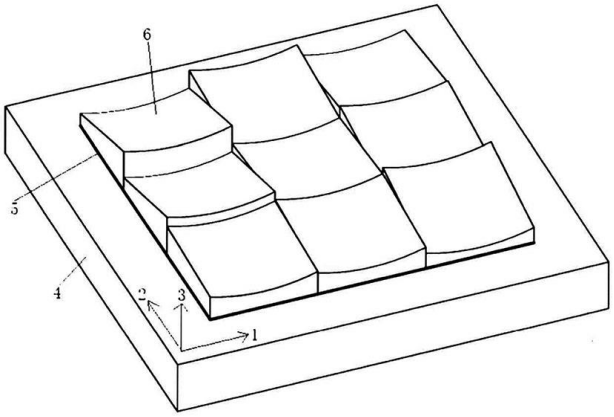



Fig. 1

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(11) **22360**

Consulter le mémoire

(51) C07C 1/04 (2023.01);
C07C 41/01 (2023.01);
C07C 43/04 (2023.01);
C07C 9/08 (2023.01) ;
C07C 9/10 (2023.01)

(21) **1202600030 - PCT/US2024/038339**

(22) 17/07/2024

(30) **US n° 18/224,397 du 20/07/2023**

(54) **Activation of catalyst systems for the production of Liquefied Petroleum Gas (LPG) hydrocarbons from synthesis gas.**

(72) Patrick LITTLEWOOD (GB);
Terry MARKER (US) et
Michael BRADFORD (US)

(73) **GTI Energy**, 1700 South Mount Prospect Road, DES PLAINES, Illinois 60018 (US)

(74) **Cabinet ÉKÉMÉ LYSAGHT SARL, B.P. 6370, YAOUNDE (CM).**

(57)
Processes are disclosed for the production of liquefied petroleum gas (LPG) hydrocarbons, utilizing both alcohol (e.g., methanol) synthesis and in situ dehydration of the alcohol to

hydrocarbons, and particularly propane and/or butane. Operational adjustments and/or variations, involving activation of LPG synthesis catalyst Systems at relatively high temperatures, followed by initial operation at relatively low temperatures, surprisingly lead to improvements in the stability of such catalyst Systems. These improvements are often in conjunction with other benefits, for example greater selectivity and/or per-pass yield, with such improvements and benefits resulting from the ability to operate at reduced temperatures. Problems typically encountered in the art due to catalyst instability, such as the need for frequent replacement and/or regeneration, are thereby potentially reduced or even eliminated.

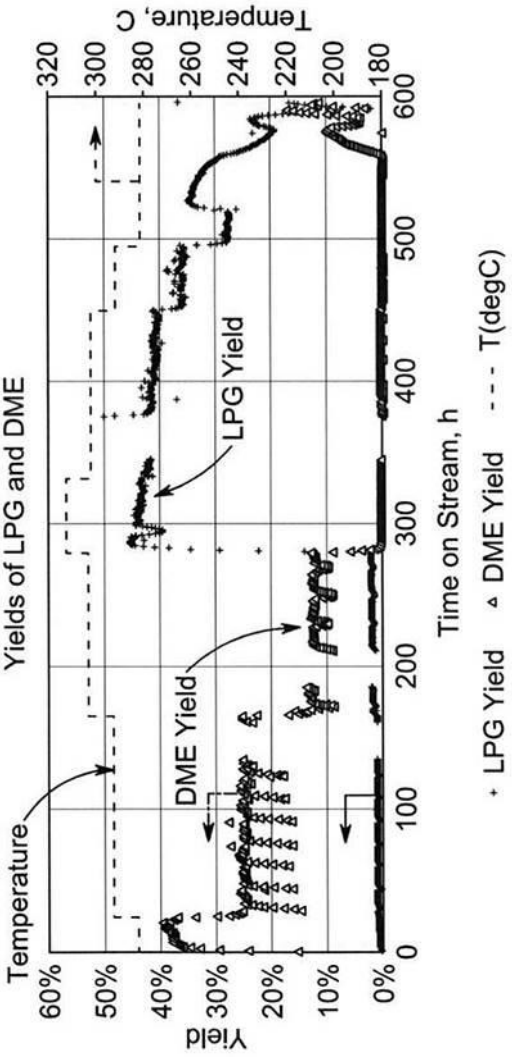



Fig. 1

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(11) **22361**

Consulter le mémoire

(51) A01H 1/04 (2023.01);
A01H 5/00 (2023.01);
A01H 6/46 (2023.01);
C12N 15/11 (2023.01);
C12Q 1/6895 (2023.01)

(21) **1202600085 - PCT/CN2023/125356**

(22) 19/10/2023

(30) **CN n° 202311093966.x du 28/08/2023**

(54) **Maize transgenic event QY2569-42 and method for detecting same.**

(72) CHEN, Bo (CN);
LI, Huarong (CN);
DING, Dehui (CN);
WU, Yongchun (CN) et
LIAN, Lei (CN)

(73) **QINGDAO KINGAGROOT SEED SCIENCE CO., LTD**, No. 53, Qinglonghe Road, Huangdao District, QINGDAO, Shandong 266000 (CN)

(74) **Barrister ALEMBONG OSWALD AMIN, S/C VON SEIDELS CAMEROON SARL, Dépôt de Bois Damas, B.P. 30188, YAOUNDE (CM).**

(57)

The present invention relates to a transgenic corn event, QY2569-42, and further relates to a nucleic acid sequence for detecting a corn plant QY2569-42 and a detection method thereof. The nucleic

acid sequence of the corn plant comprises SEQ ID N0:1, SEQ ID N0:2, SEQ ID N0:3, SEQ ID NO:4, SEQ ID N0:5, SEQ ID NO:6, SEQ ID N0:7, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:11 and/or SEQ ID NO:12, or a nucleic acid sequence complementary thereto. The corn plant QY2569-42 of the present invention has good resistance against lepidopteran insects and good tolerance to glufosinate herbicide without impacts on yield. In addition, the detection method can accurately and rapidly identify whether a biological sample comprises DNA molecules of transgenic corn event QY2569-42.

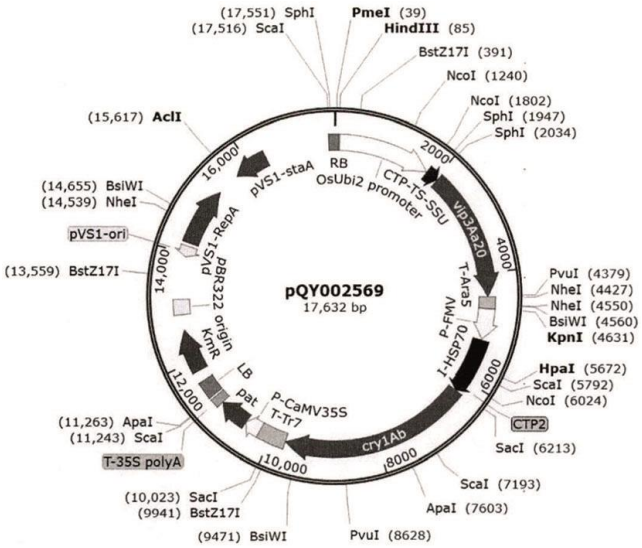



**Fig. 1**

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(11) **22362**

Consulter le mémoire

(51) B41M 3/14 (2023.01);
C09D 11/03 (2023.01);
C09D 11/037 (2023.01);
C09D 11/101 (2023.01);
C09D 11/322 (2023.01);
C09D 11/38 (2023.01)

(21) **1202600095 - PCT/EP2024/074411**

(22) 02/09/2024

(30) **EP n° 23195678.0 du 06/09/2023**

(54) **UV-VIS curable security inks comprising tags and security features obtained thereof.**

(72) PASQUIER, Cécile (CH);
ESPINOSA, David (CH);
MOLINA, Aldric (CH);
MARTINI, Thibaut (FR);
YADEL, Cindy (FR) et
ROD, Coraline (CH)

(73) **SICPA HOLDING SA**, Avenue de Florissant 41,1008 PRILLY (CH)

(74) **NICO HALLE & CO. LAW FIRM, 1st Floor SHALOM Building, Ancienne Route - Bonassama, Bonabéri, P.O. Box 4876, DOUALA (CM).**

(57)

The present invention relates to the technical field of security features comprising taggants by means of Surface-Enhanced Raman Spectroscopy (SERS) and their detection. Furthermore, the present invention relates to the field of UV-Vis curable security inks comprising SERS tags for printing security features on substrates, in particular on security documents or articles, wherein said inks comprise one or more surface enhanced Raman spectroscopy (SERS) tags, one or more radiation curable compounds, and one or more photoinitiators and wherein said inks lack a vinyl ether containing compound.

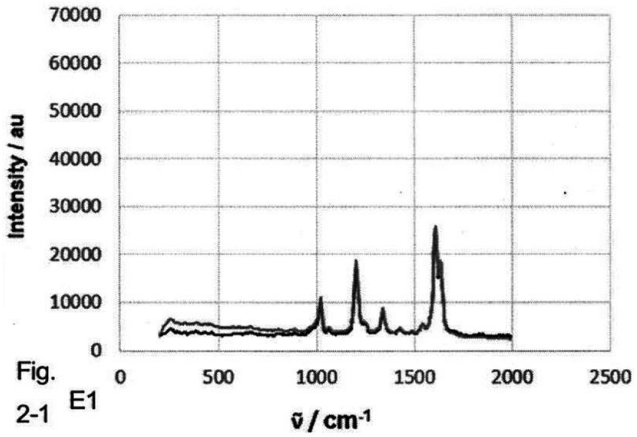



**Fig. 2-1**

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(11) **22363**

Consulter le mémoire

(51) B41M 3/14 (2023.01);
C09D 11/03 (2023.01);
C09D 11/101 (2023.01);
C09D 11/322 (2023.01) ;
C09D 11/38 (2023.01)

(21) **1202600096 - PCT/EP2024/074412**

(22) 02/09/2024

(30) **EP n° 23195677.2 du 06/09/2023**

(54) **UV-VIS curable security inks comprising tags and security features obtained thereof.**

(72) MOLINA, Aldric (CH);
ESPINOSA, David (CH);
MARTINI, Thibaut (FR) et
RUGGERONE Riccardo (IT)

(73) **SICPA HOLDING SA**, Avenue de Florissant 41,1008 PRILLY (CH)

(74) **NICO HALLE & CO. LAW FIRM, 1st Floor SHALOM Building, Ancienne Route - Bonassama, Bonabéri, P.O. Box 4876, DOUALA (CM).**

(57)

The present invention relates to the technical field of security features comprising taggants by means of Surface-Enhanced Raman Spectroscopy (SERS) and their detection. Furthermore, the present invention relates to the field of UV-Vis curable security inks comprising SERS tags for printing security features on substrates, in particular on security documents or articles, wherein said inks comprise i) one or more surface enhanced Raman spectroscopy (SERS) tags, ii) one or more vinyl ether containing compounds, iii) one or more cationically radiation curable compounds different from the one or more vinyl ether containing compounds of ii) and iv) one or more cationic photoinitiators being a salt of hexafluorophosphate.

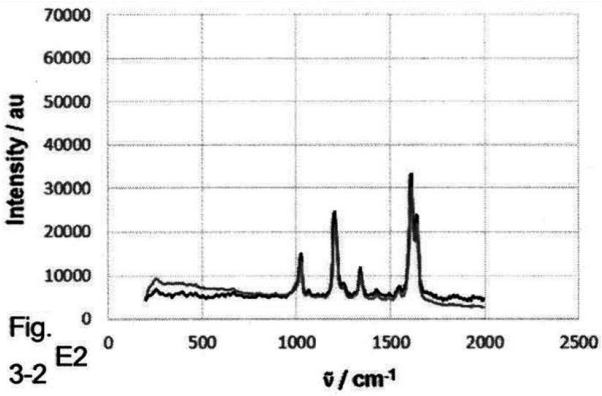



**Fig. 3-2**

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(11) **22364**

Consulter le mémoire

(51) C21B 13/00 (2023.01);
C21B 13/14 (2023.01);
C22B 1/243 (2023.01);
C22B 5/10 (2023.01) ;
C22B 7/04 (2023.01)

(21) **1202600097 - PCT/IB2024/054628**

(22) 13/05/2024

(30) **ZA n° 2024/0169 du 28/02/2024**

(54) **Process for the carbothermic smelting of a metalliferous feedstock material using a hot oxidising gas.**

(72) BOUWER, Petrus, Hendrik, Ferreira (ZA)

(73) **AFRICAN RAINBOW MINERALS LIMITED**, 24 Impala Road, Chislehurston, 2196 SANDTON (ZA)

(74) **NICO HALLE & CO. LAW FIRM, 1st Floor SHALOM Building, Ancienne Route - Bonassama, Bonabéri, P.O. Box 4876, DOUALA (CM).**

(57)

The invention relates to a process for the smelting of a metalliferous feedstock material. More particularly, the invention relates to a process for the smelting of composite agglomerates including metalliferous feedstock material, reductant and fluxes, using hot oxidising gas. According to a first aspect of the present invention, there is provided a process for the carbothennic smelting of a metalliferous feedstock material using oxidising gas including the steps of:
(i) feeding composite agglomerates into a reactor to create a packed bed within a reactor, wherein the agglomerates comprise metalliferous feedstock material, reductant and fluxes;
(ii) heating and smelting the agglomerates with hot oxidising gas, wherein the hot oxidising gas enters the reactor and is passed through the packed bed to form molten material comprising an intermediate slag constituent and a partially reduced metalliferous constituent;
(iii) channelling the molten material into an electrical slag cleaning furnace;
(iv) adding additional reductant to the molten material in the electrical slag cleaning furnace to form a liquid metal product, a liquid slag product, and a CO-containing gas; and
(v) combusting the CO-containing gas with pre-heated air to form the hot oxidising gas which is oxygen enriched before entering the reactor in step (ii), wherein the temperature of the hot oxidising gas entering the reactor is controlled to be above 1400°C, and wherein the oxygen content of the hot oxidising gas is controlled to be between 0% - 20%.

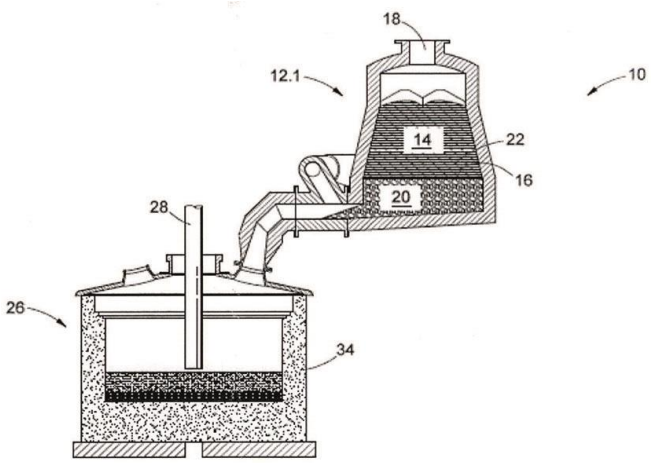



**Fig. 2**

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(11) **22365**

Consulter le mémoire

(51) C09K 3/22 (2023.01);
C12N 11/12 (2023.01)

(21) **1202600099 - PCT/EP2024/075019**

(22) 06/09/2024

(30) **EP n° 23196185.5 du 08/09/2023**

(54) **Dust suppressant solid formulation.**

(72) TOUSSAINT, Claudia (CA);
NEUFELD, Simon (CA) et
SAFINA, Gulnaz (CA)

(73) **EARTH ALIVE CLEAN TECHNOLOGIES INC.**, 1050 Côte du Beaver Hall, Suite 1560, Montréal, QUÉBEC H2Z 1S4 (CA)

(74) **S.C.P AKKUM, AKKUM & Associates, No. 1777, rue 6.261, Yaoundé 2, Auditorium Jean Paul II boulevard, Face Brigade de Gendarmerie, Mbankolo, B.P. 4966, YAOUNDE (CM).**

(57)
Dust suppressant solid formulation to be diluted in an aqueous phase, comprising from 95 to 99.9 weight% of a non-microbial fraction and from 0.1

to 5 weight% of microbial fraction comprising at least a series of biofilm forming bacteria species chosen in the group comprising Bacillus amyloliquefaciens, Bacillus licheniformis, Bacillus megaterium, Bacillus pumilis, Bacillus subtilis, Bacillus subtilis subspecies lnaquosorum, Bacillus subtilis subspecies subtilis, Bacillus velezensis with respect to the total weight of the dust suppressant solid formulation.

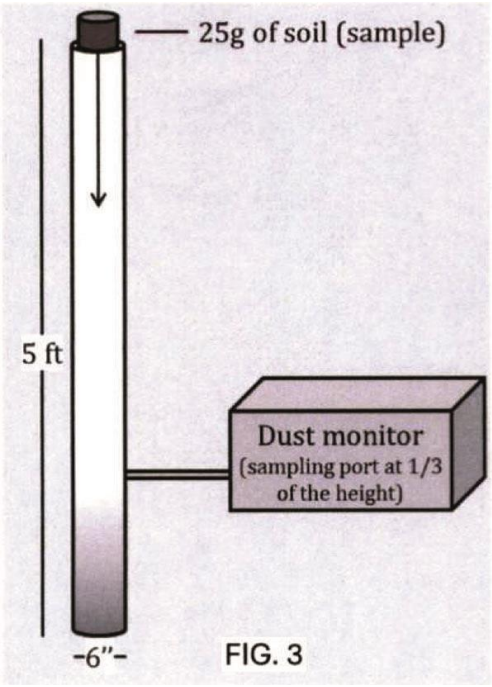


FIG. 3

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(11) **22366**

Consulter le mémoire

(51) B61L 15/00 (2023.01);
B61L 27/70 (2023.01);
G08C 17/02 (2023.01)

(21) **1202600105 - PCT/CN2024/117995**

(22) 10/09/2024

(30) **CN n° 202311662409.5 du 05/12/2023**

(54) **Backup system, and train control system and application method thereof.**

(72) GUO, Liang (CN);
JIA, Hong (CN);
CHEN, Yaohua (CN);
LI, Weijuan (CN) et
HU, Jinghai (CN)

(73) **CASCO SIGNAL LTD.**, Room 1101, Lane 1401, No. 21, Jiangchang Rd., Jing'an District, SHANGHAI (CN)

(74) **SCP Cabinet NGO MINYOGOG & Associés, Avenue MVOG FOUDA, Derrière "Immeuble Ancien FONADER", Elig Essono, B.P. 20501, YAOUNDE (CM).**

(57)

Disclosed are a backup system, a train control system, and an application method thereof. The backup system includes: a trackside electronic unit, communicating with a train control center and interlocking integrated system (TIS) or a station computer interlocking device to acquire a signal status and switch position information; active balises, connected to the trackside electronic unit and onboard equipment, respectively, where the trackside electronic unit determines movement authority information and line data information sent according to the acquired signal status and switch position information; when a train passes positions where the active balises are located, the active balises send the acquired movement authority information and line data information to the onboard equipment; and when the onboard equipment in the train control system switches to an enhanced backup mode, a speed-distance control curve is calculated according to the movement authority information and the line data information acquired by the active balises, so as to monitor and protect train operation. The present disclosure is capable of allowing the train to enter a station at a higher speed when a train-ground wireless communication is interrupted and the train control system degrades to the backup mode.

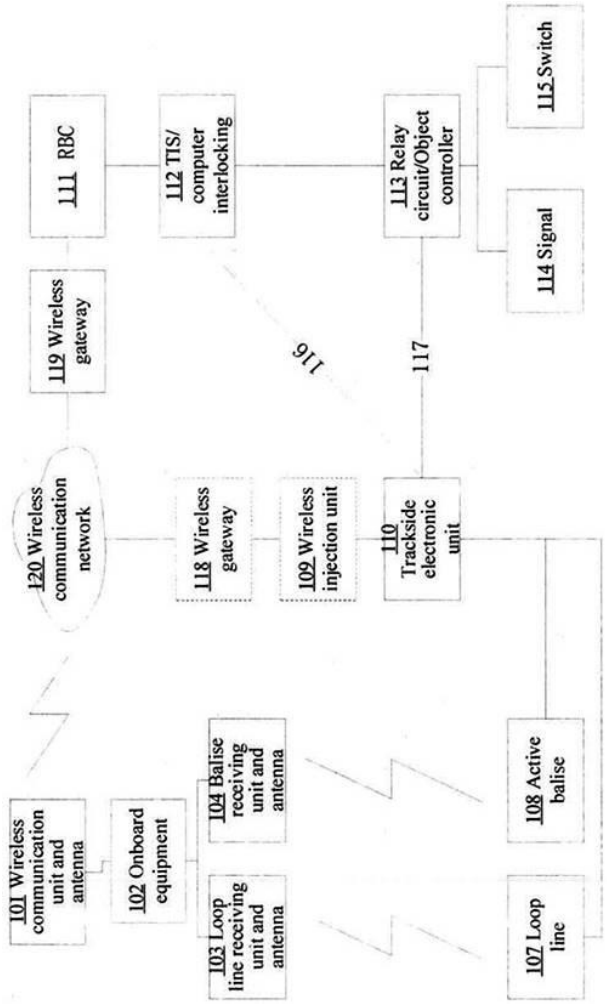



Fig. 1

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(11) **22367**

Consulter le mémoire

(51) A61K 31/7125 (2023.01);
A61P 25/00 (2023.01);
A61P 3/10 (2023.01);
A61P 35/00 (2023.01);
A61P 37/00 (2023.01);
A61P 9/00 (2023.01);
A61P 9/10 (2023.01);
C12N 15/113 (2023.01)

(21) 1202600111

(22) 18/10/2024

(30) **AU n° 2023903354 du 20/10/2023**

(54) **Antisense oligonucleotides targeting rage.**

(72) WRAIGHT, Christopher John (AU) et THOMAS, Merlin Christopher (AU)

(73) **RAGE BIOTECH PTY LTD**, 655 Elizabeth Street, MELBOURNE, Victoria 3000 (AU)

(74) **S.C.P AKKUM, AKKUM & Associates, No. 1777, rue 6.261, Yaoundé 2, Auditorium Jean Paul II boulevard, Face Brigade de Gendarmerie, Mbankolo, B.P. 4966, YAOUNDE (CM).**

(57)

The present invention relates to potent splice-switching antisense oligonucleotides that modulate alternative splicing of pre-mRNA coding for the Receptor for Advanced Glycation End-products (RAGE) or part thereof, and methods of treatment of RAGE-related disorders using said antisense oligonucleotides. In one aspect, the present invention provides an antisense oligonucleotide (AON) consisting of the nucleotide sequence TGCCGCCTTTGCCACAAG (5'-3'; SEQ ID NO: 1); or GCCGCCTTTGCCACAAGA (5'-3'; SEQ ID NO: 2), preferably wherein the antisense oligonucleotide comprises at least one modified nucleotide.

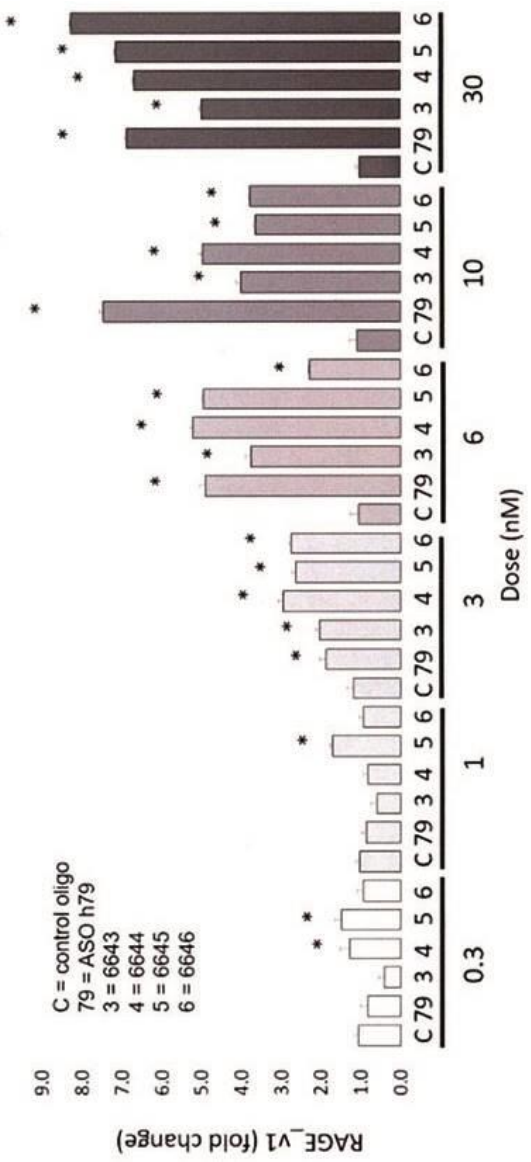



**Fig. 1**

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(11) **22368**

Consulter le mémoire

(51) A61C 13/00 (2023.01);
A61C 9/00 (2023.01) ;
A61K 6/70 (2023.01)

(21) **1202600147 - PCT/US2024/049942**

(22) 04/10/2024

(30) **US n° 18/480,944 du 04/10/2023**

(54) **Dental impression tray with bite registration and method of making dentures from the same.**

(72) DAVIS, William P. (US)

(73) **MEHARRY MEDICAL COLLEGE**, Hulda Lyttle Hall, 3rd Floor, Suite 314, 1005 Dr. D.B. Todd, Jr., Blvd., NASHVILLE, Tennessee 37208 (US)

(74) **S.C.P AKKUM, AKKUM & Associates, No. 1777, rue 6.261, Yaoundé 2, Auditorium Jean Paul II boulevard, Face Brigade de Gendarmerie, Mbankolo, B.P. 4966, YAOUNDE (CM).**

(57)

An impression system (100) is disclosed for enabling the creation of dentures in one-visit. The impression system (100) may include an upper impression tray (110), an upper wax bite registration (120) coupled to the upper impression tray (110), a lower impression tray(130), a lower wax bite registration (140) coupled to the lower impression tray (130), and one or more arc-shaped wax plates (150) configured to be coupled to at least one of the upper or lower wax bite registrations (120, 140). Each of the upper and lower impression trays (110, 130) may include a convex outer surface (112, 132) and a concave inner surface (114, 134) with the associated wax bite registration (120, 140) coupled to the convex outer surface (112, 132). The one or more arc-shaped wax plates (150) may be configured to adjust a distance between the concave inner surfaces (114, 134) of the upper and lower impression trays (110, 130), generally associated with an occlusal vertical dimension of the patient.

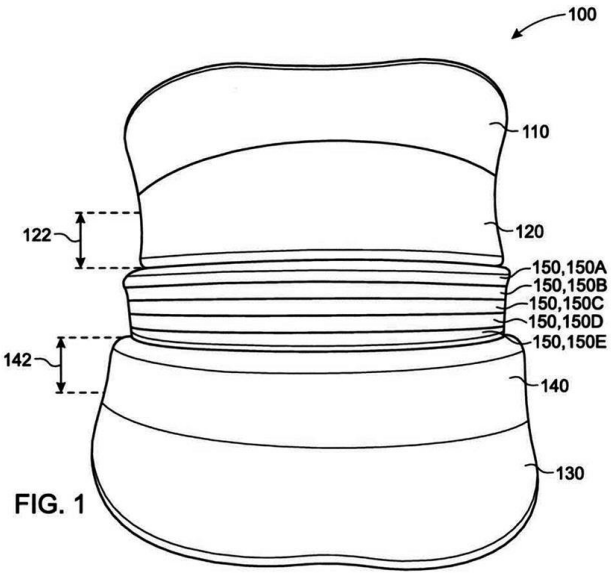


FIG. 1

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(11) **22369**

Consulter le mémoire

(51) B63C 11/20 (2023.01)

(21) **1202600189 - PCT/NL2024/050611**

(22) 05/11/2024

(30) **NL n° 2036202 du 07/11/2023**

(54) **Diving device, actuatable gas storage unit and kit of parts.**

(72) SCHMIDT, Sander (NL) et
SOPAR, Petrus Wilhelmus (NL)

(73) **IWP IP N.V.**, Veeris B2, WILLEMSTAD, Curaçao (CW)

(74) **Cabinet ISIS CONSEILS (SCP), Bastos, Rue 1.862, face de l'Agence Turque de Coopération et de Coordination, B.P. 15067, YAOUNDE (CM).**

(57)

The present invention is related to a diving device, comprising at least one actuatable gas storage unit, wherein at least a volume of the actuatable gas storage unit is adjustable by the user, at least one gas supply line, for supplying of gas into the adjustable volume, at least one gas discharge line, for allowing the user to inhale gas from the adjustable volume, at least one gas storage unit actuating element actuatable by the user, in particular manually actuatable, wherein the at least one gas storage unit actuating element is configured to adjust the volume of the actuatable gas storage unit, in particular to increase and/or decrease, at least one wearable unit, wearable on a body part of the user, wherein the at least one actuatable gas storage unit is, directly or indirectly, connected or connectable to the at least one wearable unit. The invention is further related to an actuatable gas storage unit for use in a diving device and a kit of parts.

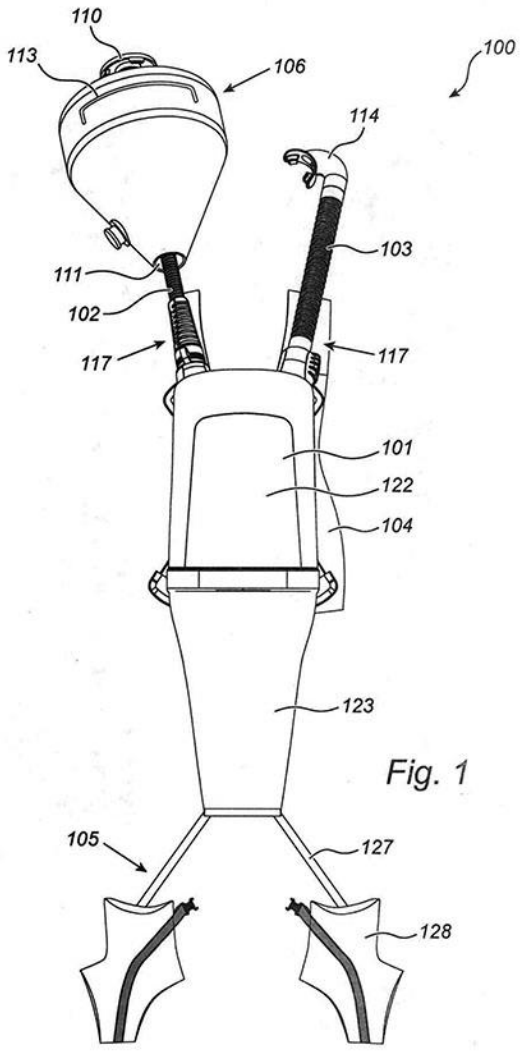


Fig. 1

(11) **22370**

Consulter le mémoire

(51) B03D 1/02 (2023.01);
C12P 21/02 (2023.01);
C22B 3/18 (2023.01)

(21) **1202600103 - PCT/BR2024/050416**
(22) 12/09/2024
(30) **BR n° 1020230185444 du 13/09/2023**

(54) **Polypeptide, composition and process for separating silica from a medium.**

(72) SILVAS, Flávia Paulucci Cianga (BR);
LIMA, Evandro Antonio de (BR);
ANDRADE, Maxuel de Oliveira (BR);
RODRIGUES, Priscila Thihara (BR);
MERMA, Antonio Gutierrez (BR) et
MURAKAMI, Mario Tyago (BR)

(73) **1-VALE S.A.**, Praia de Botafogo, n° 186, Salas 901, 1101, 1601 (parte), 1701 e 1801, BOTAFOGO 22250-145, RIO DE JANEIRO, RJ (BR);

**2-CENTRO NACIONAL DE PESQUISA EM ENERGIA E MATERIAIS**, Rua Giuseppe Máximo Scolfaro, n° 10.000, Polo II de Alta Tecnologia 13083-100 CAMPINAS - SP, SAO PAULO (BR) et

**3-ASSOCIAÇÃO INSTITUTO TECNOLÓGICO VALE - ITV**, Praia de Botafogo, n° 186, sala 1801, BOTAFOGO 22250-145, RIO DE JANEIRO, RJ (BR)

(74) **S.C.P AKKUM, AKKUM & Associates, No. 1777, rue 6.261, Yaoundé 2, Auditorium Jean Paul II boulevard, Face Brigade de Gendarmerie, Mbankolo, B.P. 4966, YAOUNDE (CM).**

(57)

The present invention relates to the field of ore processing and flotation. More specifically, the present invention relates to the production of recombinant polypeptides, a composition comprising a silica-binding polypeptide and to a process for separating silica in a medium, where the process is preferably quartz flotation in iron ore.

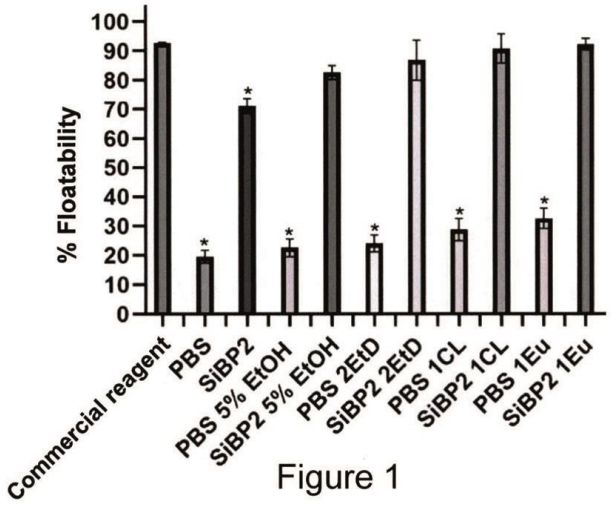


Figure 1

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(11) **22371**

Consulter le mémoire

(51) B65D 33/00 (2023.01);
B65F 1/00 (2023.01) ;
B65F 1/06 (2023.01)

(21) **1202600003 - PCT/EP2024/056512**
(22) 12/03/2024
(30) **EP n° 23184832.6 du 11/07/2023**

(54) **Refuse bag roll, refuse disposal system, method for refuse disposal, and method for making available a refuse bag roll.**

(72) TROJAN, Marcus (DE)

(73) **MARCUS TROJAN GMBH**, Rochstrasse 1, 10178 BERLIN (DE)

(74) **Barrister ALEMBONG OSWALD AMIN, S/C VON SEIDELS CAMEROON SARL, Dépôt de Bois Damas, B.P. 30188, YAOUNDE (CM).**

(57)

A refuse bag roll comprises a plurality of refuse bags ($10^{IV}$), which have at least two refuse bag areas ($16^{IV}$-1, $16^{IV}$-2, $16^{IV}$-3 and $16^{IV}$-4) which may be filled from a common side ("filling opening") and which are each separable from the refuse bag non-destructively, so that the refuse bag areas ($16^{IV}$-1, $16^{IV}$-2, $16^{IV}$-3 and $16^{IV}$-4) each form separate refuse bags after separation from the refuse bag.

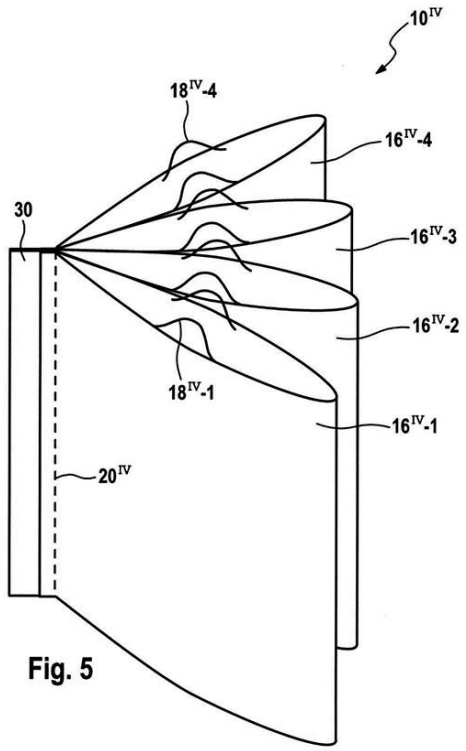



Fig. 5

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(11) **22372**

Consulter le mémoire

(51) H04W 36/00 (2023.01)

(21) **1202500215 - PCT/SE2024/050033**

(22) 16/01/2024

(30) **US n° 63/439,231 du 16/01/2023**

(54) **Fallback for time alignment during mobility.**

(72) TIDESTAV, Claes (SE);
BERGQVIST, Jens (SE);
DA SILVA, Icaro Leonardo (BR) et
ORSINO, Antonino (IT)

(73) **TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)**, 164 83 STOCKHOLM (SE)

(74) **Barrister ALEMBONG OSWALD AMIN, S/C VON SEIDELS CAMEROON SARL, Dépôt de Bois Damas, B.P. 30188, YAOUNDE (CM).**

(57)

A method is performed by a wireless device for layer one (L1)/layer two (L2) triggered mobility (LTM). The method comprises: obtaining an uplink configuration for an LTM candidate cell; receiving a first indication from a serving cell to perform an uplink transmission in the candidate cell; transmitting a first uplink transmission in the candidate cell with a first transmit power and on a first uplink time/frequency resource; receiving a second indication from the serving cell to perform an uplink transmission in the candidate cell; transmitting a second uplink transmission in the candidate cell. wherein the second uplink transmission is transmitted with one or more of a second transmit power different from the first transmit power and a second uplink time/frcquency resource different from the first time/frequency resource; and receiving, from the serving cell, a timing advance value for the candidate cell based on the second uplink transmission.

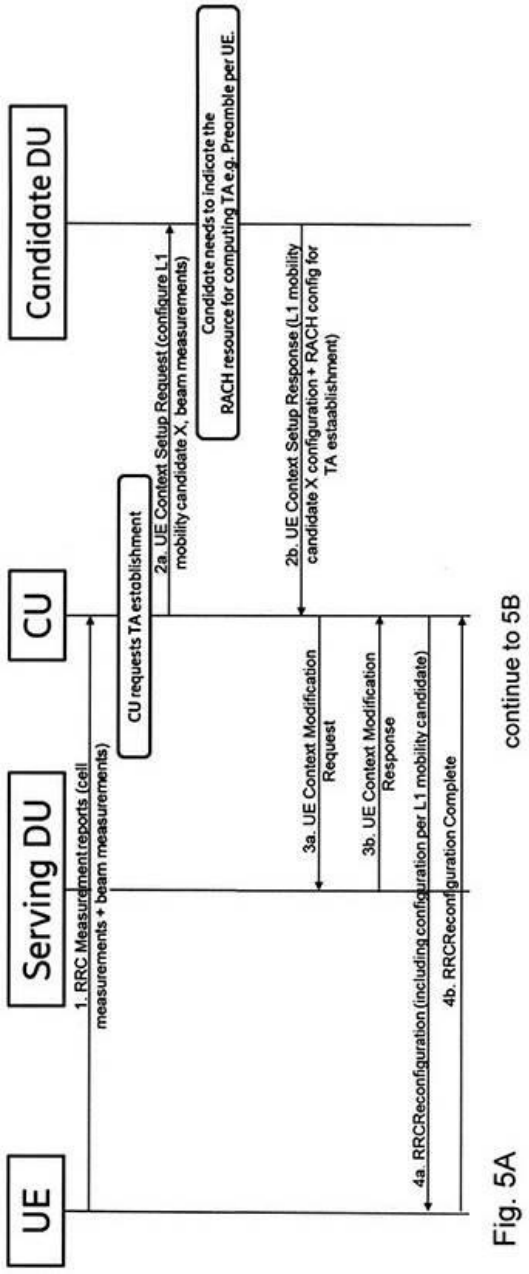



Fig. 5A

Fig. 5A

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(11) **22373**

Consulter le mémoire

(51) B29C 35/04 (2023.01);
B29C 41/04 (2023.01);
B29C 44/06 (2023.01);
B29C 44/34 (2023.01) ;
B60R 13/02 (2023.01)

(21) **1202600005 - PCT/IB2024/056378**

(22) 29/06/2024

(30) **EP n° 23184269.1 du 07/07/2023**

(54) **Reinforced rotomolded body.**

(72) CROZIER, Etienne (CH);
HEISEL, Guillaume (CH);
LANDWERLIN, Stéphane (CH);
VIGOUROUX, Philippe (FR);
PLUQUET, Patrick (FR) et
THULIEZ, Jean-Luc (CH)

(73) **SOFTCAR SA**, Passage du Cardinal 1, 1700 FRIBOURG (CH)

(74) **S.C.P AKKUM, AKKUM & Associates, No. 1777, rue 6.261, Yaoundé 2, Auditorium Jean Paul II boulevard, Face Brigade de Gendarmerie, Mbankolo, B.P. 4966, YAOUNDE (CM).**

(57)

The invention relates to a process for manufacturing parts, for example a vehicle body (01), said process involving rotomolding a compact outer layer (11, 21), rotomolding a compact inner layer (12, 22), and treating the inner layer in order to enhance the mechanical properties of the part.

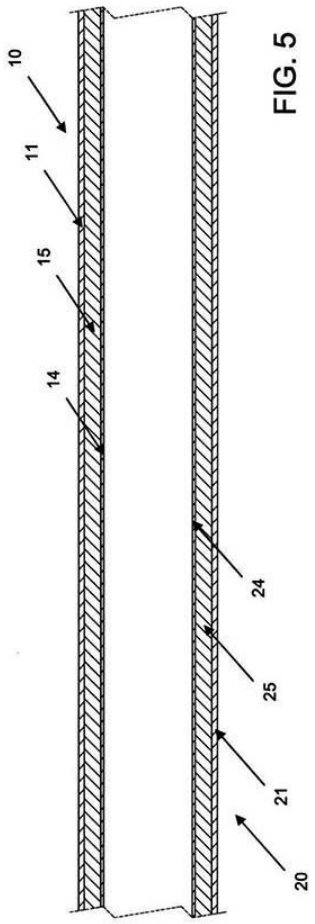



Fig. 5

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(11) **22374**

Consulter le mémoire

(51) E21D 21/00 (2023.01)

(21) **1202600014 - PCT/AU2024/050725**

(22) 03/07/2024

(30) **AU n° 2023902259 du 14/07/2023**

(54) **Rock Bolt.**

(72) CATOI, Peter Bryce (AU)

(73) **CATOI, Peter Bryce**, 26a Burke Drive, ATTADALE, Western Australia 6156 (AU)

(74) **Cabinet ISIS CONSEILS (SCP), Bastos, Rue 1.862, face de l'Agence Turque de Coopération et de Coordination, B.P. 15067, YAOUNDE (CM).**

(57)

A rock bolt (10) comprising a shaft (12) having a first anchor member (18) and a first wedge member (24) adjacent the first anchor member (18). A sleeve (30) is received around the shaft (12) and an end member (36) is provided adjacent the outer end of the shaft (12) to engage with the shaft (12) and with the rock face around the hole. The first anchor member (18) includes a first portion (20) and a second portion (21) such that the first portion (20) is received into an end of the sleeve (30) and the second portion (21) extends beyond the sleeve (30) and is expandable by the first wedge member (24) to engage with the inner surface of the hole and secure the rock bolt (10) within the hole.

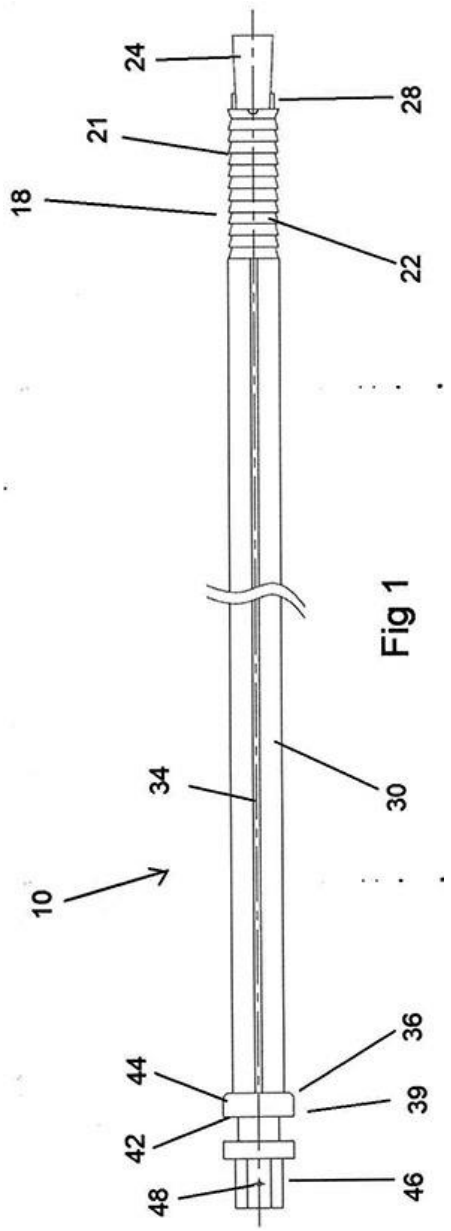



Fig 1

Fig. 1

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(11) **22375**

Consulter le mémoire

(51) A61M 35/00 (2023.01)

(21) **1202500413 - PCT/GB2024/051489**

(22) 11/06/2024

(30) **GB n° 2310028.2 du 30/06/2023**

(54) **Fluid applicators.**

(72) RUPRA, Perminder (GB) et
ROWE, Andrew (GB)

(73) **ELIPSE HEALTH LTD**, 63 Bermondsey Street, LONDON SE1 3XF (GB)

(74) **S.C.P AKKUM, AKKUM & Associates, No. 1777, rue 6.261, Yaoundé 2, Auditorium Jean Paul II boulevard, Face Brigade de Gendarmerie, Mbankolo, B.P. 4966, YAOUNDE (CM).**

(57)

The invention provides an applicator suitable for applying a fluid, such as an antiseptic fluid, to the skin of a subject. The applicator comprises a handie (4) that can be used more than once and a head (2) that is removable from the handie (4) for safe disposal after each use of the applicator. The head (2) can move along the handle (4) from a first position, in which it is releasably secured to the handle (4) and is isolated from a source of fluid, to a second position, in which it is releasably secured to the handle (4) and is in communication with the source of fluid. Affer use, the head (2) can be moved to a third position, in which it is released from the handle (4). The head (2) may engage the handle (4) via a track (14) that extends along only said one side of the handle (4) to minimize the quantity of material that is required in the disposable head (2).

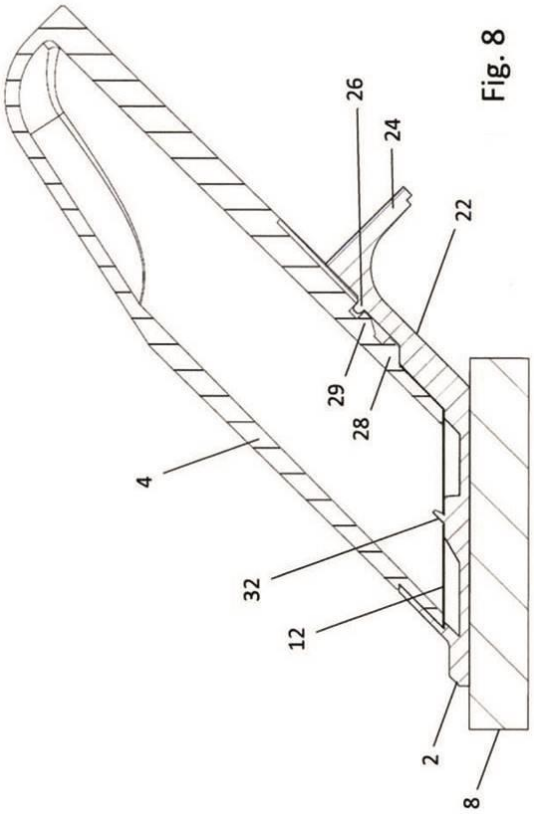



Figure 8

# B
# REPERTOIRE SUIVANT LA C.I.B.

| | (51) | (11) |
|---|---|---|
| **1** | B63B 35/44 | 22356 |
| **2** | A01H 1/04 | 22361 |
| **3** | A01N 63/30 | 22357 |
| **4** | A61C 9/00 | 22368 |
| **5** | A61K 31/65 | 22358 |
| **6** | A61M 35/00 | 22375 |
| **7** | B29C 44/06 | 22373 |
| **8** | B41M 3/14 | 22363 |
| **9** | B41M 3/14 | 22362 |
| **10** | B42D 25/30 | 22359 |
| **11** | B61L 27/70 | 22366 |
| **12** | B63C 11/20 | 22369 |
| **13** | B65D 33/00 | 22371 |
| **14** | C07C 1/04 | 22360 |
| **15** | C09K 3/22 | 22365 |
| **16** | C12N 15/113 | 22367 |
| **17** | C12P 21/02 | 22370 |
| **18** | C21B 13/00 | 22364 |
| **19** | E21D 21/00 | 22374 |
| **20** | H04W 36/00 | 22372 |

# C
# REPERTOIRE DES NOMS

**1-UPL Mauritius Limited et 2-UPL Europe Supply Chain GmbH**
(11) 22357 (51) A01N 63/30

**1-VALE S.A.; 2-CENTRO NACIONAL DE PESQUISA EM ENERGIA E MATERIAIS et 3-ASSOCIAÇÃO INSTITUTO TECNOLÓGICO VALE - ITV**
(11) 22370 (51) C12P 21/02

**1-ZHONGCHAO SPECIAL SECURITY TECHNOLOGY CO., LTD et 2-CHINA BANKNOTE PRINTING AND MINTING CORP.**
(11) 22359 (51) B42D 25/30

**AFRICAN RAINBOW MINERALS LIMITED**
(11) 22364 (51) C21B 13/00

**CASCO SIGNAL LTD.**
(11) 22366 (51) B61L 27/70

**CATOI, Peter Bryce**
(11) 22374 (51) E21D 21/00

**EARTH ALIVE CLEAN TECHNO-LOGIES INC.**
(11) 22365 (51) C09K 3/22

**ELIPSE HEALTH LTD**
(11) 22375 (51) A61M 35/00

**GTI Energy**
(11) 22360 (51) C07C 1/04

**IWP IP N.V.**
(11) 22369 (51) B63C 11/20

**MARCUS TROJAN GMBH**
(11) 22371 (51) B65D 33/00

**MEHARRY MEDICAL COLLEGE**
(11) 22368 (51) A61C 9/00

**PUBLICHNOE AKTSIONERNOE OBSHCHESTVO ‘‘NOVATEK’’**
(11) 22356 (51) B63B 35/44

**QINGDAO KINGAGROOT SEED SCIENCE CO., LTD**
(11) 22361 (51) A01H 1/04

**RAGE BIOTECH PTY LTD**
(11) 22367 (51) C12N 15/113

**SICPA HOLDING SA**
(11) 22362 (51) B41M 3/14
(11) 22363 (51) B41M 3/14

**SOFTCAR SA**
(11) 22373 (51) B29C 44/06

**TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)**
(11) 22372 (51) H04W 36/00

**Topelia Aust Limited**
(11) 22358 (51) A61K 31/65