



Canadian  
Intellectual Property  
Office

An Agency of  
Industry Canada

Office de la propriété  
intellectuelle  
du Canada

Un organisme  
d'Industrie Canada

ISSN-1712-4034

# The Patent

Office Record

# La Gazette

du Bureau des brevets



Vol. 152 No. 16 April 16, 2024

Vol. 152 No. 16 le 16 avril 2024

Canada



# THE CANADIAN PATENT OFFICE RECORD

## LA GAZETTE DU BUREAU DES BREVETS

The Canadian Patent Office Record is published on Tuesday of each week under the authority of the Commissioner of Patents, Ottawa-Gatineau, Canada, to whom all communications should be addressed.

The Canadian Intellectual Property Office does not guarantee the accuracy of this publication, nor undertake any responsibility for errors or omissions or their consequences.

La Gazette du Bureau des brevets paraît le mardi de chaque semaine sous l'autorité du Commissaire aux brevets, Ottawa-Gatineau, Canada, à qui doit être adressée toute correspondance.

L'Office de la propriété intellectuelle de Canada ne garantit pas l'exactitude de la présente publication et ne se rend responsable d'aucune erreur ou omission ou de leurs conséquences.

# Table of Contents

## Table des matières

Notices	
Avis .....	1
Canadian Patents Issued	
Brevets canadiens délivrés .....	25
Canadian Applications Open to Public Inspection	
Demandes canadiennes mises à la disponibilité du public.....	77
PCT Applications Entering the National Phase	
Demandes PCT entrant en phase nationale .....	87
Canadian Divisional and Previously Unavailable Applications Open to Public Inspection	
Demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant .....	141
Index of Canadian Patents Issued	
Index des brevets canadiens délivrés .....	145
Index of Canadian Applications Open to Public Inspection	
Index des demandes canadiennes mises à la disponibilité du public .....	154
Index of PCT Applications Entering the National Phase	
Index des demandes PCT entrant en phase nationale .....	156
Index of Canadian Divisional and Previously Unavailable Applications Open to Public Inspection	
Index des demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant .....	166

## Notices

## Avis

### 1. Dates and Code Numerals Appearing in Patent Headings

#### Dates

All dates appearing in the patent headings of this publication follow the form recommended by the International Standards Organization. The four digits on the left represent the years followed by two digits each for the months and the days. For example, January 02, 1999 will be shown as 1999-01-02.

#### Code Numerals

The numerals within the brackets in the patent headings are INID codes. "INID" is an acronym for "Internationally agreed Numbers for the Identification of Data". These codes are utilized to identify patent bibliography as recommended by the Permanent Committee on Industrial Property Information (PCIPI) under the administration of the World Intellectual Property Organization (WIPO) based in Geneva, Switzerland.

The INID Codes and their corresponding definitions of bibliographic data elements are as follows:

- [11] - Number of Patent document
- [13] - Kind-of-document code
- [21] - Number assigned to the Application
- [22] - Date of Filing Application or
- [22] - Date of filing of related divisional application
- [25] - Language in which the published application was originally filed
- [30] - Data relating to priority under the Paris Convention
  
- [41] - Open to Public Inspection Date
- [45] - Date of Issue
- [48] - Correction Date ( Re-Issued, Re-Examined )
- [51] - International Classification
- [52] - Domestic Classification
- [54] - Title of Invention
- [60] - Related by Supplementary Disclosure
- [62] - Related by Division
- [64] - Related by Reissue
- [71] - Name(s) of Applicant(s)
- [72] - Name(s) of Inventor(s)
- [73] - Name(s) of Grantee(s)
- [85] - National Entry Date
- [86] - PCT International Filing Data
- [87] - PCT International Publication data

### 1. Dates et chiffres de code figurant à l'entête des brevets

#### Dates

Toutes dates figurant aux entêtes des brevets de cette publication suivent la forme recommandée par l'Organisation des normes internationales. Les quatre chiffres de gauche représentent les années et sont suivis, vers la droite, de deux autres chiffres chacun, pour les mois et les jours. Le 2 janvier 1999, par exemple, sera représenté par 1999-01-02.

#### Chiffres de code

Les chiffres à l'intérieur des parenthèses aux entêtes des brevets sont des codes INID. Le sigle « INID » signifie « Identification numérique internationale des données bibliographiques ». Ces codes sont utilisés pour l'identification de la bibliographie de brevets, tel que recommandé par le Comité permanent chargé de l'information en matière de propriété industrielle (PCIPI), sous l'administration de l'Organisation mondiale de la propriété intellectuelle (OMPI), sise à Genève, Suisse.

Les codes INID accompagnés des définitions des données bibliographiques correspondantes sont comme suit :

- [11] - Numéro du brevet
- [13] - Désignation du type de document
- [21] - Numéro attribué à la demande
- [22] - Date du dépôt de la demande ou
- [22] - Date du dépôt de la demande divisionnaire apparentée
- [25] - Langue dans laquelle la demande publiée a été initialement déposée
- [30] - Données relatives à la priorité selon la Convention de Paris
  
- [41] - Date de mise à la disponibilité du public
- [45] - Date de délivrance
- [48] - Date de correction ( Redélivrance, Réexamen )
- [51] - Classification internationale
- [52] - Classification nationale
- [54] - Titre de l'invention
- [60] - Apparenté par divulgation supplémentaire
- [62] - Apparenté par division
- [64] - Apparenté par redélivrance
- [71] - Nom(s) du (des) demandeur(s)
- [72] - Nom(s) de(s) l'inventeur(s)
- [73] - Nom(s) du (des) titulaire(s)
- [85] - Date d'entrée en phase nationale
- [86] - Données du dépôt international selon le PCT
- [87] - Données de publication internationale selon le PCT

## 2. Country Code

The Country Codes appearing in this publication conform to those contained in annex A of the *Handbook on Industrial Property Information and Documentation* published by the World Intellectual Property Organization (WIPO). This document is accessible from a link entitled Standards ST-3 on the List of WIPO Standards, Recommendations and Guidelines (Abbreviated Titles) located on the WIPO Web site: ([www.wipo.int/scit/en/standards/standards.htm](http://www.wipo.int/scit/en/standards/standards.htm)).

## 3. How to Purchase Paper Copies of Canadian Patents and Canadian Applications Open to Public Inspection

Paper copies of all other Canadian Patents and Canadian applications open to public inspection may be purchased at the cost of \$1 per page by visiting ([www.strategis.ic.gc.ca/patentsorder](http://www.strategis.ic.gc.ca/patentsorder)) or by writing to the Commissioner of Patents, Ottawa-Gatineau, K1A 0C9.

Item 25.1* On requesting copy in electronic form of a document:	N/A
a) for each request	\$10
b) plus, for each patent or application to which the request relates	\$10
c) plus, if the copy is requested on a physical medium, for each physical medium requested in addition to the first	\$10
d) plus, for each additional 10 megabytes or part of them exceeding 7 megabytes	\$10

## 4. Orders for Patents by Class or Sub-Class

A listing of all patents that have issued in each class or sub-class including both patents in force and expired patents, may be ordered at a price of \$1 per page from the Patent Office.

## 2. Code des pays

Les Codes des pays qui se trouvent dans cette publication sont conformes à ceux dans l'annexe A du *Manuel sur l'information et la documentation en matière de propriété industrielle* publié par l'Organisation Mondiale de la Propriété Intellectuelle (OMPI). Ce document est accessible à partir de l'hyperlien intitulé Normes ST-3 dans la Liste des normes, recommandations et principes directeurs de l'OMPI (Titres abrégés) qui se trouve au site Web de l'OMPI: ([www.wipo.int/scit/fr/standards/standards.htm](http://www.wipo.int/scit/fr/standards/standards.htm)).

## 3. Comment acheter des copies sur papier de brevets canadiens et de demandes canadiennes mises à la disponibilité du public

Les copies sur papier de tous les autres brevets canadiens et des demandes canadiennes mises à la disponibilité du public peuvent être achetées au coût de 1 \$ par page en visitant notre site Web ([www.strategis.ic.gc.ca/brevetscommande](http://www.strategis.ic.gc.ca/brevetscommande)) ou en écrivant au Commissaire aux brevets, Ottawa-Gatineau, K1A 0C9.

Article 25.1* Demande d'une copie d'un document sous forme électronique :	S.O.
a) pour chaque demande	10 \$
b) pour chaque demande de brevet ou brevet visé par la demande	10 \$
c) dans le cas où le document doit être copié sur plus d'un support matériel, pour chaque support matériel additionnel	10 \$
d) pour chaque tranche de 10 méga-octets qui excède 7 méga-octets, l'excédant étant arrondi au multiple supérieur	10 \$

## 4. Commande de brevets par classe ou sous-classe

Les listes de brevets délivrés dans chaque classe ou sous-classe, incluant les brevets en vigueur et ceux ayant expiré, peuvent être commandées auprès du Bureau des brevets au prix de 1 \$ la page.

## 5. Advice on Making a Patent Application

Any person intending to file a patent application may obtain an information kit upon request from the Commissioner of Patents, Ottawa-Gatineau, Canada K1A 0C9. It is recommended that applicants make use of the services of a registered Patent Agent. A list of Patent Agents in any area of Canada will also be supplied upon request.

## 6. Licensing of Patents

### Voluntary Licences

Persons desiring to use, make or sell an invention patented in Canada should negotiate terms with the patent owner. The address of the patentee may be obtained by writing to the Commissioner of Patents, Ottawa-Gatineau, Canada, K1A 0C9. If a voluntary licence cannot be arranged, a compulsory licence may be possible.

### Compulsory Licences

Three years after a patent has been granted, one may request a compulsory licence to use the patent if there has been an abuse of the exclusive right. See Sections 65 to 71 of the *Patent Act*. Applications for a compulsory licence are made to the Commissioner of Patents.

## 7. Patents Available for Licence or Sale

An asterisk (\*) placed beside any patent listed in this issue of the *Canadian Patent Office Record* indicates that as of the date of grant the said patent is available for licence or sale. These and other patents now made available for licensing are included in the listing in part 8 of these notices.

## 8. List of Patents Available for Licence or Sale

The following Canadian patents have been made available this week for sale or licensing:

None

## 5. Conseils relatifs à la préparation de demandes de brevets

Toute personne qui a l'intention de déposer une demande de brevet peut obtenir une trousse d'information sur demande faite au Commissaire aux brevets, Ottawa-Gatineau, Canada K1A 0C9. On recommande aux demandeurs d'avoir recours aux services d'un agent de brevets inscrit au registre. Une liste des agents de brevets dans n'importe quelle région du Canada sera également fournie sur demande.

## 6. Octroi de licences en vertu des brevets

### Licences librement accordées

Les personnes désirant utiliser, fabriquer ou vendre une invention brevetée au Canada doivent en négocier les conditions avec le titulaire du brevet. L'adresse du titulaire peut être obtenue en écrivant au Commissaire aux brevets, Ottawa-Gatineau, Canada, K1A 0C9. S'il est impossible d'obtenir une licence résultant d'un libre accord, il est peut être possible d'obtenir une licence obligatoire.

### Licences obligatoires

Il est possible de faire la demande d'une licence obligatoire trois ans après l'octroi d'un brevet si les droits exclusifs qui en dérivent ont donné lieu à un abus. Voir les articles 65 à 71 de la *Loi sur les brevets*. Les demandes de licence obligatoire doivent être présentées au Commissaire aux brevets.

## 7. Brevets disponibles pour licence ou vente

Un astérisque (\*) marqué à côté de tout brevet inscrit dans le présent numéro de la *Gazette du bureau des brevets*, signale qu'à compter de la date de la présente publication, ledit brevet est disponible pour octroi de licence ou vente. Une liste de ces brevets et d'autres mis en disponibilité pour octroi de licence, est publiée au no. 8 des présents avis.

## 8. Liste des brevets disponibles pour octroi de licence ou vente

Les brevets canadiens suivants ont été mis en disponibilité cette semaine pour vente ou octroi de licence :

Aucun

## 9. Applications Open to Public Inspection

All patent applications filed since October 1, 1989 and documents filed in connection therewith are open to public inspection at the Patent Office after the expiration of a confidentiality period of eighteen months beginning on the filing date of the application, or where a request for priority has been made in respect to the application, beginning on the priority date claimed. An application may become open to public inspection sooner at the request or with the approval of the applicant (Section 10(2) of the *Patent Act*). However, an application shall not be open for public inspection if it is withdrawn within the time set out in Section 92 of the *Patent Rules*. This time limit is two months before the expiry of the confidentiality period or where the Commissioner is able to stop technical preparations to open the application to the public at a subsequent date.

## 10. Language of Published Documents

When ordering a published patent, please note that the language of the document can be identified by the language code (INID [25]) EN (English) or FR (French).

## 11. Patent Cooperation Treaty (PCT) Schedule of Fees Applicable for Applications Filed on or After June 3, 2020

1. Transmittal Fee (Rule 14)	\$300
2. International Filing Fee	\$1961*
For each additional sheet over 30	\$22
3. International Search Fee	\$1600

The above mentioned fees are due at time of filing of the international application, or within one month from the international filing date (date of receipt of the international application by the receiving office). These fees are to be paid in Canadian dollars and cheques should be made payable to the Receiver General for Canada.

If the fees are not paid within one month from the international filing date, the receiving office shall invite the applicant to pay the amount required, together with a late payment fee under

## 9. Demandes mises à la disponibilité du public

Toutes les demandes de brevet et documents relatifs à ceux-ci, déposés au Bureau des brevets depuis le 1er octobre 1989, peuvent y être consultées après l'expiration de la période de confidentialité de dix-huit mois à compter de la date de dépôt de la demande de brevet ou, si une demande de priorité a été présentée à l'égard de celle-ci, de la date de dépôt sur laquelle la demande de priorité est fondée. Une demande de brevet peut être consultée avant l'expiration de la période, à la requête ou sur autorisation du demandeur (article 10(2) de la *Loi sur les brevets*). Toutefois, une demande de brevet ne pourra être consultée si celle-ci est retirée à l'intérieur du délai prévu à l'article 92 des *Règles sur les brevets*. Le délai prévu est de deux mois précédant la date d'expiration de la période de confidentialité ou, lorsque le commissaire est en mesure, à une date ultérieure, d'arrêter les préparatifs techniques en vue de la consultation de cette demande.

## 10. Langue du document publié

Toute personne intéressée à obtenir une copie d'un brevet publié doit prendre note que les codes suivants EN (Anglais) ou FR (Français) représentent (INID [25]) la langue de la copie du brevet publié.

## 11. Traité de coopération en matière de brevets (PCT) barème de taxes à partir du 3 juin 2020

1. Taxe de transmission (Règle 14)	300 \$
2. Taxe de dépôt internationale	1961 \$*
Pour chaque feuille au delà de 30	22 \$
3. Taxe de recherche internationale	1600 \$

Les taxes mentionnées ci-haut sont payables au moment du dépôt de la demande internationale, ou dans un délai d'un mois à compter de la date de dépôt international, (soit la date de réception de la demande internationale par l'office récepteur). Les taxes doivent être payées en dollars canadiens et les chèques sont payables au receveur général du Canada.

Si les taxes n'ont pas été payées dans un délai d'un mois à compter de la date de dépôt international, l'office récepteur invitera le demandeur à payer le montant dû, accompagné de la

## Notices

Rule 16bis.2, within one month from the date of the invitation. Failure to pay the fees will result in the withdrawal of the application by the receiving office.

taxe pour le paiement tardif visée à la règle 16bis.2, dans un délai d'un mois à compter de l'invitation. Si vous omettez de payer les taxes, l'office récepteur retirera votre demande.

### 4. Late payment fee

50% of the fees that are due, or,  
Minimum: Transmittal fee  
Maximum: 50% of the international filing fee

### 4. Taxe pour paiement tardif

50% du montant impayé, ou,  
Minimum : taxe de transmission  
Maximum : 50% de la taxe de dépôt international

## Preliminary Examination

## Examen préliminaire

5. Handling fee (Rule 57.2(a)) \$295

5. Taxe de traitement (Règle 57.2a) 295 \$

6. Preliminary examination fee (Rule 58) \$800

6. Taxe d'examen préliminaire (Règle 58) 800 \$

\* International fees will be reduced by:

- \$295 for all applications filed electronically using PCT-SAFE or ePCT (The request in character coded format).
- \$442 for all applications filed electronically using PCT-SAFE or ePCT (The request, description, claims and abstract in character coded format).

\* Les frais seront réduits de:

- 295 \$ pour toutes les demandes déposées en utilisant PCT-SAFE ou ePCT (La requête étant en format à codage de caractères).
- 442 \$ pour toutes les demandes déposées en utilisant PCT-SAFE ou ePCT (La requête, la description, les revendications et l'abrégé étant en format à codage de caractères).

## 12. PCT Notices

## 12. Avis PCT

### Patent Cooperation Treaty (PCT)

### Traité de Coopération en matière de brevets (PCT)

Copies of the *Patent Cooperation Treaty Applicants Guide* and the *Patent Cooperation Treaty & Regulations* are available from WIPO - World Intellectual Property Organization at a cost of 200 Swiss Francs and 18 Swiss Francs, respectively.

Des copies du *Guide du déposant du PCT* ainsi que du *Traité et des Règlements* sont disponibles auprès de l'OMPI - Organisation mondiale de la propriété intellectuelle au coût de 200 francs suisses et 18 francs suisses, respectivement.

Those wishing for further information including prices for both previous and current subscriptions should contact WIPO at:

Les personnes qui désirent obtenir de plus amples renseignements, notamment sur le prix des abonnements antérieurs et courants, sont priées de s'adresser directement à :

Information Products Section  
Post Office Box 18  
1211 Geneva 20 Switzerland  
Telephone (011 41 22) 338-9618  
Facsimile (011 41 22) 740-1812

l'OMPI à la Section des produits d'information  
Boîte postale 18  
1211 Genève 20 Suisse  
Téléphone (011 41 22) 338-9618  
Télécopieur (011 41 22) 740-1812

or by "E-mail" ([publications.mail@wipo.int](mailto:publications.mail@wipo.int)) or visit their Web site ([www.wipo.int](http://www.wipo.int)).

ou par courriel ([publications.mail@wipo.int](mailto:publications.mail@wipo.int)) ou visiter leur site Web ([www.wipo.int](http://www.wipo.int)).



### 13. Practice Notice

#### LIMITED PARTNERSHIPS CAN BE ENTERED ON THE REGISTER OF AGENTS AND ON THE LIST OF TRADE-MARK AGENTS

**Note:** *This practice notice is intended to provide guidance on current Patent and Trade-marks Office practice and interpretation of relevant legislation. However, in the event of any inconsistency between this notice and the applicable legislation, the legislation must be followed.*

The Patent Office and the Trade-marks Office (hereinafter jointly referred to as “the Offices”) have been receiving inquiries as to whether limited partnerships are entitled to act as patent and trade-mark agents before the Offices.

With respect to the register of patent agents, section 15 of the *Patent Act* provides that a register of patent agents shall be kept in the Patent Office on which shall be entered the names of all persons and firms entitled to represent applicants in the presentation and prosecution of applications for patents or in other business before the Patent Office. Section 2 of the *Patent Rules* stipulates that the expression “patent agent” means any person or firm whose name is entered on the register of patent agents pursuant to section 15. Paragraph 15(c) of the *Patent Rules* provides that the Commissioner shall enter on the register of patent agents, on payment of the fee set out in item 33 of Schedule II, the name of **any firm, if the name of at least one member of the firm is entered on the register.**

With respect to the list of trade-mark agents, subsection 28(2) of the *Trade-marks Act* provides that the list of trade-mark agents shall include the names of all persons and firms entitled to represent applicants in the presentation and prosecution of applications for the registration of a trade-mark or in other business before the Trade-marks Office. Paragraph 21(d) of the *Trade-mark Regulations* (1996) stipulates that the Registrar shall, on written request and payment of the fee set out in item 19 of the schedule, enter on a list of trade-mark agents the name of **any firm having the name of at least one of its members entered on the list as a trade-mark agent.**

Both the patent and trade-mark legislation therefore provide that firms may act as agents before the Offices, as long as one of their members is entered on the register or list of agents. It is generally recognised that the term “firm” includes partnerships, and the Offices have already allowed general partnerships and limited liability partnerships to be entered on the register or list of agents. The Offices consider that limited partnerships are also firms, and that they are entitled to act as agents before the

### 13. Énoncé de pratique

#### LES SOCIÉTÉS EN COMMANDITE PEUVENT ÊTRE INSCRITES AU REGISTRE DES AGENTS DE BREVETS ET SUR LA LISTE DES AGENTS DE MARQUES DE COMMERCE

**Nota :** *Le présent énoncé de pratique a pour but de préciser les pratiques actuelles du Bureau des brevets et du Bureau des marques de commerce et l'interprétation faite par ces derniers de certaines dispositions législatives. Toutefois, en cas de divergence entre le présent énoncé et la législation applicable, c'est la législation qui prévaudra.*

Le Bureau des brevets et le Bureau des marques de commerce (ci-après appelés conjointement « les Bureaux ») ont reçu des questions à savoir si les sociétés en commandite (en anglais « limited partnerships ») ont le droit d'agir en tant qu'agents de brevets et de marques de commerce auprès des Bureaux.

En ce qui concerne le registre des agents de brevets, l'article 15 de la *Loi sur les brevets* prévoit qu'un registre des agents de brevets est tenu au Bureau des brevets sur lequel sont inscrits les noms de toutes les personnes et entreprises ayant le droit de représenter les demandeurs dans la présentation et la poursuite des demandes de brevet ou dans toute autre affaire devant le Bureau des brevets. Aux termes de l'article 2 des *Règles sur les brevets*, « agent de brevets » s'entend de toute personne ou maison d'affaires dont le nom est inscrit au registre des agents de brevets aux termes de l'article 15. L'alinéa 15c) des *Règles sur les brevets* prévoit que le commissaire inscrit au registre des agents de brevets, moyennant paiement de la taxe prévue à l'article 33 de l'annexe II, le nom de **toute maison d'affaires dont le nom d'au moins un membre est inscrit au registre des agents de brevets.**

En ce qui concerne la liste des agents de marques de commerce, le paragraphe 28(2) de la *Loi sur les marques de commerce* prévoit que la liste des agents de marques de commerce comporte les noms des personnes et études habilitées à représenter les intéressés dans la présentation et la poursuite des demandes d'enregistrement des marques de commerce et de toute affaire devant le Bureau des marques de commerce. Aux termes de l'alinéa 21d) du *Règlement sur les marques de commerce* (1996), le registraire, sur demande écrite et sur paiement du droit prévu à l'article 19 de l'annexe, inscrit sur la liste des agents de marques de commerce le nom de **toute firme dont le nom d'au moins un membre est inscrit sur la liste à titre d'agent de marques de commerce.**

La législation actuelle sur les brevets et celle sur les marques de commerce prévoient donc que des firmes peuvent agir en tant qu'agents auprès des Bureaux, à condition que l'un de leurs membres soit inscrit au registre ou à la liste des agents. Il est généralement admis que le terme « firme » inclut les sociétés (en anglais « partnerships ») et les Bureaux ont déjà autorisé des sociétés en nom collectif (en anglais « general partnerships ») ainsi que des sociétés à responsabilité limitée

## Notices

Offices.

(en anglais « limited liability partnerships ») à être inscrites au registre ou à la liste des agents. Les Bureaux considèrent que les sociétés en commandite sont aussi des firmes et qu'elles ont le droit d'agir en tant qu'agents auprès des Bureaux.

Therefore, commencing immediately, the Offices will enter upon request, on the register or list of agents, limited partnerships that otherwise meet the requirements set out in the patent and trade-mark legislation.

En conséquence, sur demande, les Bureaux inscriront désormais au registre, ou à la liste des agents, les sociétés en commandite qui répondent aux exigences de la *Loi sur les brevets et de la Loi sur les marques de commerce*.

The Offices, however, continue to consider that the current patent and trade-mark legislation do not allow corporations to be entered on the register or list of agents, since corporations do not have members and therefore cannot meet the requirements set out in paragraph 15(c) of the *Patent Rules* and paragraph 21(d) of the *Trade-mark Regulations* (1996).

Les Bureaux continuent toutefois de considérer que la législation actuelle sur les brevets et les marques de commerce ne permet pas aux compagnies (en anglais « corporations ») d'être inscrites au registre ou à la liste des agents, étant donné que les compagnies n'ont pas de membres et ne peuvent donc pas satisfaire aux exigences de l'alinéa 15c) des *Règles sur les brevets* et de l'alinéa 21d) du *Règlement sur les marques de commerce* (1996).

## 14. Correspondence Procedures

The correspondence procedures and the related practice for written communications to the Commissioner of Patents and the Patent Office under the Patent Act and the Patent Rules is outlined in Chapter 2 of the Manual of Patent Office Practice (MOPOP).

Web Link for MOPOP:

[http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h\\_wr00720.html](http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr00720.html)

The correspondence procedures and the related practice of written communications with respect to Trademarks and to Industrial Design can be found in the Practice Notice entitled [Correspondence Procedures](#), available on CIPO's website.

CIPO Web Link for correspondence procedures pertaining to Trademarks and Industrial Design:

<https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr00633.html>

Publication date: May 10, 2017

Amendment date: June 17, 2019

### On this page:

1. Physical Delivery of Correspondence and Written Communications to CIPO
2. Electronic Correspondence
3. Details Concerning the Electronic Formats Accepted
4. General Information
5. Time Period Extensions
6. Procedures in Case of an Unexpected Office Closure at CIPO

## 14. Procédures de correspondance

Les procédures de correspondance et les pratiques connexes de communication écrite au commissaire aux brevets ou au Bureau des brevets en vertu de la Loi sur les brevets et des Règles sur les brevets seront exposées dans le chapitre 2 du Recueil des pratiques du Bureau des brevets (RPBB).

Lien Web pour le RPBB :

[http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/fra/h\\_wr00720.html](http://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/fra/h_wr00720.html)

Les procédures de correspondance et les pratiques connexes de communication écrite concernant les marques de commerce et les dessins industriels se trouvent dans le document intitulé [Procédures de correspondance](#), consultable sur le site Web de l'OPIC.

Lien Web de l'OPIC pour les procédures de correspondance relatives aux marques de commerce et aux dessins industriels :

<https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/fra/wr00633.html>

Date de publication : 10 mai 2017

Date de modification : 17 juin 2019

### Sur cette page :

1. Remise physique de correspondance et communications écrites à l'OPIC.
2. Correspondance électronique
3. Précisions concernant les formats électroniques acceptés
4. Renseignements généraux
5. Prorogation des délais
6. Procédures en cas de fermeture imprévue des bureaux de l'OPIC

## Avis

7. Procedures when CIPO is Open to the Public but Clients are Unable to Communicate with the Office
8. Intellectual Property Acts, Rules and Regulation

7. Procédures à suivre lorsque l'Office est ouvert au public, mais les clients sont incapables de communiquer avec l'Office
8. Lois, règles et règlements sur la propriété intellectuelle

This notice is intended to clarify the practice of the Canadian Intellectual Property Office with respect to correspondence procedures and written communications and replaces all previous notices.

Le présent énoncé de pratique a pour but de préciser la pratique de l'Office de la propriété intellectuelle du Canada relativement aux procédures de correspondance et de communications écrites et remplace tout avis antérieur.

### 1. Physical Delivery of Correspondence and Written Communications to CIPO

For the purposes of sections 5 and 54 of the Patent Rules, subsection 10(1) of the Trademarks Regulations, section 2 of the Copyright Regulations, section 4 of the Industrial Design Regulations and section 3 of the Integrated Circuit Topography Regulations, the address of the Patent Office, the Office of the Registrar of Trademarks, the Copyright Office, the Industrial Design Office, and the Office of the Registrar of Topographies (hereinafter sometimes collectively referred to as "CIPO") is:

Canadian Intellectual Property Office  
Place du Portage I  
50 Victoria Street, Room C-114  
Gatineau QC K1A 0C9

In accordance with subsections 5(2), 5(3), 54(1) and 54(2) of the Patent Rules, subsection 10(2) of the Trademarks Regulations, subsections 2(2) and (3) of the Copyright Regulations, subsection 5(1) of the Industrial Design Regulations and subsections 3(2) and (3) of the Integrated Circuit Topography Regulations, correspondence and written communications delivered to the above address between 8:30 a.m. to 4:30 p.m. (Eastern Time) Monday to Friday is deemed to have been received on the actual date of their delivery if they are delivered when CIPO is open to the public.

Correspondence delivered at a time when CIPO is closed to the public will be deemed or considered to have been received on the day on which CIPO is next open to the public.

Please be advised that once correspondence is received by CIPO it cannot be returned to the sender, even if the sender states that the correspondence was sent by mistake. Exceptionally, in cases where correspondence is related to a patent application that does not meet the requirements under subsection 27.1(1) of the Patent Act for obtaining a filing date, the documents will be returned to the sender.

The Fee Payment Form should always be submitted as a covering document and should be the only document submitted

### 1. Remise physique de correspondance et communications écrites à l'OPIC

Pour l'application des articles 5 et 54 des Règles sur les brevets, du paragraphe 10(1) du Règlement sur les marques de commerce, de l'article 2 du Règlement sur le droit d'auteur, de l'article 4 du Règlement sur les dessins industriels et de l'article 3 du Règlement sur les topographies de circuits intégrés, l'adresse du Bureau des brevets, du Bureau du registraire des marques de commerce, du Bureau du droit d'auteur, du Bureau des dessins industriels, et du Bureau du registraire des topographies (ci-après parfois collectivement appelés « OPIC ») est la suivante :

Office de la propriété intellectuelle du Canada  
Place du Portage I  
50, rue Victoria, pièce C-114  
Gatineau (Québec) K1A 0C9

Conformément aux paragraphes 5(2), 5(3), 54(1) et 54(2) des Règles sur les brevets, du paragraphe 10(2) du Règlement sur les marques de commerce, des paragraphes 2(2) et (3) du Règlement sur le droit d'auteur, du paragraphe 5(1) du Règlement sur les dessins industriels et des paragraphes 3(2) et (3) du Règlement sur les topographies de circuits intégrés, la correspondance et les communications écrites ayant été remises à l'adresse ci-dessus entre 8h30 et 16h30 (Heure de l'Est) du lundi au vendredi seront réputées avoir été reçues le jour de leur remise, si elles sont remises alors que l'OPIC est ouvert au public.

La correspondance remise lorsque les bureaux de l'OPIC sont fermés au public sera réputée avoir été reçue le jour de la réouverture de l'OPIC au public.

Veuillez prendre note qu'une fois que l'OPIC reçoit de la correspondance, celle-ci ne peut pas être retournée à l'expéditeur, même si l'expéditeur indique que la correspondance a été envoyée par erreur. Exceptionnellement, dans le cas où la correspondance vise une demande de brevet qui ne rencontre pas les exigences du paragraphe 27.1(1) de la Loi sur les brevets pour l'obtention d'une date de dépôt, les documents seront retournés à l'expéditeur.

Le formulaire de paiements des frais devrait toujours être

## Notices

to CIPO that contains financial information, such as credit card numbers.

Download the [Fee Payment Form](#).

### 1.1 Designated Establishments

For the purposes of subsections 5(4) and 54(3) of the Patent Rules, subsection 10(1) of the Trademarks Regulations, subsection 2(4) of the Copyright Regulations, section 4 of the Industrial Design Regulations and subsection 3(4) of the Integrated Circuit Topography Regulations, the following are the designated establishments or designated offices to which correspondence addressed to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies may be delivered **in person**. Please note that documents, payments and payment instructions delivered to the addresses listed below **must be enclosed in a sealed envelope** and that **no in person payment transactions** are processed on site. The ordinary business hours for each designated establishment are listed below.

- Innovation, Science and Economic Development  
Canada  
C.D. Howe Building  
235 Queen Street, Room S-143  
Ottawa ON K1A 0H5  
Tel.: 343-291-3436

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

- Innovation, Science and Economic Development  
Canada  
Sun Life Building  
1155 Metcalfe Street, Room 950  
Montreal QC H3B 2V6  
Tel.: 514-496-1797  
Toll-free: 1-888-237-3037

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

- Innovation, Science and Economic Development  
Canada  
151 Yonge Street, 4th Floor  
Toronto ON M5C 2W7  
Tel.: 416-973-5000

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,

fourni comme page couverture et devrait être le seul document soumis à l'OPIIC contenant de l'information financière telle que les numéros de carte de crédit.

Téléchargez le [formulaire de paiement des frais](#).

### 1.1 Établissements désignés

Pour l'application des paragraphes 5(4) et 54(3) des Règles sur les brevets, du paragraphe 10(1) du Règlement sur les marques de commerce, du paragraphe 2(4) du Règlement sur le droit d'auteur, de l'article 4 du Règlement sur les dessins industriels et du paragraphe 3(4) du Règlement sur les topographies de circuits intégrés, la correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être remise **en personne** aux établissements ou bureaux désignés suivants. Veuillez prendre note que les documents, paiements et instructions de paiements remis aux adresses énumérées ci-dessous doivent être **inclus dans une enveloppe scellée** et qu'**aucune transaction de paiement en personne** n'est traitée sur place. Les heures normales d'ouverture pour chaque établissement désigné sont indiquées ci-dessous.

- Innovation, Sciences et Développement économique  
Canada  
Édifice C.D. Howe  
235, rue Queen, pièce S-143  
Ottawa (Ontario) K1A 0H5  
Tél. : 343-291-3436

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

- Innovation, Sciences et Développement économique  
Canada  
Édifice Sun Life  
1155, rue Metcalfe, bureau 950  
Montréal (Québec) H3B 2V6  
Tél. : 514-496-1797  
Sans frais : 1-888-237-3037

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

- Innovation, Sciences et Développement économique  
Canada  
151, rue Yonge, 4e étage  
Toronto (Ontario) M5C 2W7  
Tél. : 416-973-5000

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à

## Avis

except statutory holiday

l'exception des jours fériés

- Innovation, Science and Economic Development  
Canada  
Canada Place  
9700 Jasper Avenue, Suite 725  
Edmonton AB T5J 4C3  
Tel.: 780-495-4782  
Toll-free: 1-800-461-2646

- Innovation, Sciences et Développement économique  
Canada  
Canada Place  
9700, avenue Jasper, pièce 725  
Edmonton (Alberta) T5J 4C3  
Tél. : 780-495-4782  
Sans frais : 1-800-461-2646

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

- Innovation, Science and Economic Development  
Canada  
Library Square  
300 West Georgia Street, Suite 2000  
Vancouver BC V6B 6E1  
Tel.: 604-666-5000

- Innovation, Sciences et Développement économique  
Canada  
Library Square  
300, rue Georgia Ouest, pièce 2000  
Vancouver (C.-B.) V6B 6E1  
Tél. : 604-666-5000

8:30 a.m. to 4:30 p.m. (local time) Monday to Friday,  
except statutory holidays

8 h 30 à 16 h 30 (heure locale) du lundi au vendredi, à  
l'exception des jours fériés

In accordance with subsections 5(4), 5(5), 54(3) and 54(4) of the Patent Rules, subsection 10(3) of the Trademarks Regulations, subsections 2(4) and (5) of the Copyright Regulations, subsection 5(2) of the Industrial Design Regulations and subsections 3(4) and (5) of the Integrated Circuit Topography Regulations, correspondence delivered to a designated establishment on a day when CIPO is open to the public will be deemed or considered to be received on the day on which they are delivered to that designated establishment. If CIPO is closed to the public, correspondence will be deemed or considered to be received on the day on which CIPO is next open to the public. For example, if correspondence intended for CIPO is delivered to the designated establishment in Toronto on June 24, it will not be considered to be received on June 24 as CIPO is closed on that day (St-Jean-Baptiste Holiday in Quebec). It will be deemed received on the day on which CIPO is next open to the public.

Conformément aux paragraphes 5(4), 5(5), 54(3) et 54(4) des Règles sur les brevets, au paragraphe 10(3) du Règlement sur les marques de commerce, aux paragraphes 2(4) et (5) du Règlement sur le droit d'auteur, au paragraphe 5(2) du Règlement sur les dessins industriels et aux paragraphes 3(4) et (5) du Règlement sur les topographies de circuits intégrés, la correspondance remise à l'un des établissements désignés susmentionnés lorsque les bureaux de l'OPIC sont ouverts au public sera réputée ou considérée avoir été reçue le jour de leur remise à cet établissement désigné. Si les bureaux de l'OPIC sont fermés au public, la correspondance sera réputée ou considérée avoir été reçue à le jour de la réouverture de l'OPIC au public. Par exemple, la correspondance adressée à l'OPIC remise à l'établissement désigné de Toronto le 24 juin ne sera pas considérée avoir été reçue le 24 juin puisque les bureaux de l'OPIC sont fermés ce jour-là (la Saint-Jean Baptiste est un jour férié au Québec). La correspondance sera alors réputée avoir été reçue le jour de la réouverture des bureaux de l'OPIC au public.

### 1.2. Registered Mail™ and Xpresspost™ services of Canada Post

For the purposes of subsections 5(4) and 54(3) of the Patent Rules, subsection 3(4) of the Trade-marks Regulations, subsection 2(4) of the Copyright Regulations, subsection 3(4) of the Industrial Design Regulations and subsection 3(4) of the Integrated Circuit Topography Regulations, the Registered Mail™ and Xpresspost™ services of Canada Post are designated establishments or designated offices to which

### 1.2. Services Courrier recommandé<sup>MC</sup> et Xpresspost<sup>MC</sup> de Postes Canada

Pour l'application des paragraphes 5(4) et 54(3) des Règles sur les brevets, du paragraphe 10(1) du Règlement sur les marques de commerce, du paragraphe 2(4) du Règlement sur le droit d'auteur, de l'article 4 du Règlement sur les dessins industriels et du paragraphe 3(4) du Règlement sur les topographies de circuits intégrés, les services Courrier recommandé<sup>MC</sup> et Xpresspost<sup>MC</sup> de Postes Canada sont des établissements ou des

## Notices

correspondence addressed to the Commissioner of Patents, the Registrar of Trade-marks, the Copyright Office or the Registrar of Topographies may be delivered.

CIPO considers that correspondence delivered through the Registered Mail™ and Xpresspost™ services of Canada Post is received by CIPO on the day indicated on the mailing receipt provided by Canada Post, or if CIPO is closed for business on that day, on the day when CIPO is next open for business.

### 2. Electronic Correspondence

For the purposes of section 8.1 of the Patent Act, subsection 64(1) of the Trademarks Act, subsection 24.1(1) of the Industrial Design Act and in accordance with subsections 5(6), 54(5), and 68(3) of the Patent Rules, subsection 10(4) of the Trademarks Regulations, subsection 2(6) of the Copyright Regulations, subsection 10(3) of the Industrial Design Regulations, and subsection 3(6) of the Integrated Circuit Topography Regulations, correspondence addressed to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies may be sent by facsimile, online or on an electronic medium only as provided in the current notice.

In accordance with subsection 54(5) of the Patent Rules, the request for national entry is the only correspondence addressed to the Commissioner in respect of an international application that can be submitted online or on an electronic medium with the exception of sequence listings, applications prepared using the PCT-SAFE software or prepared using WIPO's ePCT online service as specified in the current notice. Other correspondence submitted online or on an electronic medium in respect of international applications that have not entered the national phase will not be accepted.

Subsection 10(5) of the Trademarks Regulations specifies certain categories of correspondence to which the provisions of subsection 10(4) do not apply.

Correspondence sent by facsimile or online to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies constitutes the original, therefore a duplicate paper copy should not be forwarded.

Correspondence delivered to the Commissioner of Patents by electronic means of transmission, including facsimile, will be considered to be received on the day that it is transmitted if delivered and received before midnight local time at CIPO on a day when CIPO is open for business. When CIPO is closed for business, correspondence delivered on that day will be considered to be received on the next day on which CIPO is

bureaux désignés auxquels la correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être remise.

L'OPIC considère que la correspondance remise par l'entremise des services Courrier recommandé<sup>MC</sup> et Xpresspost<sup>MC</sup> de Postes Canada sont reçus par l'OPIC le jour indiqué sur le reçu de confirmation de Postes Canada, en autant que l'OPIC soit ouvert au public ce jour-là. Si l'OPIC est fermé au public ce jour-là, la correspondance sera réputée ou considérée avoir été reçue le jour de réouverture de l'OPIC au public.

### 2. Correspondance électronique

Pour l'application de l'article 8.1 de la Loi sur les brevets, du paragraphe 64(1) de la Loi sur les marques de commerce, du paragraphe 24.1(1) de la Loi sur les dessins industriels, et conformément aux paragraphes 5(6), 54(5) et 68(3) des Règles sur les brevets, au paragraphe 10(4) du Règlement sur les marques de commerce, au paragraphe 2(6) du Règlement sur le droit d'auteur, au paragraphe 10(3) du Règlement sur les dessins industriels et au paragraphe 3(6) du Règlement sur les topographies de circuits intégrés, la correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être transmise par télécopieur, en ligne ou à l'aide d'un support électronique et ce, seulement de la manière indiquée dans le présent énoncé.

Conformément au paragraphe 54(5) des Règles sur les brevets, la demande d'entrée en phase nationale d'une demande internationale est la seule correspondance adressée au commissaire qui peut être présentée en ligne ou sur support électronique, à l'exception des listages de séquences, des demandes préparées à l'aide du logiciel PCT-SAFE ou préparées à l'aide du service en ligne ePCT de l'OMPI, tel qu'indiqué dans le présent avis. Toute autre correspondance présentée en ligne ou sur support électronique relativement à des demandes internationales qui ne sont pas entrées dans la phase nationale ne sera pas acceptée.

Le paragraphe 10(5) du Règlement sur les marques de commerce prévoit certaines catégories de correspondance auxquelles les dispositions du paragraphe 10(4) ne s'appliquent pas.

La correspondance envoyée par télécopieur ou en ligne au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies constitue une version originale. Par conséquent, un duplicata sur support papier ne devrait pas être expédié.

La correspondance livrée au commissaire aux brevets et reçue par voie électronique, y compris par télécopieur, est considérée comme ayant été reçue à l'OPIC le jour même de sa transmission, si elle est livrée avant minuit, heure locale,

## Avis

open for business.

Correspondence delivered to the Registrar of Trademarks or the Industrial Design Office by electronic means of transmission, including facsimile, is deemed to have been received on the day on which CIPO receives it (Eastern Time).

### 2.1 Facsimile

Black and white facsimile correspondence addressed to the Commissioner of Patents, the Registrar of Trademarks, the Copyright Office, the Industrial Design Office or the Registrar of Topographies may be sent to the following facsimile numbers:

(819) 953-CIPO (2476) or (819) 953-OPIC (6742)

Colour facsimile correspondence addressed to the Registrar of Trademarks or the Industrial Design Office **must** be sent to the following facsimile number:

(819) 934-3833

Note that the model of facsimile is a Xerox C505/X and that this information may be needed to ensure a successful colour transmission.

Facsimile correspondence that is sent to any facsimile number other than those indicated above, including those of a designated establishment, will be considered not to have been received.

Evidence submitted by facsimile in respect of an opposition or section 45 proceeding **will not be accepted** due to issues such as the often-poor quality of transmission, the risk of incomplete transmission and the voluminous nature of the documents.

The electronic transmittal report returned to you following your facsimile transmission will constitute your acknowledgment receipt. Confidentiality of the facsimile transmission process cannot be guaranteed. Please note that CIPO strongly discourages the use of a computer facsimile interface or internet-based facsimile services due to technical issues with reception.

When submitting by facsimile a document that also has a fee requirement, notification of the preferred mode of payment to be applied must be prominently displayed on the Fee Payment Form to ensure expedient processing.

lorsque les bureaux de l'OPIC sont ouverts au public. Si elle est transmise un jour où les bureaux de l'OPIC sont fermés au public, elle est considérée comme ayant été reçue à la date du jour d'ouverture suivant de l'OPIC.

La correspondance fournie au registraire des marques de commerce ou transmise au Bureau des dessins industriels par voie électronique, y compris par télécopieur, est réputée avoir été reçue le jour où l'OPIC l'a reçue (Heure de l'Est).

### 2.1 Correspondance par télécopieur

La correspondance en noir et blanc par télécopieur adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur, au Bureau des dessins industriels ou au registraire des topographies peut être transmise aux numéros ci-dessous :

819-953-OPIC (6742) ou 819-953-CIPO (2476)

La correspondance en couleur par télécopieur (modèle : Xerox C505/X) adressée au registraire des marques de commerce ou au Bureau des dessins industriels doit être transmise au numéro ci-dessous :

(819) 934-3833

À noter que le modèle de télécopieur est un Xerox C505/X; information qui peut être nécessaire afin de compléter une transmission en couleur.

La correspondance qui est transmise par télécopieur à tout autre numéro de télécopieur que ceux qui sont indiqués ci-dessus, y compris ceux d'établissements désignés, sera considérée comme n'ayant pas été reçue.

Les éléments de preuve présentés par télécopieur dans le cadre d'une procédure d'opposition ou de radiation en vertu de l'article 45 de la Loi **ne seront pas acceptés** en raison des inconvénients reliés à la mauvaise qualité de la transmission, au risque que la transmission soit incomplète et à la nature volumineuse de ces documents.

Le rapport de transmission électronique que vous recevrez après votre transmission par télécopieur constituera votre accusé de réception. La confidentialité du processus de transmission électronique ne peut pas être garantie. Veuillez noter que l'OPIC décourage fortement l'utilisation d'une interface de télécopie par ordinateur ou de services de télécopie par le biais d'internet étant donné les problèmes techniques probables avec la réception.

Lors de la transmission par télécopieur d'un document comprenant une demande d'acquiescement de droit ou taxe, il faut clairement indiquer le mode de paiement préféré sur le formulaire de paiements des frais afin d'assurer un traitement rapide.

## Notices

### Patents

The document presentation requirements set out in sections 69 and 70 of the Patent Rules apply to facsimile correspondence.

### 2.2 Online

Correspondence addressed to the Commissioner of Patents, the Registrar of Trade-marks, the Copyright Office or the Registrar of Topographies may be sent electronically using the relevant links below.

### Patents

For the purpose of subsection 5(6) of the Patent Rules, correspondence addressed to the Commissioner may be sent electronically by accessing the following pages:

- [filing an application](#) (regular application);
- [filing a request for national entry](#);
- [filing an international application](#) (PCT Safe or ePCT);
- [general correspondence relating to applications and patents](#);
- [maintaining the name of a patent agent on the register of patent agents](#); and
- [ordering copies in paper, or electronic form of a document](#).

### Canada as Receiving Office Under the PCT: PCT-SAFE

Pursuant to PCT Rule 89bis, CIPO, in its role as a receiving Office, accepts the electronic filing of an international application prepared using the latest version of the WIPO's PCT-Safe software and applications prepared using WIPO's ePCT online service. Filing in both cases must be done using CIPO's International Filing e-service, called [PCT E-Filing](#).

**Note:** Correspondence related to PCT international applications can not be sent electronically to CIPO. Correspondence may be sent by mail, by facsimile or delivered by hand to CIPO or to a [designated establishment](#).

### Trademarks

For the purpose of subsection 10(4) of the Trademarks Regulations, the following correspondence addressed to the Registrar of Trademarks may be sent electronically by

### Brevets

Les exigences relatives à la présentation des documents énoncées aux articles 69 et 70 des Règles sur les brevets s'appliquent à la correspondance par télécopieur.

### 2.2 En ligne

La correspondance adressée au commissaire aux brevets, au registraire des marques de commerce, au Bureau du droit d'auteur ou au registraire des topographies peut être transmise par voie électronique.

### Brevets

Pour l'application du paragraphe 5(6) des Règles sur les brevets, la correspondance adressée au commissaire peut être envoyée par voie électronique, notamment en accédant aux pages suivantes :

- [déposer une demande](#) (demande régulière);
- [déposer une demande d'entrée dans la phase nationale](#);
- [déposer une demande internationale](#) (PCT Safe ou ePCT);
- [correspondance générale concernant des demandes et des brevets](#);
- [maintien du nom d'un agent de brevets dans le registre des agents de brevets](#);
- [commande de copies papier ou d'un document sous forme électronique](#).

### Le Canada comme office récepteur au titre du PCT : PCT-SAFE et ePCT

Conformément à la Règle 89bis du PCT, l'OPIC, à titre d'office récepteur, accepte le dépôt d'une demande internationale préparée à l'aide de la plus récente version du logiciel PCT-SAFE de l'OMPI, et d'une demande préparée à l'aide du service en ligne ePCT de l'OMPI. Dans les deux cas, le dépôt doit se faire à l'aide du service électronique de dépôt de demandes internationales de l'OPIC, appelé [Dépôt en ligne de demandes PCT](#).

**Note:** La correspondance liée aux demandes internationales PCT ne peut être envoyée par voie électronique à l'OPIC. La correspondance peut être envoyée par courrier, par télécopieur ou remis en mains à l'OPIC ou à un [établissement désigné](#).

### Marques de commerce

Pour l'application du paragraphe 10(4) du Règlement sur les marques de commerce, la correspondance adressée au registraire des marques de commerce peut être envoyés par voie électronique, notamment en accédant aux pages suivantes



## Avis

accessing the following pages:

- [filing a new or revised trademark application](#);
- [renewal of a trademark registration](#);
- [request to enter a name on the list of trademark agents](#);
- [annual renewal of a trademark agent](#);
- [requesting copies of trademark documents](#);
- [registration of a trademark application](#);

For the purpose of subsection 10(4) of the Trademarks Regulations, correspondence addressed to the Registrar of Trademarks in the context of opposition and section 45 proceedings may be sent electronically by accessing the [Trademarks Opposition Board's online web application](#):

### *Opposition proceedings before the Trademarks Opposition Board*

- filing a statement of opposition;
- filing of a counter statement;
- submission of the opponent's evidence, or statement;
- submission of the applicant's evidence, or statement;
- submission of the opponent's reply evidence;
- submission of the opponent's written representations, or statement;
- submission of the applicant's written representations, or statement;
- filing a request for a hearing; and
- requesting an extension of time.

### *Section 45 proceedings before the Trademarks Opposition Board*

- filing a request for a section 45 notice;
- submission of the registered owner's evidence;
- submission of the requesting party's written representations, or statement;
- submission of the registered owner's written representations, or statement;
- filing a request for a hearing; and
- requesting an extension of time.

## Copyright

:

- [nouvelle demande ou demande modifiée d'enregistrement de marque de commerce](#);
- [renouvellement de l'enregistrement d'une marque de commerce](#);
- [demande d'inscription d'un nom à la liste des agents de marques de commerce](#);
- [renouvellement annuel d'un agent de marques de commerce](#);
- [commande de copies de documents de marques de commerce](#);
- [l'enregistrement d'une marque de commerce](#)

Pour l'application du paragraphe 10(4) du Règlement sur les marques de commerce, la correspondance adressée au registraire des marques de commerce dans le cadre des procédures d'opposition ou de radiation en vertu de l'article 45 peut être envoyée par voie électronique en accédant à [l'application web en ligne de la Commission des oppositions des marques de commerce](#).

### *Procédures d'opposition devant la Commission des oppositions des marques de commerce*

- production d'une déclaration d'opposition;
- Production d'une contre-déclaration d'opposition;
- Production de la preuve de l'opposant, ou d'une déclaration;
- Production de la preuve du requérant, ou d'une déclaration;
- Production de la contre-preuve de l'opposant;
- Production des arguments écrits de l'opposant, ou déclarations;
- Soumission des arguments écrits du requérant, ou déclarations;
- Produire une demande pour une audience; et
- demande de prolongation de délai.

### *Procédures en vertu de l'article 45 devant la Commission des oppositions des marques de commerce*

- Production d'une demande pour un avis en vertu de l'article 45;
- Production de la preuve du propriétaire inscrit;
- Production des arguments écrits de la demanderesse, ou déclaration;
- Production des arguments écrits du propriétaire inscrit, ou déclaration;
- Produire une demande pour une audience; et
- Demande de prolongation de délai.

## Droits d'auteur

## Notices

For the purpose of subsection 2(6) of the Copyright Regulations, the following correspondence addressed to the Copyright Office may be sent electronically, by accessing the following pages:

- [application for registration of a copyright in a work](#),
- [application for registration of a copyright in a performer's performance, sound recording or a communication signal](#);
- [filing a grant of interest](#);
- [request for certificate of correction](#);
- [ordering copies in paper, or electronic form of a document](#); and
- [general correspondence relating to copyright](#).

## Industrial Designs

For the purpose of subsection 24.1(1) of the Industrial Design Act, the following correspondence addressed to the Industrial Design Office may be sent electronically, by accessing the following pages:

- [application for registration of an industrial design](#);
- [ordering copies in paper, or electronic form of a document](#);
- [general correspondence relating to industrial designs](#); and
- [payment of industrial design maintenance fees](#).

## Integrated Circuit Topographies

For the purpose of subsection 3(6) of the Integrated Circuit Topography Regulations, the following correspondence addressed to the Registrar of Topographies may be sent electronically, by accessing the following page:

- [general correspondence relating to integrated circuit topographies](#).

### 2.3 Electronic medium

**Note:** all electronic media must be free of worms, viruses or other malicious content. Files with malicious content will be deleted.

Pour l'application du paragraphe 2(6) du Règlement sur le droit d'auteur, la correspondance indiquée ci-dessous qui est adressée au Bureau du droit d'auteur peut être transmise par voie électronique, notamment en accédant aux pages suivantes :

- [demande d'enregistrement d'un droit d'auteur sur une œuvre](#),
- [demande d'enregistrement d'un droit d'auteur sur une prestation, un enregistrement sonore ou un signal de communication](#);
- [dépôt d'une concession d'intérêt](#);
- [demande de certificat de correction](#);
- [commande de copies des documents papier ou électroniques](#) et
- [correspondance générale relative aux droits d'auteur](#).

## Dessins industriels

Pour l'application du paragraphe 24.1(1) de la Loi sur les dessins industriels, la correspondance indiquée ci-dessous qui est adressée au Bureau des dessins industriels peut être transmise par voie électronique, notamment en accédant aux pages suivantes :

- [demande d'enregistrement d'un dessin industriel](#);
- [commande de copies de documents papier ou électroniques](#);
- [correspondance générale relative aux dessins industriels](#); et
- [paiement des droits de maintien des dessins industriels](#).

## Topographies de circuits intégrés

Pour l'application du paragraphe 3(6) du Règlement sur les topographies de circuits intégrés, la correspondance indiquée ci-dessous qui est adressée au registraire des topographies peut être transmise par voie électronique, notamment en accédant aux pages suivantes :

- [correspondance générale relative aux topographies de circuits intégrés](#).

### 2.3 Supports électroniques

**Note :** Les supports électroniques doivent être exempts de ver informatique, de virus, ou de tout autre contenu malveillant. Les fichiers qui comprennent du contenu malveillant seront supprimés.

## Brevets

## Patents

The Patent Office will accept correspondence on various types of electronic medium as specified below. The electronic medium should contain a table of contents and be provided with a cover letter, which will be date stamped by CIPO and placed in the application file. Filing date requirements prescribed in the Patent Rules still remain.

When submitted on an electronic medium, the parts of the application must be logically broken down in files, which are no larger than 25 megabytes.

With regards to sequence listings under Rule 111 of the Patent Rules, the electronic medium must be separate from any electronic medium which may be filed containing parts of the application itself or amendment(s) thereof.

### Canada as Receiving Office Under the PCT: Electronic Filing of Sequence Listings

Pursuant to PCT Rules 89bis and 89ter, and in accordance with Part 7 of the PCT Administrative Instructions, where an international application contains disclosure of one or more nucleotide and/or amino acid sequence listings, CIPO, in its role as a receiving Office, accepts that the sequence listing part of the description and/or any table related to the sequence listing(s) be filed, at the option of the applicant:

- i. only on an electronic medium in electronic form in accordance with section 702 of Part 7 of the PCT Administrative Instructions; or
- ii. both on an electronic medium in electronic form and on paper in accordance with section 702 of Part 7 of the PCT Administrative Instructions;

provided that the other elements of the international application are filed as otherwise provided for under the PCT.

The sequence listing part of an international application filed in electronic form and related tables filed in electronic form shall comply with the relevant provisions of Annex C and C-bis of the PCT Administrative Instructions respectively.

For this purpose the Canadian receiving Office will accept any electronic media specified in Annex F of the PCT Administrative Instructions. Where both the sequence listing and the tables are filed in electronic form, the listing and the tables shall be contained on separate electronic media, which shall contain no other programs or files.

For the purpose of processing the international application, the Canadian receiving Office requires two (2) additional copies of

Le Bureau des brevets acceptera la correspondance transmise à l'aide de divers supports électroniques, tel qu'indiqué ci-dessous. Le support électronique devrait contenir une table des matières et être accompagné d'une lettre explicative, laquelle sera datée par l'OPIC et placée dans le dossier de la demande. Les exigences relatives à la date de dépôt énoncées dans les Règles sur les brevets resteront applicables.

Les parties d'une demande qui sont présentées sur support électronique doivent être logiquement réparties en fichiers de 25 mégaoctets au maximum.

En ce qui concerne les listages des séquences prévus à l'article 111 des Règles sur les brevets, le support électronique doit être distinct de tout support électronique qui peut être déposé et qui contient des parties de la demande elle-même ou des modifications relatives à la demande.

### Le Canada comme office récepteur au titre du PCT : Dépôt électronique des listages de séquences

Conformément aux Règles 89bis et 89ter du PCT et à la Partie 7 des Instructions administratives du PCT, lorsqu'une demande internationale contient la divulgation d'un ou de plusieurs listages des séquences de nucléotides et/ou d'acides aminés, à titre d'office récepteur l'OPIC accepte le dépôt de la partie de la description contenant les listages des séquences et/ou de tout tableau relatif aux listages des séquences et ce, à la discrétion du requérant :

- i. seulement sous forme électronique et sur support électronique, conformément à l'article 702 de la Partie 7 des Instructions administratives du PCT, ou
- ii. sur support papier et sur support électronique sous forme électronique, conformément à l'article 702 de la Partie 7 des Instructions administratives du PCT,

à condition que les autres éléments de la demande internationale soient déposés conformément aux dispositions du PCT.

Dans une demande internationale déposée sous forme électronique, la partie qui contient le listage des séquences et les tableaux connexes seront conformes aux dispositions pertinentes de l'Annexe C et de l'Annexe C-bis des Instructions administratives du PCT, respectivement.

À cette fin, l'office récepteur canadien acceptera tout support électronique prévu à l'Annexe F des Instructions administratives du PCT. Lorsque le listage des séquences et les tableaux sont déposés sous forme électronique, ils le seront sur des supports électroniques distincts ne contenant pas d'autres programmes ni fichiers.

## Notices

the electronic media containing the sequence listing and/or tables in electronic form, accompanied by a statement that the sequence listings and/or tables contained in the copies are identical to those in electronic form as filed.

For further details concerning the filing of sequence listings and/or tables in electronic form, including the labeling of the electronic media and the calculation of the international filing fee, refer to section 7 of the PCT Administrative Instructions.

### Electronic Media accepted by the Patent Office

The Patent Office will accept 3.5 inch diskette, CD-ROM, CD-R, DVD, DVD-R and any format as specified in Annex F of the PCT Administration Instructions.

### Trademarks and Industrial Design

The Office of the Registrar of Trademarks and the Industrial Design Office will accept the following types of electronic media: CD-ROM, CD-R, DVD, DVD-R, and USB stick.

## 3. Details Concerning the Electronic Formats Accepted

### Patents

In accordance with section 8.1 of the Patent Act, and for the purposes of subsections 5(6), 54(5), and 68(3) of the Patent Rules, the acceptable file formats for documents submitted electronically site using the relevant links set out in [section 2.2](#) of these correspondence procedures or on electronic media are TIFF and PDF. In order to get a correspondence date, the office will accept documents initially filed in other formats provided they are viewable with the software "Stellent Quick View Plus 8.0.0". In these cases, the office will request the documents to be replaced by documents in PDF or TIFF and the submission of a statement to the effect that the replacement documents are the same as the documents initially filed.

Sequence listings can be initially provided in TIFF, PDF or in ASCII file formats. However, as a completion requirement according to section 94 of the Patent Rules, a sequence listing in the ASCII format compliant with the "PCT sequence listing standard" has to be submitted. Therefore, CIPO encourages applicants to submit the sequence listings in the ASCII format in the first place.

When applicable, the Patent Office will accept files in the

Aux fins du traitement de la demande internationale, l'office récepteur canadien exige deux (2) copies supplémentaires du support électronique contenant le listage de séquences et/ou les tableaux sous forme électronique, accompagnées d'une déclaration indiquant que le listage des séquences et/ou les tableaux contenus dans les copies sont identiques à ceux qui ont été déposés sous forme électronique.

On trouvera à l'article 7 des Instructions administratives du PCT des détails supplémentaires sur le dépôt de listages des séquences et/ou de tableaux sous forme électronique, notamment sur l'étiquetage des supports électroniques et le calcul de la taxe de dépôt internationale.

### Supports électroniques acceptés par le Bureau des brevets

Le Bureau de brevets acceptera des disquettes 3,5 pouces, CD-ROM, CD-R, DVD, DVD-R et tout format spécifié à l'Annexe F des Instructions administratives du PCT.

### Marques de commerce et dessins industriels

Le Bureau du registraire des marques de commerce et le Bureau des dessins industriels acceptent les supports électroniques suivants : CD ROM, CD-R, DVD, DVD-R, et clé USB.

## 3. Précisions concernant les formats électroniques acceptés

### Brevets

Conformément à l'article 8.1 de la Loi sur les brevets et aux fins des paragraphes 5(6), 54(5) et 68(3) des Règles sur les brevets, les formats de fichiers acceptables pour les documents présentés par voie électronique en utilisant les liens spécifiés à [l'article 2.2](#) des présentes procédures de correspondance ou sur support électronique sont les formats TIFF et PDF. Pour qu'une date de correspondance soit attribuée, le Bureau acceptera des documents initialement déposés dans d'autres formats à condition qu'ils soient consultables à l'aide du logiciel « Stellent Quick View Plus 8.0.0 ». Dans de tels cas, le Bureau exigera le remplacement des documents par des fichiers en format PDF ou TIFF, ainsi qu'une déclaration indiquant que ces fichiers sont identiques aux documents initialement déposés.

Les listages des séquences peuvent être initialement déposés sous forme de fichiers TIFF, PDF ou ASCII. Toutefois, afin de compléter la demande, conformément à l'article 94 des Règles sur les brevets, un listage des séquences en format ASCII conforme à la Norme PCT de listage des séquences devra être présenté. L'OPIC encourage donc les demandeurs à déposer les listages de séquences en format ASCII dès le départ.

## Avis

TIFF, PDF and ASCII format when they comply with the following specifications:

TIFF Format:

- TIFF CCITT Group 4, single or multi-page, black and white;
- Resolution of either 300 or 400 dpi;
- The dimensions of the scanned/stored images should match that of the paper requirements, namely 8 1/2" by 11" or A4.

PDF Format:

- Adobe Portable Document Format Version 1.4 compatible;
- Non-compressed text to facilitate searching;
- Unencrypted text;
- No embedded OLE objects;
- All fonts must be embedded and licensed for distribution.

ASCII

- Shall be encoded using IBM Code Page 437, IBM Code Page 932 or a compatible code page.

## Trademarks

For the purposes of subsection 64(1) of the Trademarks Act, the acceptable file formats for documents submitted electronically using the relevant links set out in [section 2.2](#) of these correspondence procedures are: PNG, TIFF, JPEG, GIF, MP3, MP4, PDF, BMP and Doc.

## Industrial Design

For the purposes of subsection 24.1(1) of the Industrial Design Act, the acceptable file formats for documents, other than a representation of a design, submitted electronically are WPD, DOC, DOCX and PDF. The acceptable file formats for the representation of a design are PDF, JPEG, TIFF and GIF. The file size limit is of 60MB for PDF, 10MB for the other file formats. The scanned/stored images should be of a resolution of at least 300 dpi and the dimensions must be of 21.59 cm by 27.94 cm (8.5 in by 11 in).

Note that the conversion of files to an acceptable format may result in a change to the quality of the drawings.

Le cas échéant, le Bureau des brevets acceptera des fichiers en format TIFF, PDF et ASCII s'ils sont conformes aux spécifications suivantes :

Format TIFF

- TIFF CCITT Groupe 4, une ou plusieurs pages, noir et blanc
- Résolution : 300 ou 400 ppp
- Les dimensions des images balayées par scanner ou mémorisées doivent être compatibles avec celles qui sont requises pour les papiers, soit 8 1/2 po par 11 po ou A4.

Format PDF

- Compatible avec Adobe Portable Document Format Version 1.4
- Texte non comprimé, pour faciliter la recherche
- Texte non chiffré
- Pas d'objets OLE incorporés
- Toutes les polices de caractère doivent être incorporées et leur distribution doit être autorisée.

ASCII

- Le texte sera encodé à l'aide des pages de codes IBM 437 ou IBM 932 ou d'une page de codes compatible.

## Marques de commerce

Pour l'application du paragraphe 64(1) de la Loi sur les marques de commerce, les formats de fichiers acceptables pour les documents fournis par un moyen électronique énoncé à la [section 2.2](#) des présentes procédures de correspondance sont : PNG, TIFF, JPEG, GIF, MP3, MP4, PDF, BMP et Doc.

## Dessins industriels

Pour l'application du paragraphe 24.1(1) de la Loi sur les dessins industriels, les formats de fichiers acceptables pour les documents autres que la représentation d'un dessin, transmis par voie électronique sont : WPD, DOC, DOCX, PDF. Les formats de fichiers acceptables pour la représentation d'un dessin sont PDF, JPEG, TIFF, et GIF. La taille maximale est de 60MB pour le format PDF et de 10MB pour tout autre format. L'image numérisée/stockée devrait être dans une résolution d'au moins 300 dpi et les dimensions doivent être de 21,59 cm par 27,94 cm (8,5 po par 11po)

Veillez noter que la conversion de fichiers vers un format acceptable pourrait résulter en un changement à la qualité des dessins.

## Notices

### 4. General Information

General information may be obtained by communicating with CIPO's [Client Service Centre](#).

### 5. Time Period Extensions

- [Time period extensions under the Patent, Trademarks and Industrial Design Acts](#)
- [Time period extensions under the Copyright and Integrated Circuit Topography Acts](#)
- [Time period extensions under the Patent Cooperation Treaty](#)
- [Time period extensions under the Madrid Protocol and the Hague Agreement](#)

#### Time period extensions under the Patent, Trademarks and Industrial Design Acts

For the purposes of subsection 78(1) of the Patent Act, subsection 66(1) of the Trademarks Act, and subsection 21(1) of the Industrial Design Act, any time period fixed under those Acts and ending on 1) a **prescribed day** set out in the list below or 2) a **designated day** on account of unforeseen circumstances, will be extended to the next day that is not a prescribed day or a designated day and where CIPO is open to the public.

**Designated days** are those days that are designated by the Commissioner, the Registrar, or the Minister, on account of unforeseen circumstances and if they are satisfied that it is in the public interest to do so. If a day is designated, the public will be informed of that fact on CIPO's website.

**Prescribed days** under the Patent Act, Trademarks Act and Industrial Design Act are as follows:

- Every Saturday and Sunday;
- New Year's Day (January 1)\*;
- Good Friday;
- Easter Monday;
- Victoria Day: First Monday immediately preceding May 25;
- St. Jean Baptiste Day (June 24)\*;
- Canada Day (July 1)\*;
- The first Monday in August;\*\*\*
- Labour Day: First Monday in September;
- Thanksgiving Day: Second Monday in October;

### 4. Renseignements généraux

Des renseignements généraux peuvent être obtenus en communiquant avec [le Centre de services à la clientèle de l'OPIC](#).

### 5. Prorogation des délais

- [Prorogation des délais en vertu des les Lois sur les brevets, les marques de commerce, et les dessins industriels](#)
- [Prorogation des délais en vertu des les Lois sur le droit d'auteur et les topographies de circuits intégrés](#)
- [Prorogation des délais en vertu du le Traité de coopération en matière de brevets](#)
- [Prorogation des délais en vertu du Protocole de Madrid et de l'Arrangement de La Haye](#)

#### Prorogation des délais prévus par les Lois sur les brevets, les marques de commerce, et les dessins industriels

Pour l'application du paragraphe 78(1) de la Loi sur les brevets, du paragraphe 66(1) de la Loi sur les marques de commerce, et du paragraphe 21(1) de la Loi sur les dessins industriels, tout délai fixé sous le régime de ces lois et qui expire 1) un **jour prescrit ou réglementaire** tel qu'indiqué dans la liste ci-dessous, ou 2) un **jour désigné** en raison de circonstances imprévues, sera prorogé jusqu'au jour suivant qui n'est ni un jour prescrit ni un jour désigné et où l'OPIC est ouvert au public.

Les **jours désignés** sont les jours désignés par le commissaire, le registraire, ou le ministre, où, en raison de circonstances imprévues, s'il est dans l'intérêt public de le faire. Si un jour est désigné, le public en sera informé sur le site web de l'OPIC.

Les **jours prescrits ou réglementaires** en vertu de la Loi sur les brevets, de la Loi sur les marques de commerce et de la Loi sur les dessins industriels sont les suivants :

- Tous les samedis et dimanches;
- Nouvel An (1<sup>er</sup> janvier)\*;
- Vendredi Saint;
- Lundi de Pâques;
- Fête de la Reine ou Journée nationale des patriotes : Premier lundi immédiatement avant le 25 mai;
- Saint-Jean-Baptiste (24 juin)\*;
- Fête du Canada (1<sup>er</sup> juillet)\*;
- Le premier lundi du mois d'août\*\*\*;
- Fête du travail : Premier lundi du mois de septembre;

## Avis

- Remembrance Day (November 11)\*;
- Christmas Day (December 25)\*\*;
- Boxing Day (December 26)\*\* ;
- Any day on which CIPO is closed to the public for all or part of that day during ordinary business hours.

\*In the case of New Year's Day, St. Jean Baptiste Day, Canada Day and Remembrance Day, if the day falls on a Saturday or Sunday, deadlines will be extended to the following Tuesday.

\*\*If December 25 falls on a Friday, deadlines will be extended to the following Tuesday. If December 25 falls on a Saturday or Sunday, any time periods ending on December 25 or December 26 will be extended to the following Wednesday.

\*\*\*Please note that the Office is open to the public on the first Monday in August. Any time period which expires on that day will be extended to the next day the Office is open to the public (first Tuesday in August). However, any correspondence or fees submitted to the Office on that day will be deemed or considered received on that day.

Extensions for prescribed days occur regardless of place of residence or of the establishment to which documents are delivered.

Please be aware that not all provincial and territorial holidays are days where deadlines are extended. It is recommended that clients be mindful and ensure that all deadlines are respected.

### Time period extensions under the Copyright and Integrated Circuit Topography Acts

In accordance with section 26 of the Interpretation Act, any person choosing to deliver a document to CIPO or a designated establishment (including the Registered Mail™ and Xpresspost™ services of Canada Post) where a federal, provincial or territorial holiday exists, is entitled to an extension of any time limit for the filing of the document that expires on the holiday, until the next day that is not a holiday. It is to be noted, in respect of provincial and territorial holidays, that the entitlement to the extension is dependent on the establishment to which the document is delivered and not on the place of residence of the person for whom the document is filed or of their agent. For this purpose, documents transmitted to CIPO by electronic means, including by facsimile, would be considered to be delivered to CIPO's offices in Gatineau, Quebec.

CIPO has no practical way of keeping track of the establishment to which documents are delivered. Accordingly,

- Action de Grâce : Deuxième lundi du mois d'octobre;
- Jour du Souvenir (11 novembre)\*;
- Jour de Noël (25 décembre)\*\*;
- Lendemain de Noël\*\* ;
- Tout jour où l'OPIC est fermé au public pendant tout ou une partie des heures normales d'ouverture de l'OPIC au public.

\*Si le Nouvel An, la Saint-Jean-Baptiste, la Fête du Canada, ou le Jour du Souvenir est un samedi ou un dimanche, les délais seront prorogés au mardi suivant.

\*\*Si le 25 décembre est un vendredi, les délais seront prorogés au mardi suivant. Si le 25 décembre est un samedi ou un dimanche, les délais seront prorogés au mercredi suivant.

\*\*\*Veuillez noter que les Bureaux sont ouverts au public le premier lundi du mois d'août. Tout délai qui expire ce jour-là sera prorogé au prochain jour ouvrable (premier mardi du mois d'août). Cependant, toute correspondance, droits ou taxes fournis au Bureau ce jour-là seront réputés ou considéré avoir été reçus à cette date.

La prorogation de délai concernant les jours prescrits ou réglementaires s'appliquent nonobstant du lieu de résidence ou du lieu de l'établissement auquel les documents ont été remis.

Veuillez noter que ce ne sont pas tous les jours fériés provinciaux ou territoriaux qui sont des jours prescrits ou réglementaires pour lesquels un délai peut être prorogé. Il est recommandé que les clients soient attentifs et s'assurent que tout délai soit respecté.

### Prorogation des délais prévus par les Lois sur le droit d'auteur et sur les topographies de circuits

Selon l'article 26 de la Loi d'interprétation, lorsqu'une personne choisit de livrer un document à l'OPIC ou à un établissement désigné (y compris un bureau régional d'Innovation, Sciences et Développement économique Canada ou le service Courrier recommandé<sup>MC</sup>, ou par Xpresspost<sup>MC</sup> de Postes Canada) dans une province où il y a un jour férié fédéral, provincial ou territorial, tout délai fixé pour le dépôt du document, qui expire un jour férié peut être prorogé jusqu'au jour non férié suivant. Dans le cas d'un jour férié provincial ou territorial, il convient de souligner que le droit à la prorogation dépend de l'établissement auquel le document est livré et non du lieu de résidence de la personne pour laquelle le document est déposé ou de son agent. À cet égard, les documents envoyés à l'OPIC par un moyen électronique, y compris par télécopieur, sont réputés être livrés aux bureaux de l'OPIC à Gatineau, au Québec.

En pratique, l'OPIC n'a aucun moyen de faire le suivi relativement aux établissements auxquels des documents sont

## Notices

where a person has a time limit for the filing of a document that expires on a provincial or territorial holiday but only delivers the document on the next day that is not a holiday, CIPO will assume that the document was delivered to an establishment that would justify an extension of the time limit. In such circumstances, it will be the responsibility of the person filing the document to ensure that he or she is properly entitled to any needed extension of the time limit.

### Time period extensions under the Patent Cooperation Treaty

Rule 80.5 of the Regulations under the PCT provides:

If the expiration of any period during which any document or fee must reach a national Office or intergovernmental organization falls on a day:

- i. on which such Office or organization is not open to the public for the purposes of the transaction of official business;
- ii. on which ordinary mail is not delivered in the locality in which such Office or organization is situated;
- iii. which, where such Office or organization is situated in more than one locality, is an official holiday in at least one of the localities in which such Office or organization is situated, and in circumstances where the national law applicable by that Office or organization provides, in respect of national applications, that, in such a case, such period shall expire on a subsequent day; or
- iv. which, where such Office is the government authority of a Contracting State entrusted with the granting of patents, is an official holiday in part of that Contracting State, and in circumstances where the national law applicable by that Office provides, in respect of national applications, that, in such a case, such period shall expire on a subsequent day;

the period shall expire on the next subsequent day on which none of the said four circumstances exists.

### Time period extensions under the Madrid Protocol and the Hague Agreement

If a period within which a communication must be received by the International Bureau of the World Intellectual Property Office would expire on a day on which the International

livrés. Par conséquent, si le délai pour le dépôt d'un document tombe un jour férié provincial ou territorial et qu'une personne le livre seulement le jour non férié suivant, l'OPIC tiendra pour acquis que le document a été livré à un établissement qui justifierait une prorogation du délai. Dans de telles circonstances, il incombe au déposant de s'assurer qu'il a droit à une telle prorogation.

### Prolongations de délais prévus au Traité de coopération en matière de brevets

La règle 80.5 du Règlement d'exécution du PCT prévoit ce qui suit :

Si un délai quelconque pendant lequel un document ou une taxe doit parvenir à un office national ou à une organisation intergouvernementale expire un jour :

- i. où cet office ou cette organisation n'est pas ouvert au public pour traiter d'affaires officielles;
- ii. où le courrier ordinaire n'est pas délivré dans la localité où cet office ou cette organisation est situé;
- iii. qui, lorsque cet office ou cette organisation est situé dans plus d'une localité, est un jour férié dans au moins une des localités dans lesquelles cet office ou cette organisation est situé, et dans le cas où la législation nationale applicable par cet office ou cette organisation prévoit, à l'égard des demandes nationales, que, dans cette situation, ce délai prend fin le jour suivant; ou
- iv. qui, lorsque cet office est l'administration gouvernementale d'un État contractant chargée de délivrer des brevets, est un jour férié dans une partie de cet État contractant, et dans le cas où la législation nationale applicable par cet office prévoit, à l'égard des demandes nationales, que, dans cette situation, ce délai prend fin le jour suivant;

Le délai prend fin le premier jour suivant auquel aucune de ces quatre circonstances n'existe plus.

### Prorogation des délais en vertu du Protocole de Madrid et de l'Arrangement de La Haye

Si un délai à l'intérieur duquel une communication doit être reçue par le Bureau international de l'Organisation mondiale de propriété intellectuelle expire un jour où le Bureau international n'est pas ouvert au public, le délai expirera lors du



## Avis

Bureau is not open to the public, it will expire on the next subsequent day on which the International Bureau is open. Likewise, if the period within which a communication (such as a notification of refusal of protection) must be sent by CIPO to the International Bureau would expire on a day on which CIPO is not open to the public, it will expire on the next subsequent day on which CIPO is open.

A list of the days on which the International Bureau is closed to the public during the current and the following calendar year is available on the [WIPO website](#).

### 6. Procedures in Case of an Unexpected Office Closure at CIPO

In case of unforeseen circumstances, CIPO will attempt to remain open to the public and ensure that essential service to our clients continues with the least possible disruption or delay.

In accordance with paragraph 27.01(n) of the Patent Rules, paragraph 15(n) of the Trademarks Regulations and paragraph 36(n) of the Industrial Design Regulations, whenever CIPO is closed to the public, for all or part of a day during ordinary business hours, including closures due to extraordinary circumstances, time periods will be extended to the next day that is not a prescribed or a designated day and where CIPO is open to the public.

For Copyright and Integrated Circuit Topography, if CIPO is closed to the public due to extraordinary circumstances, CIPO considers all time limits to be extended until the next day that it is open to the public. In such situations, mail delivered to CIPO or to designated establishments will be considered to be received on the date that CIPO re-opens to the public, with the exception of correspondence addressed to the Registrar of Topographies.

In view of the date-sensitive nature of intellectual property (IP), clients are advised to address important deadlines ahead of time to minimize the risk of affecting their IP rights. For the purposes of such deadlines, unless otherwise notified, clients should assume that all due dates remain in effect.

When possible during an emergency, information and search systems will continue to be available on our website; however, services provided through the Client Service Centre and other support areas within CIPO may be temporarily unavailable. Should an emergency occur, CIPO will post information with respect to [service interruptions](#) on our website as it becomes available and as circumstances permit.

Clients are **strongly encouraged** to send date-sensitive material through Canada Post by Registered Mail™ or Xpresspost™ or to use electronic means using the relevant links set out in [section 2.2](#) of these correspondence procedures. Documents may continue to be faxed to CIPO at 819-953-CIPO (953-2476). Date-sensitive material requiring fee

premier jour suivant où le Bureau international est ouvert au public. Similairement, si un délai à l'intérieur duquel une communication (tel qu'une notification de refus de la protection) doit être envoyée par l'OPIC au Bureau international expire un jour où les bureaux de l'OPIC sont fermés au public, ce délai expirera lors du premier jour suivant la réouverture de l'OPIC.

Une liste des jours pendant lesquels le Bureau international est fermé au public pendant l'année civile en cours et à venir est disponible [sur le site web de l'OMPI](#).

### 6. Procédures en cas de fermeture des bureaux

Lors de circonstances imprévues, l'OPIC s'efforcera de demeurer ouvert au public et d'assurer un service essentiel à ses clients, et ce, avec le moins d'interruption ou de retard possible.

Conformément à l'alinéa 27.01n) des Règles sur les Brevets, l'alinéa 15n) du Règlement sur les marques de commerce et de l'alinéa 36n) du Règlement sur les dessins industriels, lorsque les bureaux de l'OPIC sont fermés au public pendant toute ou une partie des heures normales d'ouverture, y compris une fermeture en raison de circonstances extraordinaires, les délais seront prorogés au jour suivant qui ne sera pas un jour prescrit ou un jour désigné et où l'OPIC est ouvert au public.

Pour les droits d'auteur et les topographies de circuits intégrés, si les bureaux de l'OPIC sont fermés au public en raison de circonstances extraordinaires, l'OPIC considère que tous les délais sont prorogés au prochain jour d'ouverture au public. Dans de telles circonstances, le courrier livré à l'OPIC ou à des établissements désignés sera considéré avoir été reçu à la date du jour de la réouverture de l'OPIC au public, à l'exception de la correspondance adressée au registraire des topographies.

Étant donné **l'importance que revêtent les délais** en matière de propriété intellectuelle (PI), il est recommandé aux clients de minimiser les risques pouvant nuire à leurs droits en matière de PI en tenant compte à l'avance des dates limites importantes. En ce qui a trait aux délais prescrits, les clients doivent respecter toutes les dates d'échéance, à moins d'avis contraire.

En situation d'urgence, les systèmes d'information et de recherche resteront, dans la mesure du possible, accessibles à partir de notre site Web. Toutefois, les services fournis par le Centre de services à la clientèle et les autres services de soutien de l'OPIC pourraient temporairement ne pas être offerts. En situation d'urgence, l'OPIC va publier les renseignements nécessaires sur notre [page d'interruptions des services](#), lorsque ceux-ci seront disponibles et les circonstances le permettront.

Les clients sont **fortement encouragés** de faire parvenir les documents assujettis à des délais précis par Postes Canada par Courrier recommandé<sup>MC</sup>, par Xpresspost<sup>MC</sup> ou par voie électronique en utilisant les liens spécifiés à [l'article 2.2](#) des présentes procédures de correspondance. Il est toujours

## Notices

payment that is sent by fax must be accompanied by a [VISA™](#), [MasterCard™](#), or [American Express™](#) credit card number, or [CIPO deposit account number](#).

Please note that there may also be instances in which the designated offices may be temporarily closed, yet CIPO remains open to the public. In such situations, it remains **the responsibility of CIPO's clients** to ensure that all deadlines are respected.

### 7. Procedures when CIPO is Open to the Public but Clients are Unable to Communicate with the Office

#### Patents, Industrial Design, Copyright and Integrated Circuit Topography

The legislative framework in relation with the abovementioned types of intellectual property does not provide CIPO with the flexibility to extend deadlines when it is open to the public but clients are unable to communicate with the Office.

In these situations it remains the responsibility of clients to ensure that all deadlines are respected.

#### Trademarks

The Trademarks Act and Regulations allow clients to request a retroactive extension of time when a due date has been missed due to a force majeure type situation. In order for a retroactive extension of time to be granted, the Registrar of Trademarks must be satisfied that the failure to do the act or apply for an extension of time before the original due date was not reasonably avoidable. A prescribed fee is required in certain cases.

### 8. Intellectual property acts, rules and regulations

- [Copyright Act](#)
- [Copyright Regulations](#)
- [Industrial Design Act](#)
- [Industrial Design Regulations](#)
- [Integrated Circuit Topography Act](#)
- [Integrated Circuit Topography Regulations](#)
- [Interpretation Act](#)
- [Patent Act](#)

possible de transmettre par télécopieur des documents à l'OPIC en composant le 819-953-OPIC (953-6742). Cependant, les documents assujettis à des délais pour lesquels des droits ou taxes sont exigés, qui sont envoyés par télécopieur, doivent être accompagnés [d'un numéro de carte VISA<sup>MC</sup>](#), [Mastercard<sup>MC</sup>](#) ou [American Express<sup>MC</sup>](#) ou [d'un numéro de compte de dépôt à l'OPIC](#).

Veillez noter qu'il pourrait y avoir des cas où les bureaux régionaux seraient fermés temporairement, mais où l'OPIC resterait ouvert au public. Le cas échéant, **les clients de l'OPIC demeurent responsables** du respect de tous les échéanciers.

### 7. Procédures à suivre lorsque l'Office est ouvert au public, mais les clients sont incapables de communiquer avec l'Office

#### Brevets, dessins industriels, droit d'auteur et topographies de circuits intégrés

Le cadre législatif en rapport aux types de propriété intellectuelle mentionnés ci-haut ne donne pas à l'OPIC la flexibilité de proroger les délais lorsque l'Office est ouvert au public, mais les clients sont dans l'impossibilité de communiquer avec le l'Office.

Dans une telle situation, les clients demeurent tenus de veiller à ce que les échéances soient respectées.

#### Marques de commerce

La Loi sur les marques de commerce et le Règlement sur les marques de commerce permettent aux clients de demander une prolongation rétroactive lorsqu'un délai n'a pas été respecté en raison d'un cas de force majeure. Pour qu'une prolongation de délai rétroactive soit accordée, le registraire des marques de commerce doit être convaincu que l'omission d'accomplir l'acte ou de demander la prorogation avant la date initiale d'échéance n'était pas raisonnablement évitable. Un droit prescrit est exigé dans certains cas.

### 8. Lois, règles et règlements sur la propriété intellectuelle

- [Loi sur le droit d'auteur](#)
- [Règlement sur le droit d'auteur](#)
- [Loi sur les dessins industriels](#)
- [Règlement sur les dessins industriels](#)
- [Loi sur les topographies de circuits intégrés](#)
- [Règlement sur les topographies de circuits intégrés](#)
- [Loi d'interprétation](#)
- [Loi sur les brevets](#)
- [Règles sur les brevets](#)

## Avis

- [Patent Rules](#)
- [Regulations under the PCT](#)
- [Trademarks Act](#)
- [Trademarks Regulations](#)

- [Règlement d'exécution du PCT](#)
- [Loi sur les marques de commerce](#)
- [Règlement sur les marques de commerce](#)

### **15. Canadian Applications Open to Public Inspection**

The *Canadian Patent Office Record* of April 16, 2024 contains applications open to public inspection from March 31, 2024 to April 6, 2024.

### **15. Demandes canadiennes mises à la disponibilité du public**

La *Gazette du bureau des brevets* du 16 avril 2024 contient les demandes disponibles au public pour consultation pour la période du 31 mars 2024 au 6 avril 2024.

# Canadian Patents Issued

April 16, 2024

## Brevets canadiens délivrés

16 avril 2024

---

[11] **2,770,490**  
[13] C

[51] **Int.Cl. C12N 5/071 (2010.01) C12N 5/077 (2010.01) A61K 35/35 (2015.01) A61K 47/00 (2006.01) A61L 27/14 (2006.01) A61L 27/36 (2006.01) A61L 27/38 (2006.01) A61L 27/40 (2006.01) A01N 1/02 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR IMPLANTATION OF PROCESSED ADIPOSE TISSUE AND PROCESSED ADIPOSE TISSUE PRODUCTS**

[54] **COMPOSITIONS ET PROCEDES D'IMPLANTATION DE TISSU ADIPEUX TRAITE ET PRODUITS DE TISSUS ADIPEUX TRAITES**

[72] NAHAS, ZAYNA, US  
[72] ELISSEFF, JENNIFER H., US  
[72] WU, IWEN, US  
[73] THE JOHNS HOPKINS UNIVERSITY, US

[85] 2012-02-08  
[86] 2010-08-11 (PCT/US2010/045177)  
[87] (WO2011/019822)  
[30] US (61/232,915) 2009-08-11

---

[11] **2,828,940**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 31/352 (2006.01) A61K 38/19 (2006.01) A61P 35/00 (2006.01) C07K 14/52 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **COMBINATION OF LOCAL AND SYSTEMIC IMMUNOMODULATIVE THERAPIES FOR ENHANCED TREATMENT OF CANCER**

[54] **COMBINAISON DE THERAPIES IMMUNOMODULATRICES LOCALES ET SYSTEMIQUES POUR L'AMELIORATION DU TRAITEMENT DU CANCER**

[72] EAGLE, CRAIG J., US  
[72] DEES, H. CRAIG, US  
[72] WACHTER, ERIC A., US  
[72] SINGER, JAMIE, US  
[73] PROTECTUS PHARMATECH, INC., US

[73] PROTECTUS PHARMACEUTICALS, INC., US

[85] 2013-09-03  
[86] 2012-03-09 (PCT/US2012/028412)  
[87] (WO2012/122444)  
[30] US (61/451,395) 2011-03-10

---

[11] **2,845,212**  
[13] C

[51] **Int.Cl. G06Q 40/04 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR DISPLAYING AN AMOUNT OF FUNDS AVAILABLE TO PURCHASE SECURITIES**

[54] **PROCEDE ET METHODE D'AFFICHAGE DU MONTANT DE FONDS DISPONIBLES POUR L'ACHAT DE TITRES**

[72] KHOLODENKO, EDWARD, CA  
[72] PERCY, DEAN, CA  
[72] GLOZSHTEIN, URY, CA  
[72] VIEGAS, SIDNEY, CA  
[73] QUESTRADE FINANCIAL GROUP INC., CA

[86] (2845212)  
[87] (2845212)  
[22] 2014-03-07

---

[11] **2,884,611**  
[13] C

[51] **Int.Cl. G06Q 20/26 (2012.01) G06Q 20/40 (2012.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR AUTHORIZING A DEBIT TRANSACTION WITHOUT USER AUTHENTICATION**

[54] **SYSTEME ET METHODE D'AUTORISATION D'UNE TRANSACTION DE DEBIT SANS AUTHENTIFICATION DE L'UTILISATEUR**

[72] HAMBLETON, SCOTT LAWSON, CA  
[72] LANGHAM, STEVEN ROBERT, CA  
[73] THE TORONTO-DOMINION BANK, CA

[86] (2884611)  
[87] (2884611)  
[22] 2015-03-12  
[30] US (61/951,561) 2014-03-12

---

[11] **2,886,597**  
[13] C

[51] **Int.Cl. H04H 60/33 (2009.01) A61B 5/245 (2021.01) A61B 5/377 (2021.01)**

[25] EN

[54] **PREDICTING RESPONSE TO STIMULUS**

[54] **PREDICTION DE LA REPONSE A UN STIMULUS**

[72] PARRA, LUCAS CRISTOBAL, US  
[72] DMOCHOWSKI, JACEK PIOTR, US  
[73] OPTIOS, INC., US

[85] 2015-03-27  
[86] 2013-10-11 (PCT/US2013/064474)  
[87] (WO2014/059234)  
[30] US (61/712,430) 2012-10-11  
[30] US (61/822,382) 2013-05-12

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **2,887,072**  
[13] C

[51] **Int.Cl. G16H 20/10 (2018.01) G16H 50/50 (2018.01) A61M 5/172 (2006.01) G06F 17/10 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR PROVIDING PATIENT-SPECIFIC DOSING AS A FUNCTION OF MATHEMATICAL MODELS**

[54] **SYSTEME ET PROCEDE D'ADMINISTRATION D'UNE POSOLOGIE SPECIFIQUE D'UN PATIENT EN FONCTION DE MODELES MATHEMATIQUES**

[72] MOULD, DIANE R., US

[73] MOULD, DIANE R., US

[85] 2015-04-01

[86] 2013-10-07 (PCT/US2013/063691)

[87] (WO2014/055978)

[30] US (61/710,330) 2012-10-05

---

[11] **2,895,144**  
[13] C

[51] **Int.Cl. C07K 16/00 (2006.01) C12N 15/85 (2006.01)**

[25] EN

[54] **POLYNUCLEOTIDES ENCODING RODENT ANTIBODIES WITH HUMAN IDIOTYPES AND ANIMALS COMPRISING SAME**

[54] **POLYNUCLEOTIDES CODANT POUR DES ANTICORPS DE RONGEUR AYANT DES IDIOTYPES HUMAINS, ET ANIMAUX LES COMPRENANT**

[72] BRUGGEMANN, MARIANNE, GB

[72] BUELOW, ROLAND, US

[72] OSBORN, MICHAEL J., GB

[72] MA, BIAO, GB

[73] OMNIAB, INC., US

[85] 2015-06-12

[86] 2013-12-13 (PCT/US2013/075157)

[87] (WO2014/093908)

[30] US (61/737,371) 2012-12-14

---

[11] **2,905,183**  
[13] C

[51] **Int.Cl. G06F 17/00 (2019.01) H04W 4/14 (2009.01) G06F 16/955 (2019.01) G06F 40/171 (2020.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR SIGNATURE CAPTURE**

[54] **SYSTEME ET METHODE DESTINEE A LA SAISIE DE SIGNATURE**

[72] WEISSINGER, KEYTON, US

[73] THE STANDARD REGISTER COMPANY, US

[86] (2905183)

[87] (2905183)

[22] 2015-09-21

[30] US (14/492,679) 2014-09-22

---

[11] **2,914,203**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 37/08 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **METHODS FOR TREATING ALLERGY AND ENHANCING ALLERGEN-SPECIFIC IMMUNOTHERAPY BY ADMINISTERING AN IL-4R INHIBITOR**

[54] **METHODES POUR TRAITER L'ALLERGIE ET RENFORCER L'IMMUNOTHERAPIE SPECIFIQUE D'ALLERGENE PAR ADMINISTRATION D'UN INHIBITEUR D'IL-4R**

[72] STAHL, NEIL, US

[72] ORENGO, JAMIE M., US

[72] MURPHY, ANDREW J., US

[72] GANDHI, NAMITA, US

[72] GRAHAM, NEIL, US

[73] REGENERON PHARMACEUTICALS, INC., US

[85] 2015-12-01

[86] 2014-06-03 (PCT/US2014/040695)

[87] (WO2014/197470)

[30] US (61/830,919) 2013-06-04

---

[11] **2,927,785**  
[13] C

[51] **Int.Cl. G08B 17/103 (2006.01) G08B 17/107 (2006.01)**

[25] EN

[54] **SMOKE DETECTOR WITH EXTERNAL SAMPLING VOLUME AND AMBIENT LIGHT REJECTION**

[54] **DETECTEUR DE FUMEE A VOLUME D'ECHANTILLONNAGE EXTERIEUR ET A REJET DE LUMIERE AMBIANTE**

[72] ERDTMANN, MATTHEW, US

[73] VALOR FIRE SAFETY, LLC, US

[85] 2016-04-15

[86] 2014-10-28 (PCT/US2014/062560)

[87] (WO2015/065965)

[30] US (14/067,431) 2013-10-30

[30] US (14/522,971) 2014-10-24

---

[11] **2,933,858**  
[13] C

[51] **Int.Cl. H04L 43/04 (2022.01) H04L 43/08 (2022.01) H04L 43/16 (2022.01) H04L 65/80 (2022.01) H04L 67/10 (2022.01) H04L 41/5067 (2022.01) H04L 43/0864 (2022.01) H04L 43/087 (2022.01) H04L 47/12 (2022.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR HEURISTIC CONTROL OF NETWORK TRAFFIC MANAGEMENT**

[54] **SYSTEME ET METHODE DE CONTROLE HEURISTIQUE DE GESTION DE TRAFIC RESEAU**

[72] SREEVALSAN, SHYAM, IN

[72] RAJASEKAR, KATHIRAVAN, IN

[72] FLATT, STEVEN J., CA

[72] SURESH, AKASH, IN

[72] BOUCHARD, FELIX-ANTOINE R., CA

[73] SANDVINE CORPORATION, CA

[86] (2933858)

[87] (2933858)

[22] 2016-06-22

[30] IN (690/KOL/2015) 2015-06-22

**Canadian Patents Issued  
April 16, 2024**

---

[11] **2,934,093**  
[13] C

[51] **Int.Cl. G01N 21/3518 (2014.01) G01M 3/04 (2006.01) H01L 31/0304 (2006.01) H01L 31/09 (2006.01)**

[25] EN

[54] **REMOTE SENSING OF NATURAL GAS LEAKS**

[54] **TELEDETECTION DE FUITES DE GAZ NATUREL**

[72] TOLTON, T. BOYD, CA

[73] NEW ERA TECHNOLOGY, INC., US

[86] (2934093)

[87] (2934093)

[22] 2016-06-27

---

[11] **2,935,565**  
[13] C

[51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/1459 (2006.01)**

[25] EN

[54] **CONTINUOUS ANALYTE MONITORING SYSTEM**

[54] **SYSTEME DE SURVEILLANCE CONTINUE D'ANALYTES**

[72] DEHENNIS, ANDREW, US

[72] RASIONI, BARKHA, US

[72] WHITEHURST, TODD, US

[73] SENSEONICS, INCORPORATED, US

[85] 2016-06-29

[86] 2014-12-23 (PCT/US2014/072068)

[87] (WO2015/103022)

[30] US (61/922,387) 2013-12-31

---

[11] **2,936,539**  
[13] C

[51] **Int.Cl. H04L 51/08 (2022.01) H04W 4/12 (2009.01) G06F 3/04817 (2022.01) H04L 51/066 (2022.01)**

[25] EN

[54] **METHOD AND DEVICE FOR ATTACHING MESSAGES STORED AT A DEVICE AS ATTACHMENTS TO A MESSAGE BEING COMPOSED AT THE DEVICE**

[54] **METHODE ET DISPOSITIF SERVANT A JOINDRE DES MESSAGES STOCKES SUR UN DISPOSITIF COMME PIECES JOINTES A UN MESSAGE COMPOSE SUR LE DISPOSITIF**

[72] EWANCHUK, ANDREW JOHN, CA

[72] FOGEL, CHRISTOPHER MICHAEL, CA

[72] PURI, RONEESH, CA

[72] BALASUBRAMANIAM, MAHADEVAN, US

[73] BLACKBERRY LIMITED, CA

[86] (2936539)

[87] (2936539)

[22] 2016-07-19

[30] US (14/817547) 2015-08-04

---

[11] **2,936,857**  
[13] C

[51] **Int.Cl. B62D 24/00 (2006.01) B62D 21/00 (2006.01) B62D 21/18 (2006.01)**

[25] EN

[54] **LIGHTWEIGHT STRUCTURAL JOINER**

[54] **JOINT STRUCTURAL LEGER**

[72] KUMAR, ANJANI, US

[72] PATEL, MITESHKUMAR HASMUKHLAL, US

[72] LAROSE, PAUL, US

[73] NEW ENGLAND WHEELS, INC., US

[86] (2936857)

[87] (2936857)

[22] 2016-07-22

[30] US (14/806,730) 2015-07-23

---

[11] **2,937,331**  
[13] C

[51] **Int.Cl. G01C 9/02 (2006.01) G01C 5/00 (2006.01) G01C 9/18 (2006.01) G01S 17/88 (2006.01)**

[25] EN

[54] **ADJUSTABLE LASER LEVELING DEVICE AND METHOD**

[54] **DISPOSITIF ET PROCEDE DE NIVELLEMENT LASER AJUSTABLE**

[72] HILL, JAYSON, US

[73] HILL, JAYSON, US

[85] 2016-07-19

[86] 2015-01-22 (PCT/US2015/012425)

[87] (WO2015/112692)

[30] US (61/930,645) 2014-01-23

[30] US (62/049,241) 2014-09-11

---

[11] **2,937,739**  
[13] C

[51] **Int.Cl. C07D 471/08 (2006.01) A61K 31/529 (2006.01) A61P 7/00 (2006.01) C07D 487/08 (2006.01)**

[25] EN

[54] **MACROCYCLES WITH HETEROCYCLIC P2' GROUPS AS FACTOR XIA INHIBITORS**

[54] **MACROCYCLES A GROUPES HETEROCYCLIQUES P2' SERVANT D'INHIBITEURS DU FACTEUR XIA**

[72] CORTE, JAMES R., US

[72] DE LUCCA, INDAWATI, US

[72] FANG, TIANAN, US

[72] YANG, WU, US

[72] WANG, YUFENG, US

[72] DILGER, ANDREW K., US

[72] PABBISSETTY, KUMAR BALASHANMUGA, US

[72] EWING, WILLIAM R., US

[72] ZHU, YEHENG, US

[72] WEXLER, RUTH R., US

[72] PINTO, DONALD J.P., US

[72] ORWAT, MICHAEL J., US

[72] SMITH, LEON M., II, US

[73] BRISTOL-MYERS SQUIBB COMPANY, US

[85] 2016-07-21

[86] 2015-01-30 (PCT/US2015/013654)

[87] (WO2015/116886)

[30] US (61/933,942) 2014-01-31

[30] US (62/058,293) 2014-10-01

**Brevets canadiens délivrés**  
**16 avril 2024**

---

[11] **2,937,800**  
[13] C

[51] **Int.Cl. A61K 33/18 (2006.01) A61K 33/00 (2006.01) A61P 9/04 (2006.01) A61P 9/10 (2006.01)**

[25] EN

[54] **HALOGEN TREATMENT OF HEART ATTACK AND ISCHEMIC INJURY**

[54] **TRAITEMENT AUX HALOGENES D'INFARCTUS DU MYOCARDE ET DE LESION ISCHEMIQUE**

[72] ROTH, MARK B., US

[72] MORRISON, MICHAEL L., US

[72] IWATA, AKIKO, US

[73] FRED HUTCHINSON CANCER CENTER, US

[85] 2016-07-22

[86] 2015-02-10 (PCT/US2015/015227)

[87] (WO2015/120458)

[30] US (61/937,943) 2014-02-10

[30] US (62/007,015) 2014-06-03

[30] US (62/060,338) 2014-10-06

[30] US (62/082,957) 2014-11-21

---

[11] **2,937,934**  
[13] C

[51] **Int.Cl. B60Q 1/30 (2006.01) B60Q 1/22 (2006.01) B60Q 1/44 (2006.01)**

[25] EN

[54] **VEHICLE LIGHT ASSEMBLY WITH MULTIPLE LIGHT ARRAYS**

[54] **ASSEMBLAGE LEGER DE VEHICULE COMPORTANT PLUSIEURS RESEAUX D'ECLAIRAGE**

[72] CHEN, CHUN-CHIH, TW

[73] OPTRONICS INTERNATIONAL, LLC, US

[86] (2937934)

[87] (2937934)

[22] 2016-08-03

[30] US (14/816,500) 2015-08-03

---

[11] **2,938,052**  
[13] C

[51] **Int.Cl. C12N 1/20 (2006.01) C12N 1/22 (2006.01)**

[25] EN

[54] **RAPID ACTING LACTOBACILLUS STRAINS AND THEIR USE TO IMPROVE AEROBIC STABILITY OF SILAGE**

[54] **SOUCHES DE LACTOBACILLUS A ACTION RAPIDE ET LEUR UTILISATION POUR AMELIORER LA STABILITE AEROBIE D'UN ENSILAGE**

[72] HARMAN, ELIZABETH, US

[72] RUTHERFORD, WILLIAM, US

[72] SMILEY, BRENDA KAY, US

[73] PIONEER HI-BRED INTERNATIONAL, INC., US

[85] 2016-07-26

[86] 2015-02-25 (PCT/US2015/017516)

[87] (WO2015/134254)

[30] US (14/200,231) 2014-03-07

---

[11] **2,940,948**  
[13] C

[51] **Int.Cl. A01D 69/06 (2006.01) A01D 45/02 (2006.01)**

[25] EN

[54] **CORN HEAD ROW UNIT GEARBOX DRIVE SHAFT SEAL**

[54] **JOINT DE TIGE D'ENTRAINEMENT DE BOITE DE VITESSES DE RECOLTEUR DE MAIS**

[72] BERNKLAU, NATHANIEL R., US

[72] WELCH, RANDY R., US

[72] BOMLENY, DUANE M., US

[72] CABEZAS, SARA, ES

[73] DEERE & COMPANY, US

[86] (2940948)

[87] (2940948)

[22] 2016-09-01

[30] US (14/874,227) 2015-10-02

---

[11] **2,942,000**  
[13] C

[51] **Int.Cl. C11D 9/26 (2006.01) A01N 37/00 (2006.01) A01P 1/00 (2006.01)**

[25] EN

[54] **METHODS AND COMPOSITIONS FOR CLEANING AND DISINFECTING SURFACES**

[54] **PROCEDES ET COMPOSITIONS POUR NETTOYER ET DESINFECTER DES SURFACES**

[72] BEUG-DEEB, MARIA U.D., US

[72] DEEB, THOMAS M., US

[73] MARIA BEUG-DEEB INC. DBA T&M ASSOCIATES, US

[85] 2016-09-08

[86] 2014-03-14 (PCT/US2014/027052)

[87] (WO2014/152189)

[30] US (61/792,061) 2013-03-15

---

[11] **2,942,645**  
[13] C

[51] **Int.Cl. H01H 71/00 (2006.01) H01H 71/04 (2006.01) H02H 1/00 (2006.01)**

[25] EN

[54] **COMMUNICATING CIRCUIT BREAKER ARCHITECTURE WITH AUTOMATIC LOAD CENTER POSITION IDENTIFICATION**

[54] **ARCHITECTURE DE DISJONCTEUR COMMUNIQUEANT OFFRANT L'IDENTIFICATION AUTOMATIQUE DE POSITION DE CENTRE DE CHARGE**

[72] REID, PAUL A., US

[73] SCHNEIDER ELECTRIC USA, INC., US

[86] (2942645)

[87] (2942645)

[22] 2016-09-20

[30] US (14/881,857) 2015-10-13

**Canadian Patents Issued  
April 16, 2024**

---

[11] **2,942,648**  
[13] C

[51] **Int.Cl. H01H 71/00 (2006.01) H01H 71/04 (2006.01) H02H 1/00 (2006.01)**  
[25] EN  
[54] **TRIP INDICATION USING ADJACENT CIRCUIT BREAKERS**  
[54] **INDICATION DE DECLenchement AU MOYEN DES DISJONCTEURS ADJACENTS**  
[72] REID, PAUL A., US  
[73] SCHNEIDER ELECTRIC USA, INC., US  
[86] (2942648)  
[87] (2942648)  
[22] 2016-09-20  
[30] US (14/881,746) 2015-10-13

---

[11] **2,945,712**  
[13] C

[51] **Int.Cl. B29C 65/20 (2006.01)**  
[25] EN  
[54] **WELDING METHOD AND DEVICE**  
[54] **METHODE DE SOUDAGE ET APPAREIL**  
[72] WAGNER, WLADIMIR, DE  
[73] STURTZ MASCHINENBAU GMBH, DE  
[86] (2945712)  
[87] (2945712)  
[22] 2016-10-17  
[30] DE (10 2015 014 439.6) 2015-10-15

---

[11] **2,947,920**  
[13] C

[51] **Int.Cl. G06Q 20/38 (2012.01)**  
[25] FR  
[54] **DATA ENCRYPTION PROCESS FOR METHODS OF PAYMENT, CORRESPONDING METHODS OF PAYMENT, SERVER AND PROGRAMS**  
[54] **PROCEDE DE CHIFFREMENT DE DONNEES DE MOYENS DE PAIEMENT, MOYEN DE PAIEMENT, SERVEUR ET PROGRAMMES CORRESPONDANTS**  
[72] NACCACHE, DAVID, FR  
[72] GERAUD, REMI, FR  
[72] KOUDOUSSE, HIBA, FR  
[73] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[86] (2947920)  
[87] (2947920)  
[22] 2016-11-09  
[30] FR (1560772) 2015-11-10

---

[11] **2,948,674**  
[13] C

[51] **Int.Cl. H04W 40/04 (2009.01) H04W 80/06 (2009.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR DYNAMIC SELECTION OF COMMUNICATION PATHS FOR A MOVING VEHICLE**  
[54] **METHODE ET SYSTEME DE SELECTION DYNAMIQUE DE CHEMINS DE COMMUNICATION DESTINES A UN VEHICULE EN MOUVEMENT**  
[72] BERGEK, MARTIN, SE  
[72] KARLSSON, MATS, SE  
[72] EKLUND, PETER, SE  
[73] ICOMERA AB, SE  
[86] (2948674)  
[87] (2948674)  
[22] 2016-11-16  
[30] SE (1551595-0) 2015-12-04

---

[11] **2,949,316**  
[13] C

[51] **Int.Cl. G06Q 10/10 (2023.01) G16H 40/20 (2018.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR AUTOMATED AND CENTRALIZED REAL-TIME EVENT DETECTION AND COMMUNICATION**  
[54] **SYSTEMES ET METHODES DE DETECTION ET COMMUNICATION D'EVENEMENT EN TEMPS REEL AUTOMATISEES ET CENTRALISEES**  
[72] MANCINE, NATHAN, US  
[72] ROVNNAN, JOHN, US  
[73] TELETRACKING TECHNOLOGIES, INC., US  
[86] (2949316)  
[87] (2949316)  
[22] 2016-11-23  
[30] US (62/259,344) 2015-11-24

---

[11] **2,950,506**  
[13] C

[51] **Int.Cl. G01R 31/52 (2020.01) H02J 13/00 (2006.01)**  
[25] EN  
[54] **WAVEFORM SEPARATOR APPARATUS AND METHOD FOR DETECTING LEAKAGE CURRENT IN HIGH VOLTAGE DIRECT CURRENT POWER SYSTEMS**  
[54] **APPAREIL SEPARATEUR DE FORME D'ONDE ET METHODE DE DETECTION DE COURANT DE FUITE DANS LES SYSTEMES D'ALIMENTATION EN COURANT DIRECT HAUTE TENSION**  
[72] BILIC, ZORAN, CA  
[72] BALL, DAVID JAMES, US  
[73] QUANTA ASSOCIATES, L.P., US  
[86] (2950506)  
[87] (2950506)  
[22] 2016-12-02

---

[11] **2,950,847**  
[13] C

[51] **Int.Cl. G06V 20/58 (2022.01) G06T 7/277 (2017.01) G06F 17/18 (2006.01) G01S 17/931 (2020.01)**  
[25] FR  
[54] **DYNAMIC SCENE ANALYSIS METHOD, AND ASSOCIATED ANALYSIS MODULE AND COMPUTER PROGRAMME**  
[54] **PROCEDE D'ANALYSE D'UNE SCENE DYNAMIQUE, MODULE D'ANALYSE ET PROGRAMME D'ORDINATEUR ASSOCIES**  
[72] LAUGIER, CHRISTIAN, FR  
[72] NEGRE, AMAURY, FR  
[72] PERROLLAZ, MATHIAS, FR  
[72] RUMMELHARD, LUKAS, FR  
[73] INRIA INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET EN AUTOMATIQUE, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR  
[73] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[85] 2016-11-30  
[86] 2015-06-02 (PCT/FR2015/051449)  
[87] (WO2015/185846)  
[30] FR (1455183) 2014-06-06



**Brevets canadiens délivrés  
16 avril 2024**

[11] **2,951,644**

[13] C

[51] **Int.Cl. F04D 1/06 (2006.01) B23P 6/00 (2006.01)**

[25] EN

[54] **MULTI-STAGE HORIZONTAL CENTRIFUGAL PUMP FOR CONVEYING A FLUID AND A METHOD FOR REPAIRING THE SAME**

[54] **POMPE CENTRIFUGE HORIZONTALE A PLUSIEURS ETAGES POUR TRANSPORTER UN FLUIDE ET PROCEDE DE REPARATION DE CELLE-CI**

[72] LAGAS, NICOLAS, FR

[73] SULZER MANAGEMENT AG, CH

[86] (2951644)

[87] (2951644)

[22] 2016-12-13

[30] EP (15203126.6) 2015-12-30

[11] **2,952,132**

[13] C

[51] **Int.Cl. H04W 16/14 (2009.01) H04B 1/54 (2006.01) H04B 7/185 (2006.01)**

[25] EN

[54] **METHOD FOR ALLOCATING RADIO RESOURCES IN A COMMUNICATION SYSTEM USING NON-GSO SATELLITES WITH INTERFERENCE LEVEL CONSTRAINT TO A GEOSTATIONARY SYSTEM**

[54] **METHODE D'ATTRIBUTION DE RESSOURCES RADIO, A UN SYSTEME GEOSTATIONNAIRE, DANS UN SYSTEME DE COMMUNICATION AU MOYEN DE SATELLITES NON GSO A CONTRAINTE DE NIVEAU D'INTERFERENCE**

[72] FARAJ, ZAKARIYA, FR

[72] CHUBERRE, NICOLAS, FR

[73] THALES, FR

[86] (2952132)

[87] (2952132)

[22] 2016-12-16

[30] FR (1502640) 2015-12-18

[11] **2,952,242**

[13] C

[51] **Int.Cl. H04N 19/70 (2014.01) H04N 19/30 (2014.01) H04N 19/31 (2014.01) H04N 19/46 (2014.01)**

[25] EN

[54] **SIGNALING HRD PARAMETERS FOR BITSTREAM PARTITIONS**

[54] **SIGNALISATION DE PARAMETRES HRD POUR DES DIVISIONS DE FLUX BINAIRE**

[72] WANG, YE-KUI, US

[73] QUALCOMM INCORPORATED, US

[85] 2016-12-13

[86] 2015-06-17 (PCT/US2015/036172)

[87] (WO2015/195761)

[30] US (62/013,965) 2014-06-18

[30] US (14/741,279) 2015-06-16

[11] **2,953,980**

[13] C

[51] **Int.Cl. B44D 3/14 (2006.01) B05C 21/00 (2006.01) B44D 3/12 (2006.01)**

[25] EN

[54] **THUMB HOLE PAINT CONTAINER AND HOLDER**

[54] **CONTENANT DE PEINTURE DOTE D'UN TROU POUR LE POUCE ET SUPPORT**

[72] FEE, GARRY C., US

[72] MORPHEY, JOHN C., US

[73] NOVA WILDCAT SHUR-LINE, LLC, US

[86] (2953980)

[87] (2953980)

[22] 2017-01-09

[30] US (62/276,613) 2016-01-08

[30] US (15/400,695) 2017-01-06

[11] **2,956,608**

[13] C

[51] **Int.Cl. H02G 3/14 (2006.01)**

[25] EN

[54] **MODULAR COVER PLATES**

[54] **PLAQUES DE COUVERCLE MODULAIRES**

[72] KORCZ, KRZYSZTOF, US

[72] JOHNSON, STEVEN, US

[73] HUBBELL INCORPORATED, US

[86] (2956608)

[87] (2956608)

[22] 2017-01-30

[30] US (62/288483) 2016-01-29

[11] **2,957,795**

[13] C

[51] **Int.Cl. H04L 12/16 (2006.01) H04H 20/93 (2009.01) G06F 16/955 (2019.01) G06F 3/14 (2006.01) H04L 12/18 (2006.01)**

[25] EN

[54] **METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING CONTENT DISTRIBUTION VIA TRANSCEIVERS TO A DISPLAY**

[54] **PROCEDE, APPAREIL ET PRODUIT PROGRAMME INFORMATIQUE DE COMMANDE D'UNE DISTRIBUTION DE CONTENU A UN AFFICHAGE PAR L'INTERMEDIAIRE D'EMETTEURS-RECEPTEURS**

[72] POWERS, CHRISTOPHER, US

[72] APARICIO, MIKE, US

[73] GROUPON, INC., US

[85] 2017-02-09

[86] 2015-08-11 (PCT/IB2015/056120)

[87] (WO2016/024226)

[30] US (62/036,446) 2014-08-12

[11] **2,958,371**

[13] C

[51] **Int.Cl. H04R 29/00 (2006.01) G01R 27/04 (2006.01)**

[25] EN

[54] **DEVICE AND METHOD FOR ADJUSTING AN OUTPUT TO AN AUDIO PORT BASED ON A DETERMINED SENSITIVITY**

[54] **DISPOSITIF ET METHODE D'AJUSTEMENT D'UNE SORTIE VERS UN PORT AUDIO FONDES SUR UNE SENSIBILITE DETERMINEE**

[72] LOWLES, ROBERT WILLIAM, CA

[72] LORENZ, CHRISTIAN, CA

[73] BLACKBERRY LIMITED, CA

[86] (2958371)

[87] (2958371)

[22] 2017-02-17

[30] US (15/057426) 2016-03-01

**Canadian Patents Issued  
April 16, 2024**

---

[11] **2,961,411**  
[13] C

[51] **Int.Cl. G02B 3/00 (2006.01) B42D  
25/328 (2014.01) B44F 1/10 (2006.01)  
G02B 27/06 (2006.01)**

[25] EN  
[54] **SECURE LENS LAYER  
COUCHE DE LENTILLES  
SECURISEE**

[72] COTE, PAUL F., US  
[73] CRANE SECURITY  
TECHNOLOGIES, INC., US  
[85] 2017-03-14  
[86] 2015-09-16 (PCT/US2015/050347)  
[87] (WO2016/044372)  
[30] US (62/050,865) 2014-09-16

---

[11] **2,962,798**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61P  
29/00 (2006.01) C07K 16/18 (2006.01)  
C07K 16/28 (2006.01)**

[25] EN  
[54] **INHIBITORS OF LACTATE  
TRANSPORTERS FOR USE IN  
THE TREATMENT OF  
INFLAMMATORY DISEASES**

[54] **INHIBITEURS DE  
TRANSPORTEURS DE LACTATE  
DESTINES A ETRE UTILISES  
DANS LE TRAITEMENT DE  
MALADIES INFLAMMATOIRES**

[72] MAURO, CLAUDIO, GB  
[72] HAAS, ROBERT, GB  
[72] MARELLI-BERG, FEDERICA, GB  
[73] THE UNIVERSITY OF  
BIRMINGHAM, GB  
[85] 2017-03-27  
[86] 2015-10-20 (PCT/GB2015/053125)  
[87] (WO2016/063037)  
[30] GB (1418626.6) 2014-10-20

---

---

[11] **2,963,749**  
[13] C

[51] **Int.Cl. C10G 50/00 (2006.01) C07C  
1/20 (2006.01) C10G 3/00 (2006.01)**

[25] EN  
[54] **SYSTEMS AND PROCESSES FOR  
CONVERSION OF ETHYLENE  
FEEDSTOCKS TO  
HYDROCARBON FUELS**

[54] **SYSTEMES ET PROCEDES DE  
CONVERSION DE MATIERES  
PREMIERES A BASE  
D'ETHYLENE EN CARBURANTS  
HYDROCARBONES**

[72] LILGA, MICHAEL, US  
[72] HALLEN, RICHARD, US  
[72] ALBRECHT, KARL, US  
[72] COOPER, ALAN, US  
[72] FRYE, JOHN, US  
[72] RAMASAMY, KARTHIKEYAN  
KALLUPALAYAM, US  
[73] BATTELLE MEMORIAL INSTITUTE,  
US  
[85] 2017-04-05  
[86] 2015-10-29 (PCT/GB2015/053243)  
[87] (WO2016/067033)  
[30] US (14/528,160) 2014-10-30

---

[11] **2,963,902**  
[13] C

[51] **Int.Cl. G02B 6/36 (2006.01) G02B  
6/255 (2006.01)**

[25] EN  
[54] **FIBER OPTIC CONNECTOR  
CONNECTEUR DE FIBRE  
OPTIQUE**

[72] CHABOT, BRUNO, CA  
[72] HUBBARD, DAVID, US  
[73] BELDEN CANADA ULC, CA  
[86] (2963902)  
[87] (2963902)  
[22] 2017-04-10  
[30] US (62/320,425) 2016-04-08

---

---

[11] **2,966,332**  
[13] C

[51] **Int.Cl. A61K 38/49 (2006.01) A61P  
9/00 (2006.01) C12Q 1/60 (2006.01)**

[25] EN  
[54] **METHODS AND COMPOSITIONS  
FOR SAFE AND EFFECTIVE  
THROMBOLYSIS**

[54] **METHODES ET COMPOSITIONS  
POUR THROMBOLYSE SURE ET  
EFFICACE**

[72] GUREWICH, VICTOR, US  
[73] THROMBOLYTIC SCIENCE, LLC,  
US  
[85] 2017-04-28  
[86] 2015-11-03 (PCT/US2015/058878)  
[87] (WO2016/073514)  
[30] US (62/074,374) 2014-11-03

---

[11] **2,967,421**  
[13] C

[51] **Int.Cl. H05B 47/16 (2020.01) B60Q  
3/47 (2017.01) B64D 11/00 (2006.01)**

[25] EN  
[54] **LIGHT PROGRAM FOR  
INTERIOR LIGHTING IN AN  
AIRCRAFT**

[54] **PROGRAMME D'ECLAIRAGE  
DESTINE A L'ECLAIRAGE  
INTERIEUR D'UN AERONEF**

[72] FEHRINGER, SEBASTIAN, DE  
[73] DIEHL AEROSPACE GMBH, DE  
[86] (2967421)  
[87] (2967421)  
[22] 2017-05-15  
[30] DE (102016006765.9) 2016-06-02

---

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **2,967,709**  
[13] C

[51] **Int.Cl. H02P 31/00 (2006.01) H01R 9/24 (2006.01) H02B 1/04 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR SIMPLIFYING INTERCONNECTION BETWEEN PANEL CONTROLS AND MOTOR POWER UNITS**

[54] **SYSTEME ET METHODE DE SIMPLIFICATION D'INTERCONNEXION ENTRE LES COMMANDES DE PANNEAU ET LES MODULES D'ALIMENTATION MOTEUR**

[72] OMARI, AHMAD K., US

[72] LANGER, RANDALL S., US

[73] ROCKWELL AUTOMATION TECHNOLOGIES, INC., US

[86] (2967709)

[87] (2967709)

[22] 2017-05-18

[30] US (15/188,362) 2016-06-21

---

[11] **2,967,778**  
[13] C

[51] **Int.Cl. C07K 16/26 (2006.01) A61K 38/17 (2006.01) C07K 14/725 (2006.01)**

[25] EN

[54] **ANTI-THYROGLOBULIN T CELL RECEPTORS**

[54] **RECEPTEURS DE LYMPHOCYTE T ANTI-THYROGLOBULINE**

[72] HANADA, KENICHI, US

[72] WANG, QIONG J., US

[72] YANG, JAMES C., US

[72] YU, ZHIYA, US

[73] THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, US

[85] 2017-05-12

[86] 2015-11-12 (PCT/US2015/060282)

[87] (WO2016/077525)

[30] US (62/079,713) 2014-11-14

---

[11] **2,968,304**  
[13] C

[51] **Int.Cl. C07H 21/02 (2006.01) C07H 21/04 (2006.01)**

[25] EN

[54] **PHOSPHORAMIDITE SYNTHONES FOR THE SYNTHESIS OF SELF-NEUTRALIZING OLIGONUCLEOTIDE COMPOUNDS**

[54] **SYNTHONS PHOSPHORAMIDITES POUR LA SYNTHÈSE DE COMPOSES OLIGONUCLEOTIDIQUES AUTO-NEUTRALISANTS**

[72] TABATADZE, DAVID R., US

[72] YANACHKOV, IVAN, US

[73] ZATA PHARMACEUTICALS, INC., US

[85] 2017-05-17

[86] 2015-11-18 (PCT/US2015/061343)

[87] (WO2016/081600)

[30] US (62/081,316) 2014-11-18

---

[11] **2,971,730**  
[13] C

[51] **Int.Cl. E21B 43/26 (2006.01)**

[25] EN

[54] **ADJUSTABLE FRACTURING SYSTEM**

[54] **SYSTEME DE FRACTURATION REGLABLE**

[72] TRAN, DUC THANH, US

[72] WEBSTER, MATTHEW THOMAS ROBINSON, CA

[72] PANG, RAY DICKSANG, US

[72] MURDOCH, KEITH, US

[73] SPM OIL & GAS PC LLC, US

[86] (2971730)

[87] (2971730)

[22] 2017-06-23

[30] US (62/354101) 2016-06-23

[30] US (62/393990) 2016-09-13

[30] US (62/412230) 2016-10-24

[30] US (62/421019) 2016-11-11

---

[11] **2,974,292**  
[13] C

[51] **Int.Cl. A61K 31/352 (2006.01)**

[25] EN

[54] **METHODS FOR PREPARATION OF CANNABIS OIL EXTRACTS AND COMPOSITIONS**

[54] **PROCEDES DE PREPARATION D'EXTRAITS D'HUILE DE CANNABIS ET COMPOSITIONS**

[72] FINLEY, CONSTANCE, US

[72] MCKEE, LUKE, US

[72] POOLE BESTWICK, HALEY, US

[72] ROETHLE, PAUL, US

[73] CONSTANCE THERAPEUTICS, INC., US

[85] 2017-07-18

[86] 2016-01-29 (PCT/US2016/015633)

[87] (WO2016/123475)

[30] US (61/996,993) 2015-01-31

[30] US (62/259,539) 2015-11-24

---

[11] **2,974,870**  
[13] C

[51] **Int.Cl. A61K 31/7064 (2006.01) A23L 33/00 (2016.01) A23L 33/115 (2016.01) A23L 33/13 (2016.01) A23L 33/145 (2016.01) A23L 33/155 (2016.01) A23L 33/17 (2016.01) A61K 31/07 (2006.01) A61K 31/198 (2006.01) A61K 31/202 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **TREATMENT OR PREVENTION OF SURGERY-INDUCED CACHEXIA AND/OR EXPRESSION OF MYELOID-DERIVED SUPPRESSOR CELLS AND PRO-INFLAMMATORY CYTOKINES**

[54] **TRAITEMENT OU PREVENTION DE LA CACHEXIE INDUITE PAR UNE INTERVENTION CHIRURGICALE ET/OU DE L'EXPRESSION DES CELLULES SUPPRESSIVES DE LA LIGNEE MYELOIDE ET DE CYTOKINES PRO-INFLAMM ATOIRES**

[72] HAMILTON-REEVES, JILL, US

[72] HOLZBEIERLEIN, JEFFREY M., US

[72] YANKEE, THOMAS, US

[73] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2017-07-25

[86] 2016-02-15 (PCT/EP2016/053156)

[87] (WO2016/128576)

[30] US (62/116,155) 2015-02-13

**Canadian Patents Issued  
April 16, 2024**

---

[11] **2,976,984**  
[13] C

[51] **Int.Cl. F01D 21/00 (2006.01) F01D 21/02 (2006.01) F01D 21/14 (2006.01)**  
[25] EN  
[54] **SHAFT EVENT DETECTION IN GAS TURBINE ENGINES**  
[54] **DETECTION D'EVENEMENT TOUCHANT L'ARBRE DANS LES TURBINES A GAZ**  
[72] DUBREUIL, JEAN, CA  
[72] VINSKI, JOHNNY, CA  
[72] DESJARDINS, MICHEL, CA  
[73] PRATT & WHITNEY CANADA CORP., CA  
[86] (2976984)  
[87] (2976984)  
[22] 2017-08-18  
[30] US (15/374,115) 2016-12-09

---

[11] **2,977,742**  
[13] C

[51] **Int.Cl. G06F 16/11 (2019.01) G06F 12/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR DEDUPLICATION IN STORAGE SYSTEM, STORAGE SYSTEM, AND CONTROLLER**  
[54] **METHODE DE DEDOUBLEMENT DANS UN SYSTEME DE RANGEMENT, SYSTEME DE RANGEMENT ET CONTROLEUR**  
[72] LAN, WENHAI, CN  
[72] ZHANG, WEI, CN  
[72] YU, XIAOAN, CN  
[72] LIU, XUYOU, CN  
[72] ZHANG, ZHIXIONG, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2018-04-12  
[86] 2016-09-28 (PCT/CN2016/100629)  
[87] (WO2018/058382)

---

[11] **2,977,758**  
[13] C

[51] **Int.Cl. A61B 5/145 (2006.01) A61B 5/1459 (2006.01) A61B 5/01 (2006.01)**  
[25] EN  
[54] **ANALYTE SENSOR**  
[54] **CAPTEUR D'ANALYTE**  
[72] DEHENNIS, ANDREW, US  
[72] TANKIEWICZ, SZYMON, US  
[72] WHITEHURST, TODD, US  
[73] SENSEONICS, INCORPORATED, US  
[85] 2017-08-24  
[86] 2015-02-24 (PCT/US2015/017299)  
[87] (WO2016/137444)

---

[11] **2,978,091**  
[13] C

[51] **Int.Cl. H04W 4/06 (2009.01) H04W 4/12 (2009.01)**  
[25] EN  
[54] **INTER-NETWORK MESSAGING FOR MOBILE COMPUTING PLATFORMS**  
[54] **MESSAGERIE INTER-RESEAU POUR PLATES-FORMES INFORMATIQUES MOBILES**  
[72] KUMAR, VIJAY, US  
[72] BANGALORE, VISH, US  
[73] OMNITRACS, LLC, US  
[85] 2017-08-28  
[86] 2016-03-04 (PCT/US2016/020929)  
[87] (WO2016/144772)  
[30] US (14/641,036) 2015-03-06

---

[11] **2,978,613**  
[13] C

[51] **Int.Cl. H01R 9/00 (2006.01) F16L 3/02 (2006.01) H01R 9/24 (2006.01)**  
[25] EN  
[54] **WIRE DETACHMENT-PREVENTING STRUCTURE**  
[54] **STRUCTURE DE PREVENTION DE DETACHEMENT DE FIL**  
[72] WU, KUNRAN, CN  
[72] ZHONG, BODONG, CN  
[73] PANASONIC ECOLOGY SYSTEMS GUANGDONG CO., LTD., CN  
[86] (2978613)  
[87] (2978613)  
[22] 2017-09-06  
[30] CN (201621088654.5) 2016-09-28

---

[11] **2,980,697**  
[13] C

[51] **Int.Cl. C08L 23/02 (2006.01) G02B 6/44 (2006.01)**  
[25] EN  
[54] **FLOODING COMPOUNDS FOR TELECOMMUNICATION CABLES**  
[54] **COMPOSES D'ENROBAGE POUR CABLES DE TELECOMMUNICATION**  
[72] ESSEGHIR, MOHAMED, US  
[72] ZHANG, YICHI, US  
[72] BAILEY, BRAD C., US  
[72] JIN, YI, US  
[72] YALVAC, SELIM, US  
[73] DOW GLOBAL TECHNOLOGIES LLC, US  
[85] 2017-09-22  
[86] 2016-03-14 (PCT/US2016/022252)  
[87] (WO2016/160315)  
[30] US (62/140,673) 2015-03-31

---

[11] **2,980,836**  
[13] C

[51] **Int.Cl. C11D 3/386 (2006.01) C11D 1/83 (2006.01) C11D 3/00 (2006.01) C11D 3/395 (2006.01) C11D 7/00 (2006.01) C11D 7/42 (2006.01) C11D 7/54 (2006.01)**  
[25] EN  
[54] **POLYPEPTIDES SUITABLE FOR DETERGENT**  
[54] **POLYPEPTIDES APPROPRIES POUR DETERGENT**  
[72] BENIE, ASTRID, DK  
[72] KNOTZEL, JURGEN C. F., DK  
[72] BAUER, MIKAEL, DK  
[72] CHRISTENSEN, LARS L. H., DK  
[72] RANNES, JULIE B., DK  
[72] SKAGERLIND, JAN PETER, SE  
[72] GAO, NAN, CN  
[73] NOVOZYMES A/S, DK  
[85] 2017-09-25  
[86] 2016-04-29 (PCT/EP2016/059669)  
[87] (WO2016/174234)  
[30] EP (15165808.5) 2015-04-29

---

[11] **2,982,219**  
[13] C

[51] **Int.Cl. H04J 3/06 (2006.01) H04N 21/242 (2011.01)**  
[25] EN  
[54] **PRECISION TIMING FOR BROADCAST NETWORK**  
[54] **SYNCHRONISATION DE PRECISION POUR RESEAU DE DIFFUSION**  
[72] MEYER, CHARLES S., US  
[73] GVBB HOLDINGS S.A.R.L., LU  
[85] 2017-10-10  
[86] 2016-04-09 (PCT/EP2016/057865)  
[87] (WO2016/162549)  
[30] US (62/146,203) 2015-04-10

---

[11] **2,983,251**  
[13] C

[51] **Int.Cl. F41J 5/02 (2006.01) F41J 3/02 (2006.01) F41J 5/10 (2006.01)**  
[25] EN  
[54] **AUTOMATIC DARTBOARD SCORING SYSTEM**  
[54] **SYSTEME DE COMPTAGE DE CIBLE AUTOMATIQUE**  
[72] DALE, JASON, GB  
[72] MOORE, STEPHEN, GB  
[73] FLIGHT PATH IP LIMITED, GB  
[85] 2017-10-18  
[86] 2016-05-19 (PCT/GB2016/051441)  
[87] (WO2016/203194)  
[30] GB (1510727.9) 2015-06-18  
[30] US (14/984,585) 2015-12-30

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **2,983,372**  
[13] C

[51] **Int.Cl. G05B 19/4065 (2006.01) B25J 9/16 (2006.01) G05B 19/19 (2006.01) G05B 19/4061 (2006.01) G05B 19/4067 (2006.01)**

[25] EN  
[54] **MACHINING METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL D'USINAGE**

[72] COOK, AUSTIN JAMES, GB  
[72] CARBERRY, JONATHAN MICHAEL, GB  
[72] MCMILLAN, DAVID, US  
[72] DERECICHEI, ARON, US  
[72] ASHMORE, CRAIG, US  
[73] BAE SYSTEMS PLC, GB  
[85] 2017-10-19  
[86] 2016-04-29 (PCT/GB2016/051239)  
[87] (WO2016/174463)  
[30] US (14/700,231) 2015-04-30  
[30] EP (15275192.1) 2015-08-26

---

[11] **2,985,013**  
[13] C

[51] **Int.Cl. A61K 31/385 (2006.01) A61K 31/185 (2006.01) A61P 17/00 (2006.01) A61P 17/06 (2006.01) A61P 27/02 (2006.01)**

[25] FR  
[54] **COMBINATION OF LIPOIC ACID AND TAURINE AS OSMOPROTECTIVE AGENT**  
[54] **ASSOCIATION D'ACIDE LIPOIQUE ET DE TAURINE EN TANT QU'AGENT OSMOPROTECTEUR**

[72] CLARET, MARTINE, CH  
[72] CLARET, CLAUDE, CH  
[72] CHATARD-BAPTISTE, CAROLINE, FR  
[73] OPHTALMIS MONACO, MC  
[85] 2017-11-03  
[86] 2016-05-20 (PCT/EP2016/061358)  
[87] (WO2016/184998)  
[30] FR (1554590) 2015-05-21  
[30] FR (1650372) 2016-01-18

---

[11] **2,986,770**  
[13] C

[51] **Int.Cl. A61B 34/35 (2016.01) A61B 34/20 (2016.01) A61B 34/30 (2016.01) A61B 34/37 (2016.01)**

[25] EN  
[54] **HAND GRIP APPARATUS FOR RECEIVING OPERATOR INPUT IN A ROBOTIC SURGERY SYSTEM**  
[54] **APPAREIL DE PREHENSION MANUELLE POUR RECEVOIR UNE ENTREE OPERATEUR DANS UN SYSTEME DE CHIRURGIE ROBOTIQUE**

[72] LUTZOW, THOMAS ANDREW, US  
[72] SMITH, DANIEL P., US  
[72] CAMERON, PETER JOHN KENNETH, US  
[73] TITAN MEDICAL INC., CA  
[85] 2017-11-22  
[86] 2016-04-13 (PCT/CA2016/000112)  
[87] (WO2016/201544)  
[30] US (62/180,312) 2015-06-16

---

[11] **2,983,888**  
[13] C

[51] **Int.Cl. C08B 31/00 (2006.01) A23L 29/212 (2016.01) C08J 3/075 (2006.01) C08J 3/24 (2006.01) C08K 3/32 (2006.01) C08L 3/04 (2006.01)**

[25] EN  
[54] **STARCH FOR PULPY TEXTURES**  
[54] **AMIDON POUR TEXTURES PULPEUSES**

[72] FONTEYN, DIRK, BE  
[73] CARGILL, INCORPORATED, US  
[85] 2017-10-24  
[86] 2016-06-10 (PCT/US2016/036815)  
[87] (WO2016/205081)  
[30] EP (15172093.5) 2015-06-15

---

[11] **2,985,986**  
[13] C

[51] **Int.Cl. A61M 16/00 (2006.01) A61B 5/1455 (2006.01)**

[25] EN  
[54] **CONGESTIVE HEART FAILURE THERAPY DEVICE**  
[54] **DISPOSITIF DE TRAITEMENT DE L'INSUFFISANCE CARDIAQUE CONGESTIVE**

[72] MATSUMOTO, SADAYOSHI, JP  
[73] TEIJIN PHARMA LIMITED, JP  
[85] 2017-11-14  
[86] 2016-06-28 (PCT/JP2016/069181)  
[87] (WO2017/002826)  
[30] JP (2015-130099) 2015-06-29  
[30] JP (2016-025125) 2016-02-12

---

[11] **2,988,357**  
[13] C

[51] **Int.Cl. H04L 9/18 (2006.01) G06F 21/62 (2013.01) G09C 1/00 (2006.01) H04L 9/14 (2006.01)**

[25] FR  
[54] **ENCRYPTION METHOD, CORRESPONDING ENCRYPTION METHOD, DEVICES AND PROGRAMS**  
[54] **PROCEDE DE CHIFFREMENT, PROCEDE DE CHIFFREMENT, DISPOSITIFS ET PROGRAMMES CORRESPONDANTS**

[72] BRIER, ERIC, FR  
[73] BANKS AND ACQUIRERS INTERNATIONAL HOLDING, FR  
[85] 2017-12-05  
[86] 2016-06-06 (PCT/EP2016/062766)  
[87] (WO2016/193493)  
[30] FR (1555173) 2015-06-05

**Canadian Patents Issued  
April 16, 2024**

---

[11] **2,988,575**  
[13] C

[51] **Int.Cl. A61K 47/14 (2017.01) A61K 31/7052 (2006.01)**  
[25] EN  
[54] **INJECTABLE ANTIBIOTIC FORMULATIONS AND USE THEREOF**  
[54] **FORMULATIONS ANTIBIOTIQUES INJECTABLES ET UTILISATION DE CELLES-CI**  
[72] HEPLER, DOUGLAS I., US  
[72] PAULSEN, NEIL E., US  
[72] DEMPSEY, GAIL L., US  
[72] DANIEL, MICHAEL S., US  
[72] TOMLINSON, TIFFANY G., US  
[72] PETZOLD, RAY, US  
[73] DECHRA VETERINARY PRODUCTS, LLC, US  
[85] 2017-12-06  
[86] 2016-06-10 (PCT/US2016/036936)  
[87] (WO2016/201259)  
[30] US (62/173,850) 2015-06-10  
[30] US (62/307,284) 2016-03-11  
[30] US (62/312,382) 2016-03-23

---

[11] **2,989,099**  
[13] C

[51] **Int.Cl. H04S 5/02 (2006.01) G10L 19/008 (2013.01) H04S 7/00 (2006.01)**  
[25] EN  
[54] **ENCODING APPARATUS, ENCODING METHOD, DECODING APPARATUS, DECODING METHOD, AND PROGRAM**  
[54] **APPAREIL DE CODAGE, METHODE DE CODAGE, APPAREIL DE DECODAGE, METHODE DE DECODAGE ET PROGRAMME**  
[72] YAMAMOTO, YUKI, JP  
[72] CHINEN, TORU, JP  
[72] TSUJI, MINORU, JP  
[73] SONY CORPORATION, JP  
[85] 2017-12-11  
[86] 2016-06-03 (PCT/JP2016/066574)  
[87] (WO2016/203994)  
[30] JP (2015-123589) 2015-06-19  
[30] JP (2015-196494) 2015-10-02

---

[11] **2,989,333**  
[13] C

[51] **Int.Cl. G01N 29/11 (2006.01) E03B 7/00 (2006.01)**  
[25] EN  
[54] **DETERMINATION OF TUBERCULATION IN A FLUID DISTRIBUTION SYSTEM**  
[54] **DETERMINATION DE TUBERCULISATION DANS UN SYSTEME DE DISTRIBUTION DE FLUIDE**  
[72] YUSUF, SHABBIR, CA  
[72] RICHAZ, WERNER GUENTHER, CA  
[73] MUELLER INTERNATIONAL, LLC, US  
[85] 2017-12-12  
[86] 2016-06-10 (PCT/US2016/036856)  
[87] (WO2016/205082)  
[30] US (14/740,902) 2015-06-16

---

[11] **2,989,525**  
[13] C

[51] **Int.Cl. A61M 25/00 (2006.01) A61M 1/36 (2006.01)**  
[25] EN  
[54] **HEMODIALYSIS CATHETER WITH CORRUGATED TIPS**  
[54] **CATHETER D'HEMODIALYSE AVEC EMBOUTS ONDULES**  
[72] TAL, MICHAEL GABRIEL, IL  
[73] PRISTINE ACCESS TECHNOLOGIES LTD, IL  
[85] 2017-12-14  
[86] 2016-07-20 (PCT/IB2016/054317)  
[87] (WO2017/013598)  
[30] US (62/194,325) 2015-07-20

---

[11] **2,991,682**  
[13] C

[51] **Int.Cl. C09K 5/20 (2006.01)**  
[25] EN  
[54] **HEAT TRANSFER FLUID COMPOSITION AND USE**  
[54] **COMPOSITION DE FLUIDE CALOPORTEUR ET UTILISATION**  
[72] GRAY, PHILIP, GB  
[73] KILFROST GROUP PLC, GB  
[85] 2018-01-08  
[86] 2016-07-14 (PCT/GB2016/052134)  
[87] (WO2017/009652)  
[30] GB (1512303.7) 2015-07-14

---

[11] **2,991,990**  
[13] C

[51] **Int.Cl. A61K 35/747 (2015.01) A61K 9/06 (2006.01) A61K 9/107 (2006.01) A61K 45/06 (2006.01)**  
[25] EN  
[54] **BIOLOGICAL ACTIVITIES OF LACTOBACILLUS FERMENTUM QI6 BIOFILM FOR IMPROVING SKIN AND/OR MUCOSAL BARRIER FUNCTIONS**  
[54] **ACTIVITES BIOLOGIQUES DU BIOFILM DE LACTOBACILLUS FERMENTUM QI6 POUR AMELIORER LES FONCTIONS DE BARRIERES DERMIIQUES ET/OU MUQUEUSES**  
[72] BERKES, EVA A., US  
[72] MONSUL, NICHOLAS, T., US  
[72] BOEHM, FREDERICK T., US  
[73] QUORUM INNOVATIONS, LLC, US  
[85] 2018-01-09  
[86] 2016-07-19 (PCT/US2016/042939)  
[87] (WO2017/015275)  
[30] US (62/194,630) 2015-07-20

---

[11] **2,992,736**  
[13] C

[51] **Int.Cl. H04L 9/08 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR PROVIDING SECURE COMMUNICATION AMONG CONSTRAINED DEVICES**  
[54] **PROCEDE ET APPAREIL POUR FOURNIR UNE COMMUNICATION SECURISEE ENTRE DES DISPOSITIFS LIMITES**  
[72] MOSES, TIMOTHY EDWARD, US  
[73] ENTRUST, INC., US  
[85] 2018-01-16  
[86] 2016-07-21 (PCT/US2016/043272)  
[87] (WO2017/015436)  
[30] US (62/195,032) 2015-07-21  
[30] US (15/215,047) 2016-07-20

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **2,993,909**  
[13] C

[51] **Int.Cl. C01F 7/164 (2022.01) C22B 7/04 (2006.01)**

[25] EN

[54] **METHOD FOR OBTAINING CALCIUM ALUMINATES FROM NON-SALINE ALUMINUM SLAGS**

[54] **PROCEDE D'OBTENTION D'ALUMINATES DE CALCIUM A PARTIR DE SCORIES D'ALUMINIUM NON SALINES**

[72] LOPEZ GOMEZ, FELIX ANTONIO, ES

[72] ALGUACIL PRIEGO, FRANCISCO JOSE, ES

[72] RAMIREZ ZABLAH, MARIO SERGIO, MX

[72] GONZALEZ GRACIA, JOSE RAMON, MX

[73] CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS (CSIC), ES

[73] ARZYZ, S.A. DE C.V., MX

[85] 2018-01-26

[86] 2016-07-26 (PCT/ES2016/070566)

[87] (WO2017/017304)

[30] ES (P201531116) 2015-07-28

---

[11] **2,994,899**  
[13] C

[51] **Int.Cl. A61K 47/10 (2017.01) A61K 9/14 (2006.01) A61K 9/48 (2006.01) A61K 31/192 (2006.01) A61K 47/14 (2017.01)**

[25] EN

[54] **SOLID SOLUTION COMPOSITIONS FOR NSAIDS**

[54] **COMPOSITIONS DE SOLUTION SOLIDE POUR AINS**

[72] BANNISTER, ROBIN MARK, GB

[72] BREW, JOHN, GB

[72] REILEY, RICHARD ROBERT, GB

[72] CAPARROS-WANDERLEY, WILSON, GB

[73] INFIRST HEALTHCARE LIMITED, GB

[85] 2018-02-06

[86] 2016-08-08 (PCT/EP2016/068900)

[87] (WO2017/025517)

[30] EP (15180256.8) 2015-08-07

[30] US (14/821,687) 2015-08-07

---

[11] **2,995,395**  
[13] C

[51] **Int.Cl. A61K 36/756 (2006.01) A61K 31/198 (2006.01) A61K 31/7076 (2006.01) A61K 38/01 (2006.01) A61K 45/06 (2006.01) A61P 25/22 (2006.01)**

[25] EN

[54] **COMPOSITIONS COMPRISING MAGNOLIA, PHELLODENDRON, THEANINE AND/OR WHEY PROTEIN**

[54] **COMPOSITIONS COMPRENANT DU MAGNOLIA, DU PHELLODENDRON, DE LA THEANINE ET/OU UNE PROTEINE DU PETIT-LAIT**

[72] HENDERSON, TODD, US

[72] GRIFFIN, DAVID, US

[72] BLEDSOE, DAVID, US

[73] NUTRAMAX LABORATORIES, INC., US

[85] 2018-02-09

[86] 2016-08-31 (PCT/US2016/049630)

[87] (WO2017/040611)

[30] US (62/212,080) 2015-08-31

---

[11] **2,996,085**  
[13] C

[51] **Int.Cl. A61K 8/9789 (2017.01) A61Q 19/04 (2006.01)**

[25] FR

[54] **GARDENIA EXTRACT FOR COLOURING THE SKIN**

[54] **EXTRAIT DE GARDENIA DANS LA COLORATION DE LA PEAU**

[72] DUPLAN, HELENE, FR

[72] FIORINI-PUYBARET, CHRISTEL, FR

[72] JACQUES-JAMIN, CARINE, FR

[72] JOULIA, PHILIPPE, FR

[72] SUBRA, LAURENT, FR

[73] PIERRE FABRE MEDICAMENT, FR

[85] 2018-02-20

[86] 2016-09-08 (PCT/EP2016/071157)

[87] (WO2017/042257)

[30] FR (1558358) 2015-09-09

---

[11] **3,000,639**  
[13] C

[51] **Int.Cl. D03D 13/00 (2006.01) D03D 15/50 (2021.01) D03D 1/00 (2006.01)**

[25] EN

[54] **CONDUCTIVE FABRIC, METHOD OF MANUFACTURING A CONDUCTIVE FABRIC AND APPARATUS THEREFOR**

[54] **TISSU CONDUCTEUR, PROCEDE DE FABRICATION DE TISSU CONDUCTEUR ET APPAREIL CONNEXE**

[72] SWALLOW, STANLEY SHIGEZO, GB

[72] THOMPSON, ASHA PETA, GB

[73] INTELLIGENT TEXTILES LIMITED, GB

[85] 2018-03-29

[86] 2016-11-24 (PCT/GB2016/053693)

[87] (WO2017/103562)

[30] GB (1522351.4) 2015-12-18

[30] EP (15275267.1) 2015-12-18

---

[11] **3,000,966**  
[13] C

[51] **Int.Cl. G06F 16/53 (2019.01) G06F 16/538 (2019.01) G06F 16/95 (2019.01) G06F 3/04845 (2022.01)**

[25] EN

[54] **DYNAMIC SEARCH INPUT SELECTION**

[54] **SELECTION DYNAMIQUE D'ENTREE DE RECHERCHE**

[72] XU, KELEI, US

[72] GAVINI, NAVEEN, US

[72] JING, YUSHI, US

[72] ZHAI, ANDREW HUAN, US

[72] KISLYUK, DMITRY OLEGOVICH, US

[73] PINTEREST, INC., US

[85] 2018-04-04

[86] 2016-10-03 (PCT/US2016/055212)

[87] (WO2017/062317)

[30] US (14/875,010) 2015-10-05

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,001,058**  
[13] C

[51] **Int.Cl. G01V 1/38 (2006.01)**  
[25] EN  
[54] **ACOUSTIC RANGING APPARATUS AND METHODS**  
[54] **APPAREIL DE TELEMETRIE ACOUSTIQUE ET PROCEDES**  
[72] GUILLOT, CLEMENT B., III, US  
[73] DIGICOURSE LLC, US  
[85] 2018-04-04  
[86] 2016-10-07 (PCT/US2016/056129)  
[87] (WO2017/062866)  
[30] US (62/239,702) 2015-10-09

---

[11] **3,001,114**  
[13] C

[51] **Int.Cl. D21H 11/00 (2006.01)**  
[25] EN  
[54] **PAPERBOARD PRODUCT INCLUDING REFINED CELLULOSE**  
[54] **PRODUIT DE CARTON COMPRENANT DE LA CELLULOSE RAFFINEE**  
[72] TUSZKIEWICZ, GEORGE, US  
[72] LORENCE, MATT, US  
[72] PARADIS, MARK, US  
[72] BILODEAU, MICHAEL A., US  
[73] GENERAL MILLS, INC., US  
[73] UNIVERSITY OF MAINE SYSTEM BOARD OF TRUSTEES, US  
[85] 2018-04-05  
[86] 2015-10-16 (PCT/US2015/055939)  
[87] (WO2017/065800)

---

[11] **3,001,926**  
[13] C

[51] **Int.Cl. B02C 17/04 (2006.01) B02C 17/18 (2006.01)**  
[25] EN  
[54] **A LIFTING WALL ARRANGEMENT AND A SEGMENT OF A LIFTING WALL ARRANGEMENT**  
[54] **AGENCEMENT DE PAROI DE LEVAGE ET SEGMENT D'UN AGENCEMENT DE PAROI DE LEVAGE**  
[72] CANABES GUERRA, CRISTIAN ALEJANDRO, CL  
[73] METSO OUTOTEC FINLAND OY, FI  
[85] 2018-04-13  
[86] 2016-10-07 (PCT/EP2016/074068)  
[87] (WO2017/063954)  
[30] EP (15190107.1) 2015-10-16

---

[11] **3,002,422**  
[13] C

[51] **Int.Cl. C07K 16/18 (2006.01) C12N 15/09 (2006.01)**  
[25] EN  
[54] **ANTI-MYOSTATIN ANTIBODIES, POLYPEPTIDES CONTAINING VARIANT FC REGIONS, AND METHODS OF USE**  
[54] **ANTICORPS ANTI-MYOSTATINE, POLYPEPTIDES CONTENANT DES VARIANTS DE REGIONS FC, ET PROCEDES D'UTILISATION**  
[72] KURAMOCHI, TAICHI, SG  
[72] IGAWA, TOMOYUKI, JP  
[72] KATADA, HITOSHI, JP  
[72] HORI, YUJI, JP  
[73] CHUGAI SEIYAKU KABUSHIKI KAISHA, JP  
[85] 2018-04-17  
[86] 2016-12-16 (PCT/JP2016/087487)  
[87] (WO2017/104783)  
[30] JP (2015-247070) 2015-12-18

---

[11] **3,002,831**  
[13] C

[51] **Int.Cl. A61K 31/44 (2006.01) A61P 3/04 (2006.01) A61P 25/00 (2006.01) A61P 43/00 (2006.01)**  
[25] EN  
[54] **METHODS FOR TREATING ANGELMAN SYNDROME AND RELATED DISORDERS**  
[54] **PROCEDES POUR TRAITER LE SYNDROME D'ANGELMAN ET DES TROUBLES ASSOCIES**  
[72] MARICICH, YURI, US  
[73] CAVION, INC., US  
[85] 2018-04-20  
[86] 2016-10-24 (PCT/US2016/058487)  
[87] (WO2017/070680)  
[30] US (62/245,038) 2015-10-22

---

[11] **3,003,703**  
[13] C

[51] **Int.Cl. H03M 13/27 (2006.01) H04L 27/26 (2006.01)**  
[25] EN  
[54] **DATA PROCESSING APPARATUS, AND DATA PROCESSING METHOD**  
[54] **DISPOSITIF ET PROCEDE DE TRAITEMENT DE DONNEES**  
[72] YAMAMOTO, MAKIKO, JP  
[73] SONY CORPORATION, JP  
[85] 2018-04-30  
[86] 2016-10-27 (PCT/JP2016/081808)  
[87] (WO2017/082060)  
[30] JP (2015-220516) 2015-11-10

---

[11] **3,004,152**  
[13] C

[51] **Int.Cl. A61K 39/395 (2006.01) A61K 31/198 (2006.01) A61K 31/4439 (2006.01) A61K 31/573 (2006.01) A61K 31/69 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **SUBCUTANEOUS FORMULATIONS OF ANTI-CD38 ANTIBODIES AND THEIR USES**  
[54] **FORMULATIONS SOUS-CUTANEE D'ANTICORPS ANTI-CD38 ET LEURS UTILISATIONS**  
[72] JANSSON, RICHARD, US  
[72] KUMAR, VINEET, US  
[73] JANSSEN BIOTECH, INC., US  
[85] 2018-05-02  
[86] 2016-11-01 (PCT/US2016/059893)  
[87] (WO2017/079150)  
[30] US (62/250,016) 2015-11-03

---

[11] **3,004,750**  
[13] C

[51] **Int.Cl. G06N 10/40 (2022.01) B82Y 10/00 (2011.01)**  
[25] EN  
[54] **TECHNIQUES FOR QUANTUM ERROR CORRECTION USING BOSONIC MODES AND RELATED SYSTEMS AND METHODS**  
[54] **TECHNIQUES DE CORRECTION D'ERREUR QUANTIQUE UTILISANT DES MODES BOSONIQUES AINSI QUE SYSTEMES ET PROCEDES ASSOCIES**  
[72] GIRVIN, STEVEN M., US  
[72] JIANG, LIANG, US  
[72] MICHAEL, MARIOS H., US  
[72] SILVERI, MATTI, US  
[72] BRIERLEY, RICHARD T., US  
[72] ALBERT, VICTOR V., US  
[72] SALMILEHTO, JUHA, US  
[73] YALE UNIVERSITY, US  
[85] 2018-05-08  
[86] 2016-12-02 (PCT/US2016/064609)  
[87] (WO2017/151200)  
[30] US (62/263,473) 2015-12-04



**Brevets canadiens délivrés**  
**16 avril 2024**

---

[11] **3,005,516**  
[13] C

[51] **Int.Cl. C07D 417/14 (2006.01) A61K 31/501 (2006.01) A61K 31/53 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **1,3,4-THIADIAZOLE COMPOUNDS AND THEIR USE IN TREATING CANCER**

[54] **COMPOSES DE 1,3,4-THIADIAZOLE ET LEUR UTILISATION POUR TRAITER LE CANCER**

[72] FINLAY, MAURICE RAYMOND  
VERSCHOYLE, GB

[72] NISSINK, JOHANNES WILHELMUS  
MARIA, GB

[72] CHARLES, MARK DAVID, GB

[72] WOOD, JAMES MATTHEW, GB

[73] CANCER RESEARCH  
TECHNOLOGY LIMITED, GB

[73] ASTRAZENECA AB, SE

[85] 2018-05-16

[86] 2016-11-30 (PCT/EP2016/079251)

[87] (WO2017/093300)

[30] US (62/260787) 2015-11-30

---

[11] **3,005,702**  
[13] C

[51] **Int.Cl. A61M 5/142 (2006.01) A61M 39/28 (2006.01)**

[25] EN

[54] **METHOD OF OPERATING AN INJECTION SYSTEM**

[54] **PROCEDE DE FONCTIONNEMENT D'UN SYSTEME D'INJECTION**

[72] CHASSOT, PIERRE-YVES, CH

[73] ACIST MEDICAL SYSTEMS, INC.,  
US

[85] 2018-05-17

[86] 2017-02-08 (PCT/EP2017/052716)

[87] (WO2017/137421)

[30] EP (EP16154762.5) 2016-02-09

---

[11] **3,006,149**  
[13] C

[51] **Int.Cl. G05B 19/409 (2006.01) B66C 13/40 (2006.01) G01C 21/08 (2006.01) G01C 21/18 (2006.01)**

[25] EN

[54] **METHOD OF ESTIMATING AN ATTITUDE OF A CONTROL DEVICE FOR CONTROLLING OPERATING MACHINES**

[54] **PROCEDE D'ESTIMATION D'ATTITUDE D'UN DISPOSITIF DE COMMANDE DESTINE A COMMANDER DES MACHINES DE TRAVAIL**

[72] VINATI, FELICE, IT

[72] VINATI, SAMUELE, IT

[72] VINATI, MATTEO, IT

[72] VINATI, MARIACHIARA, IT

[72] VINATI, GIACOMO, IT

[72] PREVIDI, FABIO, IT

[72] COLOGNI, ALBERTO, IT

[72] ERMIDORO, MICHELE, IT

[72] BORTOLOTTI, LUCA, IT

[73] VINATI S.R.L., IT

[85] 2018-05-23

[86] 2016-11-18 (PCT/EP2016/078132)

[87] (WO2017/089236)

[30] IT (UB2015A005844) 2015-11-24

---

[11] **3,006,946**  
[13] C

[51] **Int.Cl. C07D 249/08 (2006.01)**

[25] EN

[54] **METHOD FOR PRODUCING 2-[4-(4-CHLOROPHENOXY)-2-(TRIFLUOROMETHYL)PHENYL]-1-(1,2,4-TRIAZOL-1-YL)PROPAN-2-OL**

[54] **PROCEDE DE PRODUCTION DU 2-[4-(4-CHLOROPHENOXY)-2-(TRIFLUOROMETHYL)PHENYL]-1-(1,2,4-TRIAZOL-1-YL)PROPAN-2-OL**

[72] GEBHARDT, JOACHIM, DE

[72] SAELINGER, DANIEL, DE

[72] EHRESMANN, MANFRED, DE

[72] GOETZ, ROLAND, DE

[73] BASF AGRO B.V., NL

[85] 2018-05-30

[86] 2016-12-15 (PCT/EP2016/081113)

[87] (WO2017/102905)

[30] EP (15201269.6) 2015-12-18

---

[11] **3,008,223**  
[13] C

[51] **Int.Cl. H01M 4/86 (2006.01) H01M 8/0271 (2016.01) H01M 4/88 (2006.01) H01M 4/96 (2006.01) H01M 8/10 (2016.01)**

[25] EN

[54] **GAS DIFFUSION ELECTRODE, MICROPOROUS LAYER PAINT AND PRODUCTION METHOD THEREOF**

[54] **ELECTRODE A DIFFUSION DE GAZ, MATERIAU DE REVETEMENT DE COUCHE MICROPOREUSE ET SON PROCEDE DE PRODUCTION**

[72] KATO, SHO, JP

[72] HASHIMOTO, MASARU, JP

[72] WAKATABE, MICHIO, JP

[73] TORAY INDUSTRIES, INC., JP

[85] 2018-06-12

[86] 2017-01-11 (PCT/JP2017/000617)

[87] (WO2017/130694)

[30] JP (2016-013133) 2016-01-27

[30] JP (2016-013134) 2016-01-27

[30] JP (2016-112415) 2016-06-06

---

[11] **3,009,443**  
[13] C

[51] **Int.Cl. H05B 45/24 (2020.01)**

[25] FR

[54] **CONFIGURATION OF THE INTENSITY OF THE LIGHT SOURCES COMPOSING A LIGHTING SYSTEM**

[54] **CONFIGURATION DE L'INTENSITE DES SOURCES DE LUMIERE COMPOSANT UN SYSTEME D'ECLAIRAGE**

[72] BELIN, PATRICK, FR

[72] BAILLY, YANNICK, FR

[73] WATTLUX, FR

[85] 2018-06-21

[86] 2016-12-16 (PCT/FR2016/053499)

[87] (WO2017/109351)

[30] FR (1563327) 2015-12-24

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,009,745**  
[13] C

[51] **Int.Cl. B01J 23/42 (2006.01) B01J 23/44 (2006.01) B01J 29/00 (2006.01) B01J 29/03 (2006.01) B01J 29/04 (2006.01) B01J 37/02 (2006.01) B01J 37/08 (2006.01) C10G 45/10 (2006.01) C10G 45/12 (2006.01) C10G 45/62 (2006.01) C10G 45/64 (2006.01) C10G 65/04 (2006.01)**

[25] EN

[54] **SEQUENTIAL IMPREGNATION OF A POROUS SUPPORT FOR NOBLE METAL ALLOY FORMATION**

[54] **IMPREGNATION SEQUENTIELLE D'UN SUPPORT POREUX AFIN DE FORMER UN ALLIAGE DE METAUX NOBLES**

[72] IDE, MATTHEW S., US

[72] MCCARTHY, STEPHEN J., US

[72] SCHLEICHER, GARY P., US

[73] EXXONMOBIL TECHNOLOGY AND ENGINEERING COMPANY, US

[85] 2018-06-26

[86] 2016-12-16 (PCT/US2016/067175)

[87] (WO2017/116757)

[30] US (62/271,499) 2015-12-28

---

[11] **3,009,777**  
[13] C

[51] **Int.Cl. H04N 21/236 (2011.01) H04N 21/2662 (2011.01) H04N 21/434 (2011.01) H04N 19/30 (2014.01) H04N 19/70 (2014.01)**

[25] EN

[54] **TRANSMISSION DEVICE, TRANSMISSION METHOD, RECEPTION DEVICE AND RECEPTION METHOD**

[54] **DISPOSITIF DE TRANSMISSION, PROCEDE DE TRANSMISSION, DISPOSITIF DE RECEPTION ET PROCEDE DE RECEPTION**

[72] TSUKAGOSHI, IKUO, JP

[73] SONY CORPORATION, JP

[85] 2018-06-26

[86] 2017-02-06 (PCT/JP2017/004146)

[87] (WO2017/138470)

[30] JP (2016-023185) 2016-02-09

---

[11] **3,009,924**  
[13] C

[51] **Int.Cl. H05K 7/20 (2006.01) B21D 53/02 (2006.01) B23P 15/26 (2006.01) F25B 13/00 (2006.01) F28F 13/08 (2006.01)**

[25] EN

[54] **VACUUM-BASED THERMAL MANAGEMENT SYSTEM**

[54] **SYSTEME DE GESTION THERMIQUE FAISANT APPEL AU VIDE**

[72] PARNES, TAL, IL

[72] EADELSON, NAHSHON, IL

[73] ZUTA-CORE LTD., IL

[85] 2018-06-27

[86] 2016-12-27 (PCT/IL2016/051384)

[87] (WO2017/115359)

[30] US (62/272,290) 2015-12-29

---

[11] **3,010,561**  
[13] C

[51] **Int.Cl. C07D 231/14 (2006.01) C07C 251/72 (2006.01)**

[25] EN

[54] **CATALYTIC HYDROGENATION PROCESS FOR PREPARING PYRAZOLES**

[54] **PROCEDE D'HYDROGENATION CATALYTIQUE POUR LA PREPARATION DE PYRAZOLES**

[72] RACK, MICHAEL, DE

[72] SOERGEL, SEBASTIAN, DE

[72] GOCKEL, BIRGIT, DE

[72] GOETZ, ROLAND, DE

[72] KLAUBER, ERIC GEORGE, US

[73] BASF SE, DE

[85] 2018-07-04

[86] 2017-01-25 (PCT/EP2017/051524)

[87] (WO2017/133942)

[30] EP (16153833.5) 2016-02-02

---

[11] **3,011,015**  
[13] C

[51] **Int.Cl. A61K 9/08 (2006.01) A61K 31/56 (2006.01) A61K 31/573 (2006.01)**

[25] EN

[54] **BETAMETHASONE ORAL SPRAY FORMULATION AND METHOD OF USE TO TREAT ATAXIA**

[54] **FORMULATION DE BETAMETHASONE DESTINEE A UNE PULVERISATION PAR VOIE ORALE ET METHODE D'UTILISATION ASSOCIEE POUR LE TRAITEMENT DE L'ATAXIE**

[72] KOTTAYIL, S. GEORGE, US

[72] KUMAR, AMRESH, US

[72] SUNTHANKAR, PRASANNA, US

[72] KAVURU, VIMAL, US

[73] ACASTI PHARMA U.S., INC., US

[85] 2018-07-10

[86] 2017-01-12 (PCT/US2017/013173)

[87] (WO2017/123744)

[30] US (62/277,707) 2016-01-12

---

[11] **3,011,064**  
[13] C

[51] **Int.Cl. B67D 1/08 (2006.01) A23L 2/00 (2006.01) A23L 2/54 (2006.01) A47J 31/00 (2006.01) A47J 31/44 (2006.01) B65D 81/00 (2006.01) B65D 85/816 (2006.01)**

[25] EN

[54] **SYSTEM, CARTRIDGE, BEVERAGE PREPARATION UNIT AND METHOD FOR PRODUCING A BEVERAGE**

[54] **SYSTEME, CARTOUCHE, UNITE DE PREPARATION DE BOISSON ET PROCEDE DE PREPARATION DE BOISSON**

[72] KRUGER, MARC, DE

[72] EMPL, GUNTER, DE

[72] FISCHER, DANIEL, CH

[73] FREEZIO AG, CH

[85] 2018-07-10

[86] 2017-01-12 (PCT/EP2017/050564)

[87] (WO2017/121799)

[30] DE (10 2016 200 254.6) 2016-01-12

[30] DE (10 2016 212 012.3) 2016-07-01

[30] DE (10 2016 212 013.1) 2016-07-01

[30] DE (10 2016 218 509.8) 2016-09-27

[30] DE (10 2016 218 507.1) 2016-09-27

[30] DE (10 2016 218 884.4) 2016-09-29

**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,011,094**

[13] C

[51] **Int.Cl. G05B 21/00 (2006.01) G05D 23/00 (2006.01) G05D 23/19 (2006.01) H05K 7/20 (2006.01)**

[25] EN

[54] **PREDICTIVE FREE COOLING**

[54] **PREDICTION DE REFROIDISSEMENT NATUREL**

[72] ERPELDING, BEN, US

[72] DEMPSTER, IAN, US

[72] CHEN, PENG, US

[72] MATTHYS, CLARK, US

[73] OPTIMUM ENERGY LLC, US

[85] 2018-07-10

[86] 2017-01-12 (PCT/US2017/013254)

[87] (WO2017/123810)

[30] US (62/277,883) 2016-01-12

[11] **3,011,274**

[13] C

[51] **Int.Cl. H04W 56/00 (2009.01)**

[25] EN

[54] **METHODS AND APPARATUS FOR RADIO LINK MONITORING IN UNLICENSED COMMUNICATION CHANNELS**

[54] **PROCEDES ET APPAREIL POUR UNE SURVEILLANCE DE LIAISON RADIO DANS DES CANAUX DE COMMUNICATION NON AUTORISES**

[72] RADULESCU, ANDREI, US

[72] LUO, TAO, US

[72] PATEL, CHIRAG, US

[73] QUALCOMM INCORPORATED, US

[85] 2018-07-11

[86] 2017-01-27 (PCT/US2017/015384)

[87] (WO2017/136239)

[30] US (62/290,365) 2016-02-02

[30] US (15/417,002) 2017-01-26

[11] **3,012,189**

[13] C

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/11 (2006.01) A61M 16/00 (2006.01) A61M 16/10 (2006.01) A61M 16/12 (2006.01) A61M 16/20 (2006.01)**

[25] EN

[54] **COMPENSATING FOR DISRUPTIONS IN BREATHING GAS FLOW MEASUREMENT**

[54] **COMPENSATION DES INTERRUPTIONS DANS UNE MESURE DE DEBIT DE GAZ RESPIRATOIRE**

[72] ACKER, JARON M., US

[72] TOLMIE, CRAIG R., US

[73] MALLINCKRODT PHARMACEUTICALS IRELAND LIMITED, IE

[85] 2018-07-20

[86] 2017-01-31 (PCT/US2017/015825)

[87] (WO2017/136340)

[30] US (62/290,430) 2016-02-02

[11] **3,013,696**

[13] C

[51] **Int.Cl. C07D 413/12 (2006.01) A61K 31/4245 (2006.01) A61P 25/00 (2006.01)**

[25] EN

[54] **5-ETHYL-4-METHYL-PYRAZOLE-3-CARBOXAMIDE DERIVATIVE HAVING ACTIVITY AS AGONIST OF TAAR**

[54] **DERIVE DE 5-ETHYL-4-METHYL-PYRAZOLE-3-CARBOXAMIDE AYANT UNE ACTIVITE EN TANT QU'AGONISTE DE TAAR**

[72] GALLEY, GUIDO, CH

[72] HOENER, MARIUS, CH

[72] NORCROSS, ROGER, CH

[72] PFLIEGER, PHILIPPE, CH

[73] F. HOFFMANN-LA ROCHE AG, CH

[85] 2018-08-03

[86] 2017-03-14 (PCT/EP2017/055885)

[87] (WO2017/157873)

[30] EP (16160790.8) 2016-03-17

[11] **3,013,704**

[13] C

[51] **Int.Cl. A61K 47/26 (2006.01) A61K 9/08 (2006.01) A61K 9/70 (2006.01) A61K 47/10 (2017.01) A61K 47/34 (2017.01) A61K 47/36 (2006.01) A61M 37/00 (2006.01)**

[25] EN

[54] **COATING LIQUID FOR MICRONEEDLES, MICRONEEDLE-COATING SUBSTANCE, AND MICRONEEDLE ARRAY**

[54] **LIQUIDE DE REVETEMENT POUR MICRO-AIGUILLES, SUBSTANCE DE REVETEMENT DE MICRO-AIGUILLE ET ENSEMBLE DE MICRO-AIGUILLES**

[72] QUAN, YING-SHU, JP

[72] SAITO, MIO, JP

[72] KITAOKA, SHOUTA, JP

[72] KAMIYAMA, FUMIO, JP

[73] COSMED PHARMACEUTICAL CO., LTD., JP

[85] 2018-08-03

[86] 2017-02-01 (PCT/JP2017/003565)

[87] (WO2017/135290)

[30] JP (2016-018844) 2016-02-03

[11] **3,014,334**

[13] C

[51] **Int.Cl. G06T 19/00 (2011.01) G09B 9/00 (2006.01) G09B 9/05 (2006.01)**

[25] EN

[54] **METHOD FOR OPERATING A DISPLAY DEVICE AND SYSTEM FOR DISPLAYING ACTUAL IMAGE CONTENTS OF AN ACTUAL ENVIRONMENT OVERLAID WITH VIRTUAL IMAGE CONTENTS**

[54] **PROCEDE DE FONCTIONNEMENT D'UN DISPOSITIF D'AFFICHAGE ET SYSTEME D'AFFICHAGE DE CONTENUS D'IMAGE VIRTUELS SUPERPOSES A DES CONTENUS D'IMAGE REELS D'UN ENVIRONNEMENT REEL**

[72] HAUBNER, MICHAEL, DE

[72] PABST, MANUEL, DE

[73] KRAUSS-MAFFEI WEGMANN GMBH & CO. KG, DE

[85] 2018-08-13

[86] 2017-02-16 (PCT/DE2017/100118)

[87] (WO2017/144049)

[30] DE (10 2016 103 056.2) 2016-02-22

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,014,392**  
[13] C

[51] **Int.Cl. G06Q 30/0207 (2023.01) G06Q 20/06 (2012.01) G06Q 20/36 (2012.01) G06F 21/62 (2013.01) G06F 16/27 (2019.01) H04L 9/00 (2022.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR DIGITAL REWARD PROCESSING**

[54] **PROCEDES ET SYSTEMES DE TRAITEMENT NUMERIQUE DE RECOMPENSES**

[72] ORTIZ, EDISON U., US

[72] VINTILA, IUSTINA-MIRUNA, RO

[73] ROYAL BANK OF CANADA, CA

[85] 2018-08-10

[86] 2017-02-13 (PCT/CA2017/050169)

[87] (WO2017/136956)

[30] US (62/294,978) 2016-02-12

[30] US (62/341,363) 2016-05-25

---

[11] **3,014,714**  
[13] C

[51] **Int.Cl. A61N 1/05 (2006.01) A61N 1/362 (2006.01) A61N 1/365 (2006.01)**

[25] EN

[54] **APPARATUS FOR APPLYING ELECTRIC PULSES TO LIVING MYOCARDIAL TISSUE**

[54] **APPAREIL POUR APPLIQUER DES IMPULSIONS ELECTRIQUES A UN TISSU MYOCARDIQUE VIVANT**

[72] SCHLEMMER, ALEXANDER, DE

[72] LILIENKAMP, THOMAS, DE

[72] BERG, SEBASTIAN, DE

[72] PARLITZ, ULRICH, DE

[72] LUTHER, STEFAN, DE

[73] MAX-PLANCK-GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V., DE

[85] 2018-08-15

[86] 2017-03-14 (PCT/EP2017/056021)

[87] (WO2017/157954)

[30] EP (16160234.7) 2016-03-14

---

[11] **3,014,896**  
[13] C

[51] **Int.Cl. G08B 21/20 (2006.01) A61F 13/42 (2006.01)**

[25] EN

[54] **PATIENT MOVEMENT AND INCONTINENCE NOTIFICATION DEVICES**

[54] **DISPOSITIFS DE NOTIFICATION D'INCONTINENCE ET DE MOUVEMENT DE PATIENT**

[72] EDDY, PATRICK E., US

[72] KILCRAN, MICHAEL, US

[73] PARASOL MEDICAL, LLC, US

[85] 2018-08-16

[86] 2017-02-17 (PCT/US2017/018328)

[87] (WO2017/143159)

[30] US (62/296,201) 2016-02-17

---

[11] **3,015,374**  
[13] C

[51] **Int.Cl. H04L 27/26 (2006.01) H04L 5/00 (2006.01)**

[25] EN

[54] **COMMUNICATION OF BROADCAST REFERENCE SIGNAL**

[54] **COMMUNICATION D'UN SIGNAL DE REFERENCE DE RADIODIFFUSION**

[72] YANG, YANG, US

[72] JIANG, JING, US

[72] LUO, TAO, US

[72] LY, HUNG, US

[73] QUALCOMM INCORPORATED, US

[85] 2018-08-21

[86] 2017-03-08 (PCT/US2017/021441)

[87] (WO2017/165121)

[30] US (62/312,332) 2016-03-23

[30] US (15/251,946) 2016-08-30

---

[11] **3,016,291**  
[13] C

[51] **Int.Cl. C09J 197/00 (2006.01) C08H 7/00 (2011.01) C07G 1/00 (2011.01) C08L 97/00 (2006.01) C09D 197/02 (2006.01) C09J 161/00 (2006.01)**

[25] EN

[54] **LIQUID LIGNIN COMPOSITION, LIGNIN-BASED RESIN, AND METHOD OF INCREASING THE SOLUBILITY OF LIGNIN**

[54] **COMPOSITION LIQUIDE DE LIGNINE, RESINE A BASE DE LIGNINE ET PROCEDE D'AUGMENTATION DE LA SOLUBILITE DE LA LIGNINE**

[72] ZAFAR, ASHAR, SE

[72] ARESKOGH, DIMITRI, SE

[72] EKSTROM, JESPER, SE

[73] STORA ENSO OYJ, FI

[85] 2018-08-30

[86] 2017-03-20 (PCT/IB2017/051592)

[87] (WO2017/163163)

[30] SE (1650372-4) 2016-03-21

---

[11] **3,016,313**  
[13] C

[51] **Int.Cl. A61B 5/1486 (2006.01) A61M 5/158 (2006.01) A61M 5/168 (2006.01) A61M 37/00 (2006.01)**

[25] EN

[54] **ENHANCED CANCER IMMUNOTHERAPY BY MICRONEEDLE PATCH-ASSISTED DELIVERY**

[54] **IMMUNOTHERAPIE ANTICANCEREUSE AMELIOREE PAR LE BIAIS D'UNE ADMINISTRATION PAR PATCH A MICRO-AIGUILLES**

[72] GU, ZHEN, US

[72] WANG, CHAO, US

[72] YE, YANQI, US

[73] NORTH CAROLINA STATE UNIVERSITY, US

[85] 2018-08-30

[86] 2017-03-01 (PCT/US2017/020135)

[87] (WO2017/151727)

[30] US (62/301,789) 2016-03-01

**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,017,050**  
[13] C

- [51] **Int.Cl. C12Q 1/6806 (2018.01) C12Q 1/6844 (2018.01) C12M 1/34 (2006.01) C12M 1/38 (2006.01) C12N 15/10 (2006.01)**
- [25] EN
- [54] **INTEGRATED APPARATUS FOR PERFORMING NUCLEIC ACID EXTRACTION AND DIAGNOSTIC TESTING ON MULTIPLE BIOLOGICAL SAMPLES**
- [54] **DISPOSITIF INTEGRE D'EXTRACTION DES ACIDES NUCLEIQUES ET DE TESTS DIAGNOSTIQUES SUR DES ECHANTILLONS BIOLOGIQUES MULTIPLES**
- [72] WILLIAMS, JEFF, US  
[72] WILSON, KERRY, US  
[72] HANDIQUE, KALYAN, US  
[73] HANDYLAB, INC., US  
[86] (3017050)  
[87] (3017050)  
[22] 2008-07-14  
[62] 2,698,253  
[30] US (60/959437) 2007-07-13  
[30] US (11/985577) 2007-11-14

[11] **3,017,385**  
[13] C

- [51] **Int.Cl. H04B 7/0417 (2017.01) H04B 7/06 (2006.01)**
- [25] EN
- [54] **BEAM REFERENCE SIGNAL BASED NARROWBAND CHANNEL MEASUREMENT AND CQI REPORTING**
- [54] **SIGNAL DE REFERENCE DE FAISCEAU BASE SUR UN RAPPORT CQI ET MESURE DE CANAL DE BANDE ETROITE**
- [72] ISLAM, MUHAMMAD NAZMUL, US  
[72] LUO, TAO, US  
[72] SADIQ, BILAL, US  
[72] CEZANNE, JUERGEN, US  
[72] SUBRAMANIAN, SUNDAR, US  
[72] LI, JUNYI, US  
[73] QUALCOMM INCORPORATED, US  
[85] 2018-09-10  
[86] 2017-03-27 (PCT/US2017/024335)  
[87] (WO2017/184302)  
[30] US (62/324,861) 2016-04-19  
[30] US (62/335,630) 2016-05-12  
[30] US (15/468,594) 2017-03-24

[11] **3,017,506**  
[13] C

- [51] **Int.Cl. B60S 3/00 (2006.01)**
- [25] EN
- [54] **LIGHTED VEHICLE WASH DRYER ASSEMBLY CONTROL SYSTEM**
- [54] **SYSTEME DE COMMANDE D'ENSEMBLE DE LAVAGE ET DE SECHAGE DE VEHICULES ECLAIRE**
- [72] BELANGER, MICHAEL J., US  
[73] WASHME PROPERTIES, LLC, US  
[85] 2018-09-11  
[86] 2017-03-13 (PCT/US2017/022071)  
[87] (WO2017/156525)  
[30] US (15/067,693) 2016-03-11

[11] **3,017,553**  
[13] C

- [51] **Int.Cl. F23D 14/76 (2006.01) F23D 14/10 (2006.01)**
- [25] EN
- [54] **BURNER BOX LINER FOR LOW NOX EMISSION FURNACE**
- [54] **REVETEMENT DE CHAMBRE DE COMBUSTION POUR FOUR A FAIBLE EMISSION DE NOX**
- [72] PEREZ, ERIC, US  
[72] POIRIER, RANDAL, US  
[72] CHANTHALANGSY, ERIC, US  
[72] SCHNEIDER, STEVEN, US  
[73] LENNOX INDUSTRIES INC., US  
[86] (3017553)  
[87] (3017553)  
[22] 2018-09-17  
[30] US (15/723,564) 2017-10-03

[11] **3,018,094**  
[13] C

- [51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/01 (2006.01) A61H 39/02 (2006.01)**
- [25] EN
- [54] **AN APPARATUS AND METHOD TO LOCATE, MEASURE, MONITOR, AND TREAT INFLAMMATION OF THE SKIN'S SOFT TISSUE AND FASCIA LAYERS**
- [54] **APPAREIL ET PROCEDE POUR LOCALISER, MESURER, SURVEILLER ET TRAITER UNE INFLAMMATION DES COUCHES DE TISSU MOU ET DE FASCIA DE LA PEAU**
- [72] COWIE, JOCELYN WALKER, CA  
[73] ASSESSX TECHNOLOGY LTD., CA  
[85] 2018-09-18  
[86] 2017-03-21 (PCT/CA2017/050360)  
[87] (WO2017/161451)  
[30] US (62/390,094) 2016-03-21

[11] **3,018,259**  
[13] C

- [51] **Int.Cl. H04B 7/04 (2017.01)**
- [25] EN
- [54] **ELECTRONIC DEVICE AND WIRELESS COMMUNICATION METHOD IN WIRELESS COMMUNICATION SYSTEM**
- [54] **DISPOSITIF ELECTRONIQUE ET PROCEDE DE COMMUNICATION SANS FIL DANS UN SYSTEME DE COMMUNICATION SANS FIL**
- [72] HU, BINGSHAN, CN  
[72] SUN, CHEN, CN  
[73] SONY CORPORATION, JP  
[85] 2018-09-19  
[86] 2017-03-16 (PCT/CN2017/076930)  
[87] (WO2017/167024)  
[30] CN (201610202724.3) 2016-04-01

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,019,222**  
[13] C

[51] **Int.Cl. A01C 15/12 (2006.01) A01B 49/06 (2006.01) A01C 5/06 (2006.01) A01C 7/06 (2006.01) A01C 15/06 (2006.01) A01C 15/16 (2006.01) A01C 21/00 (2006.01) A01G 29/00 (2006.01)**

[25] EN

[54] **APPLICATION UNITS TO ACTUATE AT LEAST ONE APPLICATOR ARM FOR PLACEMENT WITH RESPECT TO AGRICULTURAL PLANTS**

[54] **UNITES D'APPLICATION POUR ACTIONNER AU MOINS UN BRAS APPLICATEUR POUR LE PLACER PAR RAPPORT A DES PLANTES AGRICOLES**

[72] WILDERMUTH, PAUL, US  
[72] STOLLER, JASON, US  
[72] RADTKE, IAN, US  
[73] PRECISION PLANTING LLC, US  
[85] 2018-09-26  
[86] 2017-04-18 (PCT/US2017/028186)  
[87] (WO2017/184637)  
[30] US (62/324,095) 2016-04-18  
[30] US (62/365,824) 2016-07-22  
[30] US (62/442,895) 2017-01-05

---

[11] **3,020,221**  
[13] C

[51] **Int.Cl. G16C 20/00 (2019.01) B82Y 5/00 (2011.01) B82Y 10/00 (2011.01) B82Y 15/00 (2011.01) G16H 50/30 (2018.01) G16C 20/20 (2019.01)**

[25] EN

[54] **METHOD FOR THE PREPARATION OF BIOSYNTHETIC DEVICE AND THEIR USES IN DIAGNOSTICS**

[54] **METHODE DE PREPARATION D'UN DISPOSITIF BIOSYNTHETIQUE ET UTILISATIONS DANS LES DIAGNOSTICS**

[72] MOLINA, FRANCK, FR  
[72] COURBET, ALEXIS, FR  
[72] SANTOS SCHNEIDER, FRANCISCO, FR  
[73] SKILLCELL, FR  
[73] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS), FR  
[73] CHU MONTPELLIER, FR  
[85] 2018-10-05  
[86] 2017-04-13 (PCT/IB2017/000683)  
[87] (WO2017/178896)  
[30] EP (EP16165189) 2016-04-13

---

[11] **3,020,809**  
[13] C

[51] **Int.Cl. G02B 27/28 (2006.01) G02F 1/09 (2006.01)**

[25] EN

[54] **OPTICAL ISOLATOR**

[54] **OPTOISOLATEUR**

[72] WATANABE, TOSHIAKI, JP  
[73] SHIN-ETSU CHEMICAL CO., LTD., JP  
[85] 2018-10-12  
[86] 2017-03-31 (PCT/JP2017/013558)  
[87] (WO2017/187886)  
[30] JP (2016-087688) 2016-04-26

---

[11] **3,021,266**  
[13] C

[51] **Int.Cl. C07D 493/04 (2006.01)**

[25] FR

[54] **PROCESS FOR MANUFACTURING DIANHYDROHEXITOL CRYSTALS WITH A STEP OF EVAPORATIVE CRYSTALLIZATION OF THE FIRST CRYSTALLIZATION MOTHER LIQUORS**

[54] **PROCEDE DE FABRICATION DE CRISTAUX DE DIANHYDROHEXITOL AVEC UNE ETAPE D'EVAPOCRISTALLISATION DES EAUX MERES DE PREMIERE CRISTALLISATION**

[72] WYART, HERVE, FR  
[72] LESUR, THOMAS, FR  
[72] IBERT, MATHIAS, FR  
[73] ROQUETTE FRERES, FR  
[85] 2018-10-16  
[86] 2017-04-21 (PCT/FR2017/050947)  
[87] (WO2017/187058)  
[30] FR (16 53619) 2016-04-25

---

[11] **3,021,420**  
[13] C

[51] **Int.Cl. H02H 7/26 (2006.01) H02H 1/00 (2006.01) H02H 3/28 (2006.01) H02H 3/30 (2006.01) H02J 13/00 (2006.01) H04J 3/06 (2006.01)**

[25] EN

[54] **METHOD OF OPERATING A DIFFERENTIAL PROTECTION SCHEME**

[54] **PROCEDE DE FONCTIONNEMENT D'UN SYSTEME DE PROTECTION DIFFERENTIELLE**

[72] WESTWOOD, JOHN, GB  
[72] ZHANG, YANZHONG, GB  
[73] GENERAL ELECTRIC TECHNOLOGY GMBH, CH  
[85] 2018-10-11  
[86] 2017-04-11 (PCT/EP2017/058664)  
[87] (WO2017/178481)  
[30] EP (16275054.1) 2016-04-13

---

[11] **3,022,004**  
[13] C

[51] **Int.Cl. D21H 27/38 (2006.01) D21H 21/20 (2006.01)**

[25] EN

[54] **SOFT, LOW LINT, THROUGH AIR DRIED TISSUE AND METHOD OF FORMING THE SAME**

[54] **TISSU SOUPLE, SECHE A L'AIR TRAVERSANT, A FAIBLE TENEUR EN PELUCHE ET SON PROCEDE DE FORMATION**

[72] MILLER, BYRD TYLER, IV, US  
[72] SEALEY, JAMES E., II, US  
[73] FIRST QUALITY TISSUE, LLC, US  
[85] 2018-10-23  
[86] 2017-04-27 (PCT/US2017/029890)  
[87] (WO2017/189869)  
[30] US (62/328,350) 2016-04-27

**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,023,518**  
[13] C

- [51] **Int.Cl. G06F 16/21 (2019.01) G06F 16/23 (2019.01)**  
[25] EN  
[54] **DYNAMIC DEACTIVATION OF COLD DATABASE IN DATABASE SERVICE**  
[54] **DESACTIVATION DYNAMIQUE D'UNE BASE DE DONNEES FROIDE DANS UN SERVICE DE BASE DE DONNEES**  
[72] KALHAN, AJAY, US  
[72] TALIUS, TOMAS, US  
[72] ARORA, PANKAJ, US  
[72] GUO, QUN, US  
[72] XU, SHIZE, US  
[73] MICROSOFT TECHNOLOGY LICENSING, LLC, US  
[85] 2018-11-06  
[86] 2017-06-27 (PCT/US2017/039351)  
[87] (WO2018/005396)  
[30] US (15/199,345) 2016-06-30

[11] **3,024,062**  
[13] C

- [51] **Int.Cl. H03B 5/04 (2006.01) H03B 5/32 (2006.01) H03H 9/02 (2006.01)**  
[25] EN  
[54] **OSCILLATOR WITH REDUCED ACCELERATION SENSITIVITY**  
[54] **OSCILLATEUR AYANT UNE SENSIBILITE A L'ACCELERATION REDUITE**  
[72] SAUR-BROSCH, ROLAND, DE  
[73] KVG QUARTZ CRYSTAL TECHNOLOGY GMBH, DE  
[85] 2018-11-13  
[86] 2016-05-11 (PCT/DE2016/200222)  
[87] (WO2016/180417)  
[30] DE (10 2015 107 384.6) 2015-05-11  
[30] DE (10 2015 107 495.8) 2015-05-12  
[30] DE (10 2015 116 529.5) 2015-09-29  
[30] DE (10 2015 116 815.4) 2015-10-02

[11] **3,025,258**  
[13] C

- [51] **Int.Cl. A61K 31/436 (2006.01) A61P 7/10 (2006.01) A61P 27/02 (2006.01)**  
[25] EN  
[54] **USE OF SIROLIMUS TO TREAT EXUDATIVE AGE-RELATED MACULAR DEGENERATION WITH PERSISTENT EDEMA**  
[54] **UTILISATION DU SIROLIMUS POUR TRAITER LA DEGENERESCENCE LIEE A L'AGE EXSUDATIVE AVEC UN OEDEME PERSISTANT**  
[72] MATURI, RAJ K., US  
[73] SANTEN PHARMACEUTICAL CO., LTD., JP  
[85] 2018-11-22  
[86] 2017-05-25 (PCT/JP2017/019551)  
[87] (WO2017/204298)  
[30] US (62/341,543) 2016-05-25

[11] **3,025,419**  
[13] C

- [51] **Int.Cl. C10G 49/12 (2006.01) C10G 49/26 (2006.01)**  
[25] EN  
[54] **DUAL CATALYST SYSTEM FOR EBULLATED BED UPGRADING TO PRODUCE IMPROVED QUALITY VACUUM RESIDUE PRODUCT**  
[54] **SYSTEME CATALYSEUR DOUBLE DESTINE A L'ENRICHISSEMENT D'UN LIT BOUILLONNANT EN VUE DE PRODUIRE UN PRODUIT DE RESIDU SOUS VIDE DE QUALITE AMELIOREE**  
[72] MOUNTAINLAND, DAVID, US  
[72] SILVERMAN, BRETT M., US  
[72] RUETER, MICHAEL, US  
[72] SMITH, LEE, US  
[73] HYDROCARBON TECHNOLOGY & INNOVATION, LLC, US  
[85] 2018-11-22  
[86] 2017-06-07 (PCT/US2017/036324)  
[87] (WO2017/214256)  
[30] US (62/347,304) 2016-06-08  
[30] US (15/615,574) 2017-06-06

[11] **3,027,417**  
[13] C

- [51] **Int.Cl. C07K 16/30 (2006.01) C07K 16/28 (2006.01) C07K 16/46 (2006.01) C12N 15/13 (2006.01)**  
[25] EN  
[54] **ANTI-HUMAN TROP-2 ANTIBODY HAVING AN ANTITUMOR ACTIVITY IN VIVO**  
[54] **ANTICORPS ANTI-TROP-2 HUMAIN PRESENTANT UNE ACTIVITE ANTITUMORALE IN VIVO**  
[72] NAKAMURA, KOJI, JP  
[72] OKAMURA, KENTARO, JP  
[72] TAMURA, MAKI, JP  
[72] YANAI, HIROYUKI, JP  
[72] KANKE, TORU, JP  
[72] TSURUSHITA, NAOYA, US  
[72] KUMAR, SHANKAR, US  
[73] CHIOME BIOSCIENCE INC., JP  
[86] (3027417)  
[87] (3027417)  
[22] 2012-11-21  
[62] 2,855,699  
[30] US (61/562672) 2011-11-22

[11] **3,027,628**  
[13] C

- [51] **Int.Cl. B64C 25/60 (2006.01) B64F 5/40 (2017.01)**  
[25] EN  
[54] **METHOD OF SERVICING AN AIRCRAFT LANDING GEAR SHOCK ABSORBING STRUT**  
[54] **METHODE D'ENTRETIEN DE JAMBE ANTICHOC DE TRAIN D'ATERRISSAGE D'UN AERONEF**  
[72] BROWN, ADAM, GB  
[72] SMITH, JOHN, GB  
[73] SAFRAN LANDING SYSTEMS UK LIMITED, GB  
[86] (3027628)  
[87] (3027628)  
[22] 2018-12-13  
[30] EP (17207026.0) 2017-12-13

Canadian Patents Issued  
April 16, 2024

---

[11] **3,028,141**  
[13] C  
[51] **Int.Cl. C10G 21/08 (2006.01) C10C 3/02 (2006.01) C10G 1/00 (2006.01) C10G 29/02 (2006.01)**  
[25] EN  
[54] **SEPARATION OF HYDROCARBONS FROM PARTICULATE MATTER USING SALT AND POLYMER**  
[54] **SEPARATION D'HYDROCARBURES A PARTIR DE MATIERE PARTICULAIRE A L'AIDE D'UN SEL ET D'UN POLYMERE**  
[72] LUPINSKY, ARON, US  
[72] MILLER, BRUCE G., US  
[72] PAINTER, PAUL C., US  
[73] EXTRAKT PROCESS SOLUTIONS LLC, US  
[85] 2018-12-14  
[86] 2017-06-22 (PCT/US2017/038682)  
[87] (WO2017/223274)  
[30] US (62/353,287) 2016-06-22  
[30] US (15/457,029) 2017-03-13

---

[11] **3,028,580**  
[13] C  
[51] **Int.Cl. A61K 9/48 (2006.01) A61K 31/352 (2006.01)**  
[25] EN  
[54] **CANNABINOID FORMULATIONS**  
[54] **FORMULATIONS DE CANNABINOIDES**  
[72] WILKHU, JITINDER, GB  
[72] BENDER, JOHAN, NL  
[73] GW RESEARCH LIMITED, GB  
[85] 2018-12-19  
[86] 2017-06-30 (PCT/GB2017/051943)  
[87] (WO2018/002665)  
[30] GB (1611544.6) 2016-07-01

---

[11] **3,029,073**  
[13] C  
[51] **Int.Cl. C07C 67/03 (2006.01) C07C 69/52 (2006.01) C10L 1/02 (2006.01) C11C 3/04 (2006.01)**  
[25] FR  
[54] **METHOD FOR PRODUCING FATTY ACID ESTERS AND GLYCEROL AT A LOW TEMPERATURE**  
[54] **PROCEDE DE PRODUCTION D'ESTERS D'ACIDES GRAS ET DE GLYCEROL A BASSE TEMPERATURE**  
[72] LACOSTE, FRANCOIS, FR  
[72] THIEL, JULIEN, FR  
[72] LAIR, VALENTIN, FR  
[72] HALLOUMI, SAMY, FR  
[73] EASYL, FR  
[85] 2018-12-21  
[86] 2017-06-30 (PCT/FR2017/051778)  
[87] (WO2018/002559)  
[30] FR (1656335) 2016-07-01

---

[11] **3,029,715**  
[13] C  
[51] **Int.Cl. B01F 23/2375 (2022.01) B01F 23/232 (2022.01) B01F 25/433 (2022.01) B01F 35/75 (2022.01) B05B 1/34 (2006.01)**  
[25] EN  
[54] **NANOBUBBLE GENERATING NOZZLE AND NANOBUBBLE GENERATOR**  
[54] **BUSE PRODUISANT DES NANOBULLES ET GENERATEUR DE NANOBULLES**  
[72] TSUCHIYA, YUKIHIRO, JP  
[72] OTA, TOMOHIRO, JP  
[72] GOTO, TAKAHUMI, JP  
[73] AQUA SOLUTION CO., LTD., JP  
[85] 2019-01-02  
[86] 2016-11-17 (PCT/JP2016/084129)  
[87] (WO2018/020701)  
[30] JP (2016-148510) 2016-07-28

---

[11] **3,029,834**  
[13] C  
[51] **Int.Cl. G06F 7/00 (2006.01)**  
[25] EN  
[54] **ASSESSING ROBOTIC GRASPING**  
[54] **EVALUATION DE SAISIE ROBOTISEE**  
[72] ODHNER, LAEL, US  
[72] JENTOFT, LEIF, US  
[72] TENZER, YAROSLAV, US  
[72] KECK, MARK, US  
[72] HOWE, ROBERT, US  
[73] ODHNER, LAEL, US  
[73] JENTOFT, LEIF, US  
[73] TENZER, YAROSLAV, US  
[73] KECK, MARK, US  
[73] HOWE, ROBERT, US  
[85] 2019-01-03  
[86] 2017-07-18 (PCT/US2017/042674)  
[87] (WO2018/017616)  
[30] US (62/363,446) 2016-07-18

---

[11] **3,031,855**  
[13] C  
[51] **Int.Cl. A23L 13/30 (2016.01) A23L 23/10 (2016.01) A23L 33/115 (2016.01) A23P 10/40 (2016.01) A23D 9/00 (2006.01) A23D 9/05 (2006.01)**  
[25] EN  
[54] **POWDERED BEEF FAT**  
[54] **GRAISSE DE BOEUF EN Poudre**  
[72] PERDANA, JIMMY, DE  
[72] BULLING, KATHARINA, DE  
[72] MARAZZATO, MICHELE, CH  
[72] TRAPPO, GREGORY, DE  
[72] KJOLBY, CHRISTIAN, CH  
[72] SAGALOWICZ, LAURENT, CH  
[73] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2019-01-24  
[86] 2017-08-02 (PCT/EP2017/069530)  
[87] (WO2018/029057)  
[30] EP (16183570.7) 2016-08-10



**Brevets canadiens délivrés**  
**16 avril 2024**

---

[11] **3,032,098**  
[13] C

[51] **Int.Cl. B22C 9/04 (2006.01) B22C 9/10 (2006.01) B22C 21/14 (2006.01)**  
[25] FR  
[54] **METHOD FOR CREATING A NONPERMANENT MODEL**  
[54] **PROCEDE DE REALISATION D'UN MODELE NON PERMANENT**  
[72] ROLLINGER, ADRIEN BERNARD VINCENT, FR  
[72] VOLLEBREGT, MATHIEU JEAN LUC, FR  
[72] TAMI LIZUZU, JOSEPH TOUSSAINT, FR  
[72] HERB, VINCENT MARC, FR  
[72] GUERCHE, DIDIER MAURICE MARCEAU, FR  
[72] BOHLI, RAMZI, FR  
[73] SAFRAN, FR  
[73] SAFRAN AIRCRAFT ENGINES, FR  
[85] 2019-01-25  
[86] 2017-07-27 (PCT/FR2017/052126)  
[87] (WO2018/020182)  
[30] FR (1657229) 2016-07-27

---

[11] **3,032,903**  
[13] C

[51] **Int.Cl. C10K 1/02 (2006.01) C10K 3/00 (2006.01) C10K 3/02 (2006.01)**  
[25] EN  
[54] **SEPARATOR SYSTEM AND TAR REFORMER SYSTEM**  
[54] **SYSTEME SEPARATEUR ET SYSTEME REFORMEUR DE GOUDRON**  
[72] MADSEN, JORGEN, DK  
[72] GAMBARINI, ERIK, DK  
[72] LOGSTED-NIELSEN, ERIK, DK  
[73] TOPSOE A/S, DK  
[85] 2019-02-04  
[86] 2017-08-22 (PCT/EP2017/071134)  
[87] (WO2018/054635)  
[30] DK (PA 2016 00552) 2016-09-21

---

[11] **3,033,455**  
[13] C

[51] **Int.Cl. H04L 27/26 (2006.01)**  
[25] EN  
[54] **BASE STATION, USER EQUIPMENT AND WIRELESS COMMUNICATION METHOD**  
[54] **STATION DE BASE, EQUIPEMENT UTILISATEUR ET PROCEDE DE COMMUNICATION SANS FIL**  
[72] WANG, LILEI, CN  
[72] SUZUKI, HIDETOSHI, JP  
[72] GOLITSCHKEK EDLER VON ELBWART, ALEXANDER, DE  
[73] PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA, US  
[85] 2019-02-08  
[86] 2016-11-03 (PCT/CN2016/104448)  
[87] (WO2018/081976)

---

[11] **3,034,344**  
[13] C

[51] **Int.Cl. A23L 33/00 (2016.01) A23L 33/18 (2016.01) A23L 33/185 (2016.01) A61P 37/08 (2006.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING A NUTRITIONAL COMPOSITION**  
[54] **PROCEDE DE PRODUCTION D'UNE COMPOSITION NUTRITIONNELLE**  
[72] THEVENIER, ANNE, CH  
[72] SCHUH, SUSANNE, CH  
[72] KUSLYS, MARTINAS, CH  
[72] RAN-RESSLER, RINAT, US  
[72] RADE-KUKIC, KORALJKA, US  
[73] SOCIETE DES PRODUITS NESTLE S.A., CH  
[85] 2019-02-19  
[86] 2017-09-13 (PCT/EP2017/073040)  
[87] (WO2018/050704)  
[30] US (62/393787) 2016-09-13

---

[11] **3,036,493**  
[13] C

[51] **Int.Cl. C08L 101/08 (2006.01) B82Y 30/00 (2011.01) C08J 3/20 (2006.01) C08K 7/02 (2006.01) C08L 1/02 (2006.01) C08L 23/00 (2006.01) C08L 25/06 (2006.01) C08L 67/00 (2006.01)**  
[25] EN  
[54] **COMPATIBILIZERS FOR POLYMER-NANOCELLULOSE COMPOSITES**  
[54] **AGENTS DE COMPATIBILITE POUR COMPOSITES POLYMERE-NANOCELLULOSE**  
[72] BANERJIE, ASIS, US  
[72] NELSON, KIMBERLY, US  
[73] API INTELLECTUAL PROPERTY HOLDINGS, LLC, US  
[85] 2019-03-11  
[86] 2016-09-16 (PCT/US2016/052034)  
[87] (WO2017/049021)  
[30] US (62/220,075) 2015-09-17  
[30] US (62/259,414) 2015-11-24  
[30] US (15/266,688) 2016-09-15

---

[11] **3,037,469**  
[13] C

[51] **Int.Cl. A61K 31/436 (2006.01) A61K 39/395 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **TREATMENT OF DERMAL DISORDERS COMPRISING A MTORC1 INHIBITOR**  
[54] **NOUVEAUX COMPOSES, COMPOSITIONS ET METHODES POUR LE TRAITEMENT DE TROUBLES CUTANES**  
[72] SELL, CHRISTIAN, US  
[72] NACARELLI, TIMOTHY, US  
[72] AZAR, ASHLEY, US  
[73] DREXEL UNIVERSITY, US  
[85] 2019-03-19  
[86] 2016-09-19 (PCT/US2016/052442)  
[87] (WO2017/053222)  
[30] US (62/232,228) 2015-09-24

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,037,962**  
[13] C

[51] **Int.Cl. A61F 7/02 (2006.01) A61F 7/08 (2006.01) A61F 7/10 (2006.01)**  
[25] EN  
[54] **A THERMAL PACK THAT APPROXIMATES A CURVED THREE-DIMENSIONAL SURFACE**  
[54] **EMBALLAGE THERMIQUE AYANT UNE FORME SENSIBLEMENT IDENTIQUE A UNE SURFACE TRIDIMENSIONNELLE INCURVEE**  
[72] WEINSTEIN, RANDY H., US  
[73] WEINSTEIN, RANDY H., US  
[85] 2019-03-21  
[86] 2018-03-29 (PCT/US2018/025287)  
[87] (WO2018/183769)  
[30] US (PCT/US17/24871) 2017-03-29  
[30] US (15/940,861) 2018-03-29

---

[11] **3,041,319**  
[13] C

[51] **Int.Cl. F24F 11/62 (2018.01)**  
[25] EN  
[54] **OPERATING AN HVAC SYSTEM TO REACH TARGET TEMPERATURE EFFICIENTLY**  
[54] **FONCTIONNEMENT D'UN SYSTEME CVCA POUR ATTEINDRE LA TEMPERATURE CIBLE EFFICACEMENT**  
[72] BRAHME, ROHINI, US  
[72] IYENGAR, AJAY, US  
[72] GOKHALE, UMESH, US  
[73] LENNOX INDUSTRIES INC., US  
[86] (3041319)  
[87] (3041319)  
[22] 2019-04-26  
[30] US (15/980,182) 2018-05-15

---

[11] **3,041,411**  
[13] C

[51] **Int.Cl. C22C 19/05 (2006.01)**  
[25] FR  
[54] **SUPERALLOY BASED ON NICKEL, MONOCRYSTALLINE BLADE AND TURBOMACHINE**  
[54] **SUPERALLIAGE A BASE DE NICKEL, AUBE MONOCRISTALLINE ET TURBOMACHINE**  
[72] RAME, JEREMY, FR  
[72] BELAYGUE, PHILIPPE, FR  
[72] CARON, PIERRE, FR  
[72] DELAUTRE, JOEL, FR  
[72] JAQUET, VIRGINIE, FR  
[72] LAVIGNE, ODILE, FR  
[73] SAFRAN, FR  
[73] SAFRAN AIRCRAFT ENGINES, FR  
[73] OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, FR  
[73] SAFRAN HELICOPTER ENGINES, FR  
[85] 2019-04-23  
[86] 2017-10-24 (PCT/FR2017/052918)  
[87] (WO2018/078269)  
[30] FR (1660337) 2016-10-25

---

[11] **3,041,504**  
[13] C

[51] **Int.Cl. F16L 3/10 (2006.01) B64C 1/00 (2006.01) F16L 3/23 (2006.01) F16L 3/24 (2006.01)**  
[25] EN  
[54] **ELECTRICAL RACEWAY SYSTEM AND ASSOCIATED WIRE BUNDLE CLAMP SYSTEM AND METHOD**  
[54] **SYSTEME DE CANALISATION ELECTRIQUE ET SYSTEME ET PROCEDE D'ATTACHE DE FAISCEAU DE FILS CONNEXE**  
[72] MOHLMAN, SHAWN D., US  
[73] THE BOEING COMPANY, US  
[86] (3041504)  
[87] (3041504)  
[22] 2019-04-29  
[30] US (16/031487) 2018-07-10

---

[11] **3,041,626**  
[13] C

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 31/5575 (2006.01) A61K 47/26 (2006.01)**  
[25] EN  
[54] **OPHTHALMIC COMPOSITION FOR LOWERING INTRAOCULAR PRESSURE**  
[54] **COMPOSITION OPHTALMIQUE SERVANT A REDUIRE LA PRESSION INTRAOCULAIRE**  
[72] LEE, JOON YOUNG, KR  
[72] SHIN, YOUNG JAE, KR  
[72] LEE, MIN JI, KR  
[73] TAEJOON PHARMACEUTICAL CO., LTD., KR  
[85] 2019-04-24  
[86] 2017-06-28 (PCT/KR2017/006857)  
[87] (WO2018/088663)  
[30] KR (10-2016-0148858) 2016-11-09  
[30] KR (10-2017-0002444) 2017-01-06

---

[11] **3,044,846**  
[13] C

[51] **Int.Cl. H10N 30/80 (2023.01) H10N 30/057 (2023.01) H10N 30/85 (2023.01) B06B 1/06 (2006.01) G01F 1/66 (2022.01)**  
[25] EN  
[54] **THICKNESS MODE TRANSDUCERS AND RELATED DEVICES AND METHODS**  
[54] **TRANSDUCTEURS EN MODE D'EPaisseur ET DISPOSITIFS ET PROCEDES ASSOCIES**  
[72] BUCKLAND, JUSTIN RORKE, GB  
[73] SENSUS USA, INC., US  
[85] 2019-05-30  
[86] 2017-12-07 (PCT/US2017/065010)  
[87] (WO2018/106861)  
[30] US (15/374,044) 2016-12-09

---

**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,047,095**

[13] C

- [51] **Int.Cl. G07C 5/08 (2006.01)**  
[25] EN  
[54] **VEHICLE MANAGEMENT SYSTEM**  
[54] **SYSTEME DE CONTROLE DE VEHICULE**  
[72] POEPEL, SCOTT C., US  
[72] LETWIN, NICHOLAS G., US  
[72] KELLY, SEAN J., US  
[73] UATC, LLC, US  
[85] 2019-06-13  
[86] 2017-12-12 (PCT/US2017/065818)  
[87] (WO2018/111877)  
[30] US (15/379,407) 2016-12-14  
[30] US (15/379,420) 2016-12-14  
[30] US (15/730,211) 2017-10-11

[11] **3,048,480**

[13] C

- [51] **Int.Cl. G01R 21/00 (2006.01) G06Q 50/06 (2012.01)**  
[25] EN  
[54] **SUPPLEMENTAL TECHNIQUES FOR CHARACTERIZING POWER QUALITY EVENTS IN AN ELECTRICAL SYSTEM**  
[54] **AUTRES METHODES DE CARACTERISATION D'EVENEMENTS DE QUALITE ENERGETIQUE DANS UN SYSTEME ELECTRIQUE**  
[72] BICKEL, JON A., US  
[72] WALL, THERESA K., US  
[73] SCHNEIDER ELECTRIC USA, INC., US  
[86] (3048480)  
[87] (3048480)  
[22] 2019-07-02  
[30] US (62/694,791) 2018-07-06  
[30] US (62/770,730) 2018-11-21  
[30] US (62/770,732) 2018-11-21  
[30] US (62/770,737) 2018-11-21  
[30] US (62/770,741) 2018-11-21  
[30] US (16/233,241) 2018-12-27

[11] **3,049,076**

[13] C

- [51] **Int.Cl. E21B 33/03 (2006.01) E21B 33/06 (2006.01)**  
[25] EN  
[54] **ROTATING CONTROL DEVICE HAVING LOCKING PINS FOR LOCKING A BEARING ASSEMBLY**  
[54] **DISPOSITIF DE COMMANDE DE ROTATION DOTE DE GOUPILLES DE VERROUILLAGE POUR VERROUILLER UN ENSEMBLE DE PALIERS**  
[72] YOUSEF, FAISAL, US  
[72] VU, TOMMY, US  
[72] ELLIS, BRIAN, US  
[73] NABORS DRILLING TECHNOLOGIES USA, INC., US  
[86] (3049076)  
[87] (3049076)  
[22] 2019-07-10  
[30] US (16/054984) 2018-08-03

[11] **3,050,099**

[13] C

- [51] **Int.Cl. A61K 35/28 (2015.01) C12N 5/0775 (2010.01) A61L 27/38 (2006.01) A61P 19/00 (2006.01) A61P 19/02 (2006.01) A61P 19/08 (2006.01)**  
[25] EN  
[54] **PREVENTION AND TREATMENT OF BONE AND CARTILAGE DAMAGE OR DISEASE**  
[54] **PREVENTION ET TRAITEMENT D'UNE DEGRADATION OU D'UNE MALADIE CARTILAGINEUSE ET OSSEUSE**  
[72] LUNDGREN AKERLUND, EVY, SE  
[72] UVEBRANT, CHRISTINA, SE  
[72] TALTS, JAN, SE  
[73] XINTELA AB, SE  
[85] 2019-07-11  
[86] 2018-01-29 (PCT/EP2018/052104)  
[87] (WO2018/138322)  
[30] US (62/451,372) 2017-01-27

[11] **3,050,598**

[13] C

- [51] **Int.Cl. G01N 21/64 (2006.01) B01L 3/00 (2006.01) G01B 11/04 (2006.01) G01J 3/44 (2006.01) G01N 1/30 (2006.01) G01N 21/03 (2006.01)**  
[25] EN  
[54] **METHOD FOR ANALYZING AND SELECTING A SPECIFIC DROPLET AMONG A PLURALITY OF DROPLETS AND ASSOCIATED APPARATUS**  
[54] **PROCEDE D'ANALYSE ET DE SELECTION D'UNE GOUTTELETTE SPECIFIQUE PARMY UNE PLURALITE DE GOUTTELETTES ET APPAREIL ASSOCIE**  
[72] REICHEN, MARCEL, CH  
[72] DOINEAU, RAPHAEL CLEMENT LIMING, FR  
[72] ELLOUZE, SAMI, FR  
[73] HIFIBIO SAS, FR  
[85] 2019-07-17  
[86] 2018-01-18 (PCT/EP2018/051245)  
[87] (WO2018/134323)  
[30] EP (17305052.7) 2017-01-18

[11] **3,050,895**

[13] C

- [51] **Int.Cl. F24F 5/00 (2006.01) F24D 15/04 (2006.01)**  
[25] EN  
[54] **SINGLE-PIPE THERMAL ENERGY SYSTEM**  
[54] **SYSTEME D'ENERGIE THERMIQUE A CONDUITE UNIQUE**  
[72] ESLAMI-NEJAD, PARHAM, CA  
[72] BASTANI, ARASH, CA  
[72] GIGUERE, DANIEL, CA  
[73] HER MAJESTY THE QUEEN IN RIGHT OF CANADA, AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES, CA  
[86] (3050895)  
[87] (3050895)  
[22] 2019-07-31  
[30] US (62/712,602) 2018-07-31

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,051,883**  
[13] C

[51] **Int.Cl. F01D 5/00 (2006.01)**  
[25] FR  
[54] **METHOD FOR REMOVING A METAL ELEMENT BONDED TO AN ELEMENT MADE OF COMPOSITE MATERIAL**

[54] **PROCEDE POUR LE DECOLLEMENT D'UN ELEMENT METALLIQUE COLLE A UN ELEMENT EN MATERIAU COMPOSITE**

[72] CHARLAS, MATHIEU JULIEN, FR  
[73] SAFRAN AIRCRAFT ENGINES, FR  
[85] 2019-07-25  
[86] 2018-01-26 (PCT/FR2018/050177)  
[87] (WO2018/138445)  
[30] FR (17 50731) 2017-01-30

---

[11] **3,052,334**  
[13] C

[51] **Int.Cl. A01C 17/00 (2006.01) A01C 19/02 (2006.01)**  
[25] EN  
[54] **DISTRIBUTING MACHINE AND METERING ELEMENT SUITABLE FOR SAID DISTRIBUTING MACHINE**

[54] **MACHINE DE DISTRIBUTION ET ELEMENT DE DOSAGE CORRESPONDANT**

[72] STOCKLIN, VOLKER, DE  
[72] ZEITVOGEL, THOMAS, DE  
[72] DOLL, FRANZ, DE  
[73] RAUCH LANDMASCHINENFABRIK GMBH, DE  
[85] 2019-08-01  
[86] 2018-03-05 (PCT/EP2018/000085)  
[87] (WO2018/162116)  
[30] DE (20 2017 001 237.5) 2017-03-09

---

---

[11] **3,052,483**  
[13] C

[51] **Int.Cl. C30B 9/14 (2006.01) B82Y 40/00 (2011.01) C01B 32/15 (2017.01) C01B 32/158 (2017.01) C01B 32/16 (2017.01) C01B 32/168 (2017.01) C01B 32/182 (2017.01)**

[25] EN  
[54] **METHODS AND SYSTEMS FOR PRODUCTION OF DOPED CARBON NANOMATERIALS**

[54] **PROCEDES ET SYSTEMES DE PRODUCTION DE NANOMATERIAUX DE CARBONE DOPES**

[72] LICHT, STUART, US  
[73] C2CNT LLC, US  
[85] 2019-08-01  
[86] 2018-02-21 (PCT/US2018/019035)  
[87] (WO2018/156642)  
[30] US (62/461,641) 2017-02-21

---

[11] **3,053,820**  
[13] C

[51] **Int.Cl. F16B 2/20 (2006.01) A41F 1/02 (2006.01) D07B 1/18 (2006.01) E04H 15/64 (2006.01) F16B 45/00 (2006.01)**

[25] EN  
[54] **TARPAULIN CLAMP**

[54] **PINCE POUR BACHE**

[72] ZOLTEK, RICHARD J., CA  
[73] ZOLTEK, RICHARD J., CA  
[86] (3053820)  
[87] (3053820)  
[22] 2019-09-03  
[30] US (16/368,125) 2019-03-28

---

[11] **3,055,163**  
[13] C

[51] **Int.Cl. A41H 1/02 (2006.01) G06Q 30/0601 (2023.01) H04W 4/38 (2018.01) G01B 7/02 (2006.01)**

[25] EN  
[54] **SIZE MEASURING DEVICE, MANAGING SERVER, USER TERMINAL AND SIZE MEASURING SYSTEM**

[54] **DISPOSITIF DE MESURE DE TAILLE, SERVEUR DE GESTION, TERMINAL D'UTILISATEUR ET SYSTEME DE MESURE DE TAILLE**

[72] MAEZAWA, YUSAKU, JP  
[73] ZOZO, INC., JP  
[85] 2019-08-30  
[86] 2018-02-09 (PCT/JP2018/004684)  
[87] (WO2018/159271)  
[30] JP (2017-038102) 2017-03-01

---

---

[11] **3,056,957**  
[13] C

[51] **Int.Cl. H04W 16/14 (2009.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING DATA IN A WIRELESS COMMUNICATION SYSTEM**

[54] **PROCEDE ET APPAREIL DE TRANSMISSION ET DE RECEPTION DE DONNEES DANS UN SYSTEME DE COMMUNICATION SANS FIL**

[72] LIU, JINHUA, CN  
[72] LI, SHAOHUA, CN  
[72] ZHANG, ZHAN, CN  
[73] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE  
[85] 2019-09-18  
[86] 2018-01-23 (PCT/CN2018/073854)  
[87] (WO2018/171326)  
[30] CN (PCT/CN2017/077497) 2017-03-21

---

[11] **3,057,732**  
[13] C

[51] **Int.Cl. H04B 14/00 (2006.01) H04W 84/02 (2009.01) G01D 7/00 (2006.01) G08C 19/00 (2006.01) H04B 7/00 (2006.01) H04L 12/00 (2006.01)**

[25] EN  
[54] **SIGNAL COMMUNICATION SYSTEM WHERE DISTRIBUTION OF SIGNALS IS MANAGED BY A DISTRIBUTION SYSTEM AND NOT BE SIGNAL NODES OR CLIENT NODES**

[54] **SYSTEME DE COMMUNICATION PAR SIGNAUX SELON LEQUEL UNE DISTRIBUTION DE SIGNAUX EST GEREE PAR UN SYSTEME DE DISTRIBUTION ET NON DES NOEUDS DE SIGNAUX NOEUDS CLIENTS**

[72] NIEDERFELD, GERHARD, DE  
[72] ALTAN, NICOLA, DE  
[73] ISTA INTERNATIONAL GMBH, DE  
[85] 2019-09-24  
[86] 2017-03-28 (PCT/EP2017/057288)  
[87] (WO2018/177509)

---

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **3,058,188**  
[13] C

[51] **Int.Cl. B01D 53/52 (2006.01) C08K 5/3492 (2006.01) C08L 95/00 (2006.01)**

[25] EN

[54] **DISSOLUTION OF HEXAMINE IN NON-AQUEOUS SOLVENT**

[54] **DISSOLUTION DE L'HEXAMINE DANS UN SOLVANT NON AQUEUX**

[72] SOLOMON, KIM R., US

[73] ECOLAB USA INC., US

[85] 2019-09-26

[86] 2018-03-26 (PCT/US2018/024272)

[87] (WO2018/183158)

[30] US (62/478,427) 2017-03-29

---

[11] **3,058,685**  
[13] C

[51] **Int.Cl. H01L 33/58 (2010.01) H01L 33/50 (2010.01) F21K 9/20 (2016.01)**

[25] EN

[54] **LOW REFRACTIVE INDEX NEODYMIUM FLUORIDE DOPED POLYCARBONATE**

[54] **POLYCARBONATE DOPE AU FLUORURE DE NEODYME A FAIBLE INDICE DE REFRACTION**

[72] YI, QING, CN

[72] HE, JIANMIN, US

[72] LIN, CHUAN, CN

[72] WANG, ZHIYONG, CN

[72] MURPHY, JAMES EDWARD, US

[72] CAI, DENGKE, US

[72] WU, XIAOYONG, CN

[73] SAVANT TECHNOLOGIES LLC, US

[85] 2019-10-01

[86] 2017-02-28 (PCT/CN2017/075209)

[87] (WO2018/157288)

---

[11] **3,059,256**  
[13] C

[51] **Int.Cl. C07D 277/64 (2006.01) A61K 31/428 (2006.01) A61P 1/16 (2006.01) C07D 405/12 (2006.01)**

[25] EN

[54] **COVALENT SMALL MOLECULE DCN1 INHIBITORS AND THERAPEUTIC METHODS USING THE SAME**

[54] **INHIBITEURS COVALENTS A PETITES MOLECULES DE DCN1 ET PROCEDES THERAPEUTIQUES LES UTILISANT**

[72] WANG, SHAO MING, US

[72] STUCKEY, JEANNE, US

[72] LIU, LIU, US

[72] LU, JIANFENG, US

[72] ZHOU, HAIBIN, US

[72] RUI, LIANGYOU, US

[72] SUN, YI, US

[73] THE REGENTS OF THE UNIVERSITY OF MICHIGAN, US

[85] 2019-10-04

[86] 2018-04-10 (PCT/US2018/026789)

[87] (WO2018/191199)

[30] US (62/483,640) 2017-04-10

---

[11] **3,060,557**  
[13] C

[51] **Int.Cl. E02F 3/34 (2006.01) E02F 9/08 (2006.01) E02F 9/20 (2006.01)**

[25] EN

[54] **MECHANICAL DRIVE CONTROL FOR LOADERS**

[54] **COMMANDE D'ENTRAINEMENT MECANIQUE POUR CHARGEURS**

[72] ROSKE, CRAIG, US

[73] DOOSAN BOBCAT NORTH AMERICA, INC., US

[85] 2019-10-17

[86] 2018-04-19 (PCT/US2018/028303)

[87] (WO2018/195277)

[30] US (62/487,161) 2017-04-19

---

[11] **3,064,359**  
[13] C

[51] **Int.Cl. F16L 15/04 (2006.01) C10M 103/02 (2006.01) C10M 107/38 (2006.01) C10M 125/10 (2006.01) C10M 145/04 (2006.01) C10M 145/20 (2006.01) C10M 149/18 (2006.01) C23C 28/00 (2006.01) F16L 15/00 (2006.01)**

[25] EN

[54] **THREADED CONNECTION FOR PIPES OR TUBES AND METHOD FOR PRODUCING THE THREADED CONNECTION FOR PIPES OR TUBES**

[54] **RACCORD FILETE POUR TUYAUX OU TUBES ET PROCEDE DE PRODUCTION D'UN RACCORD FILETE POUR TUYAUX OU TUBES**

[72] GOTO, KUNIO, JP

[73] NIPPON STEEL CORPORATION, JP

[73] VALLOUREC OIL AND GAS FRANCE, FR

[85] 2019-11-20

[86] 2018-04-24 (PCT/JP2018/016582)

[87] (WO2018/216416)

[30] JP (2017-100546) 2017-05-22

---

[11] **3,064,573**  
[13] C

[51] **Int.Cl. C05G 3/00 (2020.01) C05G 3/40 (2020.01) C05G 3/70 (2020.01) C05G 5/12 (2020.01) C05G 5/30 (2020.01) C05D 9/00 (2006.01) C05G 1/00 (2006.01)**

[25] EN

[54] **SWELLABLE FERTILIZER GRANULES CONTAINING ELEMENTAL SULFUR WITH INCREASED OXIDATION RATES**

[54] **GRANULES D'ENGRAIS GONFLABLES CONTENANT DU SOUFRE ELEMENTAIRE PRESENTANT DES TAUX D'OXYDATION ACCRUS**

[72] MCLAUGHLIN, MICHAEL, US

[72] DEGRYSE, JOZEFIE, US

[72] BAIRD, ROSLYN, US

[72] DA SILVA, RODRIGO COQUI, US

[73] THE MOSAIC COMPANY, US

[85] 2019-11-21

[86] 2018-05-23 (PCT/US2018/034125)

[87] (WO2018/217888)

[30] US (62/510,080) 2017-05-23

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,064,680**  
[13] C

[51] **Int.Cl. B01D 35/02 (2006.01) B01D 29/33 (2006.01) B01D 35/06 (2006.01) B03C 1/30 (2006.01) C02F 1/48 (2006.01) F16L 55/24 (2006.01)**

[25] EN  
[54] **FLUID TREATMENT**  
[54] **TRAITEMENT DE FLUIDE**  
[72] COWLEY, RICHARD, ZA  
[72] WILKINSON, DARREN, GB  
[73] VEXO INTERNATIONAL (UK) LIMITED, GB  
[85] 2019-11-22  
[86] 2018-05-25 (PCT/GB2018/051429)  
[87] (WO2018/215788)  
[30] GB (1708380.9) 2017-05-25

---

[11] **3,064,849**  
[13] C

[51] **Int.Cl. G01F 15/07 (2006.01) G01F 3/06 (2006.01)**

[25] EN  
[54] **SIDE VIEW FLUID METER COUNTER ASSEMBLY AND A FLUID METER WITH A SIDE COUNTER**  
[54] **ENSEMBLE COMPTEUR POUR DEBITMETRE DE FLUIDE DE VUE LATERALE ET DEBITMETRE DE FLUIDE AVEC COMPTEUR LATERAL**  
[72] SMICH, ANDREW, CA  
[73] ROMET LIMITED, CA  
[86] (3064849)  
[87] (3064849)  
[22] 2019-12-12  
[30] US (62/860,978) 2019-06-13

---

[11] **3,066,131**  
[13] C

[51] **Int.Cl. B60J 10/30 (2016.01)**

[25] EN  
[54] **RUBBER EDGE SEAL RETENTION DEVICE**  
[54] **DISPOSITIF DE RETENUE DE JOINT D'ETANCHEITE SUR RIVES EN CAOUTCHOUC**  
[72] NICOLE, MARTIN, CA  
[73] WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION, US  
[86] (3066131)  
[87] (3066131)  
[22] 2019-12-24  
[30] US (16/233,843) 2018-12-27

---

[11] **3,067,136**  
[13] C

[51] **Int.Cl. B23K 23/00 (2006.01) B23K 37/00 (2006.01) B23K 37/06 (2006.01)**

[25] EN  
[54] **CONFIGURABLE EXOTHERMIC REACTION MOLD**  
[54] **MOULE DE REACTION EXOTHERMIQUE CONFIGURABLE**  
[72] STILWELL, CHARLES MITCHELL, US  
[72] CEASS, RICHARD WALLACE, US  
[72] RUFFIN, LOUIS WEBSTER, JR., US  
[73] HUBBELL INCORPORATED, US  
[85] 2019-12-11  
[86] 2018-06-27 (PCT/US2018/039765)  
[87] (WO2019/005974)  
[30] US (62/525,820) 2017-06-28

---

[11] **3,067,960**  
[13] C

[51] **Int.Cl. B60W 30/06 (2006.01) B60W 50/14 (2012.01) B60R 21/00 (2006.01) B60W 30/08 (2012.01)**

[25] EN  
[54] **PARKING CONTROL METHOD AND DEVICE**  
[54] **METHODE ET DISPOSITIF DE CONTROLE AUX FINS DE STATIONNEMENT**  
[72] KUWABARA, JUNICHI, JP  
[72] SUZUKI, YASUHIRO, JP  
[72] HAYAKAWA, YASUHISA, JP  
[73] NISSAN MOTOR CO., LTD., JP  
[85] 2019-12-19  
[86] 2017-06-23 (PCT/JP2017/023242)  
[87] (WO2018/235274)

---

[11] **3,068,117**  
[13] C

[51] **Int.Cl. C10G 2/00 (2006.01) C01B 3/38 (2006.01)**

[25] EN  
[54] **SYSTEMS AND METHODS FOR PRODUCING LIQUID FUELS FROM LANDFILL GASES**  
[54] **SYSTEMES ET PROCEDES DE PRODUCTION DE COMBUSTIBLES LIQUIDES A PARTIR DE GAZ DE DECHARGE**  
[72] WALKER, DEVIN M., US  
[72] KUHN, JOHN N., US  
[72] JOSEPH, BABU, US  
[72] ROBERGE, TIMOTHY, US  
[72] GARDEZI, SYED ALI, US  
[73] UNIVERSITY OF SOUTH FLORIDA, US  
[85] 2019-12-20  
[86] 2017-06-28 (PCT/GB2017/051882)  
[87] (WO2019/002803)

---

[11] **3,068,667**  
[13] C

[51] **Int.Cl. C10M 129/54 (2006.01)**

[25] EN  
[54] **LUBRICATING OIL COMPOSITIONS CONTAINING DETERGENT COMPOUNDS**  
[54] **COMPOSITIONS D'HUILE LUBRIFIANTE CONTENANT DES COMPOSES DETERGENTS**  
[72] BOFFA, ALEXANDER BOWMAN, US  
[72] HARTGERS, WALTER ALEXANDER, NL  
[72] HOSSEINI, SEYEDEH MAHBOOBEH, US  
[72] CAMPBELL, CURTIS BAY, US  
[73] CHEVRON ORONITE COMPANY LLC, US  
[73] CHEVRON ORONITE TECHNOLOGY B.V., NL  
[85] 2019-12-30  
[86] 2018-06-28 (PCT/IB2018/054806)  
[87] (WO2019/003178)  
[30] US (62/527,089) 2017-06-30

**Brevets canadiens délivrés**  
**16 avril 2024**

[11] **3,068,729**  
[13] C

- [51] **Int.Cl. H04L 5/00 (2006.01)**  
[25] EN  
[54] **SPECIFIC HOPPING PATTERNS FOR REPEATED TRANSMISSION AND RECEPTION OF DATA AND METHODS FOR GENERATING THE SAME**  
[54] **SCHEMA DE SAUT SPECIFIQUE POUR L'EMISSION ET LA RECEPTION REPETEES DE DONNEES ET PROCEDE DE PRODUCTION CORRESPONDANT**  
[72] KNEISSL, JAKOB, DE  
[72] BERNHARD, JOSEF, DE  
[72] KILIAN, GERD, DE  
[72] WECHSLER, JOHANNES, DE  
[72] MEYER, RAIMUND, DE  
[72] OBERNOSTERER, FRANK, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E. V., DE  
[85] 2019-12-23  
[86] 2018-07-03 (PCT/EP2018/067891)  
[87] (WO2019/007933)  
[30] DE (10 2017 211 375.8) 2017-07-04

[11] **3,070,249**  
[13] C

- [51] **Int.Cl. B01D 65/02 (2006.01) B01D 61/42 (2006.01) B01D 61/46 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR ASYMMETRIC POLARITY INVERSION IN ELECTROMEMBRANE PROCESSES**  
[54] **PROCEDE ET APPAREIL D'INVERSION ASYMETRIQUE DE POLARITE DANS DES PROCEDES A ELECTROMEMBRANE**  
[72] GONZALEZ VOGEL, ALVARO MAURICIO, CL  
[72] JOUTSIMO, OLLI PEKKA, FI  
[72] BORNHARDT BRACHMANN, KLAUS ERWIN, CL  
[73] INVESTIGACIONES FORESTALES BIOFOREST S.A., CL  
[85] 2020-01-17  
[86] 2017-07-18 (PCT/CL2017/050033)  
[87] (WO2019/014781)

[11] **3,072,517**  
[13] C

- [51] **Int.Cl. B28B 1/00 (2006.01) B28B 7/42 (2006.01) B28B 7/46 (2006.01) B28B 11/24 (2006.01)**  
[25] EN  
[54] **AQUEOUS GELCASTING METHOD FOR CERAMIC PRODUCTS**  
[54] **PROCEDE DE COULAGE EN GEL AQUEUX POUR PRODUITS CERAMIQUES**  
[72] THOMAS, KURT J., US  
[72] BRIDGETT, PAUL A. V., US  
[72] VEROS, MICHAEL J., US  
[72] ELMER, JOSEPH A., US  
[72] DENNIS, NATHANAEL W., US  
[73] DELTA FAUCET COMPANY, US  
[85] 2020-02-07  
[86] 2018-09-25 (PCT/US2018/052630)  
[87] (WO2019/067439)  
[30] US (62/563,345) 2017-09-26  
[30] US (62/563,350) 2017-09-26

[11] **3,072,682**  
[13] C

- [51] **Int.Cl. H04L 5/00 (2006.01)**  
[25] EN  
[54] **CONTROL INFORMATION SENDING/RECEIVING METHOD AND DEVICE**  
[54] **PROCEDE ET DISPOSITIF D'ENVOI ET DE RECEPTION D'INFORMATIONS DE COMMANDE**  
[72] XUE, LIXIA, CN  
[72] ZHANG, XU, CN  
[72] WANG, JIANGUO, CN  
[72] QIN, YI, CN  
[72] CAO, YONGZHAO, CN  
[73] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2020-02-11  
[86] 2018-07-27 (PCT/CN2018/097425)  
[87] (WO2019/029385)  
[30] CN (201710687956.7) 2017-08-11

[11] **3,072,802**  
[13] C

- [51] **Int.Cl. G01C 21/20 (2006.01) B64D 45/00 (2006.01)**  
[25] EN  
[54] **OPERATIONAL FLIGHT ENVELOPE MANAGEMENT SYSTEM**  
[54] **SYSTEME DE GESTION DE L'ENVELOPPE DE VOL OPERATIONNELLE**  
[72] LEOPOLD, DAVID DANIEL, US  
[73] THE BOEING COMPANY, US  
[86] (3072802)  
[87] (3072802)  
[22] 2020-02-18  
[30] US (16/353557) 2019-03-14

[11] **3,074,049**  
[13] C

- [51] **Int.Cl. C23F 13/20 (2006.01) C25D 11/00 (2006.01)**  
[25] EN  
[54] **CATHODIC CORROSION PROTECTION WITH SOLAR PANEL**  
[54] **PROTECTION CATHODIQUE CONTRE LA CORROSION AVEC PANNEAU SOLAIRE**  
[72] WHITMORE, DAVID WILLIAM, CA  
[73] WHITMORE, DAVID WILLIAM, CA  
[85] 2020-02-27  
[86] 2018-09-05 (PCT/CA2018/051066)  
[87] (WO2019/046934)  
[30] US (15/695,515) 2017-09-05

[11] **3,074,058**  
[13] C

- [51] **Int.Cl. B60L 53/80 (2019.01) H01M 50/289 (2021.01) B64D 47/00 (2006.01) H01M 10/44 (2006.01)**  
[25] EN  
[54] **REMOVABLE BATTERY COMPRESSION DEVICES**  
[54] **DISPOSITIFS DE COMPRESSION DE BATTERIES DEMONTABLES**  
[72] BERNHARDT, ROGER D., US  
[73] THE BOEING COMPANY, US  
[86] (3074058)  
[87] (3074058)  
[22] 2020-02-26  
[30] US (16/399,562) 2019-04-30

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,075,634**  
[13] C

[51] **Int.Cl. A23D 7/005 (2006.01) A23L 7/10 (2016.01) A23L 7/126 (2016.01) A23L 7/139 (2016.01) A23L 7/196 (2016.01)**

[25] EN

[54] **METHOD OF PRODUCING ROASTED OATS AND ROASTED OAT-BASED PEANUT BUTTER-FLAVORED COMPOSITIONS**

[54] **PROCEDE DE PRODUCTION D'AVOINE TORREFIEE ET COMPOSITIONS AU GOUT DE BEURRE DE CACAHUETE A BASE D'AVOINE TORREFIEE**

[72] GUGGER, ERIC T., US  
[72] GALUSKA, PETE, US  
[73] GENERAL MILLS, INC., US  
[85] 2020-03-11  
[86] 2017-10-13 (PCT/US2017/056572)  
[87] (WO2019/074520)

---

[11] **3,076,499**  
[13] C

[51] **Int.Cl. H02J 7/00 (2006.01) F02N 11/12 (2006.01) F02N 11/14 (2006.01)**

[25] EN

[54] **RECHARGEABLE BATTERY JUMP STARTING DEVICE WITH DEPLETED OR DISCHARGED BATTERY PRE-CONDITIONING SYSTEM**

[54] **DISPOSITIF DE DEMARRAGE DE SECOURS DE BATTERIE RECHARGEABLE DOTE D'UN SYSTEME DE PRE-CONDITIONNEMENT DE BATTERIE DECHARGEE OU EPUISEE**

[72] NOOK, JONATHAN LEWIS, US  
[72] NOOK, WILLIAM KNIGHT, US  
[72] STANFIELD, JAMES RICHARD, US  
[72] UNDERHILL, DEREK MICHAEL, US  
[73] THE NOCO COMPANY, US  
[85] 2020-03-19  
[86] 2018-09-21 (PCT/US2018/052189)  
[87] (WO2019/060699)  
[30] US (62/561,850) 2017-09-22  
[30] US (62/561,751) 2017-09-22  
[30] US (62/562,713) 2017-09-25  
[30] US (62/567,479) 2017-10-03  
[30] US (62/568,044) 2017-10-04  
[30] US (62/568,537) 2017-10-05  
[30] US (62/569,355) 2017-10-06  
[30] US (62/569,243) 2017-10-06  
[30] US (62/568,967) 2017-10-06  
[30] US (62/637,615) 2018-03-02  
[30] US (PCT/US2018/34902) 2018-05-29  
[30] US (PCT/US2018/35029) 2018-05-30  
[30] US (PCT/US2018/40919) 2018-07-05  
[30] US (PCT/US2018/42474) 2018-07-17  
[30] US (PCT/US2018/49548) 2018-09-05  
[30] US (PCT/US2018/50904) 2018-09-13  
[30] US (PCT/US2018/51655) 2018-09-19  
[30] US (PCT/US2018/51834) 2018-09-20  
[30] US (PCT/US2018/51964) 2018-09-20

---

[11] **3,078,524**  
[13] C

[51] **Int.Cl. A61B 1/012 (2006.01) A61B 1/005 (2006.01) A61B 17/16 (2006.01)**

[25] EN

[54] **MEDICAL DEVICE**

[54] **DISPOSITIF MEDICAL**

[72] RIES, WOLFGANG, DE  
[72] SCHENDZIELORZ, LARS, DE  
[72] STEEGMULLER, RAINER, DE  
[73] JOIMAX GMBH, DE  
[85] 2020-04-06  
[86] 2018-08-23 (PCT/EP2018/000412)  
[87] (WO2019/081051)  
[30] DE (10 2017 010 033.0) 2017-10-27

---

[11] **3,080,949**  
[13] C

[51] **Int.Cl. C07F 5/02 (2006.01) A61K 31/69 (2006.01)**

[25] EN

[54] **IMMUNOPROTEASOME INHIBITORS**

[54] **INHIBITEURS D'IMMUNOPROTEASOME**

[72] LOU, YAN, US  
[72] OWENS, TIMOTHY DUNCAN, US  
[72] BRAMELD, KENNETH ALBERT, US  
[72] GOLDSTEIN, DAVID MICHAEL, US  
[73] PRINCIPIA BIOPHARMA INC., US  
[85] 2020-04-29  
[86] 2018-11-14 (PCT/US2018/061140)  
[87] (WO2019/099582)  
[30] US (62/587,376) 2017-11-16

---

[11] **3,081,434**  
[13] C

[51] **Int.Cl. F16K 15/14 (2006.01) A61M 39/24 (2006.01)**

[25] EN

[54] **DIAPHRAGM CHECK VALVE**

[54] **CLAPET DE RETENUE A DIAPHRAGME**

[72] SHEVGOOR, SIDDARTH K., US  
[73] CAREFUSION CORPORATION, US  
[85] 2020-04-24  
[86] 2018-11-07 (PCT/US2018/059653)  
[87] (WO2019/094487)  
[30] US (15/807,505) 2017-11-08

---

[11] **3,082,264**  
[13] C

[51] **Int.Cl. A61M 5/19 (2006.01) A61J 1/20 (2006.01) A61K 9/00 (2006.01) A61K 38/17 (2006.01) A61K 47/02 (2006.01) A61K 47/32 (2006.01) A61M 5/32 (2006.01)**

[25] EN

[54] **SYRINGE ASSEMBLY WITH ION-EXCHANGE MATERIAL**

[54] **ENSEMBLE SERINGUE AVEC MATERIAU D'ECHANGE D'IONS**

[72] FRANSSON, JONAS, SE  
[73] SWEDISH ORPHAN BIOVITRUM AB (PUBL), SE  
[85] 2020-05-08  
[86] 2018-11-16 (PCT/EP2018/081588)  
[87] (WO2019/097003)  
[30] EP (17202396.2) 2017-11-17



**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,082,645**

[13] C

- [51] **Int.Cl. A61K 31/485 (2006.01) A61K 31/137 (2006.01)**  
[25] EN  
[54] **COMBINATIONS OF BUPROPION AND DEXTROMETHORPHAN AND USES THEREOF FOR THE TREATMENT OF PAIN OR NEUROLOGICAL DISORDERS**  
[54] **COMBINAISONS DE BUPROPION ET DE DEXTROMETHORPHANE ET UTILISATIONS CONNEXES POUR LE TRAITEMENT DE LA DOULEUR OU DE TROUBLES NEUROLOGIQUES**  
[72] TABUTEAU, HERRIOT, US  
[73] ANTECIP BIOVENTURES II LLC, US  
[86] (3082645)  
[87] (3082645)  
[22] 2015-05-01  
[62] 2,968,371  
[30] US (14/550,618) 2014-11-21  
[30] US (14/554,988) 2014-11-26  
[30] US (14/555,085) 2014-11-26  
[30] US (14/554,947) 2014-11-26  
[30] US (14/602,177) 2015-01-21  
[30] US (14/604,397) 2015-01-23  
[30] US (14/617,624) 2015-02-09  
[30] US (14/628,062) 2015-02-20

[11] **3,082,793**

[13] C

- [51] **Int.Cl. A61K 9/50 (2006.01) A61K 39/12 (2006.01) A61K 47/34 (2017.01)**  
[25] EN  
[54] **MICRODEVICES WITH COMPLEX GEOMETRIES**  
[54] **MICRODISPOSITIFS A GEOMETRIES COMPLEXES**  
[72] MCHUGH, KEVIN, US  
[72] JAKLENEC, ANA, US  
[72] LANGER, ROBERT S., US  
[73] MASSACHUSETTS INSTITUTE OF TECHNOLOGY, US  
[85] 2020-05-14  
[86] 2018-09-13 (PCT/US2018/050822)  
[87] (WO2019/055613)  
[30] US (62/558,172) 2017-09-13

[11] **3,084,447**

[13] C

- [51] **Int.Cl. F16K 5/20 (2006.01) F16K 5/06 (2006.01)**  
[25] EN  
[54] **SEAL WITH RETAINING PROFILE**  
[54] **JOINT D'ETANCHEITE AVEC PROFILE DE RETENUE**  
[72] BUCK, DAVID A., US  
[72] TODD, ANDY PAUL, US  
[72] SYSAVATH, SYTHONH, US  
[72] HURST, JON DAVID, US  
[73] M & M OIL TOOLS, LLC, US  
[85] 2020-06-03  
[86] 2018-12-10 (PCT/US2018/064753)  
[87] (WO2019/113585)  
[30] US (62/596,296) 2017-12-08

[11] **3,084,840**

[13] C

- [51] **Int.Cl. E04G 23/02 (2006.01) E04F 13/21 (2006.01)**  
[25] EN  
[54] **SNAP-TOGETHER STANDOFFS FOR RESTORING, REPAIRING, REINFORCING, PROTECTING, INSULATING AND/OR CLADDING STRUCTURES**  
[54] **DOUILLES-ENTRETOISES A ENCLIQUETAGE POUR RESTAURER, REPARER, RENFORCER, PROTEGER, ISOLER ET/OU BARDER DES STRUCTURES**  
[72] RICHARDSON, GEORGE DAVID, CA  
[72] KRIVULIN, SEMION, CA  
[73] CFS CONCRETE FORMING SYSTEMS INC., CA  
[85] 2020-06-05  
[86] 2018-12-21 (PCT/CA2018/051666)  
[87] (WO2019/119159)  
[30] US (62/610,145) 2017-12-22  
[30] US (62/641,927) 2018-03-12

[11] **3,087,158**

[13] C

- [51] **Int.Cl. C23F 13/20 (2006.01)**  
[25] EN  
[54] **PROTECTION OF STEEL REINFORCED CONCRETE ELEMENTS**  
[54] **PROTECTION D'ELEMENTS DE BETON ARME**  
[72] GLASS, GARETH, GB  
[72] DAVISON, NIGEL, GB  
[72] ROBERTS, ADRIAN, GB  
[73] GLASS, GARETH, GB  
[73] DAVISON, NIGEL, GB  
[73] ROBERTS, ADRIAN, GB  
[86] (3087158)  
[87] (3087158)  
[22] 2013-10-18  
[62] 2,888,592  
[30] US (61/715,373) 2012-10-18

[11] **3,087,315**

[13] C

- [51] **Int.Cl. H01M 50/264 (2021.01) H01M 50/249 (2021.01)**  
[25] EN  
[54] **BATTERY HOLDER, POWER TRANSFER DEVICE, ELECTRIC VEHICLE AND INSTALLATION METHOD FOR ELECTRIC VEHICLE**  
[54] **SUPPORT DE BATTERIE, DISPOSITIF DE TRANSFERT D'ENERGIE, VEHICULE ELECTRIQUE ET PROCEDE D'INSTALLATION POUR VEHICULE ELECTRIQUE**  
[72] ZHANG, JIANPING, CN  
[72] HUANG, CHUNHUA, CN  
[72] LAN, ZHIBO, CN  
[73] SHANGHAI DIANBA NEW ENERGY TECHNOLOGY CO., LTD., CN  
[73] AULTON NEW ENERGY AUTOMOTIVE TECHNOLOGY GROUP, CN  
[85] 2020-06-29  
[86] 2018-12-29 (PCT/CN2018/125679)  
[87] (WO2019/129285)  
[30] CN (201711486896.9) 2017-12-29  
[30] CN (201711482966.3) 2017-12-29

Canadian Patents Issued  
April 16, 2024

---

[11] **3,087,473**  
[13] C  
[51] **Int.Cl. H04R 1/34 (2006.01)**  
[25] EN  
[54] **MULTI-WAY ACOUSTIC WAVEGUIDE FOR A SPEAKER ASSEMBLY**  
[54] **GUIDE D'ONDES ACOUSTIQUES A VOIES MULTIPLES POUR ENSEMBLE HAUT-PARLEUR**  
[72] HALLEY, JEROME, US  
[72] SMOLEN, CHRIS, US  
[73] QSC, LLC, US  
[85] 2020-06-30  
[86] 2019-01-09 (PCT/US2019/012940)  
[87] (WO2019/140011)  
[30] US (62/615,398) 2018-01-09

---

[11] **3,089,532**  
[13] C  
[51] **Int.Cl. B30B 9/24 (2006.01) A22C 17/04 (2006.01)**  
[25] EN  
[54] **SOFT MATERIAL SEPARATOR WITH FILL-LEVEL-DEPENDENT ADJUSTMENT OF SPEED AND METHOD FOR OPERATING SUCH A SOFT MATERIAL SEPARATOR**  
[54] **SEPARATEUR DE SUBSTANCES MOLLES AYANT UNE ADAPTATION DE LA VITESSE DEPENDANTE DU NIVEAU DE REMPLISSAGE ET PROCEDE POUR FAIRE FONCTIONNER UN TEL SEPARATEUR DE SUBSTANCES MOLLES**  
[72] GUNTHER, HOPPE, DE  
[73] MODERNPACK HOPPE GMBH, DE  
[85] 2020-07-24  
[86] 2018-10-30 (PCT/EP2018/079679)  
[87] (WO2019/149397)  
[30] DE (10 2018 101 985.8) 2018-01-30

---

[11] **3,090,011**  
[13] C  
[51] **Int.Cl. F16G 11/12 (2006.01) B60P 7/08 (2006.01)**  
[25] EN  
[54] **RATCHET LOAD BINDER WITH TWO HANDLES**  
[54] **TENDEUR A CHAINE A ROCHET AYANT DEUX POIGNEES**  
[72] MARTENS, KOEN, BE  
[73] MARTENS, KOEN, BE  
[85] 2020-07-30  
[86] 2018-02-06 (PCT/EP2018/052941)  
[87] (WO2019/154478)

---

[11] **3,090,510**  
[13] C  
[51] **Int.Cl. F25B 49/02 (2006.01) F24F 3/153 (2006.01) F25B 6/00 (2006.01)**  
[25] EN  
[54] **VARIABLE REFRIGERANT FLOW SYSTEM**  
[54] **SYSTEME DE DEBIT VARIABLE DE FRIGORIGENE**  
[72] HUNG, DER-KAI, US  
[72] LAN, LIN, US  
[72] DRURY, CHRISTOPHER JOHN, US  
[73] LENNOX INDUSTRIES INC., US  
[86] (3090510)  
[87] (3090510)  
[22] 2020-08-19  
[30] US (16/550,446) 2019-08-26

---

[11] **3,090,584**  
[13] C  
[51] **Int.Cl. B61D 7/28 (2006.01) B61D 7/18 (2006.01)**  
[25] EN  
[54] **CENTERING APPARATUS FOR HOPPER CAR DOORS**  
[54] **APPAREIL DE CENTRAGE POUR PORTES DE WAGON-TREMIE**  
[72] HERZOG, JACOB D., US  
[72] SHIRK, TONY, US  
[72] MARSHALL, DANIEL T., US  
[72] BEDINGFIELD, STEPHEN, US  
[72] LANDES, NATHAN A., US  
[72] STAIHR, MICHAEL, US  
[72] SMITH, DAVID, US  
[73] HERZOG RAILROAD SERVICES, INC., US  
[86] (3090584)  
[87] (3090584)  
[22] 2020-08-14  
[30] US (62/887,052) 2019-08-15  
[30] US (16/992,884) 2020-08-13

---

[11] **3,090,809**  
[13] C  
[51] **Int.Cl. G01D 5/12 (2006.01) C09D 11/52 (2014.01) B32B 7/025 (2019.01) B41M 5/50 (2006.01) H05K 3/12 (2006.01)**  
[25] EN  
[54] **TRANSPARENCY INCLUDING CONDUCTIVE MESH**  
[54] **TRANSPARENT AVEC MAILLE CONDUCTRICE**  
[72] UPRETY, KRISHNA K., US  
[72] BIMANAND, ALEXANDER, US  
[72] LAKDAWALA, KHUSHROO H., US  
[73] PPG INDUSTRIES OHIO, INC., US  
[86] (3090809)  
[87] (3090809)  
[22] 2016-11-03  
[62] 3,006,276  
[30] US (62/260,151) 2015-11-25  
[30] US (15/009,630) 2016-01-28

---

[11] **3,090,836**  
[13] C  
[51] **Int.Cl. C07D 413/14 (2006.01) A61K 31/4725 (2006.01) A61K 31/502 (2006.01) A61K 31/517 (2006.01) A61K 31/553 (2006.01) C07D 401/12 (2006.01) C07D 401/14 (2006.01) C07D 403/04 (2006.01) C07D 405/12 (2006.01) C07D 405/14 (2006.01) C07D 413/12 (2006.01) C07D 471/04 (2006.01) C07D 498/04 (2006.01)**  
[25] EN  
[54] **3,4-DIHYDROISOQUINOLIN-2(1H)-YL DERIVATES USEFUL AS INHIBITORS OF PROTEIN ARGININE METHYLTRANSFERASE 5 (PRMT5), AND PHARMACEUTICAL PRODUCTS THEREOF**  
[54] **DERIVES DE 3,4-DIHYDROISOQUINOLEIN-2(1H)-YLE UTILES COMME INHIBITEURS DE LA METHYLTRANSFERASE D'ARGININE DE PROTEINE 5 (PRMT) ET PRODUITS PHARMACEUTIQUES CONNEXES**  
[72] LIU, LIU, US  
[72] LI, JIN, CN  
[72] YANG, MINMIN, CN  
[73] PHARMABLOCK SCIENCES (NANJING), INC., CN  
[85] 2020-08-06  
[86] 2019-03-08 (PCT/US2019/021497)  
[87] (WO2019/173804)  
[30] US (62/641,241) 2018-03-09

**Brevets canadiens délivrés**  
**16 avril 2024**

---

[11] **3,093,772**  
[13] C

[51] **Int.Cl. C07K 16/22 (2006.01) A61K 39/395 (2006.01) A61P 19/02 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **ANTI-NGF ANTIBODIES AND METHODS THEREOF**

[54] **ANTICORPS ANTI-NGF ET PROCEDES ASSOCIES**

[72] STEINIGER, SEBASTIAN C. J., US

[72] DUNKLE, WILLIAM, US

[72] RUGG, CATHERINE, AU

[72] DUNHAM, STEVEN A., US

[73] ZOETIS SERVICES LLC, US

[85] 2020-09-11

[86] 2019-01-18 (PCT/US2019/014113)

[87] (WO2019/177690)

[30] US (62/641,538) 2018-03-12

---

[11] **3,093,906**  
[13] C

[51] **Int.Cl. H01L 21/302 (2006.01) H01L 29/778 (2006.01)**

[25] EN

[54] **SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF**

[54] **DISPOSITIF A SEMICONDUCTEUR ET SON PROCEDE DE FABRICATION**

[72] SUN, QIAN, CN

[72] SU, SHUAI, CN

[72] ZHOU, YU, CN

[72] ZHONG, YAOZONG, CN

[72] GAO, HONGWEI, CN

[72] LIU, JIANXUN, CN

[72] ZHAN, XIAONING, CN

[72] FENG, MEIXIN, CN

[72] YANG, HUI, CN

[73] JIANGXI YUHONGJIN MATERIAL TECHNOLOGY CO., LTD., CN

[85] 2020-09-21

[86] 2019-12-31 (PCT/CN2019/130362)

[87] (WO2020/228352)

[30] CN (2019103889104) 2019-05-10

---

[11] **3,094,842**  
[13] C

[51] **Int.Cl. F21K 9/20 (2016.01) A01G 7/04 (2006.01)**

[25] EN

[54] **LED PLANT GROWTH LAMP LIGHT SPECTRUM**

[54] **SPECTRE DE LUMIERE DE LAMPE A DEL POUR LA CROISSANCE DES PLANTES**

[72] LI, YANG, CN

[72] LIU, GUOJIE, CN

[72] MA, JIAN, CN

[72] NING, QIUSHI, CN

[72] CHEN, HENGSHENG, CN

[72] MENG, LINPING, CN

[72] WANG, ZHI, CN

[73] FUJIAN SANAN SINO-SCIENCE PHOTOBIOTECH CO., LTD., CN

[85] 2020-09-23

[86] 2019-04-10 (PCT/CN2019/082028)

[87] (WO2020/164179)

[30] CN (201910117768.X) 2019-02-15

[30] CN (201910281660.4) 2019-04-09

---

[11] **3,096,085**  
[13] C

[51] **Int.Cl. A63B 71/14 (2006.01) A41D 13/015 (2006.01) A41D 13/08 (2006.01) A41D 19/015 (2006.01)**

[25] EN

[54] **BLOCKER FOR A GOALIE**

[54] **GANT BLOQUEUR POUR UN GARDIEN DE BUT**

[72] VAILLANCOURT, CHARLES, CA

[73] BAUER HOCKEY LTD., CA

[86] (3096085)

[87] (3096085)

[22] 2020-10-09

[30] US (62/913,977) 2019-10-11

---

[11] **3,096,116**  
[13] C

[51] **Int.Cl. B09B 3/35 (2022.01) B09B 3/00 (2022.01) C22B 7/00 (2006.01) H01M 10/54 (2006.01)**

[25] EN

[54] **A PROCESS, APPARATUS, AND SYSTEM FOR RECOVERING MATERIALS FROM BATTERIES**

[54] **PROCEDE, APPAREIL ET SYSTEME DE RECUPERATION DE MATERIAUX A PARTIR DE BATTERIES**

[72] KOCHHAR, AJAY, CA

[72] JOHNSTON, TIMOTHY GEORGE, CA

[73] LI-CYCLE CORP., CA

[86] (3096116)

[87] (3096116)

[22] 2018-05-30

[62] 3,043,947

[30] US (62/512,460) 2017-05-30

[30] US (62/669,205) 2018-05-09

---

[11] **3,096,363**  
[13] C

[51] **Int.Cl. C07K 16/00 (2006.01) C07K 7/08 (2006.01) C07K 16/42 (2006.01) G01N 33/564 (2006.01)**

[25] EN

[54] **NOVEL EPITOPE OF IMMUNOGLOBULIN E, ANTIBODY BINDING THERETO, AND KIT FOR ANALYZING IMMUNOGLOBULIN E IN SAMPLE CONTAINING SAME**

[54] **NOUVEL EPITOPE DE L'IMMUNOGLOBULINE E, ANTICORPS SE LIANT A CELUI-CI, ET KIT D'ANALYSE DE L'IMMUNOGLOBULINE E DANS UN ECHANTILLON CONTENANT CELLE-CI**

[72] KIM, BONG HUI, KR

[72] PARK, EUN YOUNG, KR

[72] JANG, HA KYUNG, KR

[72] HONG, KWANG WON, KR

[73] SLSBIO CO., LTD., KR

[85] 2020-10-06

[86] 2019-04-05 (PCT/KR2019/004104)

[87] (WO2019/194656)

[30] KR (10-2018-0040605) 2018-04-06

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,096,852**  
[13] C

[51] **Int.Cl. B41F 5/00 (2006.01) B41F 5/04 (2006.01) B41F 5/24 (2006.01) B41F 13/00 (2006.01) B41F 13/08 (2006.01) B41F 13/30 (2006.01)**

[25] EN

[54] **ANTI-BOUNCE PRINT DECK FOR FLEXOGRAPHIC PRINTING PRESS**

[54] **PLATEAU D'IMPRESSIION ANTI-REBOND POUR UNE MACHINE D'IMPRESSIION FLEXOGRAPHIQUE**

[72] ZEMAN, DALE E., US

[72] KOPLIEN, JORDAN W., US

[72] KAYE, JAMES J., US

[72] HEYRMAN, RANDALL L., US

[73] PAPER CONVERTING MACHINE COMPANY, US

[85] 2020-10-09

[86] 2019-04-11 (PCT/US2019/026881)

[87] (WO2019/212709)

[30] US (62/666,274) 2018-05-03

---

[11] **3,097,887**  
[13] C

[51] **Int.Cl. F21K 9/238 (2016.01) F21K 9/23 (2016.01)**

[25] EN

[54] **LED LAMP**

[54] **LAMPE A DIODE ELECTROLUMINESCENTE**

[72] REN, XIAOJUN, CN

[72] XIAO, KUN, CN

[72] MALLERY, JON, US

[72] HUANG, HAI, CN

[72] GAO, CHUNXIAO, CN

[73] SAVANT TECHNOLOGIES LLC, US

[86] (3097887)

[87] (3097887)

[22] 2020-11-03

[30] CN (2019219879447) 2019-11-18

---

[11] **3,097,889**  
[13] C

[51] **Int.Cl. H05B 45/50 (2022.01)**

[25] EN

[54] **DEVICE AND CIRCUIT FOR PROTECTING CONTROLLED LOADS, AND APPARATUS FOR SWITCHING BETWEEN LOADS**

[54] **DISPOSITIF ET CIRCUIT POUR PROTEGER LES CHARGES CONTROLEES ET LES APPAREILS POUR PASSE D'UNE CHARGE A L'AUTRE**

[72] WANG, PENGFEI, CN

[72] ZHOU, XIN, CN

[72] WANG, FANBIN, CN

[72] LIU, CHENGBIN, CN

[73] SAVANT TECHNOLOGIES LLC, US

[86] (3097889)

[87] (3097889)

[22] 2020-11-03

[30] CN (2019112298902) 2019-12-04

---

[11] **3,098,101**  
[13] C

[51] **Int.Cl. G06Q 20/00 (2012.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR AIDING TAX COMPLIANCE**

[54] **SYSTEMES ET PROCEDES D'ASSISTANCE A LA CONFORMITE FISCALE**

[72] WEST, JON, US

[72] MCINTRYE, IRISH, US

[73] THOMSON REUTERS ENTERPRISE CENTRE GMBH, CH

[85] 2020-10-22

[86] 2019-05-03 (PCT/IB2019/053645)

[87] (WO2019/211811)

[30] US (62/666,748) 2018-05-04

---

[11] **3,098,306**  
[13] C

[51] **Int.Cl. A61K 9/16 (2006.01) A61K 9/20 (2006.01)**

[25] EN

[54] **SOLID DOSAGE FORMS WITH HIGH ACTIVE AGENT LOADING**

[54] **FORMES POSOLOGIQUES SOLIDES A CHARGEMENT D'AGENT ACTIF ELEVE**

[72] MORGEN, MICHAEL M., BE

[72] MUDIE, DEANNA, BE

[72] SHEPARD, KIMBERLY, BE

[73] CAPSUGEL BELGIUM NV, BE

[85] 2020-10-23

[86] 2019-05-09 (PCT/IB2019/053836)

[87] (WO2019/220282)

[30] US (62/671,341) 2018-05-14

---

[11] **3,098,676**  
[13] C

[51] **Int.Cl. A61F 5/451 (2006.01) A61F 5/453 (2006.01) A61F 5/455 (2006.01)**

[25] EN

[54] **FLUID COLLECTION DEVICES, RELATED SYSTEMS, AND RELATED METHODS**

[54] **DISPOSITIFS DE COLLECTE DE FLUIDE, SYSTEMES ASSOCIES, ET PROCEDES ASSOCIES**

[72] SPECTOR, MARK, US

[73] PUREWICK CORPORATION, US

[85] 2020-10-28

[86] 2019-04-29 (PCT/US2019/029611)

[87] (WO2019/212952)

[30] US (62/665,297) 2018-05-01

---

[11] **3,100,054**  
[13] C

[51] **Int.Cl. A61K 8/02 (2006.01) A61K 8/21 (2006.01) A61K 8/25 (2006.01) A61K 8/34 (2006.01) A61K 8/72 (2006.01) A61Q 11/00 (2006.01)**

[25] EN

[54] **UNIT-DOSE ORAL CARE COMPOSITIONS**

[54] **COMPOSITIONS DE SOINS BUCCO-DENTAIRES A DOSE UNITAIRE**

[72] MAO, MIN, US

[72] BAIG, ARIF ALI, US

[72] GORDON, GREGORY CHARLES, US

[72] PAYNE, MELISSA CHERIE, US

[72] RAUCKHORST, HOLLY BALASUBRAMANIAN, US

[72] SAGEL, PAUL ALBERT, US

[72] SWARTZ, JEANETTE MARIE, US

[72] TROKHAN, PAUL D., US

[72] CROLL, BRIAN PATRICK, US

[72] NYANGIRO, DINAH ACHOLA, US

[72] HAN, KUO C., US

[73] THE PROCTER & GAMBLE COMPANY, US

[85] 2020-11-10

[86] 2019-05-14 (PCT/US2019/032085)

[87] (WO2019/222125)

[30] US (62/671,072) 2018-05-14

[30] US (62/671,066) 2018-05-14

[30] US (62/671,078) 2018-05-14

[30] US (62/671,083) 2018-05-14

**Brevets canadiens délivrés**  
**16 avril 2024**

[11] **3,100,132**

[13] C

- [51] **Int.Cl. A47K 3/40 (2006.01) E03C 1/22 (2006.01)**  
[25] EN  
[54] **SHOWER PAN INCLUDING MOLDED RIB STRUCTURE HAVING VARYING THICKNESS**  
[54] **CUVETTE DE DOUCHE COMPRENANT UNE STRUCTURE DE NERVURE MOULEE DE DIFFERENTES EPAISSEURS**  
[72] FERRIS, JEFFREY D., US  
[73] DELTA FAUCET COMPANY, US  
[86] (3100132)  
[87] (3100132)  
[22] 2020-11-20  
[30] US (16/731,798) 2019-12-31

[11] **3,101,011**

[13] C

- [51] **Int.Cl. D04B 1/26 (2006.01)**  
[25] EN  
[54] **COMPRESSION ARTICLE**  
[54] **ARTICLE DE CONTENTION**  
[72] PLATZ, SASCHA, DE  
[72] FRANKENBERG, BERNHARD, DE  
[72] BAUER, JOACHIM, DE  
[73] BSN-JOBST GMBH, DE  
[85] 2020-11-20  
[86] 2019-05-21 (PCT/EP2019/063124)  
[87] (WO2019/224204)  
[30] EP (18173788.3) 2018-05-23

[11] **3,102,472**

[13] C

- [51] **Int.Cl. F16K 31/02 (2006.01) B05B 1/18 (2006.01) E03C 1/02 (2006.01) F16K 11/02 (2006.01)**  
[25] EN  
[54] **MULTIPLE FUNCTION SHOWER SYSTEMS FACILITATING LOW ACTUATION FORCE MODE SWITCHING**  
[54] **SYSTEMES DE DOUCHE A FONCTIONS MULTIPLES FACILITANT LA COMMUTATION DE MODE A FAIBLE FORCE D'ACTIONNEMENT**  
[72] WALES, JOSHUA DREW, US  
[72] LEE, DAVID, US  
[73] DELTA FAUCET COMPANY, US  
[86] (3102472)  
[87] (3102472)  
[22] 2020-12-11  
[30] US (16/751,714) 2020-01-24

[11] **3,103,285**

[13] C

- [51] **Int.Cl. C08J 9/14 (2006.01)**  
[25] EN  
[54] **BLOWING AGENT BLENDS**  
[54] **MELANGES D'AGENTS GONFLANTS**  
[72] KONTOMARIS, KONSTANTINOS, US  
[73] THE CHEMOURS COMPANY FC, LLC, US  
[85] 2020-12-09  
[86] 2019-07-11 (PCT/US2019/041284)  
[87] (WO2020/018332)  
[30] US (62/698,550) 2018-07-16

[11] **3,103,450**

[13] C

- [51] **Int.Cl. A61K 8/25 (2006.01) A61K 8/02 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **DENTIFRICE FORMULATIONS HAVING SPHERICAL STANNOUS COMPATIBLE SILICA PARTICLES FOR REDUCED RDA**  
[54] **FORMULATIONS DE DENTIFRICE COMPRENANT DES PARTICULES SPHERIQUES DE SILICE STANNO-COMPATIBLES POUR UNE RDA REDUITE**  
[72] DOLAN, LAWRENCE EDWARD, US  
[72] MIDHA, SANJEEV, US  
[72] SCHNEIDERMAN, EVA, US  
[72] GALLIS, KARL WILLIAM, US  
[72] HAGAR, WILLIAM JACKSON, US  
[72] NASSIVERA, TERRY WILLIAM, US  
[73] THE PROCTER & GAMBLE COMPANY, US  
[85] 2020-12-10  
[86] 2019-06-12 (PCT/US2019/036675)  
[87] (WO2019/241323)  
[30] US (62/683,961) 2018-06-12

[11] **3,104,564**

[13] C

- [51] **Int.Cl. B60C 9/00 (2006.01) B60C 9/20 (2006.01) B60C 9/22 (2006.01) D02G 3/48 (2006.01) D07B 1/06 (2006.01)**  
[25] FR  
[54] **BI-MODULUS METAL CORDS**  
[54] **CABLES METALLIQUES BI-MODULES**  
[72] CORNILLE, RICHARD, FR  
[72] BARGUET, HENRI, FR  
[72] ROTY, GAEL, FR  
[73] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2020-12-21  
[86] 2019-07-25 (PCT/EP2019/070034)  
[87] (WO2020/021007)  
[30] FR (1856922) 2018-07-25

[11] **3,106,017**

[13] C

- [51] **Int.Cl. A61M 16/00 (2006.01) A61M 13/00 (2006.01) A61M 39/00 (2006.01)**  
[25] EN  
[54] **COMPONENTS FOR MEDICAL CIRCUITS**  
[54] **ELEMENTS POUR CIRCUITS MEDICAUX**  
[72] GIERKE, TIMOTHY DEE, US  
[72] HERMEZ, LAITH ADEEB, NZ  
[72] ORCHARD, KIERAN MICHAEL, NZ  
[73] FISHER & PAYKEL HEALTHCARE LIMITED, NZ  
[86] (3106017)  
[87] (3106017)  
[22] 2010-12-22  
[62] 2,785,433  
[30] US (61/289,089) 2009-12-22

[11] **3,109,306**

[13] C

- [51] **Int.Cl. A01M 29/06 (2011.01) A01K 37/00 (2006.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR INSTALLING BIRD FLIGHT DIVERTERS**  
[54] **METHODE ET SYSTEME POUR INSTALLER DES BARRIERES DE DEVIATION DU VOL DES OISEAUX**  
[72] CLARKE, DANIEL JOHN, CA  
[72] KRIVELES, ROMAS, CA  
[73] FT HOLDINGS INC., CA  
[86] (3109306)  
[87] (3109306)  
[22] 2021-02-18  
[30] US (62/983,642) 2020-02-29

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,111,034**  
[13] C

[51] **Int.Cl. G01N 21/3581 (2014.01) G01N 21/88 (2006.01)**  
[25] EN  
[54] **THZ MEASURING APPARATUS AND THZ MEASURING METHOD FOR DETECTING IMPURITIES IN MEASURED OBJECTS**  
[54] **DISPOSITIF DE MESURE THZ ET PROCEDE DE MESURE THZ POUR DETECTER DES DEFAUTS DANS DES OBJETS DE MESURE**  
[72] KLOSE, RALPH, DE  
[73] INOEX GMBH INNOVATIONEN UND AUSRUSTUNGEN FUR DIE EXTRUSIONSTECHNIK, DE  
[85] 2021-03-01  
[86] 2019-08-28 (PCT/DE2019/100778)  
[87] (WO2020/057689)  
[30] DE (10 2018 122 965.8) 2018-09-19

---

[11] **3,111,399**  
[13] C

[51] **Int.Cl. H04L 41/0213 (2022.01) H04L 41/0853 (2022.01) H04L 41/12 (2022.01) H04L 41/142 (2022.01) H04L 45/745 (2022.01) H04L 61/103 (2022.01) H04L 67/303 (2022.01) H04L 41/22 (2022.01) H04L 43/0876 (2022.01)**  
[25] EN  
[54] **UNIQUE IDENTITIES OF ENDPOINTS ACROSS LAYER 3 NETWORKS**  
[54] **IDENTITES UNIQUES DE TERMINAUX SUR DES RESEAUX DE COUCHE 3**  
[72] PETERSON, ANNIKA LEE LOUISE, US  
[72] WONG, EDMUND L., US  
[73] CISCO TECHNOLOGY, INC., US  
[85] 2021-03-02  
[86] 2019-09-12 (PCT/US2019/050891)  
[87] (WO2020/060844)  
[30] US (16/135,839) 2018-09-19

---

[11] **3,112,164**  
[13] C

[51] **Int.Cl. C12N 15/82 (2006.01)**  
[25] EN  
[54] **VIRUS-BASED REPLICON FOR PLANT GENOME EDITING WITHOUT INSERTING REPLICON INTO PLANT GENOME AND USE THEREOF**  
[54] **REPLICON A BASE DE VIRUS POUR L'EDITION DE GENOME SANS INSERTION DE REPLICON DANS LE GENOME D'UNE PLANTE, ET SON UTILISATION**  
[72] KIM, JAE YEAN, KR  
[72] VU, TIEN VAN, KR  
[72] KIM, JIHAЕ, KR  
[72] JEONG, SE JEONG, KR  
[72] KIM, HYUN JEONG, KR  
[72] PARK, SEO-JIN, KR  
[72] TRAN, MIL THI, KR  
[72] SIVANKALYANI, VELU, KR  
[72] SUNG, YEON WOO, KR  
[72] DOAN, THI HAI DUONG, KR  
[72] PRAMANIK, DIBYAJYOTI, KR  
[72] SHELAKE, MAHADEV RAHUL, KR  
[72] SON, GEON HUI, KR  
[73] INDUSTRY-ACADEMIC COOPERATION FOUNDATION GYEONGSANG NATIONAL UNIVERSITY, KR  
[85] 2021-03-09  
[86] 2019-09-10 (PCT/KR2019/011677)  
[87] (WO2020/055084)  
[30] KR (10-2018-0108026) 2018-09-11

---

[11] **3,113,099**  
[13] C

[51] **Int.Cl. G05D 1/244 (2024.01) G05D 1/225 (2024.01) G06Q 10/087 (2023.01)**  
[25] EN  
[54] **ZONE ENGINE FOR PROVIDING CONTEXT-AUGMENTED MAP LAYER**  
[54] **MOTEUR DE ZONES DESTINE A FOURNIR UNE COUCHE DE CARTE ENRICHEE EN CONTEXTE**  
[72] WHITAKER, MATTHEW, US  
[72] POWERS, BRADLEY, US  
[72] JOHNSON, MICHAEL CHARLES, US  
[72] JOHNSON, SEAN, US  
[72] MOORE, THOMAS, GB  
[73] LOCUS ROBOTICS CORP., US  
[85] 2021-03-16  
[86] 2019-09-19 (PCT/US2019/051826)  
[87] (WO2020/061250)  
[30] US (16/135,329) 2018-09-19

---

[11] **3,113,927**  
[13] C

[51] **Int.Cl. G01K 1/14 (2021.01) G01K 13/02 (2021.01)**  
[25] EN  
[54] **NON-INVASIVE PROCESS FLUID TEMPERATURE INDICATION FOR HIGH TEMPERATURE APPLICATIONS**  
[54] **INDICATION NON INVASIVE DE TEMPERATURE DE FLUIDE DE TRAITEMENT POUR DES APPLICATIONS A HAUTE TEMPERATURE**  
[72] RUD, JASON H., US  
[73] ROSEMOUNT INC, US  
[85] 2021-03-23  
[86] 2019-09-19 (PCT/US2019/051911)  
[87] (WO2020/068551)  
[30] US (16/139,341) 2018-09-24

---

[11] **3,114,541**  
[13] C

[51] **Int.Cl. G06Q 40/02 (2023.01) G06Q 10/04 (2023.01) G06N 3/084 (2023.01) G06N 3/02 (2006.01)**  
[25] EN  
[54] **ARTIFICIAL INTELLIGENCE MODELING TO PREDICT ELECTRONIC ACCOUNT DATA**  
[54] **MODELISATION PAR INTELLIGENCE ARTIFICIELLE POUR PREVOIR LES DONNEES DE COMPTE ELECTRONIQUE**  
[72] NOSRATI, SEYED MASOUD, CA  
[72] VAHLIS, EVGENE, CA  
[72] SHAHIR, SEYED HAMED YAGHOUBI, CA  
[72] ZHAO, BO, CA  
[72] LANGBALLE, NICOLE, CA  
[72] POON, PETER, CA  
[73] BANK OF MONTREAL, CA  
[86] (3114541)  
[87] (3114541)  
[22] 2021-04-09  
[30] US (63/010,743) 2020-04-16

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **3,115,581**  
[13] C

[51] **Int.Cl. G06F 30/13 (2020.01) G06V 30/422 (2022.01) G06N 20/00 (2019.01)**

[25] EN

[54] **AUTOMATED ARCHITECTURAL SPECIFICATION GENERATION AND HARDWARE IDENTIFICATION**

[54] **GENERATION AUTOMATISEE DE SPECIFICATIONS ARCHITECTURALES ET IDENTIFICATION DE MATERIEL**

[72] PROSTKO, ROBERT S., US

[72] MARTENS, ROBERT C., US

[72] HEITZMAN, NICK, US

[72] DAY, KRISTIN, US

[72] MADSEN, MARTIN, US

[72] KORNAKER, JASON, US

[72] LANGENBERG, DANIEL, US

[72] EICKHOFF, BRIAN C., US

[72] BAXTER, SCOTT, US

[72] BAUMGARTE, JOSEPH W., US

[72] HOPKINS, BENJAMIN, US

[72] SCHEIB, JACOB, US

[72] KOTTLOWSKI, STEVEN J., US

[73] SCHLAGE LOCK COMPANY LLC, US

[85] 2021-04-07

[86] 2019-05-29 (PCT/US2019/034449)

[87] (WO2019/232088)

[30] US (62/677,614) 2018-05-29

[30] US (62/677,660) 2018-05-29

---

[11] **3,116,039**  
[13] C

[51] **Int.Cl. A23L 33/10 (2016.01) A23L 33/12 (2016.01) A23L 33/125 (2016.01) A23L 33/15 (2016.01) A23L 33/16 (2016.01) A23L 33/175 (2016.01) A61K 31/198 (2006.01) A61K 31/685 (2006.01) A61K 31/716 (2006.01) A61P 29/00 (2006.01)**

[25] EN

[54] **HUMAN DIETARY SUPPLEMENT AND METHOD FOR TREATING DIGESTIVE SYSTEM AND IMMUNE-RELATED DISORDERS**

[54] **COMPLEMENT ALIMENTAIRE DESTINE A LA CONSOMMATION HUMAINE ET PROCEDE DE TRAITEMENT DE SYSTEME DIGESTIF ET DE TROUBLES LIES A L'IMMUNITE**

[72] ANDERSON, SCOTT, US

[72] HALL, JOHN, US

[72] YOHO, MARK, US

[73] FREEDOM HEALTH, LLC, US

[85] 2021-04-09

[86] 2019-10-14 (PCT/US2019/056045)

[87] (WO2020/081417)

[30] US (16/160,658) 2018-10-15

---

[11] **3,116,495**  
[13] C

[51] **Int.Cl. B66D 1/04 (2006.01) B60P 7/08 (2006.01)**

[25] EN

[54] **CARGO STRAP WINCH RAPID REWINDING TOOL**

[54] **OUTIL D'ENROULEMENT RAPIDE DE TREUIL DE CHARGEMENT A SANGLES**

[72] JONES, STUART, CA

[73] JONES, STUART, CA

[86] (3116495)

[87] (3116495)

[22] 2021-04-28

---

[11] **3,117,414**  
[13] C

[51] **Int.Cl. C08J 5/18 (2006.01) B32B 27/08 (2006.01) B32B 27/30 (2006.01) B65D 65/42 (2006.01) B65D 65/46 (2006.01) C09D 191/06 (2006.01) C11D 17/04 (2006.01)**

[25] EN

[54] **MULTILAYER WATER-DISPERSIBLE ARTICLES**

[54] **ARTICLES MULTICOUCHES DISPERSIBLES DANS L'EAU**

[72] KNIGHT, JONATHON, US

[72] MIRANDA, NATE, US

[73] MONOSOL, LLC, US

[85] 2021-04-21

[86] 2019-10-28 (PCT/US2019/058392)

[87] (WO2020/087079)

[30] US (62/750,988) 2018-10-26

---

[11] **3,118,098**  
[13] C

[51] **Int.Cl. G06F 9/451 (2018.01) G06F 11/07 (2006.01)**

[25] EN

[54] **ALERTING, DIAGNOSING, AND TRANSMITTING COMPUTER ISSUES TO A TECHNICAL RESOURCE IN RESPONSE TO A DEDICATED PHYSICAL BUTTON OR TRIGGER**

[54] **ALERTE, DIAGNOSTIC ET TRANSMISSION DE PROBLEMES INFORMATIQUES A UNE RESSOURCE TECHNIQUE EN REPONSE A UN BOUTON OU DECLENCHEUR PHYSIQUE DEDIE**

[72] PERMENTER, ALEXANDER, US

[72] WHEELER, CHRISTOPHER, US

[73] PERMENTER, ALEXANDER, US

[73] WHEELER, CHRISTOPHER, US

[85] 2021-04-28

[86] 2019-10-29 (PCT/US2019/058431)

[87] (WO2020/092286)

[30] US (62/751,911) 2018-10-29

[30] US (16/665,968) 2019-10-28

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,118,285**  
[13] C

[51] **Int.Cl. G01S 5/10 (2006.01) B61L 25/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR DETERMINING VEHICLE POSITION BY TRIANGULATION**  
[54] **SYSTEME ET METHODE DE DETERMINATION D'UNE POSITION DE VEHICULE PAR TRIANGULATION**  
[72] STAATS, ANDREW RYAN, US  
[72] BARR, STUART JOHN, US  
[73] WESTINGHOUSE AIR BRAKE TECHNOLOGIES CORPORATION, US  
[86] (3118285)  
[87] (3118285)  
[22] 2021-05-13  
[30] US (17/318,764) 2021-05-12

---

[11] **3,118,874**  
[13] C

[51] **Int.Cl. B05B 12/20 (2018.01) B05B 12/26 (2018.01) B05C 9/02 (2006.01) B05C 17/06 (2006.01) B05C 21/00 (2006.01) B64C 1/06 (2006.01) B64C 1/14 (2006.01)**  
[25] EN  
[54] **SYSTEMS, DEVICES, AND METHODS FOR USE WITH AEROSPACE PARTS**  
[54] **SYSTEMES, DISPOSITIFS ET PROCEDES A UTILISER AVEC DES PIECES AEROSPATIALES**  
[72] FLOOD, MITCH, US  
[72] BARNHART, TYLER, US  
[72] NEWELL, RICHARD PAUL, US  
[73] ORIZON AEROSTRUCTURES, LLC, US  
[85] 2021-05-05  
[86] 2019-11-05 (PCT/US2019/059814)  
[87] (WO2020/097042)  
[30] US (62/756,940) 2018-11-07

---

---

[11] **3,119,008**  
[13] C

[51] **Int.Cl. A24F 40/10 (2020.01) A24F 40/42 (2020.01)**  
[25] EN  
[54] **VAPOUR PROVISION SYSTEMS**  
[54] **SYSTEMES DE FOURNITURE DE VAPEUR**  
[72] POTTER, MARK, GB  
[73] NICOVENTURES TRADING LIMITED, GB  
[85] 2021-05-06  
[86] 2019-11-01 (PCT/GB2019/053112)  
[87] (WO2020/095030)  
[30] GB (1818080.2) 2018-11-06

---

[11] **3,119,474**  
[13] C

[51] **Int.Cl. B65D 85/804 (2006.01) A23F 5/00 (2006.01) A47J 31/06 (2006.01)**  
[25] EN  
[54] **COFFEE PAD FOR USE IN A COFFEE MACHINE**  
[54] **DOSETTE DE CAFE A UTILISER DANS UNE MACHINE A CAFE**  
[72] BROUWER, GUSTAAF FRANS, NL  
[72] DE GRAAF, GERBRAND KRISTIAAN, NL  
[72] MOORMAN, CHRISTIAAN J. M., NL  
[73] KONINKLIJKE DOUWE EGBERTS B.V., NL  
[86] (3119474)  
[87] (3119474)  
[22] 2014-04-03  
[62] 2,908,570  
[30] NL (2010560) 2013-04-03

---

[11] **3,120,781**  
[13] C

[51] **Int.Cl. F16B 35/04 (2006.01)**  
[25] EN  
[54] **SHORTENED FASTENER WITH LOCALLY CONTROLLED THREAD HEIGHT**  
[54] **FIXATION RACCOURCIE AVEC HAUTEUR DE FILETAGE CONTROLEE LOCALEMENT**  
[72] GARVER, MICHAEL A., US  
[73] MATHREAD INC., US  
[85] 2021-05-20  
[86] 2019-12-13 (PCT/US2019/066147)  
[87] (WO2020/146089)  
[30] US (16/245,856) 2019-01-11

---

---

[11] **3,121,055**  
[13] C

[51] **Int.Cl. A61K 47/18 (2017.01) A61K 9/14 (2006.01) A61K 9/16 (2006.01) A61K 31/202 (2006.01)**  
[25] EN  
[54] **PREPARATION COMPRISING A DISPERSION OF PHOSPHOLIPIDS AND FATTY ACID SALTS**  
[54] **PREPARATION COMPRENANT UNE DISPERSION DE PHOSPHOLIPIDES ET DE SELS D'ACIDE GRAS**  
[72] SCHILLING, MARTIN, DE  
[72] GOMEZ, MARIO, DE  
[72] SPECKMANN, BODO, DE  
[72] BENEDIKT, ANNE, DE  
[72] KESSLER, CHRISTIAN, DE  
[72] WINDHAB, NORBERT, DE  
[72] OCHROMBEL, INES, DE  
[73] EVONIK OPERATIONS GMBH, DE  
[85] 2021-05-26  
[86] 2019-11-28 (PCT/EP2019/082919)  
[87] (WO2020/109472)  
[30] EP (18209472.2) 2018-11-30

---

[11] **3,121,308**  
[13] C

[51] **Int.Cl. B02C 17/18 (2006.01) B02C 17/22 (2006.01)**  
[25] EN  
[54] **LIFTER BAR**  
[54] **BARRE DE LEVAGE**  
[72] MORENO, VICTOR, CL  
[72] LARA, HECTOR, CL  
[72] PINTO, ALONSO, CL  
[73] VULCO S.A., CL  
[85] 2021-05-27  
[86] 2019-12-13 (PCT/IB2019/060751)  
[87] (WO2020/136488)  
[30] GB (1821262.1) 2018-12-28

---



**Brevets canadiens délivrés**  
**16 avril 2024**

[11] **3,121,661**  
[13] C

- [51] **Int.Cl. A61B 34/20 (2016.01) A61B 5/06 (2006.01)**  
[25] EN  
[54] **ELECTROMAGNETIC POSITION MEASUREMENT SYSTEM WITH SENSOR PARASITIC LOOP COMPENSATION**  
[54] **SYSTEME DE MESURE D'UNE POSITION ELECTROMAGNETIQUE AVEC COMPENSATION DE LA BOUCLE PARASITE DU CAPTEUR**  
[72] ASHE, WESTLEY S., US  
[72] BRUNNER, GEORG, DE  
[73] NORTHERN DIGITAL, INC., CA  
[86] (3121661)  
[87] (3121661)  
[22] 2021-06-09  
[30] US (63/037.868) 2020-06-11

[11] **3,122,237**  
[13] C

- [51] **Int.Cl. G06K 19/07 (2006.01) G06Q 50/02 (2012.01) A01G 7/00 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TRACKING ONE OR MORE PLANTS AND/OR PLANT BASED PRODUCTS AND/OR TRACKING THE SALE OF PRODUCTS DERIVED FROM THE SAME, UTILIZING RFID TECHNOLOGY**  
[54] **PROCEDE ET APPAREIL DE SUIVI D'UNE OU DE PLUSIEURS PLANTES ET/OU DE PRODUITS A BASE DE PLANTES ET/OU DE SUIVI DE LA VENTE DE PRODUITS DERIVES DE CEUX-CI, UTILISANT LA TECHNOLOGIE RFID**  
[72] DAGDELEN UYSAL, DILEK, US  
[72] WELLS, JEFFREY LANE, US  
[73] METRC LLC, US  
[86] (3122237)  
[87] (3122237)  
[22] 2015-06-12  
[62] 2,952,024  
[30] US (62/011,463) 2014-06-12

[11] **3,122,244**  
[13] C

- [51] **Int.Cl. G06K 19/07 (2006.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR TRACKING ONE OR MORE PLANTS AND/OR PLANT BASED PRODUCTS AND/OR TRACKING THE SALE OF PRODUCTS DERIVED FROM THE SAME, UTILIZING RFID TECHNOLOGY**  
[54] **PROCEDE ET APPAREIL DE SUIVI D'UNE OU DE PLUSIEURS PLANTES ET/OU DE PRODUITS A BASE DE PLANTES ET/OU DE SUIVI DE LA VENTE DE PRODUITS DERIVES DE CEUX-CI, UTILISANT LA TECHNOLOGIE RFID**  
[72] DAGDELEN UYSAL, DILEK, US  
[72] WELLS, JEFFREY LANE, US  
[73] METRC LLC, US  
[86] (3122244)  
[87] (3122244)  
[22] 2015-06-12  
[62] 2,952,024  
[30] US (62/011,463) 2014-06-12

[11] **3,123,615**  
[13] C

- [51] **Int.Cl. A47J 31/06 (2006.01) B65D 81/34 (2006.01) B65D 85/804 (2006.01)**  
[25] EN  
[54] **PAD WITH A RELATIVELY LARGE OUTLET OPENING COMPRISING A SOLUBLE BEVERAGE PREPARATION PRODUCT FOR USE IN A COFFEE MACHINE**  
[54] **DOSETTE AVEC OUVERTURE DE SORTIE RELATIVEMENT GRANDE COMPRENANT UN PRODUIT DE PREPARATION DE BOISSON SOLUBLE POUR UTILISATION DANS UNE MACHINE A CAFE**  
[72] BROUWER, GUSTAAF FRANS, NL  
[72] DE GRAAFF, GERBRAND KRISTIAAN, NL  
[72] MOORMAN, CHRISTIAAN J. M., NL  
[73] KONINKLIJKE DOUWE EGBERTS B.V., NL  
[86] (3123615)  
[87] (3123615)  
[22] 2014-04-03  
[62] 2,908,574  
[30] NL (2010562) 2013-04-03

[11] **3,124,081**  
[13] C

- [51] **Int.Cl. G02B 13/18 (2006.01) G01C 3/14 (2006.01) G02B 27/00 (2006.01) H04N 13/00 (2018.01)**  
[25] EN  
[54] **IMAGING DEVICE, IMAGE CAPTURING OPTICAL SYSTEM, AND MOVABLE APPARATUS**  
[54] **DISPOSITIF D'IMAGERIE, SYSTEME OPTIQUE DE CAPTURE D'IMAGE ET APPAREIL MOBILE**  
[72] NAKAMURA, KENTO, JP  
[72] SATOH, HIROYUKI, JP  
[72] KISHIWADA, JUN, JP  
[72] ABE, ISSEL, JP  
[73] RICOH COMPANY, LTD., JP  
[85] 2021-06-17  
[86] 2020-03-03 (PCT/JP2020/008873)  
[87] (WO2020/184286)  
[30] JP (2019-046771) 2019-03-14

[11] **3,125,938**  
[13] C

- [51] **Int.Cl. H01M 10/052 (2010.01) H01M 10/0568 (2010.01) H01M 10/0569 (2010.01)**  
[25] EN  
[54] **LIS BATTERY WITH LOW SOLVATING ELECTROLYTE**  
[54] **BATTERIE LIS A ELECTROLYTE A FAIBLE SOLVATATION**  
[72] VESTERGAARD FRANDSEN, MIKKEL, US  
[72] KIM, DAVID, US  
[72] ALTHUES, HOLGER, DE  
[72] HARTEL, PAUL, DE  
[72] ABENDROTH, THOMAS, DE  
[72] DORFLER, SUSANNE, DE  
[72] SCHUMM, BENJAMIN, DE  
[72] KASKEL, STEFAN, DE  
[72] WELLER, CHRISTINE, DE  
[73] SCEYE SA, CH  
[85] 2021-07-07  
[86] 2020-01-14 (PCT/EP2020/050821)  
[87] (WO2020/148285)  
[30] US (62/793,474) 2019-01-17

Canadian Patents Issued  
April 16, 2024

---

[11] **3,126,151**  
[13] C  
[51] **Int.Cl. H04L 5/00 (2006.01) H04W 4/06 (2009.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR BROADBAND WIRELESS COMMUNICATION FOR MISSION CRITICAL INTERNET OF THINGS (IOT)**  
[54] **SYSTEMES ET PROCEDES DE COMMUNICATION SANS FIL A LARGE BANDE POUR L'INTERNET DES OBJETS (IDO) DE MISSIONS CRITIQUES**  
[72] SHAHAR, MENASHE, US  
[73] ONDAS NETWORKS INC., US  
[85] 2021-07-08  
[86] 2020-01-10 (PCT/US2020/013179)  
[87] (WO2020/146793)  
[30] US (62/790,774) 2019-01-10  
[30] US (62/912,825) 2019-10-09

---

[11] **3,126,466**  
[13] C  
[51] **Int.Cl. C01B 3/02 (2006.01) C25B 1/04 (2021.01)**  
[25] EN  
[54] **METHOD OF PRODUCING HYDROGEN**  
[54] **PROCEDE DE PRODUCTION D'HYDROGENE**  
[72] DAWSON, JIN, US  
[72] DAWSON, MATTHEW, US  
[72] FARANDÓS, NICHOLAS, US  
[73] UTILITY GLOBAL, INC., US  
[85] 2021-07-09  
[86] 2020-01-10 (PCT/US2020/013129)  
[87] (WO2020/146759)  
[30] US (62/875,437) 2019-07-17  
[30] US (62/791,629) 2019-01-11  
[30] US (62/797,572) 2019-01-28  
[30] US (62/798,344) 2019-01-29  
[30] US (62/955,443) 2019-01-31  
[30] US (62/804,115) 2019-02-11  
[30] US (62/805,250) 2019-02-13  
[30] US (62/808,644) 2019-02-21  
[30] US (62/809,602) 2019-02-23  
[30] US (62/814,695) 2019-03-06  
[30] US (62/819,289) 2019-03-15  
[30] US (62/819,374) 2019-03-15  
[30] US (62/824,229) 2019-03-26  
[30] US (62/825,576) 2019-03-28  
[30] US (62/827,800) 2019-04-01  
[30] US (62/834,531) 2019-04-16  
[30] US (62/837,089) 2019-04-22  
[30] US (62/839,587) 2019-04-26  
[30] US (62/840,381) 2019-04-29  
[30] US (62/844,127) 2019-05-07  
[30] US (62/844,126) 2019-05-07  
[30] US (62/847,472) 2019-05-14  
[30] US (62/849,269) 2019-05-17

[30] US (62/852,045) 2019-05-23  
[30] US (62/856,736) 2019-06-03  
[30] US (62/863,390) 2019-06-19  
[30] US (62/864,492) 2019-06-20  
[30] US (62/866,758) 2019-06-26  
[30] US (62/869,322) 2019-07-01  
[30] US (62/877,699) 2019-07-23  
[30] US (62/888,319) 2019-08-16  
[30] US (62/895,416) 2019-09-03  
[30] US (62/896,466) 2019-09-05  
[30] US (62/899,087) 2019-09-11  
[30] US (62/904,683) 2019-09-24  
[30] US (62/912,626) 2019-10-08  
[30] US (62/925,210) 2019-10-23  
[30] US (62/927,627) 2019-10-29  
[30] US (62/928,326) 2019-10-30  
[30] US (16/674,629) 2019-11-05  
[30] US (16/674,657) 2019-11-05  
[30] US (16/674,695) 2019-11-05  
[30] US (16/674,580) 2019-11-05  
[30] US (16/680,770) 2019-11-12  
[30] US (62/934,808) 2019-11-13  
[30] US (16/684,838) 2019-11-15  
[30] US (16/684,864) 2019-11-15  
[30] US (16/693,271) 2019-11-23  
[30] US (62/941,358) 2019-11-27  
[30] US (16/699,453) 2019-11-29  
[30] US (16/699,461) 2019-11-29  
[30] US (62/944,259) 2019-12-05  
[30] US (62/944,259) 2019-12-06

---

[11] **3,127,254**  
[13] C  
[51] **Int.Cl. H01Q 1/24 (2006.01)**  
[25] EN  
[54] **EIRP CONTROL METHOD, COMMUNICATIONS APPARATUS, AND COMMUNICATIONS SYSTEM**  
[54] **PROCEDE DE COMMANDE DE PIRE, DISPOSITIF DE COMMUNICATION, ET SYSTEME DE COMMUNICATION**  
[72] ZHENG, XIAOJUN, CN  
[72] GUO, JIANG, CN  
[72] CHEN, WEI, CN  
[72] ZHU, QIANG, CN  
[72] XUE, CHUNLIN, CN  
[73] HUawei TECHNOLOGIES CO., LTD., CN  
[85] 2021-07-20  
[86] 2020-01-22 (PCT/CN2020/073823)  
[87] (WO2020/151748)  
[30] CN (201910059033.6) 2019-01-22

---

[11] **3,128,180**  
[13] C  
[51] **Int.Cl. B62D 1/06 (2006.01)**  
[25] EN  
[54] **STEERING WHEEL COVER**  
[54] **COUVRE-VOLANT DE DIRECTION**  
[72] MONDRAGON, DINER, US  
[72] STROUD, ANNETTE MARIE, US  
[72] KRANKKALA, KEN, US  
[73] ADC SOLUTIONS AUTO, LLC, US  
[85] 2021-07-28  
[86] 2020-01-29 (PCT/US2020/015685)  
[87] (WO2020/160153)  
[30] US (62/798,024) 2019-01-29  
[30] US (62/817,733) 2019-03-13  
[30] US (16/661,497) 2019-10-23

---

[11] **3,128,424**  
[13] C  
[51] **Int.Cl. H04N 19/139 (2014.01)**  
[25] EN  
[54] **INTERACTIONS BETWEEN IN-LOOP RESHAPING AND INTER CODING TOOLS**  
[54] **INTERACTIONS ENTRE DES OUTILS DE REMODELAGE EN BOUCLE ET INTER-CODAGE**  
[72] ZHANG, LI, US  
[72] ZHANG, KAI, US  
[72] LIU, HONGBIN, CN  
[72] XU, JIZHENG, US  
[72] WANG, YUE, CN  
[73] BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD., CN  
[73] BYTEDANCE INC., US  
[85] 2021-07-30  
[86] 2020-02-01 (PCT/CN2020/074136)  
[87] (WO2020/156526)  
[30] CN (PCT/CN2019/074437) 2019-02-01

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **3,129,236**  
[13] C

[51] **Int.Cl. H04R 27/00 (2006.01) G06F 3/16 (2006.01) G10L 15/22 (2006.01)**  
[25] EN  
[54] **DEVICES, SYSTEMS, AND METHODS FOR DISTRIBUTED VOICE PROCESSING**  
[54] **DISPOSITIFS, SYSTEMES ET PROCES DE TRAITEMENT VOCAL DISTRIBUE**  
[72] SMITH, CONNOR KRISTOPHER, US  
[72] TOLOMEI, JOHN, US  
[72] LEE, BETTY, US  
[73] SONOS, INC., US  
[85] 2021-08-05  
[86] 2020-02-07 (PCT/US2020/017150)  
[87] (WO2020/163679)  
[30] US (16/271,550) 2019-02-08  
[30] US (16/271,560) 2019-02-08

---

[11] **3,129,529**  
[13] C

[51] **Int.Cl. E21B 47/00 (2012.01) E21B 41/00 (2006.01) E21B 43/12 (2006.01) E21B 47/12 (2012.01)**  
[25] EN  
[54] **SELECTIVE AUTOMATED POWERING OF DOWNHOLE EQUIPMENT DURING RUN-IN-HOLE OPERATIONS**  
[54] **ALIMENTATION AUTOMATISEE SELECTIVE D'EQUIPEMENT DE FOND DE TROU PENDANT DES OPERATIONS DE PASSAGE EN TROU**  
[72] PALMGREN, CARL ALBERT, III, US  
[72] ASHBAUGH, RYAN BRIDWELL, US  
[72] STEWART, MARK DALE, US  
[73] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2021-08-06  
[86] 2020-03-26 (PCT/US2020/025089)  
[87] (WO2020/214378)  
[30] US (62/836,119) 2019-04-19  
[30] US (16/830,940) 2020-03-26

---

[11] **3,130,049**  
[13] C

[51] **Int.Cl. C07D 487/04 (2006.01) A61K 31/519 (2006.01) A61K 31/53 (2006.01) A61K 31/5377 (2006.01) A61P 35/00 (2006.01) C07D 519/00 (2006.01)**  
[25] EN  
[54] **7H-PYRROLO[2,3-D]PYRIMIDINE-4-AMINE DERIVATIVE**  
[54] **DERIVE DE 7H-PYRROLO [2,3-D] PYRIMIDINE-4-AMINE**  
[72] YAMAMOTO, FUYUKI, JP  
[72] MIZUTANI, TAKASHI, JP  
[72] KASUGA, HIDEFUMI, JP  
[72] FUCHIDA, HIROKAZU, JP  
[72] HARA, SHOKI, JP  
[72] KOBAYAKAWA, YU, JP  
[72] OGINO, YOSHIO, JP  
[73] TAIHO PHARMACEUTICAL CO., LTD., JP  
[85] 2021-08-12  
[86] 2020-02-14 (PCT/JP2020/005684)  
[87] (WO2020/166680)  
[30] JP (2019-025844) 2019-02-15

---

[11] **3,131,675**  
[13] C

[51] **Int.Cl. H02K 1/18 (2006.01) H02K 15/02 (2006.01)**  
[25] EN  
[54] **ADHESIVELY-LAMINATED CORE FOR STATOR, METHOD OF MANUFACTURING SAME, AND ELECTRIC MOTOR**  
[54] **NOYAU DE STRATIFICATION DE COLLE POUR STATORS ET SON PROCEDURE DE FABRICATION, ET MACHINE ELECTRIQUE TOURNANTE**  
[72] TAKEDA KAZUTOSHI, JP  
[72] FUJII HIROYASU, JP  
[72] TAKATANI SHINSUKE, JP  
[73] NIPPON STEEL CORPORATION, JP  
[85] 2021-08-26  
[86] 2019-12-17 (PCT/JP2019/049303)  
[87] (WO2020/129946)  
[30] JP (2018-235869) 2018-12-17

---

[11] **3,131,792**  
[13] C

[51] **Int.Cl. C07D 487/00 (2006.01) A61K 9/06 (2006.01)**  
[25] EN  
[54] **SALT OF ALDOSE REDUCTASE INHIBITOR, AND PREPARATION METHOD AND APPLICATION THEREOF**  
[54] **SEL D'INHIBITEUR D'ALDOSE REDUCTASE, SON PROCEDURE DE PREPARATION ET SON UTILISATION**  
[72] YANG, ZHANKUN, CN  
[72] YANG, HANYU, CN  
[72] LI, PENGFEI, CN  
[72] LIU, XIAOPENG, CN  
[72] ZHOU, CAIHONG, CN  
[72] WANG, JUNLING, CN  
[72] LI, CHUNNA, CN  
[72] LIU, XIBAO, CN  
[73] CSPC ZHONGQI PHARMACEUTICAL TECHNOLOGY (SHIJIAZHUANG) CO., LTD., CN  
[85] 2021-08-27  
[86] 2020-02-28 (PCT/CN2020/077233)  
[87] (WO2020/173495)  
[30] CN (201910152719.X) 2019-02-28

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,132,174**  
[13] C

[51] **Int.Cl. C25B 11/073 (2021.01) B82Y 30/00 (2011.01) C25B 1/55 (2021.01) B01J 37/08 (2006.01) C25B 1/30 (2006.01) H01L 31/0256 (2006.01)**

[25] EN

[54] **Z-SCHEME HETEROSTRUCTURE PHOTOCATALYST, PREPARATION METHOD, AND APPLICATION THEREOF**

[54] **PHOTOCATALYSEUR A HETEROSTRUCTURE EN Z, METHODE DE PREPARATION ET APPLICATION CONNEXE**

[72] ZHANG, XUDONG, CN

[72] LIN, SHIWEI, CN

[72] CHEN, HANDE, CN

[72] FU, JIAN, CN

[72] ZHOU, YILONG, CN

[72] CHEN, BAO, CN

[72] LIN, ZHENGXI, CN

[72] WANG, LINGZHUAN, CN

[72] LIN, HUIYUAN, CN

[72] FU, ZHIHAO, CN

[72] HUANG, XIUCAL, CN

[73] HAINAN UNICAN SCIENCE AND TECHNOLOGY INNOVATION INSTITUTE CO. LTD., CN

[85] 2021-09-24

[86] 2021-05-12 (PCT/CN2021/093269)

[87] (WO2022/198766)

[30] CN (202110321216.8) 2021-03-25

---

[11] **3,132,523**  
[13] C

[51] **Int.Cl. G01G 3/12 (2006.01) G01F 23/20 (2006.01) G01G 3/18 (2006.01) G01G 21/23 (2006.01)**

[25] FR

[54] **SYSTEMS AND METHODS FOR MEASURING THE FILLING LEVEL OF A SILO**

[54] **SYSTEMES ET PROCEDES DE MESURE DU NIVEAU DE REMPLISSAGE D'UN SILO**

[72] DIGIANANTONIO, LUCAS, FR

[72] BOIS, JEAN-JACQUES, FR

[73] NANOLIKE, FR

[85] 2021-10-05

[86] 2020-04-30 (PCT/EP2020/062024)

[87] (WO2020/221857)

[30] FR (FR1904594) 2019-04-30

---

[11] **3,134,421**  
[13] C

[51] **Int.Cl. B65D 81/24 (2006.01) B67D 1/04 (2006.01) C12H 1/00 (2006.01)**

[25] EN

[54] **AUTOMATIC PRESERVATIVE GAS REPLENISHING SYSTEM**

[54] **SYSTEME DE REAPPROVISIONNEMENT AUTOMATIQUE DE GAZ CONSERVATEUR**

[72] BAZOBERRY, CARLOS FERNANDO, US

[73] BOSTON WINE DEVICES, LLC, US

[85] 2021-09-20

[86] 2020-03-18 (PCT/US2020/023307)

[87] (WO2020/191020)

[30] US (16/358,666) 2019-03-19

---

[11] **3,135,561**  
[13] C

[51] **Int.Cl. C10B 53/02 (2006.01) C10B 7/10 (2006.01) C10B 47/44 (2006.01) C10B 49/04 (2006.01) C10L 5/44 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR THE MANUFACTURING OF BIOCHAR WITH THERMAL TREATMENT**

[54] **METHODE ET APPAREIL POUR LA FABRICATION DE BIOCHARBON PAR TRAITEMENT THERMIQUE**

[72] TUKIAINEN, SAMPO, FI

[73] CARBOFEX OY, FI

[85] 2021-09-29

[86] 2020-04-07 (PCT/FI2020/050226)

[87] (WO2020/208301)

[30] FI (20195284) 2019-04-08

---

[11] **3,135,704**  
[13] C

[51] **Int.Cl. B32B 9/04 (2006.01) C08J 5/18 (2006.01)**

[25] EN

[54] **A COMPOSITE PANEL FOR STRUCTURAL AND DECORATIVE SURFACES**

[54] **PANNEAU COMPOSITE POUR SURFACES STRUCTURALES ET DECORATIVES**

[72] BRITO DA COSTA, CLAUDIA, PT

[72] TAVARES DA SILVA VINHAS, ANA JOAO, PT

[72] SANTOS SILVA MARTINS, JORGE MANUEL, PT

[72] HORA DE CARVALHO, LUISA MARIA, PT

[72] DE MONTENEGRO BAPTISTA MALHEIRO DE MAGALHAES, FERNAO DOMINGOS, PT

[73] UNIVERSIDADE DO PORTO, PT

[73] INSTITUTO POLITECNICO DE VISEU, PT

[73] SURFORMA, S.A., PT

[85] 2021-10-29

[86] 2020-04-24 (PCT/IB2020/053879)

[87] (WO2020/222098)

[30] PT (115478) 2019-04-29

---

[11] **3,135,906**  
[13] C

[51] **Int.Cl. H04W 74/0833 (2024.01) H04L 27/26 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD FOR CONFIGURING RANDOM ACCESS PREAMBLES**

[54] **SYSTEME ET PROCEDE PERMETTANT DE CONFIGURER DES PREAMBULES D'ACCES ALEATOIRE**

[72] ZHANG, CHENCHEN, CN

[72] CAO, WEI, CN

[72] TIAN, KAIBO, CN

[72] YANG, ZHEN, CN

[72] ZHANG, NAN, CN

[73] ZTE CORPORATION, CN

[85] 2021-10-01

[86] 2019-04-04 (PCT/CN2019/081480)

[87] (WO2020/199190)

**Brevets canadiens délivrés  
16 avril 2024**

---

[11] **3,135,921**  
[13] C

[51] **Int.Cl. C07D 215/233 (2006.01) A61K 31/47 (2006.01) A61K 31/4709 (2006.01) C07D 401/12 (2006.01) A61P 1/16 (2006.01) A61P 3/10 (2006.01) A61P 9/00 (2006.01) A61P 17/06 (2006.01) A61P 25/00 (2006.01) A61P 25/28 (2006.01) A61P 35/00 (2006.01) A61P 35/02 (2006.01) A61P 37/02 (2006.01)**

[25] EN

[54] **QUINOLYL-CONTAINING COMPOUND AND PHARMACEUTICAL COMPOSITION, AND USE THEREOF**

[54] **COMPOSE CONTENANT DU QUINOLYLE, COMPOSITION PHARMACEUTIQUE ET UTILISATION ASSOCIEE**

[72] WU, WEI, CN  
[72] ZHU, LI, CN  
[72] YANG, YANQING, CN  
[72] HU, WEI, CN  
[72] ZHANG, HUI, CN  
[72] DONG, CHANGXIN, CN  
[73] PRIMEGENE (BEIJING) CO., LTD., CN

[85] 2021-10-01  
[86] 2020-03-30 (PCT/CN2020/082041)  
[87] (WO2020/200160)  
[30] CN (201910266681.9) 2019-04-03

---

[11] **3,137,113**  
[13] C

[51] **Int.Cl. A61B 18/14 (2006.01) A61B 18/00 (2006.01)**

[25] EN

[54] **ELECTROSURGICAL VESSEL SEALER HAVING OPPOSED SEALING SURFACES WITH VARYING GAP HEIGHT**

[54] **SCELLEUSE DE VAISSEAUX ELECTROCHIRURGICALE AYANT DES SURFACES DE SCELLAGE OPPOSEES AYANT UNE HAUTEUR D'ESPACE VARIABLE**

[72] EILERS, DEREK, US  
[72] WILLIAMS, MASON, US  
[73] CONMED CORPORATION, US

[85] 2021-10-15  
[86] 2020-04-29 (PCT/US2020/030551)  
[87] (WO2020/223405)  
[30] US (62/840,437) 2019-04-30

---

[11] **3,137,384**  
[13] C

[51] **Int.Cl. F04C 18/356 (2006.01) F04C 28/26 (2006.01) F04C 29/06 (2006.01)**

[25] EN

[54] **ROTARY COMPRESSOR AND REFRIGERATION CYCLE DEVICE**

[54] **COMPRESSEUR ROTATIF ET DISPOSITIF A CYCLE DE REFRIGERATION**

[72] OZU, MASAO, CN  
[72] GAO, BIN, CN  
[72] WANG, LING, CN  
[73] GUANGDONG MEIZHI COMPRESSOR CO., LTD., CN

[85] 2021-10-19  
[86] 2019-11-04 (PCT/CN2019/115399)  
[87] (WO2021/035945)  
[30] CN (201910785989.4) 2019-08-23  
[30] CN (201910785885.3) 2019-08-23

---

[11] **3,137,426**  
[13] C

[51] **Int.Cl. H04N 19/50 (2014.01)**

[25] EN

[54] **METHOD FOR SIGNALING RECTANGULAR SLICE PARTITIONING IN CODED VIDEO STREAM**

[54] **PROCEDE POUR SIGNALEMENT D'UN PARTITIONNEMENT EN TRANCHES RECTANGULAIRES DANS UN FLUX VIDEO CODE**

[72] CHOI, BYEONGDOO, US  
[72] LIU, SHAN, US  
[72] WENGER, STEPHAN, US  
[73] TENCENT AMERICA LLC, US

[85] 2021-10-19  
[86] 2021-02-15 (PCT/US2021/018101)  
[87] (WO2021/202001)  
[30] US (63/003,101) 2020-03-31  
[30] US (17/098,892) 2020-11-16

---

[11] **3,137,605**  
[13] C

[51] **Int.Cl. G02B 6/255 (2006.01)**

[25] EN

[54] **SPLICE ASSEMBLY FOR FIBER OPTIC CABLE**

[54] **ENSEMBLE EPISSURE DE CABLE A FIBRE OPTIQUE**

[72] ROSSI, NICK, US  
[72] ARTEMIE, EUGEN, US  
[73] COTSWORKS, INC., US

[85] 2021-10-20  
[86] 2020-05-24 (PCT/US2020/034435)  
[87] (WO2020/243028)  
[30] US (62/853,286) 2019-05-28

---

[11] **3,137,689**  
[13] C

[51] **Int.Cl. G01N 27/72 (2006.01)**

[25] EN

[54] **METAL STRUCTURE EVALUATOR FOR ROLLED STEEL SHEETS, METHOD FOR EVALUATING METAL STRUCTURE OF ROLLED STEEL SHEET, PRODUCTION FACILITY OF STEEL PRODUCT, METHOD FOR MANUFACTURING STEEL PRODUCT, AND METHOD OF QUALITY MANAGEMENT OF STEEL PRODUCT**

[54] **DISPOSITIF D'EVALUATION DE STRUCTURE METALLIQUE DE TOLE D'ACIER LAMINEE, PROCEDE D'EVALUATION DE STRUCTURE METALLIQUE DE TOLE D'ACIER LAMINEE, EQUIPEMENT DE FABRICATION DE MATERIAU D'ACIER, PROCEDE DE FABRICATION DE MATERIAU D'ACIER, ET PROCEDE DE CONTROLE QUALITE DE MATERIAU D'ACIER**

[72] OZEKI, TAKAFUMI, JP  
[72] MATSUI, YUTAKA, JP  
[72] ADACHI, KENJI, JP  
[72] SHIMAMURA, JUNJI, JP  
[73] JFE STEEL CORPORATION, JP

[85] 2021-10-21  
[86] 2020-04-17 (PCT/JP2020/016877)  
[87] (WO2020/218192)  
[30] JP (2019-080845) 2019-04-22

---

[11] **3,138,091**  
[13] C

[51] **Int.Cl. G06F 21/31 (2013.01) G16H 40/40 (2018.01)**

[25] EN

[54] **EXTENSIBLE DEPLOYMENT SYSTEM**

[54] **SYSTEME DE DEPLOIEMENT EXTENSIBLE**

[72] BARNEFIHER, GERALD E., US  
[72] LAM, WILLIS, US  
[72] MASSEY, RICHARD W., US  
[72] NGUYEN, NICK T., US  
[72] NGUYEN, RYAN, US  
[73] CAREFUSION 303, INC., US

[86] (3138091)  
[87] (3138091)  
[22] 2013-11-12  
[62] 2,890,195  
[30] US (13/678,472) 2012-11-15

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,138,339**  
[13] C

[51] **Int.Cl. A61M 16/00 (2006.01) A61M 16/12 (2006.01) A61M 16/20 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR INTELLIGENT GAS SOURCE MANAGEMENT AND/OR SYSTEMS AND METHODS FOR DELIVERY OF THERAPEUTIC GAS AND/OR ENHANCED PERFORMANCE VERIFICATION FOR THERAPEUTIC GAS DELIVERY**  
[54] **SYSTEMES ET PROCEDES DE GESTION DE SOURCE DE GAZ INTELLIGENTE, ET/OU SYSTEMES ET PROCEDES D'ADMINISTRATION DE GAZ THERAPEUTIQUE ET/OU DE VERIFICATION DE PERFORMANCE AMELIOREE POUR L'ADMINISTRATION DE GAZ THERAPEUTIQUE**  
[72] ACKER, JARON M., US  
[72] FALLIGANT, JOHN C., US  
[72] MILSAP, JEFF, US  
[72] ROEHL, ROBIN, US  
[72] SCHMIDT, JEFFREY, US  
[72] TOLMIE, CRAIG R., US  
[73] MALLINCKRODT PHARMACEUTICALS IRELAND LIMITED, IE  
[86] (3138339)  
[87] (3138339)  
[22] 2015-05-11  
[62] 2,941,761  
[30] US (61/991,032) 2014-05-09  
[30] US (61/991,028) 2014-05-09  
[30] US (61/991,083) 2014-05-09  
[30] US (14/709,298) 2015-05-11  
[30] US (14/709,316) 2015-05-11  
[30] US (14/709,308) 2015-05-11

---

[11] **3,138,790**  
[13] C

[51] **Int.Cl. G16Z 99/00 (2019.01) G06F 40/279 (2020.01) G06F 40/30 (2020.01) B44D 2/00 (2006.01) G06T 11/00 (2006.01)**  
[25] EN  
[54] **DEVICE AND METHOD FOR AUTOMATICALLY CREATING CARTOON IMAGE BASED ON INPUT SENTENCE**  
[54] **DISPOSITIF ET METHODE DE CREATION AUTOMATIQUE D'IMAGE DE DESSIN HUMORISTIQUE EN FONCTION D'UNE PHRASE SAISIE**  
[72] LEE, HO YOUNG, KR  
[72] KIM, GYU CHEOL, KR  
[72] CHOI, HO SOP, KR  
[73] TOONSQUARE CORP., KR  
[86] (3138790)  
[87] (3138790)  
[22] 2021-11-12  
[30] KR (KR10-2021-0099674) 2021-07-29

---

[11] **3,138,802**  
[13] C

[51] **Int.Cl. G02C 7/10 (2006.01) G02F 1/1514 (2019.01)**  
[25] EN  
[54] **OPTICAL DEVICE FOR ENHANCING THE WELL-BEING OF A WEARER**  
[54] **DISPOSITIF OPTIQUE POUR AMELIORER LE BIEN-ETRE D'UN PORTEUR**  
[72] WALLER, THOMAS MCCARTHY, CA  
[72] SLAWSON, SIAN ELIZABETH, CA  
[72] ALLEN, SIAN VICTORIA, CA  
[72] SMITH, TODD JAMES, CA  
[72] EDZEN, NILS JOHAN, CA  
[72] DOGURGA, KEREM, CA  
[72] SIWEK, PHILIP DAVID, CA  
[72] MCGEE, TIMOTHY RYAN, CA  
[72] MACMILLAN, KATE ALEXANDRIA, CA  
[72] KAILAY, NAVJOT, CA  
[72] CALDER, ELLISA KATHLEEN, CA  
[72] LY, WILLIAM, CA  
[73] LULULEMON ATHLETICA CANADA INC., CA  
[85] 2021-11-19  
[86] 2020-05-22 (PCT/CA2020/050691)  
[87] (WO2020/237352)  
[30] US (62/852,878) 2019-05-24

---

[11] **3,139,442**  
[13] C

[51] **Int.Cl. G21C 19/10 (2006.01) G21C 19/20 (2006.01)**  
[25] EN  
[54] **BOILING WATER REACTOR BLADE GUIDE AND EXCHANGE TOOL**  
[54] **OUTIL DE GUIDAGE ET D'ECHANGE DE LAME DE REACTEUR A EAU BOUILLANTE**  
[72] OSTRANDER, KRISTOFFER, US  
[72] WHITLING, ROBERT W., US  
[72] SMITH, BRIAN J., US  
[73] GE-HITACHI NUCLEAR ENERGY AMERICAS LLC, US  
[85] 2021-11-05  
[86] 2020-04-30 (PCT/US2020/030730)  
[87] (WO2020/231639)  
[30] US (16/412,979) 2019-05-15

---

[11] **3,139,906**  
[13] C

[51] **Int.Cl. C25B 15/02 (2021.01)**  
[25] EN  
[54] **METHOD OF OPERATING ELECTROLYSIS APPARATUS**  
[54] **PROCEDE DE FONCTIONNEMENT D'UN APPAREIL D'ELECTROLYSE**  
[72] OHNO, JUN, JP  
[72] UCHINO, YOUSUKE, JP  
[73] ASahi KASEI KABUSHIKI KAISHA, JP  
[85] 2021-11-10  
[86] 2020-04-22 (PCT/JP2020/017357)  
[87] (WO2020/241129)  
[30] JP (2019-103103) 2019-05-31  
[30] JP (2019-103106) 2019-05-31

---

[11] **3,141,228**  
[13] C

[51] **Int.Cl. H02P 3/08 (2006.01) B25F 5/00 (2006.01) B25B 13/46 (2006.01)**  
[25] EN  
[54] **METHOD OF BRAKING A POWER TOOL**  
[54] **METHODE DE FREINAGE D'UN OUTIL ELECTRIQUE**  
[72] RAJZER, MICHAEL, US  
[72] GENZ, JASON, US  
[73] SNAP-ON INCORPORATED, US  
[86] (3141228)  
[87] (3141228)  
[22] 2021-12-07  
[30] US (17/122,285) 2020-12-15

**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,141,319**

[13] C

- [51] **Int.Cl. G06F 9/46 (2006.01) G06F 12/0842 (2016.01) G06F 9/50 (2006.01)**  
[25] EN  
[54] **REDUCING CACHE INTERFERENCE BASED ON FORECASTED PROCESSOR USE**  
[54] **REDUCTION D'INTERFERENCE DE CACHE SUR LA BASE D'UNE UTILISATION DE PROCESSEUR PREVUE**  
[72] ROSTYKUS, BENOIT, US  
[72] HARTMANN, GABRIEL, US  
[73] NETFLIX, INC., US  
[85] 2021-11-18  
[86] 2020-05-28 (PCT/US2020/034943)  
[87] (WO2020/243318)  
[30] US (62/855,649) 2019-05-31  
[30] US (16/510,756) 2019-07-12

[11] **3,143,883**

[13] C

- [51] **Int.Cl. E04F 15/18 (2006.01)**  
[25] EN  
[54] **DECOUPLING WEB**  
[54] **BANDE DE DECOUPLAGE**  
[72] KAISER, UWE, DE  
[72] STRIEDER, BIRGIT, DE  
[72] KARGL, DANIEL, DE  
[72] BACHON, THOMAS, DE  
[73] EWALD DORKEN AG, DE  
[85] 2021-12-16  
[86] 2020-06-18 (PCT/EP2020/066913)  
[87] (WO2021/004745)  
[30] DE (10 2019 004 633.1) 2019-07-05

[11] **3,143,986**

[13] C

- [51] **Int.Cl. B29C 64/118 (2017.01) B33Y 10/00 (2015.01) B33Y 30/00 (2015.01) B33Y 50/02 (2015.01) B29C 64/209 (2017.01) B29C 64/232 (2017.01) B29C 64/236 (2017.01) B29C 64/393 (2017.01)**  
[25] EN  
[54] **METHODS AND APPARATUS FOR PROCESSING AND DISPENSING MATERIAL DURING ADDITIVE MANUFACTURING**  
[54] **PROCEDES ET APPAREIL DE TRAITEMENT ET DE DISTRIBUTION D'UN MATERIAU AU COURS D'UNE FABRICATION ADDITIVE**  
[72] SUSNJARA, KENNETH J., US  
[72] VOTE, NICOLAS, US  
[72] GAESSER, ROBERT, US  
[72] SMIDDY, BRIAN S., US  
[72] VAAL, SCOTT G., US  
[73] THERMWOOD CORPORATION, US  
[85] 2021-12-16  
[86] 2020-06-17 (PCT/US2020/038118)  
[87] (WO2020/263652)  
[30] US (16/455,877) 2019-06-28

[11] **3,144,059**

[13] C

- [51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/20 (2006.01) A61M 27/00 (2006.01)**  
[25] EN  
[54] **AUTOMATED CATHETER AND CHEST TUBE DEVICES AND RELATED SYSTEMS**  
[54] **DISPOSITIFS DE CATHETER ET DE DRAIN THORACIQUE AUTOMATISES ET SYSTEMES ASSOCIES**  
[72] KEELLEN, MENGESHA, US  
[73] TESSEFI INNOVATIONS, INC., US  
[85] 2021-12-20  
[86] 2020-06-08 (PCT/US2020/036640)  
[87] (WO2020/251893)  
[30] US (62/861,165) 2019-06-13  
[30] US (62/861,169) 2019-06-13

[11] **3,144,815**

[13] C

- [51] **Int.Cl. A47L 11/40 (2006.01) A47L 11/10 (2006.01) A47L 11/28 (2006.01) A47L 13/44 (2006.01)**  
[25] EN  
[54] **CLEANING ROBOT AND CLEANING SYSTEM**  
[54] **ROBOT DE NETTOYAGE ET SYSTEME DE NETTOYAGE**  
[72] WEIS, NORBERT, DE  
[72] HEILAND, MARC, DE  
[72] STENGLEIN, CHRISTIAN, DE  
[73] CARL FREUDENBERG KG, DE  
[85] 2021-12-22  
[86] 2020-07-23 (PCT/EP2020/070771)  
[87] (WO2021/104689)  
[30] DE (10 2019 132 312.6) 2019-11-28

[11] **3,145,292**

[13] C

- [51] **Int.Cl. B07B 1/46 (2006.01)**  
[25] EN  
[54] **APPARATUSES, METHODS, AND SYSTEMS FOR VIBRATORY SCREENING**  
[54] **APPAREILS, PROCEDES ET SYSTEMES POUR CRIBLAGE PAR VIBRATIONS**  
[72] COLGROVE, JAMES R., US  
[72] PERESAN, MICHAEL L., US  
[73] DERRICK CORPORATION, US  
[85] 2021-12-23  
[86] 2020-07-02 (PCT/US2020/040734)  
[87] (WO2021/003414)  
[30] US (16/460,496) 2019-07-02

[11] **3,146,367**

[13] C

- [51] **Int.Cl. G07C 5/08 (2006.01) B60R 1/00 (2022.01) G07C 5/00 (2006.01) G08G 1/16 (2006.01)**  
[25] EN  
[54] **INFORMATION-ENHANCED OFF-VEHICLE EVENT IDENTIFICATION**  
[54] **IDENTIFICATION D'EVENEMENT HORS VEHICULE AMELIOREE PAR DES INFORMATIONS**  
[72] KUEHNLE, ANDREAS U., US  
[72] TOKMAN, ANDRE, US  
[72] MUNCY, MARK, US  
[73] BENDIX COMMERCIAL VEHICLE SYSTEMS, LLC, US  
[85] 2022-01-06  
[86] 2020-07-29 (PCT/US2020/043967)  
[87] (WO2021/021865)  
[30] US (16/526,820) 2019-07-30

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,147,469**  
[13] C

[51] **Int.Cl. H04L 5/00 (2006.01)**  
[25] EN  
[54] **RESOURCE MANAGEMENT FOR REPORTING SIGNAL-TO-INTERFERENCE-PLUS-NOISE RATIO**  
[54] **GESTION DE RESSOURCES PERMETTANT DE RAPPORTER UN RAPPORT SIGNAL SUR BROUILLAGE PLUS BRUIT**  
[72] GAO, BO, CN  
[72] LU, ZHAOHUA, CN  
[72] LI, YU NGOK, CN  
[72] WU, HAO, CN  
[72] JIANG, CHUANGXIN, CN  
[73] ZTE CORPORATION, CN  
[85] 2022-01-14  
[86] 2019-07-16 (PCT/CN2019/096130)  
[87] (WO2021/007768)

---

[11] **3,147,487**  
[13] C

[51] **Int.Cl. H02J 3/18 (2006.01)**  
[25] EN  
[54] **METHOD FOR GENERATING AN INDUCTIVE REACTIVE POWER BY MEANS OF AN ELECTRICAL LOAD APPARATUS, ELECTRICAL LOAD APPARATUS, AND ELECTROLYSIS APPARATUS**  
[54] **PROCEDE DE GENERATION D'UNE ENERGIE REACTIVE INDUCTIVE AU MOYEN D'UN DISPOSITIF DE CONSOMMATEUR ELECTRIQUE, DISPOSITIF DE CONSOMMATEUR ELECTRIQUE ET DISPOSITIF D'ELECTROLYSE**  
[72] UTZ, PETER, DE  
[73] SIEMENS ENERGY GLOBAL GMBH & CO. KG, DE  
[85] 2022-01-14  
[86] 2020-05-26 (PCT/EP2020/064509)  
[87] (WO2021/008762)  
[30] EP (19186743.1) 2019-07-17

---

[11] **3,147,569**  
[13] C

[51] **Int.Cl. F16L 35/00 (2006.01)**  
[25] EN  
[54] **METHOD OF CONTROLLING HOSES AND PIPES UNDER PRESSURE**  
[54] **METHODE DE CONTROLE DE BOYAUX ET DE TUYAUX SOUS PRESSION**  
[72] UHRYN, MICHAEL, CA  
[73] MAXINUS INC., CA  
[86] (3147569)  
[87] (3147569)  
[22] 2022-02-03

---

[11] **3,147,908**  
[13] C

[51] **Int.Cl. C23F 14/02 (2006.01) C02F 5/00 (2006.01) C07F 11/00 (2006.01) C10G 75/04 (2006.01)**  
[25] EN  
[54] **OIL SOLUBLE MOLYBDENUM COMPLEXES AS HIGH TEMPERATURE FOULING INHIBITORS**  
[54] **COMPLEXES DE MOLYBDENE SOLUBLES DANS L'HUILE SERVANT D'INHIBITEURS D'ENCRASSEMENT A HAUTE TEMPERATURE**  
[72] GUL, OMER, US  
[72] ZENASNI, OUSSAMA, US  
[72] PENNINGTON, JANELLE, US  
[73] ECOLAB USA INC., US  
[85] 2022-01-18  
[86] 2020-07-29 (PCT/US2020/044005)  
[87] (WO2021/021888)  
[30] US (62/879,877) 2019-07-29

---

[11] **3,148,594**  
[13] C

[51] **Int.Cl. A61B 17/02 (2006.01) A61B 34/20 (2016.01) A61B 34/30 (2016.01) A61B 90/00 (2016.01) A61B 17/24 (2006.01) A61C 1/08 (2006.01)**  
[25] EN  
[54] **SPLINT DEVICE FORMING A FIDUCIAL MARKER CO-OPERABLE WITH A GUIDANCE SYSTEM OF A ROBOT**  
[54] **DISPOSITIF D'ATTELLE FORMANT UN MARQUEUR DE REPERE POUVANT FONCTIONNER AVEC UN SYSTEME DE GUIDAGE DE ROBOT**  
[72] MOZES, ALON, US  
[72] REEBYE, UDAY, US  
[72] SALCEDO, JUAN, US  
[72] FITTIPALDI, MAURO, US  
[73] NEOCIS INC., US  
[85] 2022-01-24  
[86] 2020-07-23 (PCT/IB2020/056977)  
[87] (WO2021/014408)  
[30] US (62/878,240) 2019-07-24

---

[11] **3,148,999**  
[13] C

[51] **Int.Cl. G10L 19/032 (2013.01)**  
[25] EN  
[54] **AUDIO ENCODERS, AUDIO DECODERS, METHODS AND COMPUTER PROGRAMS ADAPTING AN ENCODING AND DECODING OF LEAST SIGNIFICANT BITS**  
[54] **CODEURS AUDIO, DECODEURS AUDIO, PROCEDES ET PROGRAMMES INFORMATIQUES ADAPTANT UN CODAGE ET UN DECODAGE DE BITS LES MOINS SIGNIFICATIFS**  
[72] FUCHS, GUILLAUME, DE  
[72] GEYERSBERGER, STEFAN, DE  
[72] RAVELLI, EMMANUEL, DE  
[72] SCHNELL, MARKUS, DE  
[72] TOMASEK, ADRIAN, DE  
[73] FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., DE  
[86] (3148999)  
[87] (3148999)  
[22] 2018-11-08  
[62] 3,082,282  
[30] EP (PCT/EP2017/078959) 2017-11-10



**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,150,318**

[13] C

- [51] **Int.Cl. H01G 11/18 (2013.01) H01G 11/10 (2013.01)**  
[25] EN  
[54] **LIC MODULE**  
[54] **MODULE LIC**  
[72] OHNO, TATSUYA, JP  
[72] ONODERA, TATSUYA, JP  
[72] HINO, TAKENORI, JP  
[72] KUJIME, YASUNORI, JP  
[72] HARADA, YOSHITERU, JP  
[72] EZAKI, HIDEAKI, JP  
[72] HAYASHI, MASATO, JP  
[72] TANG, ISSAC, JP  
[72] LAMINETTE, ANTOINE, JP  
[72] LINDSTROM, JEREMY, JP  
[73] KAWASAKI JUKOGYO KABUSHIKI KAISHA, JP  
[85] 2022-03-07  
[86] 2019-09-17 (PCT/JP2019/036384)  
[87] (WO2021/053718)

[11] **3,151,080**

[13] C

- [51] **Int.Cl. H02P 27/08 (2006.01)**  
[25] EN  
[54] **MEASUREMENT GUIDED OSCILLATION DETECTION FOR MOTOR PROTECTION**  
[54] **DETECTION D'OSCILLATIONS GUIDEES PAR MESURE POUR LA PROTECTION DE MOTEURS**  
[72] ASHBAUGH, RYAN BRIDWELL, US  
[72] BECK, DAVID C., US  
[73] HALLIBURTON ENERGY SERVICES, INC., US  
[85] 2022-03-11  
[86] 2019-10-31 (PCT/US2019/059280)  
[87] (WO2021/086389)  
[30] US (16/669,892) 2019-10-31

[11] **3,151,284**

[13] C

- [51] **Int.Cl. G05B 23/02 (2006.01) H04W 12/04 (2021.01) G06F 3/0484 (2022.01) G08C 17/02 (2006.01)**  
[25] EN  
[54] **UNIDIRECTIONAL FIELD DEVICE DATA TRANSFER**  
[54] **TRANSFERT DE DONNEES DE DISPOSITIF DE CHAMP UNIDIRECTIONNEL**  
[72] SHIERS, BRET J., US  
[72] SWEET, JARED E., US  
[72] LAMOTHE, ROSS C., US  
[73] ROSEMOUNT INC., US  
[85] 2022-03-15  
[86] 2020-09-09 (PCT/US2020/049879)  
[87] (WO2021/055198)  
[30] US (16/576,126) 2019-09-19

[11] **3,154,322**

[13] C

- [51] **Int.Cl. C04B 7/12 (2006.01) C04B 7/13 (2006.01) C04B 14/26 (2006.01) C04B 28/02 (2006.01)**  
[25] EN  
[54] **COMPOSITE CEMENT WITH IMPROVED REACTIVITY AND METHOD FOR MANUFACTURING IT**  
[54] **CIMENT COMPOSITE A REACTIVITE AMELIOREE ET METHODE DE FABRICATION**  
[72] BULLERJAHN, FRANK, DE  
[72] BREMSETH, SIGURN KJAER, DE  
[72] SKJEGGERUD, KJELL, DE  
[72] DIENEMANN, WOLFGANG, DE  
[73] HEIDELBERG MATERIALS AG, DE  
[86] (3154322)  
[87] (3154322)  
[22] 2022-04-04  
[30] EP (21170683) 2021-04-27

[11] **3,154,778**

[13] C

- [51] **Int.Cl. A63C 17/26 (2006.01)**  
[25] EN  
[54] **A PERSONAL TRANSPORT APPARATUS**  
[54] **APPAREIL DE TRANSPORT PERSONNEL**  
[72] KOCH, JASON, AU  
[72] DE GAYE, DANIEL JAMES, AU  
[73] SKATE INNOVATION PTY LTD, AU  
[86] (3154778)  
[87] (3154778)  
[22] 2017-05-10  
[62] 3,062,951  
[30] AU (2016901746) 2016-05-10  
[30] AU (2016903430) 2016-08-29

[11] **3,154,919**

[13] C

- [51] **Int.Cl. G06F 16/172 (2019.01)**  
[25] EN  
[54] **DATA OBJECT IDENTIFICATION GENERATING METHOD, DEVICE, COMPUTER EQUIPMENT AND STORAGE MEDIUM**  
[54] **METHODE DE GENERATION D'IDENTIFICATION D'OBJETS DE DONNEES, DISPOSITIF, EQUIPEMENT INFORMATIQUE ET SUPPORT DE STOCKAGE**  
[72] CHEN, FANGYUAN, CN  
[72] FAN, MINJIE, CN  
[72] TANG, KUNZHOU, CN  
[73] 10353744 CANADA LTD., CA  
[85] 2022-03-17  
[86] 2020-07-30 (PCT/CN2020/105935)  
[87] (WO2021/052029)  
[30] CN (201910878201.4) 2019-09-17

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,154,948**  
[13] C

[51] **Int.Cl. A61N 5/10 (2006.01)**  
[25] EN  
[54] **RADIATION THERAPY SYSTEM,  
AND OPERATION PROCEDURE  
OF POSITIONING DEVICE  
THEREOF**  
[54] **SYSTEME DE RADIOTHERAPIE,  
ET METHODE DE  
FONCTIONNEMENT DE  
DISPOSITIF DE  
POSITIONNEMENT DUDIT  
SYSTEME**  
[72] CHEN, WEI-LIN, CN  
[72] GONG, QIU-PING, CN  
[73] NEUBORON THERAPY SYSTEM  
LTD., CN  
[85] 2022-04-14  
[86] 2020-09-28 (PCT/CN2020/118385)  
[87] (WO2021/082846)  
[30] CN (201911034270.3) 2019-10-29

---

[11] **3,155,870**  
[13] C

[51] **Int.Cl. A61K 8/365 (2006.01) A61K  
8/19 (2006.01) A61K 8/21 (2006.01)  
A61K 8/25 (2006.01) A61K 8/27  
(2006.01) A61K 8/44 (2006.01) A61P  
1/02 (2006.01) A61Q 11/00 (2006.01)**  
[25] EN  
[54] **DENTIFRICE COMPOSITIONS  
FOR TREATMENT OF DENTAL  
BIOFILM**  
[54] **COMPOSITIONS DE DENTIFRICE  
POUR LE TRAITEMENT D'UN  
BIOFILM DENTAIRE**  
[72] STRAND, ROSS, SG  
[72] LI, XIAOXIAO, CN  
[72] SHI, YUNMING, CN  
[73] THE PROCTER & GAMBLE  
COMPANY, US  
[85] 2022-03-25  
[86] 2019-09-30 (PCT/CN2019/109455)  
[87] (WO2021/062631)

---

[11] **3,156,914**  
[13] C

[51] **Int.Cl. B66F 3/35 (2006.01) B65G 7/02  
(2006.01) B66F 11/00 (2006.01)**  
[25] EN  
[54] **AUXILIARY MOUNTING TOOL  
FOR THE POSITIONING OF  
ELEMENTS IN RELATION TO AN  
ADJACENT FLAT OR PLANE**  
[54] **OUTIL DE MONTAGE  
AUXILIAIRE PERMETTANT LE  
POSITIONNEMENT D'ELEMENTS  
PAR RAPPORT A UN PLAN OU  
PLAT ADJACENT**  
[72] DISSING, CLAUS HORNSTRUP, DK  
[73] DISSING A/S, DK  
[86] (3156914)  
[87] (3156914)  
[22] 2015-08-06  
[62] 2,957,152  
[30] DK (PA 2014 70478) 2014-08-08

---

[11] **3,160,612**  
[13] C

[51] **Int.Cl. A23P 20/20 (2016.01)**  
[25] EN  
[54] **AUTOMATED FOOD  
PREPARATION AND PACKAGING  
SYSTEMS, METHODS, AND  
APPARATUS**  
[54] **SYSTEMES, PROCEDES ET  
APPAREIL DE PREPARATION ET  
D'EMBALLAGE D'ALIMENTS  
AUTOMATISES**  
[72] CLAUSSEN, ED, US  
[72] LESSARD, GERALD, US  
[73] WEST LIBERTY FOODS, L.L.C., US  
[85] 2022-06-02  
[86] 2020-12-04 (PCT/US2020/063258)  
[87] (WO2021/113607)  
[30] US (62/943,394) 2019-12-04

---

[11] **3,160,899**  
[13] C

[51] **Int.Cl. C07D 495/04 (2006.01)**  
[25] EN  
[54] **SPIRO COMPOUND SERVING AS  
ERK INHIBITOR, AND  
APPLICATION THEREOF**  
[54] **COMPOSE SPIRO SERVANT  
D'INHIBITEUR D'ERK ET SON  
APPLICATION**  
[72] LI, YI, CN  
[72] LIU, NING, CN  
[72] YU, TAO, CN  
[72] WU, CHENGDE, CN  
[72] LI, JIAN, CN  
[72] CHEN, SHUHUI, CN  
[73] D3 BIO (WUXI) CO., LTD., CN  
[85] 2022-06-06  
[86] 2020-12-07 (PCT/CN2020/134277)  
[87] (WO2021/110168)  
[30] CN (201911244788.X) 2019-12-06  
[30] CN (201911257998.2) 2019-12-10  
[30] CN (202010106897.1) 2020-02-20  
[30] CN (202011068937.4) 2020-09-30  
[30] CN (202011410488.7) 2020-12-03

---

[11] **3,160,941**  
[13] C

[51] **Int.Cl. G03F 7/004 (2006.01) G03F  
7/027 (2006.01) G03F 7/029 (2006.01)  
G03F 7/031 (2006.01) G03F 7/095  
(2006.01) G03F 7/20 (2006.01)**  
[25] EN  
[54] **PHOTOPOLYMERISABLE RELIEF  
PRECURSOR WITH ADJUSTABLE  
SURFACE PROPERTIES**  
[54] **PRECURSEUR DE RELIEF  
PHOTOPOLYMERISABLE AYANT  
DES PROPRIETES DE SURFACE  
AJUSTABLES**  
[72] BEYER, MATTHIAS, DE  
[72] BECKER, ARMIN, DK  
[72] WENDLAND, TORBEN, DE  
[72] SCHLEGEL, ISABEL, DE  
[72] FRONCZKIEWICZ, PETER J, US  
[72] WUNDLING, ANJA, DE  
[73] XSYS GERMANY GMBH, DE  
[85] 2022-06-06  
[86] 2020-12-14 (PCT/EP2020/086029)  
[87] (WO2021/116496)  
[30] EP (19215470.6) 2019-12-12

**Brevets canadiens délivrés**  
**16 avril 2024**

---

[11] **3,161,148**  
[13] C

[51] **Int.Cl. G06F 1/16 (2006.01) G06Q 20/20 (2012.01) G06K 7/01 (2006.01) G06K 7/08 (2006.01) G06K 7/10 (2006.01) G07F 7/08 (2006.01)**

[25] EN  
[54] **POINT-OF-SALE SYSTEM**  
[54] **SYSTEME DE POINT DE VENDE**

[72] EDWARDS, TROY, US  
[72] SKOOG, LUCAS, US  
[72] BABU, AMISH, US  
[72] DOROGUSKER, JESSE, US  
[73] BLOCK, INC., US  
[86] (3161148)  
[87] (3161148)  
[22] 2013-04-17  
[62] 3,077,485  
[30] US (61/635,236) 2012-04-18  
[30] US (13/797,548) 2013-03-12  
[30] US (13/798,691) 2013-03-13

---

[11] **3,161,751**  
[13] C

[51] **Int.Cl. F16C 11/06 (2006.01) F16C 11/04 (2006.01) G09B 9/12 (2006.01) G09B 9/14 (2006.01)**

[25] EN  
[54] **MOTION SIMULATOR FAULT TOLERANT LOAD CARRYING PIVOT CONNECTION**  
[54] **LIAISON PIVOT PORTEUSE DE CHARGE INSENSIBLE AUX DEFAILLANCES DE SIMULATEUR AVEC SYSTEME DE MOUVEMENT**

[72] DEANGELIS, RICHARD, US  
[72] DE GRAAF, WILLEM A., NL  
[73] MOOG INC., US  
[85] 2022-05-16  
[86] 2020-11-13 (PCT/US2020/060613)  
[87] (WO2021/101818)  
[30] US (62/937,705) 2019-11-19

---

[11] **3,168,044**  
[13] C

[51] **Int.Cl. C01F 11/18 (2006.01)**

[25] EN  
[54] **METHODS AND SYSTEMS FOR TREATMENT OF LIMESTONE TO FORM VATERITE**  
[54] **PROCEDES ET SYSTEMES POUR LE TRAITEMENT DE CALCAIRE POUR FORMER DE LA VATERITE**

[72] WEISS, MICHAEL JOSEPH, US  
[72] GILLIAM, RYAN J., US  
[73] ARELAC, INC., US  
[85] 2022-08-15  
[86] 2021-02-25 (PCT/US2021/019585)  
[87] (WO2021/173784)  
[30] US (62/981,266) 2020-02-25

---

---

[11] **3,162,200**  
[13] C

[51] **Int.Cl. C23C 22/78 (2006.01) C23C 28/00 (2006.01) C23G 1/14 (2006.01) C25D 5/48 (2006.01) C25D 7/06 (2006.01) C25F 1/04 (2006.01)**

[25] EN  
[54] **METHOD FOR MANUFACTURING LAMINATED TINPLATE, A LAMINATED TINPLATE PRODUCED THEREBY AND USE THEREOF**  
[54] **PROCEDE DE FABRICATION DE FER BLANC STRATIFIE, FER BLANC STRATIFIE PRODUIT PAR CE PROCEDE ET UTILISATION DE CELUI-CI**

[72] PENNING, JAN PAUL, NL  
[72] KONDRATIUK, DMITRY, NL  
[73] TATA STEEL IJMUIDEN B.V., NL  
[85] 2022-06-16  
[86] 2020-12-18 (PCT/EP2020/087228)  
[87] (WO2021/123312)  
[30] EP (19218809.2) 2019-12-20

---

[11] **3,166,767**  
[13] C

[51] **Int.Cl. B65G 53/04 (2006.01) E21B 41/00 (2006.01)**

[25] EN  
[54] **DRY PRODUCT ADDITIVE UNIT**  
[54] **UNITE D'ADDITIF DE PRODUIT SEC**

[72] SMITH, JEFF, US  
[72] SHARP, BRIAN, US  
[72] PAYNE, MARK, US  
[73] STEWART & STEVENSON LLC, US  
[86] (3166767)  
[87] (3166767)  
[22] 2022-07-05  
[30] US (17/387,289) 2021-07-28

---

[11] **3,168,044**  
[13] C

[51] **Int.Cl. C01F 11/18 (2006.01)**

[25] EN  
[54] **METHODS AND SYSTEMS FOR TREATMENT OF LIMESTONE TO FORM VATERITE**  
[54] **PROCEDES ET SYSTEMES POUR LE TRAITEMENT DE CALCAIRE POUR FORMER DE LA VATERITE**

[72] WEISS, MICHAEL JOSEPH, US  
[72] GILLIAM, RYAN J., US  
[73] ARELAC, INC., US  
[85] 2022-08-15  
[86] 2021-02-25 (PCT/US2021/019585)  
[87] (WO2021/173784)  
[30] US (62/981,266) 2020-02-25

---

[11] **3,168,744**  
[13] C

[51] **Int.Cl. D21H 27/02 (2006.01) B31D 1/04 (2006.01) B31F 1/12 (2006.01) B31F 1/16 (2006.01) D21F 11/14 (2006.01)**

[25] EN  
[54] **SOFT ABSORBENT SHEETS, STRUCTURING FABRICS FOR MAKING SOFT ABSORBENT SHEETS, AND METHODS OF MAKING SOFT ABSORBENT SHEETS**  
[54] **FEUILLES ABSORBANTES DOUCES, TISSUS STRUCTURANTS POUR LA FABRICATION DE FEUILLES ABSORBANTES DOUCES, ET PROCEDES DE FABRICATION DE FEUILLES ABSORBANTES DOUCES**

[72] SZE, DANIEL HUE MING, US  
[72] FAN, XIAOLIN, US  
[72] CHOU, HUNG-LIANG, US  
[72] ORIAN, TAIYE PHILIPS, US  
[72] ANAND, FARMINDER SINGH, US  
[72] BAUMGARTNER, DEAN JOSEPH, US  
[72] MILLER, JOSEPH HENRY, US  
[73] GPCP IP HOLDINGS LLC, US  
[86] (3168744)  
[87] (3168744)  
[22] 2016-06-08  
[62] 2,982,683  
[30] US (62/172,659) 2015-06-08  
[30] US (15/175,949) 2016-06-07

---

[11] **3,169,085**  
[13] C

[51] **Int.Cl. C21D 8/00 (2006.01) B21D 22/20 (2006.01) B21J 1/02 (2006.01) B21J 5/00 (2006.01) C22C 38/04 (2006.01) C22C 38/06 (2006.01)**

[25] EN  
[54] **METHOD FOR PRODUCING STEEL COMPONENT HAVING LOCALLY SOFTENED PART**  
[54] **PROCEDE DE FABRICATION D'ELEMENT EN ACIER DOTE DE SECTION RAMOLLIE LOCALEMENT**

[72] MIZUTA, NAOKI, JP  
[73] KABUSHIKI KAISHA KOBE SEIKO SHO (KOBE STEEL, LTD.), JP  
[85] 2022-08-12  
[86] 2021-01-15 (PCT/JP2021/001266)  
[87] (WO2021/181866)  
[30] JP (2020-042274) 2020-03-11  
[30] JP (2020-172764) 2020-10-13

---

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,169,181**  
[13] C

[51] **Int.Cl. E21B 34/10 (2006.01) E21B 34/06 (2006.01) E21B 34/12 (2006.01) E21B 34/14 (2006.01) E21B 43/04 (2006.01) E21B 43/08 (2006.01)**

[25] EN

[54] **MULTIPLE SYSTEM PORTS USING A TIME DELAY VALVE**

[54] **ORIFICES DE SYSTEMES UTILISANT UNE VANNE A RETARD TEMPOREL**

[72] NOVELEN, RYAN MICHAEL, US

[72] WILLIAMSON, EDMUND CHRISTOPHER, US

[73] HALLIBURTON ENERGY SERVICES, INC., US

[85] 2022-08-23

[86] 2020-05-08 (PCT/US2020/032193)

[87] (WO2021/225607)

[30] US (16/870,331) 2020-05-08

---

[11] **3,171,299**  
[13] C

[51] **Int.Cl. H04L 9/40 (2022.01) H04L 47/32 (2022.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR PROTECTING A SECURED NETWORK**

[54] **PROCEDES ET SYSTEMES PERMETTANT DE PROTEGER UN RESEAU SECURISE**

[72] ROGERS, STEVEN, US

[72] MOORE, SEAN, US

[73] CENTRIPETAL LIMITED, IE

[86] (3171299)

[87] (3171299)

[22] 2013-08-30

[62] 2,888,935

[30] US (13/657,010) 2012-10-22

---

[11] **3,171,421**  
[13] C

[51] **Int.Cl. E21B 47/13 (2012.01)**

[25] EN

[54] **OPTIMIZING DOWNHOLE DATA COMMUNICATION WITH AT BIT SENSORS AND NODES**

[54] **OPTIMISATION D'UNE COMMUNICATION DE DONNEES DE FOND DE TROU AVEC DES CAPTEURS DE TREPAN ET DES N.UDS**

[72] DERKACZ, PATRICK R., CA

[72] LOGAN, AARON, CA

[72] LOGAN, JUSTIN C., CA

[72] LIU, JILI, CA

[72] SWITZER, DAVID A., CA

[72] HARRIS, ROBERT, CA

[72] BUTERNOWSKY, BARRY DANIEL, CA

[72] WEST, KURTIS, CA

[73] EVOLUTION ENGINEERING INC., CA

[86] (3171421)

[87] (3171421)

[22] 2015-05-08

[62] 2,952,885

[30] US (62/015,817) 2014-06-23

---

[11] **3,171,424**  
[13] C

[51] **Int.Cl. B01D 15/08 (2006.01)**

[25] EN

[54] **PROCESS, METHOD, AND SYSTEM FOR REMOVING HEAVY METALS FROM FLUIDS**

[54] **PROCESSUS, PROCEDE ET SYSTEME POUR ELIMINER DES METAUX LOURDS A PARTIR DE FLUIDES**

[72] COOPER, RUSSELL EVAN, US

[72] O'REAR, DENNIS JOHN, US

[72] YEAN, SUJIN, US

[72] ODUEYUNGBO, SEYI ABIODUN, US

[73] CHEVRON U.S.A. INC., US

[86] (3171424)

[87] (3171424)

[22] 2014-03-04

[62] 2,898,232

[30] US (13/826,213) 2013-03-14

---

[11] **3,172,059**  
[13] C

[51] **Int.Cl. F21K 99/00 (2016.01) F21L 4/00 (2006.01) F21L 4/02 (2006.01) F21L 4/04 (2006.01) F21L 4/08 (2006.01) F21L 13/00 (2006.01)**

[25] EN

[54] **PORTABLE LIGHT AND KEYED RECHARGEABLE USB BATTERY**

[54] **LAMPE PORTATIVE ET BATTERIE USB RECHARGEABLE A DETROMPAGE**

[72] SHARRAH, RAYMOND L., US

[72] EICHELBERGER, CLEATIS A., US

[72] BORIS, THOMAS D., US

[73] STREAMLIGHT, INC., US

[85] 2022-09-16

[86] 2022-01-04 (PCT/US2022/011090)

[87] (WO2022/155027)

[30] US (63/136,900) 2021-01-13

[30] US (17/567,637) 2022-01-03

---

[11] **3,174,658**  
[13] C

[51] **Int.Cl. E02B 3/10 (2006.01)**

[25] FR

[54] **WATER DIKE**

[54] **DIGUE D'EAU**

[72] GILES, NORMAND, CA

[73] GILES, NORMAND, CA

[86] (3174658)

[87] (3174658)

[22] 2022-09-16

---

[11] **3,177,017**  
[13] C

[51] **Int.Cl. C10L 5/00 (2006.01)**

[25] EN

[54] **HIGH-QUALITY COKE PRODUCTS**

[54] **PRODUITS DE COKE DE GRANDE QUALITE**

[72] QUANCI, JOHN FRANCIS, US

[72] PERKINS, JONATHAN, US

[73] SUNCOKE TECHNOLOGY AND DEVELOPMENT LLC, US

[85] 2022-10-26

[86] 2021-05-03 (PCT/US2021/030520)

[87] (WO2021/225988)

[30] US (63/019,405) 2020-05-03

**Brevets canadiens délivrés  
16 avril 2024**

[11] **3,183,810**  
[13] C

- [51] **Int.Cl. H02K 49/10 (2006.01)**  
[25] EN  
[54] **MAGNETIC DRIVE HAVING A LIQUID-COOLED HIGH TORQUE AND HIGH POWER APPARATUS**  
[54] **COMMANDE MAGNETIQUE A COUPLE ELEVE REFROIDI PAR LIQUIDE ET APPAREIL DE GRANDE PUISSANCE**  
[72] CORBIN III, PHILIP, US  
[72] BRAUN, RICHARD, US  
[72] SPARKS, MICHAEL TROY, US  
[73] FLUX DRIVE LLC, US  
[85] 2022-12-21  
[86] 2020-11-12 (PCT/US2020/060073)  
[87] (WO2021/262220)  
[30] US (16/909,989) 2020-06-23

[11] **3,184,305**  
[13] C

- [51] **Int.Cl. C10M 163/00 (2006.01) C10M 137/10 (2006.01) C10M 159/20 (2006.01)**  
[25] EN  
[54] **MIXED FLEET CAPABLE LUBRICATING COMPOSITIONS**  
[54] **COMPOSITIONS DE LUBRIFICATION CAPABLES DE FLOTTE MIXTE**  
[72] GILES, NICHOLAS, US  
[72] RITZENTHALER, ABAIGEAL, US  
[72] DONHAM, LEAH, US  
[73] AFTON CHEMICAL CORPORATION, US  
[86] (3184305)  
[87] (3184305)  
[22] 2022-12-15  
[30] US (17/557828) 2021-12-21

[11] **3,184,405**  
[13] C

- [51] **Int.Cl. B01D 21/00 (2006.01) B01D 21/24 (2006.01) B65D 43/02 (2006.01) B65D 43/14 (2006.01) C21B 7/14 (2006.01) E04D 3/24 (2006.01)**  
[25] EN  
[54] **LAUNDER COVER AND COVER SYSTEM AND PROCESSES TO MAKE LAUNDER COVER ASSEMBLIES**  
[54] **COUVERCLE DE CHENAL ET SYSTEME DE COUVERCLE ET PROCESSUS POUR FABRIQUER DES ENSEMBLES DE COUVERCLE DE CHENAL DE COULEE**  
[72] SCHMIDT, KEVIN GEORGE, US  
[72] BARBERA, GUSTAVO, US  
[72] JOSHI, ROHIT, US  
[73] ENDURO COMPOSITES, INC., US  
[85] 2022-12-28  
[86] 2021-06-29 (PCT/US2021/039603)  
[87] (WO2022/006098)  
[30] US (63/045,309) 2020-06-29

[11] **3,185,610**  
[13] C

- [51] **Int.Cl. F41H 11/02 (2006.01) F41H 11/04 (2006.01) F42B 4/24 (2006.01) F42B 12/56 (2006.01) F42B 12/70 (2006.01)**  
[25] EN  
[54] **APPARATUS AND CONTROL OF A SINGLE OR MULTIPLE SOURCES TO FIRE COUNTERMEASURE EXPENDABLES**  
[54] **APPAREIL ET COMMANDE D'UNE SOURCE UNIQUE OU MULTIPLE A DES CONSOMMABLES DE CONTRE-MESURE D'INCENDIE**  
[72] BRANCH, JASON H., US  
[72] HERB, KARL P., US  
[72] PLEMONS, DANNY L., US  
[73] BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION INC., US  
[85] 2022-11-29  
[86] 2021-05-25 (PCT/US2021/033952)  
[87] (WO2021/242707)  
[30] US (16/888,035) 2020-05-29

[11] **3,192,244**  
[13] C

- [51] **Int.Cl. A47G 25/40 (2006.01)**  
[25] EN  
[54] **FOLDABLE HANGER**  
[54] **CINTRE PLIABLE**  
[72] JAKES, BORIS, SK  
[72] JAKES, ZDENEK, SK  
[73] JAKES, BORIS, SK  
[85] 2023-02-15  
[86] 2020-09-29 (PCT/SK2020/050017)  
[87] (WO2022/071895)

[11] **3,197,012**  
[13] C

- [51] **Int.Cl. E21B 17/042 (2006.01) E21B 17/043 (2006.01)**  
[25] EN  
[54] **SELF-LOCKING THREADED CONNECTION PARTIALLY IN NON-LOCKING ENGAGEMENT**  
[54] **CONNEXION FILETÉE AUTOBLOQUANTE PARTIELLEMENT EN PRISE SANS BLOCAGE**  
[72] OTT, WESLEY, FR  
[72] VAN GORP, LOGAN, FR  
[72] GRANGER, SCOTT, FR  
[73] VALLOUREC OIL AND GAS FRANCE, FR  
[73] NIPPON STEEL CORPORATION, JP  
[85] 2023-04-28  
[86] 2021-10-20 (PCT/EP2021/079122)  
[87] (WO2022/090034)  
[30] EP (20204267.7) 2020-10-28

[11] **3,198,973**  
[13] C

- [51] **Int.Cl. C30B 9/14 (2006.01) C01B 32/15 (2017.01) C01B 32/16 (2017.01) C01B 32/168 (2017.01) C01B 32/20 (2017.01) C25B 1/135 (2021.01) C25B 9/09 (2021.01) C25B 15/08 (2006.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR PRODUCTION OF DOPED CARBON NANOMATERIALS**  
[54] **PROCEDES ET SYSTEMES DE PRODUCTION DE NANOMATERIAUX DE CARBONE DOPES**  
[72] LICHT, STUART, US  
[73] C2CNT LLC, US  
[86] (3198973)  
[87] (3198973)  
[22] 2018-02-21  
[62] 3,052,483  
[30] US (62/461,641) 2017-02-21

**Canadian Patents Issued  
April 16, 2024**

---

[11] **3,198,982**  
[13] C

[51] **Int.Cl. C30B 9/14 (2006.01) C01B 32/15 (2017.01) C01B 32/154 (2017.01) C25B 1/135 (2021.01) C25B 9/09 (2021.01) C25B 15/08 (2006.01) C30B 29/02 (2006.01) C30B 29/66 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR PRODUCTION OF DOPED CARBON NANOMATERIALS**

[54] **PROCEDES ET SYSTEMES DE PRODUCTION DE NANOMATERIAUX DE CARBONE DOPES**

[72] LICHT, STUART, US

[73] C2CNT LLC, US

[86] (3198982)

[87] (3198982)

[22] 2018-02-21

[62] 3,052,483

[30] US (62/461,641) 2017-02-21

---

[11] **3,200,118**  
[13] C

[51] **Int.Cl. G02C 7/02 (2006.01) G02C 7/06 (2006.01) G02C 7/16 (2006.01)**

[25] EN

[54] **SPECTACLE LENS DESIGN, SPECTACLE LENS KIT AND METHOD OF MANUFACTURING A SPECTACLE LENS**

[54] **CONCEPTION DE VERRE DE LUNETTES, KIT DE VERRE DE LUNETTES ET PROCEDE DE FABRICATION D'UN VERRE DE LUNETTES**

[72] BRAUNGER, DIETER, DE

[73] CARL ZEISS VISION INTERNATIONAL GMBH, DE

[85] 2023-05-25

[86] 2021-11-26 (PCT/EP2021/083245)

[87] (WO2022/112531)

[30] EP (20211634.9) 2020-11-26

---

---

[11] **3,202,627**  
[13] C

[51] **Int.Cl. A23L 2/84 (2006.01) A23L 7/104 (2016.01) A23C 11/10 (2021.01) A23J 1/12 (2006.01)**

[25] EN

[54] **METHOD FOR OBTAINING A LIQUID FOOD PRODUCT AND LIQUID FOOD PRODUCT OBTAINED THEREOF**

[54] **PROCEDE D'OBTENTION D'UN PRODUIT ALIMENTAIRE LIQUIDE ET PRODUIT ALIMENTAIRE LIQUIDE OBTENU A PARTIR DE CELUI-CI**

[72] ERRA SERRABASA, JOSEP M., ES

[72] NEBRA SOLER, MONTSE, ES

[72] CASTINEIRA BUSQUETS, LAURA, ES

[72] CASARAMONA CODINACH, JORDI, ES

[72] BERNAT PEREZ, NEUS, ES

[72] ABAD SANCHEZ, SERGI, ES

[72] GUTIERREZ MONTERO, ALBA, ES

[73] LIQUATS VEGETALS, SA, ES

[85] 2023-06-16

[86] 2022-08-31 (PCT/EP2022/074154)

[87] (WO2023/099052)

[30] EP (PCT/EP2021/083977) 2021-12-02

---

[11] **3,204,334**  
[13] C

[51] **Int.Cl. A01G 25/09 (2006.01) A01G 25/16 (2006.01)**

[25] EN

[54] **CONDITION BASED MONITORING OF IRRIGATION**

[54] **SURVEILLANCE D'IRRIGATION BASEE SUR DES CONDITIONS**

[72] SANDERS, RUSSELL, US

[72] PAVELSKI, JEREMIE, US

[72] BUCHBURGER, ROBERT, US

[73] HEARTLAND AG TECH, INC., US

[85] 2023-06-05

[86] 2021-12-22 (PCT/US2021/064900)

[87] (WO2022/140569)

[30] US (63/129,799) 2020-12-23

---

---

[11] **3,208,266**  
[13] C

[51] **Int.Cl. A61M 5/142 (2006.01) A61M 5/158 (2006.01) A61M 5/20 (2006.01) A61M 5/32 (2006.01) A61M 5/42 (2006.01)**

[25] EN

[54] **INFUSION SET AND INSERTER ASSEMBLY SYSTEMS AND METHODS**

[54] **ENSEMBLE DE PERFUSION, SYSTEMES D'ENSEMBLE D'INSERTION ET PROCEDES**

[72] LANIGAN, RICHARD J., US

[72] FERRIS, JOSHUA I., US

[73] DEKA PRODUCTS LIMITED PARTNERSHIP, US

[86] (3208266)

[87] (3208266)

[22] 2020-02-21

[62] 3,126,999

[30] US (62/809,248) 2019-02-22

---

[11] **3,214,308**  
[13] C

[51] **Int.Cl. C08L 23/10 (2006.01)**

[25] EN

[54] **MIXED-PLASTICS-POLYPROPYLENE BLEND**

[54] **MELANGE DE MATIERES PLASTIQUES MIXTES ET DE POLYPROPYLENE**

[72] TRAN, TUAN ANH, AT

[72] LOPES FILIPE, SUSANA, AT

[72] NAGL, ANDREAS, AT

[72] MACHL, DORIS, AT

[72] ROSSLER-CZERMAK, ANDREAS, AT

[73] BOREALIS AG, AT

[85] 2023-09-20

[86] 2022-03-25 (PCT/EP2022/057953)

[87] (WO2022/200588)

[30] EP (21165397.7) 2021-03-26

[30] EP (21189650.1) 2021-08-04

---

**Brevets canadiens délivrés**  
**16 avril 2024**

[11] **3,214,344**

[13] C

- [51] **Int.Cl. C10L 9/06 (2006.01) C10B 57/08 (2006.01)**  
[25] EN  
[54] **OXIDATION DEVICE, OXIDATION METHOD, AND METHOD FOR PRODUCING MODIFIED FUEL**  
[54] **DISPOSITIF D'OXYDATION, PROCEDE D'OXYDATION ET PROCEDE POUR LA PRODUCTION DE COMBUSTIBLE MODIFIE**  
[72] SEKIMOTO, KENICHI, JP  
[72] MORI, EIICHIROH, JP  
[73] NIPPON STEEL ENGINEERING CO., LTD., JP  
[85] 2023-10-03  
[86] 2022-03-15 (PCT/JP2022/011733)  
[87] (WO2022/270046)  
[30] JP (2021-104606) 2021-06-24

[11] **3,216,992**

[13] C

- [51] **Int.Cl. B01D 53/32 (2006.01) C01B 32/166 (2017.01) C25B 1/135 (2021.01) B01D 53/62 (2006.01) B01D 53/77 (2006.01) C25C 7/00 (2006.01) C25C 7/02 (2006.01)**  
[25] EN  
[54] **APPARATUS, SYSTEM AND METHOD FOR DIRECT CAPTURE OF CARBON-CONTAINING GAS**  
[54] **APPAREIL, SYSTEME ET PROCEDE DE CAPTURE DIRECTE DE GAZ CONTENANT DU CARBONE**  
[72] LICHT, STUART, US  
[72] LICHT, GAD, US  
[73] DIRECT AIR CAPTURE, LLC, US  
[85] 2023-10-26  
[86] 2022-04-26 (PCT/US2022/026365)  
[87] (WO2022/232155)  
[30] US (63/179,778) 2021-04-26  
[30] US (63/305,544) 2022-02-01  
[30] US (63/318,944) 2022-03-11

[11] **3,218,837**

[13] C

- [51] **Int.Cl. G01N 27/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR SMART MATERIAL MONITORING**  
[54] **SYSTEME ET PROCEDE PERMETTANT UNE SURVEILLANCE INTELLIGENTE D'UN MATERIAU**  
[72] AGOSTINELLI, GREGORY A., CA  
[72] HANNA, STEVEN NASHED, US  
[72] MIREL, IONUT ALEXANDRU, CA  
[73] IDEACURIA INC., CA  
[86] (3218837)  
[87] (3218837)  
[22] 2016-06-10  
[62] 2,989,096  
[30] US (62/174,918) 2015-06-12

[11] **3,224,834**

[13] C

- [51] **Int.Cl. G01S 13/02 (2006.01) B60W 50/14 (2020.01) H04L 67/12 (2022.01) G07C 5/08 (2006.01)**  
[25] EN  
[54] **A SYSTEM FOR INSTALLING, OPERATING AND CONFIGURING AFTERMARKET VEHICLE SAFETY SYSTEMS**  
[54] **SYSTEME D'INSTALLATION, DE FONCTIONNEMENT ET DE CONFIGURATION DE SYSTEMES DE SECURITE DE VEHICULES AUTOMOBILES APRES VENTE**  
[72] WOODFORD, PETER, AU  
[73] AUSTRALIAN MITIGATION ENGINEERING DEVELOPMENTS PTY LTD, AU  
[85] 2024-01-03  
[86] 2022-07-06 (PCT/AU2022/050705)  
[87] (WO2023/279158)  
[30] AU (2021902058) 2021-07-06

# Canadian Applications Open to Public Inspection

March 31, 2024 to April 6, 2024

## Demandes canadiennes mises à la disponibilité du public

31 mars 2024 au 6 avril 2024

---

[21] **3,178,210**  
[13] A1  
[51] **Int.Cl. C07F 9/12 (2006.01) C09D 7/63 (2018.01) C09D 7/65 (2018.01) C09K 23/14 (2022.01) C07F 9/117 (2006.01) C08G 63/91 (2006.01) C08K 5/521 (2006.01) C09D 11/00 (2014.01)**  
[25] EN  
[54] **PHOSPHORIC ACID ESTERS, METHOD OF SYNTHETIZING THEM AND USE THEREOF AS DISPERSANTS**  
[54] **ESTERS D'ACIDE PHOSPHORIQUE, METHODE DE SYNTHESE ET UTILISATION CONNEXE COMME DISPERSANTS**  
[72] MOUSTAFA, ESLAM, EG  
[72] ABOULELA, EFFAT, EG  
[71] DELTA SPECIALTIES, EG  
[22] 2022-10-03  
[41] 2024-04-03

---

[21] **3,178,281**  
[13] A1  
[51] **Int.Cl. G08G 9/00 (2006.01) G08G 5/00 (2006.01)**  
[25] FR  
[54] **COLLABORATIVE NAVIGATION PROCESS FOR VEHICLES WITH DIFFERENT ACCURACIES**  
[54] **PROCEDE DE NAVIGATION COLLABORATIVE POUR DES VEHICULES DISPOSANT DE SOLUTIONS DE NAVIGATION DE PRECISIONS DIFFERENTES**  
[72] FEYEL, PHILIPPE, FR  
[72] ELIE, PHILIPPE, FR  
[71] SAFRAN ELECTRONICS & DEFENSE, FR  
[71] SAFRAN ELECTRONICS & DEFENSE CANADA, CA  
[22] 2022-10-03  
[41] 2024-04-03

---

[21] **3,178,332**  
[13] A1  
[51] **Int.Cl. G06Q 90/00 (2006.01) G06Q 50/18 (2012.01)**  
[25] EN  
[54] **PRIVATE LEGAL SYSTEM**  
[54] **SYSTEME JURIDIQUE PRIVE**  
[72] WYMAN, BLAKE, CA  
[71] WYMAN, BLAKE, CA  
[22] 2022-10-04  
[41] 2024-04-04

---

[21] **3,178,441**  
[13] A1  
[51] **Int.Cl. H04L 12/00 (2006.01) H04L 41/16 (2022.01) H04L 9/00 (2022.01) H04L 9/32 (2006.01)**  
[25] EN  
[54] **DATA TRANSMISSION BETWEEN DEVICES**  
[54] **TRANSMISSION DE DONNEES ENTRE LES DISPOSITIFS**  
[72] NICOLA, WILTEN, CA  
[72] GRUBER, AARON, CA  
[71] NICOLA, WILTEN, CA  
[71] GRUBER, AARON, CA  
[22] 2022-10-05  
[41] 2024-04-05

---

[21] **3,178,514**  
[13] A1  
[51] **Int.Cl. E06B 9/42 (2006.01) E06B 9/40 (2006.01)**  
[25] EN  
[54] **ROLL-UP CONTROL DEVICE FOR ROLLER SHADE**  
[54] **DISPOSITIF DE COMMANDE D-ENROULEMENT POUR UN STORE A ROULEAU**  
[72] WANG, CHIH-YUNG, TW  
[71] WANG, CHIH-YUNG, TW  
[22] 2022-10-06  
[41] 2024-04-06

---

[21] **3,178,519**  
[13] A1  
[51] **Int.Cl. G08B 25/10 (2006.01) G06Q 10/063 (2023.01) G08B 27/00 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR PROVIDING EMERGENCY RESPONSE AT LARGE-SCALE EVENTS**  
[54] **SYSTEME ET METHODE POUR FOURNIR UNE INTERVENTION D-URGENCE A DES EVENEMENTS A GRANDE ECHELLE**  
[72] HART, WILLIAM, CA  
[72] ROSS, TYLER, CA  
[72] STOYANCHEV, KALIN, US  
[71] EVENTPREP CANADA INC., CA  
[22] 2022-10-05  
[41] 2024-04-05

---

[21] **3,178,530**  
[13] A1  
[51] **Int.Cl. A01K 1/03 (2006.01) A01K 1/02 (2006.01) A01K 5/00 (2006.01)**  
[25] FR  
[54] **REHABILITATION/RELEASE CAGE, NEST BOXES AND RELEASE PROCESS FOR EASTERN GREY SQUIRRELS (SCIURUS CAROLINENSIS)**  
[54] **CAGE DE REHABILITATION/RELACHE, BOITES-NIDS ET PROCESSUS DE RELACHE POUR ECUREUILS GRIS (SCIURUS CARFOLINENSIS)**  
[72] PAGACZ, DOMINIK, CA  
[71] PAGACZ, DOMINIK, CA  
[22] 2022-10-05  
[41] 2024-04-05



**Demandes canadiennes mises à la disponibilité du public**  
**31 mars 2024 au 6 avril 2024**

---

[21] **3,178,562**  
[13] A1

[51] **Int.Cl. B60R 1/00 (2022.01)**  
[25] EN  
[54] **PARKING ASSISTIVE SYSTEM AND METHOD THEREOF**  
[54] **SYSTEME ET METHODE D'AIDE AU STATIONNEMENT**  
[72] YOON, YONG SAN, CA  
[71] YOON, YONG SAN, CA  
[22] 2022-10-05  
[41] 2024-04-05

---

[21] **3,178,693**  
[13] A1

[51] **Int.Cl. A61F 11/14 (2006.01) A41D 13/05 (2006.01)**  
[25] EN  
[54] **EAR COVERING DEVICE**  
[54] **DISPOSITIF COUVRE-OREILLE**  
[72] PYE, WADE, CA  
[71] PYE, WADE, CA  
[22] 2022-10-07  
[41] 2024-04-06  
[30] US (17/938,356) 2022-10-06

---

[21] **3,179,677**  
[13] A1

[51] **Int.Cl. E06B 9/15 (2006.01) E06B 9/11 (2006.01) E06B 9/34 (2006.01)**  
[25] EN  
[54] **ROLLING SHUTTER RETRACTABLE STOP BAR**  
[54] **BUTEE RETRACTABLE POUR VOLET A ROULEAU**  
[72] ZARBECK, CRAIG N., US  
[72] AMIL, ORLANDO, US  
[71] QUALITAS MANUFACTURING INCORPORATED, US  
[22] 2022-10-19  
[41] 2024-04-03  
[30] US (17/958,588) 2022-10-03

---

[21] **3,179,847**  
[13] A1

[51] **Int.Cl. H04L 9/32 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR PROVIDING MULTI-CHANNEL AUTHENTICATION**  
[54] **SYSTEME ET METHODE POUR FOURNIR UNE AUTHENTIFICATION MULTICANALE**  
[72] LIDDY, JAQUELYN, CA  
[72] ALLEN, ROBERT DEAN, CA  
[72] HAMMOND, JOEL DAVID, CA  
[72] PONNAMANENI, VAMSHIDAR, CA  
[72] TEVLIN, RYAN JAMES, CA  
[72] SANTOS, SARA SABRINA ALBUEN, CA  
[72] JONES, RICHARD, CA  
[72] NAICK, BIJOY, CA  
[72] HOXHA, BLERINA, CA  
[72] KESTAY, MERAD, CA  
[72] BOUCHARD, CATHARINE EUGENIE, CA  
[72] KUNDLEY, ANIRUDDHA PRAKASH, CA  
[72] GREENFIELD, MEREDITH KATHARINE CARTER, CA  
[71] THE TORONTO-DOMINION BANK, CA  
[22] 2022-10-25  
[41] 2024-04-05  
[30] US (17/960,189) 2022-10-05

---

[21] **3,192,964**  
[13] A1

[51] **Int.Cl. H05B 47/00 (2020.01) H05B 45/00 (2022.01) H05B 45/20 (2020.01) H05B 47/11 (2020.01) A47G 29/12 (2006.01) H02J 7/35 (2006.01)**  
[25] EN  
[54] **LUMINAIRE FOR USE WITH A MAILBOX**  
[54] **APPAREIL D'ECLAIRAGE POUR BOITE AUX LETTRES**  
[72] SHERMAN, DAVID, CA  
[71] SHERMAN, DAVID, CA  
[22] 2023-03-14  
[41] 2024-04-05  
[30] US (63/413,289) 2022-10-05

---

[21] **3,197,430**  
[13] A1

[51] **Int.Cl. H02J 15/00 (2006.01) H02K 1/06 (2006.01)**  
[25] EN  
[54] **PORTABLE POWER STORAGE DEVICE WITH A SELF-GENERATION AND NANO-CAPACITOR STORAGE STRUCTURE**  
[54] **DISPOSITIF DE STOCKAGE DE PUISSANCE PORTATIF COMPRENANT UNE STRUCTURE DE STOCKAGE A AUTOPRODUCTION ET NANOCONDENSATEUR**  
[72] JANG, SUK HO, KR  
[71] JANG, SUK HO, KR  
[22] 2023-04-18  
[41] 2024-04-05  
[30] KR (10-2022-0126864) 2022-10-05

---

[21] **3,199,063**  
[13] A1

[51] **Int.Cl. C07C 7/144 (2006.01) A23L 33/10 (2016.01) A23L 33/105 (2016.01) A61K 9/00 (2006.01) A61K 31/01 (2006.01) A61K 31/352 (2006.01)**  
[25] EN  
[54] **POST EXTRACTION PURIFICATION OF TERPENES**  
[54] **EPURATION DE TERPENES APRES L'EXTRACTION**  
[72] CAREY, CHAD ARTHUR, US  
[71] VAPOR OIL TECHNOLOGY LLC, US  
[22] 2023-05-08  
[41] 2024-04-05  
[30] US (17/990,991) 2022-11-21  
[30] US (17/960,682) 2022-10-05

---

[21] **3,199,065**  
[13] A1

[51] **Int.Cl. C07D 311/80 (2006.01)**  
[25] EN  
[54] **THIN FILM OXIDATION OF CRYSTALLIZED CANNABIS PRODUCTS**  
[54] **OXYDATION DE COUCHE MINCE DE PRODUITS DE CANNABIS CRISTALLISES**  
[72] CAREY, CHAD ARTHUR, US  
[71] VAPOR OIL TECHNOLOGY LLC, US  
[22] 2023-05-08  
[41] 2024-04-05  
[30] US (17/960,682) 2022-10-05

**Canadian Applications Open to Public Inspection  
March 31, 2024 to April 6, 2024**

---

[21] **3,207,119**  
[13] A1

[25] EN  
[54] **NUCLEAR REACTOR NEUTRON REFLECTOR**  
[54] **REFLECTEUR DE NEUTRONS POUR UN REACTEUR NUCLEAIRE**  
[72] LUCAS, TIMOTHY RYAN, US  
[72] SAITTA, MICHAEL, US  
[72] BEIRNAERT, GWENNAEL, US  
[72] VAN STADEN, MARTIN PETER, US  
[71] X-ENERGY, LLC, US  
[22] 2023-07-20  
[41] 2024-04-01  
[30] US (17/958.363) 2022-10-01

---

[21] **3,207,170**  
[13] A1

[51] **Int.Cl. F16K 17/00 (2006.01) B64D 47/00 (2006.01) F16K 21/00 (2006.01)**  
[25] EN  
[54] **PRESSURE REGULATING SHUT-OFF VALVE**  
[54] **ROBINET D'ARRET DE REGULATION DE PRESSION**  
[72] MORNACCHI, ANDREA, IT  
[72] QUAGLIA, ENRICO, IT  
[72] CAPPO, MATTEO, IT  
[71] MICROTECNICA S.R.L., IT  
[22] 2023-07-11  
[41] 2024-04-03  
[30] EP (22199392.6) 2022-10-03

---

[21] **3,207,176**  
[13] A1

[51] **Int.Cl. F16K 17/06 (2006.01) B64D 47/00 (2006.01) F16K 31/06 (2006.01)**  
[25] EN  
[54] **VALVE ASSEMBLY**  
[54] **ASSEMBLAGE DE SOUPE**  
[72] MEZZINO, GIACOMO, IT  
[72] SALVATORIELLO, GIANFRANCO, IT  
[71] MICROTECNICA S.R.L., IT  
[22] 2023-07-11  
[41] 2024-04-04  
[30] EP (22425046.4) 2022-10-04

---

[21] **3,207,899**  
[13] A1

[51] **Int.Cl. B64C 11/20 (2006.01) B29C 70/08 (2006.01) B63H 1/26 (2006.01) B64C 27/473 (2006.01) F01D 5/14 (2006.01)**  
[25] EN  
[54] **PROPELLER BLADE**  
[54] **PALE D'HELICE**  
[72] AMAT, PASCAL, FR  
[72] PICOT, OLIVIER, FR  
[71] RATIER-FIGEAC SAS, FR  
[22] 2023-07-28  
[41] 2024-04-03  
[30] EP (22306464.3) 2022-10-03

---

[21] **3,208,165**  
[13] A1

[51] **Int.Cl. G06K 7/10 (2006.01) G06V 30/40 (2022.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR DETERMINING THE AUTHENTICITY OF AN IDENTITY DOCUMENT**  
[54] **METHODES ET SYSTEMES POUR DETERMINER L~AUTHENTICITE D~UN DOCUMENT D~IDENTITE**  
[72] RODRIGUEZ, RAPHAEL A., US  
[71] RODRIGUEZ, RAPHAEL A., US  
[22] 2023-08-02  
[41] 2024-04-04  
[30] US (17/959,731) 2022-10-04  
[30] US (18/096,644) 2023-01-13  
[30] US (18/177,989) 2023-03-03

---

[21] **3,209,645**  
[13] A1

[51] **Int.Cl. B32B 7/02 (2019.01) B32B 9/04 (2006.01) B32B 9/06 (2006.01) B32B 23/06 (2006.01) B32B 27/08 (2006.01) B32B 27/10 (2006.01) B32B 37/02 (2006.01) B65D 30/08 (2006.01)**  
[25] EN  
[54] **MULTILAYER PACKAGING MATERIAL AND METHOD FOR MAKING SAME**  
[54] **MATERIAU D~EMBALLAGE MULTICOUCHE ET METHODE DE FABRICATION**  
[72] MEKONNEN, TIZAZU, CA  
[72] ESLAMI, HORMOZ, CA  
[71] MEKONNEN, TIZAZU, CA  
[71] ESLAMI, HORMOZ, CA  
[22] 2023-08-18  
[41] 2024-04-06  
[30] US (63/475,008) 2022-10-06

---

[21] **3,209,968**  
[13] A1

[51] **Int.Cl. H01P 5/00 (2006.01) H04B 3/14 (2006.01) H04B 3/46 (2015.01)**  
[25] EN  
[54] **CABLE NETWORK DEVICE WITH LOW LOSS MEASUREMENT PORT**  
[54] **DISPOSITIF DE RESEAU DE CABLES DISPOSANT D'UN PORT DE MESURE A FAIBLES PERTES**  
[72] ARIESEN, JAN, NL  
[72] BOGAJ, PREMTON, NL  
[72] LARO, MATTHIJS, NL  
[71] TECHNETIX B.V., NL  
[22] 2023-08-23  
[41] 2024-04-04  
[30] GB (2214602.1) 2022-10-04

---

[21] **3,210,714**  
[13] A1

[51] **Int.Cl. A47G 19/32 (2006.01) A47G 19/26 (2006.01) A47J 47/02 (2006.01) B65D 21/036 (2006.01) B65D 25/28 (2006.01)**  
[25] EN  
[54] **SERVING DISH COVER**  
[54] **COUVERCLE POUR PLAT DE SERVICE**  
[72] YEE, TEO SOK, US  
[72] VERCRUYSSSEN, ALEC, US  
[72] LORRE, ARTHUR, US  
[71] DART INDUSTRIES INC., US  
[22] 2023-08-31  
[41] 2024-04-06  
[30] US (17/961,503) 2022-10-06

**Demandes canadiennes mises à la disponibilité du public**  
**31 mars 2024 au 6 avril 2024**

[21] **3,210,761**  
[13] A1

[51] **Int.Cl. B64D 31/00 (2024.01) B60K 6/00 (2007.10) B64D 27/00 (2006.01)**  
 [25] EN  
 [54] **OVERSPEED AND/OR OVERTORQUE PROTECTION FOR HYBRID ELECTRIC AIRCRAFT PROPULSION SYSTEM**  
 [54] **PROTECTION CONTRE LA SURVITESSE ET/OU LE SURCOUPLE POUR UN SYSTEME DE PROPULSION D'AERONEF ELECTRIQUE HYBRIDE**  
 [72] SYED, YUSUF, CA  
 [72] RICCI, THOMAS TREVOR, CA  
 [72] JARVO, JAMES ROBERT, CA  
 [71] PRATT & WHITNEY CANADA CORP., CA  
 [22] 2023-08-31  
 [41] 2024-04-04  
 [30] US (17/937,871) 2022-10-04

[21] **3,210,921**  
[13] A1

[51] **Int.Cl. B32B 27/00 (2006.01) B29C 65/50 (2006.01) B32B 7/12 (2006.01) B32B 13/12 (2006.01) B32B 27/04 (2006.01) B32B 37/10 (2006.01) B32B 37/12 (2006.01) E04B 1/80 (2006.01) E04D 1/20 (2006.01) E04D 1/28 (2006.01)**  
 [25] EN  
 [54] **WATER-RESISTANT ROOF COVERBOARD PANELS**  
 [54] **PANNEAUX DE GARNISSAGE DE TOIT RESISTANTS A L'EAU**  
 [72] WINTEROWD, JACK G., US  
 [72] SPENCER, MATTHEW, US  
 [72] SUPUT, MARKO, US  
 [72] FISHER, MYA, US  
 [71] CONTINUUS MATERIALS INTELLECTUAL PROPERTY, LLC, US  
 [22] 2023-09-01  
 [41] 2024-04-03  
 [30] US (18/300,047) 2023-04-13  
 [30] US (63/412,594) 2022-10-03

[21] **3,213,290**  
[13] A1

[51] **Int.Cl. B60R 13/01 (2006.01)**  
 [25] EN  
 [54] **TRUCK BED LINER WITH CUSHIONING ELEMENTS**  
 [54] **DOUBLURE DE CAISSE DE CAMION COMPORTANT DES ELEMENTS COUSSINES**  
 [72] MASANEK, FREDERICK W., JR., US  
 [72] BUNDA, ANDRZEJ, US  
 [71] MACNEIL IP LLC, US  
 [22] 2023-09-18  
 [41] 2024-04-04  
 [30] US (17/959,715) 2022-10-04

[21] **3,213,499**  
[13] A1

[51] **Int.Cl. G06Q 40/03 (2023.01) G06Q 20/24 (2012.01) G06Q 30/06 (2023.01)**  
 [25] EN  
 [54] **INTEGRATION OF FINANCING INTO A CUSTOMER SELF-CHECKOUT INVOLVING SCANNING PRODUCTS WITH A USER DEVICE**  
 [54] **INTEGRATION DU FINANCEMENT DANS UNE CAISSE LIBRE-SERVICE CLIENT COMPRENANT LE BALAYAGE DE PRODUITS AVEC UN DISPOSITIF UTILISATEUR**  
 [72] GLOVER, ELLEN, US  
 [72] KARTHIKEYAN, AJAI, US  
 [72] TANG, NELSON, CA  
 [71] AFFIRM, INC., US  
 [22] 2023-09-21  
 [41] 2024-04-03  
 [30] US (17/958,641) 2022-10-03

[21] **3,213,681**  
[13] A1

[51] **Int.Cl. F04B 53/16 (2006.01) F04B 47/00 (2006.01)**  
 [25] EN  
 [54] **POWER END MOUNT PLATE**  
 [54] **PLAQUE DE MONTAGE ELECTRIQUE D'EXTREMITE**  
 [72] KAY, KONNER CASEY, US  
 [71] GD ENERGY PRODUCTS, LLC, US  
 [22] 2023-09-22  
 [41] 2024-04-03  
 [30] US (17/958,633) 2022-10-03  
 [30] US (18/096,901) 2023-01-13

[21] **3,213,919**  
[13] A1

[25] EN  
 [54] **STOCHASTIC CONTENT CANDIDATE SELECTION FOR CONTENT RECOMMENDATION**  
 [54] **SELECTION DE CANDIDAT DE CONTENU STOCHASTIQUE POUR UNE RECOMMANDATION DE CONTENU**  
 [72] BAMBHA, ABHISHEK, US  
 [72] MAHTO, ROHIT, US  
 [72] VO, NAM, US  
 [72] WANG, ZIDONG, US  
 [72] XIAO, FEI, US  
 [71] ROKU, INC., US  
 [22] 2023-09-22  
 [41] 2024-04-03  
 [30] US (17/937497) 2022-10-03

[21] **3,214,089**  
[13] A1

[51] **Int.Cl. B65G 47/252 (2006.01) B65G 47/40 (2006.01)**  
 [25] EN  
 [54] **SHIFTING, RE-ORIENTING, ORGANIZING, AND/OR ROUTING OBJECTS INCLUDING PARCELS AND PACKAGES**  
 [54] **DEPLACEMENT, REORIENTATION, ORGANISATION ET/OU ACHEMINEMENT D'OBJETS, Y COMPRIS DES COLIS ET DES PAQUETS**  
 [72] WOODROUGH, STEPHENS B., JR, US  
 [72] BROWN, JOSHUA D., US  
 [71] UNITED PARCEL SERVICE OF AMERICA, INC., US  
 [22] 2023-09-26  
 [41] 2024-04-05  
 [30] US (17/960,631) 2022-10-05

**Canadian Applications Open to Public Inspection  
March 31, 2024 to April 6, 2024**

[21] **3,214,143**  
[13] A1

[51] **Int.Cl. F17C 7/00 (2006.01) F17C 13/04 (2006.01) F17C 13/06 (2006.01)**  
[25] EN  
[54] **DEVICE FOR PROTECTING A DEVICE FOR SUPPLYING PRESSURISED FLUID**  
[54] **DISPOSITIF DE PROTECTION D'UN DISPOSITIF POUR L'ALIMENTATION DE FLUIDE SOUS PRESSION**  
[72] FRENAL, ANTOINE, FR  
[72] WIEMER, KLAUS, DK  
[72] WINTHER, MORTEN, DK  
[72] BANGGAARD STEFFENSEN, KASPER, DK  
[71] L'AIR LIQUIDE SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, FR  
[71] MICRO MATIC A/S, DK  
[22] 2023-09-26  
[41] 2024-04-04  
[30] EP (22306475.9) 2022-10-04

[21] **3,214,207**  
[13] A1

[51] **Int.Cl. F16L 3/00 (2006.01) A47F 5/00 (2006.01) H02G 7/05 (2006.01)**  
[25] EN  
[54] **J-HOOK**  
[54] **CROCHET EN J**  
[72] CARAMICO, STEVEN M., US  
[71] SOUTHWIRE COMPANY, LLC, US  
[22] 2023-09-27  
[41] 2024-04-03  
[30] US (63/378,153) 2022-10-03

[21] **3,214,260**  
[13] A1

[51] **Int.Cl. E04B 2/74 (2006.01)**  
[25] EN  
[54] **T-SHAPED CORNER BRACKET APPARATUS AND METHOD**  
[54] **APPAREIL ET METHODE DE GOUSSET D'ANGLE EN T**  
[72] SCHNEIDER, CHRISTOPHER MICHAEL, US  
[72] MOORE, PAIGE BARBARA, US  
[72] BERTKE, PATRICK JOSEPH, US  
[71] BARRETTE OUTDOOR LIVING, INC., US  
[22] 2023-09-27  
[41] 2024-04-03  
[30] US (17/958,672) 2022-10-03

[21] **3,214,261**  
[13] A1

[51] **Int.Cl. E04F 13/21 (2006.01) E04F 13/07 (2006.01) E04F 13/26 (2006.01)**  
[25] EN  
[54] **LOCKING APPARATUS AND SYSTEM**  
[54] **APPAREIL ET SYSTEME DE VERROUILLAGE**  
[72] SCHNEIDER, CHRISTOPHER MICHAEL, US  
[72] MOORE, PAIGE BARBARA, US  
[72] BERTKE, PATRICK JOSEPH, US  
[71] BARRETTE OUTDOOR LIVING, INC., US  
[22] 2023-09-27  
[41] 2024-04-05  
[30] US (17/960,220) 2022-10-05

[21] **3,214,416**  
[13] A1

[51] **Int.Cl. G04G 5/00 (2013.01) H05B 47/16 (2020.01)**  
[25] EN  
[54] **LOCAL TIME DETERMINATION VIA DAYLIGHT SENSING FOR PROGRAMMABLE CONTROL DEVICES**  
[54] **DETERMINATION DE L~HEURE LOCALE AU MOYEN DE LA DETECTION DE LA LUMIERE DU JOUR POUR DES DISPOSITIFS A COMMANDE PROGRAMMABLE**  
[72] HAMLIN, ROBERT W., US  
[72] GROSS, PHILIP S., US  
[72] WESTRICK, RICHARD L., JR., US  
[72] KELLER, JOHN, US  
[71] ABL IP HOLDING LLC, US  
[22] 2023-09-28  
[41] 2024-04-02  
[30] US (63/412,523) 2022-10-02

[21] **3,214,427**  
[13] A1

[25] EN  
[54] **SCREW PILE DRIVING APPARATUS**  
[54] **APPAREIL D~ENTRAINEMENT DE PIEUX VISSES**  
[72] WATTS, COLLIN, CA  
[71] WATTS, COLLIN, CA  
[22] 2023-09-27  
[41] 2024-04-04  
[30] US (63/413,024) 2022-10-04

[21] **3,214,556**  
[13] A1

[51] **Int.Cl. E21B 44/06 (2006.01) E21B 23/08 (2006.01) E21B 31/113 (2006.01)**  
[25] EN  
[54] **EXTENDED REACH AND JARRING TOOL FOR A BOTTOM HOLE ASSEMBLY**  
[54] **OUTIL DE BATTAGE A PORTEE ETENDUE POUR UN ASSEMBLAGE DE FOND DE TROU**  
[72] MCCLURE, JOHN D., US  
[72] STRATTON, ROBERT, US  
[72] NYBERG, RYAN, US  
[72] AGUILERA, CYNTHIA, US  
[72] HUGHES, CHRIS, US  
[71] KLX ENERGY SERVICES LLC, US  
[22] 2023-09-28  
[41] 2024-04-06  
[30] US (63/413,775) 2022-10-06  
[30] US (63/526,881) 2023-07-14

[21] **3,214,559**  
[13] A1

[51] **Int.Cl. E21B 21/08 (2006.01) E21B 4/02 (2006.01) E21B 7/24 (2006.01)**  
[25] EN  
[54] **EXTENDED REACH TOOL FOR A BOTTOM HOLE ASSEMBLY**  
[54] **OUTIL A PORTEE ETENDUE POUR UN ASSEMBLAGE DE FOND DE TROU**  
[72] MCCLURE, JOHN D., US  
[72] STRATTON, ROBERT, US  
[72] NYBERG, RYAN, US  
[71] KLX ENERGY SERVICES LLC, US  
[22] 2023-09-28  
[41] 2024-04-06  
[30] US (63/413,775) 2022-10-06  
[30] US (63/526,881) 2023-07-14  
[30] US (63/533,795) 2023-08-21

**Demandes canadiennes mises à la disponibilité du public**

**31 mars 2024 au 6 avril 2024**

[21] **3,214,625**  
[13] A1

[51] **Int.Cl. F16K 15/03 (2006.01) E21B 34/02 (2006.01)**  
[25] EN  
[54] **TWO-PIN CLAPPER CHECK VALVE**  
[54] **CLAPET DE NON-RETOUR COMPRENANT UN CLAPET ARTICULE A DEUX BROCHES**  
[72] FULLER, NADIYA V., US  
[72] WITKOWSKI, BRIAN C., US  
[71] SPM OIL & GAS INC., US  
[22] 2023-09-28  
[41] 2024-04-06  
[30] US (18/456553) 2023-08-28  
[30] US (63/378544) 2022-10-06

[21] **3,214,672**  
[13] A1

[51] **Int.Cl. H01M 50/231 (2021.01) H01M 10/637 (2014.01) H01M 50/284 (2021.01) H01M 50/296 (2021.01) H01M 50/503 (2021.01) H01M 50/519 (2021.01)**  
[25] EN  
[54] **BATTERY MODULE CLAMSHELL**  
[54] **DOUBLE COQUE POUR MODULE DE BATTERIE**  
[72] TISCHER, ERIC, US  
[72] HOLMES, SCOTT, CA  
[72] LOCKWOOD, THOMAS, US  
[71] OASIS AEROSPACE INC., CA  
[22] 2023-09-29  
[41] 2024-04-03  
[30] US (63/412,720) 2022-10-03

[21] **3,214,872**  
[13] A1

[51] **Int.Cl. F24F 13/08 (2006.01) F04D 3/00 (2006.01) F24F 7/06 (2006.01)**  
[25] EN  
[54] **VENTILATION FAN**  
[54] **VENTILATEUR**  
[72] NIKAM, ANUP, US  
[72] DARE, TOM, US  
[71] BROAN-NUTONE LLC, US  
[22] 2023-09-29  
[41] 2024-04-06  
[30] US (63/413,728) 2022-10-06

[21] **3,214,886**  
[13] A1

[25] EN  
[54] **AUTOMATED METHOD AND PLATFORM FOR ANALYSIS OF SHEAR WAVE VELOCITY OF SUBSURFACE MATERIALS**  
[54] **METHODE AUTOMATISEE ET PLATEFORME POUR L~ANALYSE DE LA VITESSE D~ONDE DE CISAILLEMENT DE MATERIAUX DE SUBSURFACE**  
[72] LETOURNEAU, OLIVIER, CA  
[72] DESGAGNE, JANNY, CA  
[72] ARSENAULT, JEAN-LUC, CA  
[72] CAMPOS HALAS, DANIEL, CA  
[71] GEOPHYSIQUE G.P.R. INTERNATIONAL INC., CA  
[22] 2023-09-28  
[41] 2024-04-03  
[30] US (63/378,155) 2022-10-03

[21] **3,214,978**  
[13] A1

[51] **Int.Cl. B60P 3/24 (2006.01) B65D 88/54 (2006.01) B65D 90/02 (2019.01) F17C 1/00 (2006.01)**  
[25] EN  
[54] **DUAL GAS TRAILER WITH BLADDER SYSTEM**  
[54] **REMORQUE A DEUX GAZ COMPRENANT UN SYSTEME DE VESSIE**  
[72] WILKS, ZACHARY J., US  
[72] DECKARD, MITCHEL R., US  
[71] CATERPILLAR INC., US  
[22] 2023-09-28  
[41] 2024-04-06  
[30] US (17/938,554) 2022-10-06

[21] **3,214,980**  
[13] A1

[51] **Int.Cl. F17C 1/00 (2006.01) B65D 88/12 (2006.01) B65D 88/62 (2006.01) F17C 13/00 (2006.01)**  
[25] EN  
[54] **DUAL GAS TRAILER WITH SLIDING PISTON**  
[54] **REMORQUE A DEUX GAZ COMPRENANT UN PISTON COULISSANT**  
[72] WILKS, ZACHARY J., US  
[72] DECKARD, MITCHEL R., US  
[71] CATERPILLAR INC., US  
[22] 2023-09-28  
[41] 2024-04-06  
[30] US (17/938,541) 2022-10-06

[21] **3,215,010**  
[13] A1

[51] **Int.Cl. E03C 1/264 (2006.01) F16L 55/128 (2006.01) F16L 55/24 (2006.01) G01M 3/00 (2006.01)**  
[25] EN  
[54] **TEST PLUG FOR A PLUMBING SYSTEM**  
[54] **BOUCHON D~ESSAI POUR UN SYSTEME DE PLOMBERIE**  
[72] COSCARELLA, GABE, CA  
[71] COSCARELLA, GABE, CA  
[22] 2023-10-02  
[41] 2024-04-02  
[30] US (63/412,524) 2022-10-02

[21] **3,215,032**  
[13] A1

[51] **Int.Cl. B60R 25/20 (2013.01) G07C 9/27 (2020.01) B60R 25/10 (2013.01) G06Q 10/0631 (2023.01)**  
[25] EN  
[54] **VEHICLE FLEET AND ACCESS MANAGEMENT SYSTEM**  
[54] **FLOTTE DE VEHICULES ET SYSTEME DE GESTION DE L~ACCES**  
[72] WOODCOCK, GERALD C., US  
[71] WOODCOCK, GERALD C., US  
[22] 2023-10-02  
[41] 2024-04-04  
[30] US (18/240,102) 2023-08-30  
[30] US (63/413,226) 2022-10-04

[21] **3,215,062**  
[13] A1

[51] **Int.Cl. B64D 31/00 (2024.01) F01D 11/00 (2006.01) G05D 16/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR IDENTIFYING A CONDITION OF GAS TURBINE ENGINE SEALS**  
[54] **SYSTEMES ET METHODES POUR DETERMINER UNE CONDITION DE JOINTS DE TURBINE A GAZ**  
[72] MARCHAND, NICOLAS, CA  
[72] WONG, VELDA, CA  
[72] FARVARDIN, EHSAN, CA  
[72] TRUDEL, BENOIT, CA  
[72] SUBRAMANIAN, SRI KRISHNA, CA  
[72] ST-LAURENT, GABRIEL, CA  
[72] SEAMAN, BENJAMIN Z., CA  
[71] PRATT & WHITNEY CANADA CORP., CA  
[22] 2023-10-02  
[41] 2024-04-04  
[30] US (17/959,851) 2022-10-04

**Canadian Applications Open to Public Inspection  
March 31, 2024 to April 6, 2024**

[21] **3,215,205**  
[13] A1

[51] **Int.Cl. H01B 7/14 (2006.01) H01B 9/00 (2006.01)**  
[25] EN  
[54] **DYNAMIC SUBMARINE POWER CABLE WITH CORRUGATED AND SMOOTH METALLIC WATER BARRIER**  
[54] **CABLE D'ALIMENTATION SOUS-MARIN DYNAMIQUE COMPRENANT UNE BARRIERE D'ETANCHEITE METALLIQUE ONDULEE ET LISSE**  
[72] TYRBERG, ANDREAS, SE  
[72] ERIKSSON, ERIK, SE  
[71] NKT HV CABLES AB, SE  
[22] 2023-10-03  
[41] 2024-04-04  
[30] EP (22199612.7) 2022-10-04

[21] **3,215,268**  
[13] A1

[51] **Int.Cl. A63B 53/06 (2015.01)**  
[25] EN  
[54] **PUTTER HEAD AND STRIKE FACE INSERT THEREFOR**  
[54] **TETE DE POTTEUR ET PIECE RAPPORTEE DE FACE DE FRAPPE CONNEXE**  
[72] BALABAN, MATTHEW, CA  
[72] RAFLEWSKI, GARETH, CA  
[72] LEFEBVRE, MARC, CA  
[72] COWX, SCOTT, CA  
[72] COWX, DAVID, CA  
[71] BLACKSMITH GOLF COMPANY INC., CA  
[22] 2023-10-03  
[41] 2024-04-05  
[30] US (63/413410) 2022-10-05

[21] **3,215,286**  
[13] A1

[51] **Int.Cl. C04B 28/06 (2006.01) C04B 7/32 (2006.01) C04B 22/00 (2006.01) C04B 40/02 (2006.01) C04B 41/00 (2006.01)**  
[25] EN  
[54] **PACKAGED, DRY, RAPID-HARDENING CEMENTITIOUS MATERIAL FOR CONCRETE REPAIRS IN COLD, FREEZING, AND SUB-ZERO TEMPERATURE CONDITIONS**  
[54] **LIANT HYDRAULIQUE COMPACTE, SEC ET A DURCISSEMENT RAPIDE POUR LES REPARATIONS DE BETON DANS DES CONDITIONS DE FROID, DE GEL ET DE TEMPERATURES INFERIEURES A ZERO**  
[72] PLATTENBERGER, DAN AUSTIN, US  
[71] OLDCASTLE APG, INC., US  
[22] 2023-10-03  
[41] 2024-04-03  
[30] US (63/412,662) 2022-10-03

[21] **3,215,334**  
[13] A1

[51] **Int.Cl. E21B 43/01 (2006.01) E21B 33/035 (2006.01)**  
[25] EN  
[54] **DISPOSITIF JOINT TOURNANT D'UNE INSTALLATION D'EXPLOITATION D'ENERGIE, TYPE PLATEFORME OFFSHORE, ET INSTALLATION COMPORTANT UN TEL DISPOSITIF**  
[54] **ROTARY JOINT DEVICE FOR AN ENERGY EXPLOITATION INSTALLATION, OFFSHORE PLATFORM TYPE, AND INSTALLATION COMPRISING SUCH A DEVICE**  
[72] MENARDO, PHILIPPE, FR  
[72] CAPON, CHARLES, FR  
[72] SAINT-MICHEL, LAURENT, FR  
[71] ETI GROUP, FR  
[22] 2023-10-04  
[41] 2024-04-05  
[30] FR (2210182) 2022-10-05

[21] **3,215,351**  
[13] A1

[51] **Int.Cl. E04D 1/00 (2006.01) E04D 1/12 (2006.01) E04D 1/26 (2006.01)**  
[25] EN  
[54] **BUNDLES OF ROOFING SHINGLES, AND ASSOCIATED KIT, SYSTEM, AND METHOD**  
[54] **PAQUETS DE BARDEAUX DE COUVERTURE ET TROUSSE, SYSTEME ET METHODE CONNEXES**  
[72] ELLIS, DAVID, US  
[72] ANDERSON, ERIC R., US  
[72] ORTIZ ALEMANY, LYAN, US  
[72] SOTO, NICHOLAS, US  
[72] SIMON, BRIAN, US  
[71] BMIC LLC, US  
[22] 2023-10-04  
[41] 2024-04-04  
[30] US (63/413,049) 2022-10-04

[21] **3,215,361**  
[13] A1

[25] EN  
[54] **SAMPLE PROBE MOUNTED CONDENSERS**  
[54] **CONDENSEURS MONTES SUR SONDRE D-ECHANTILLONNAGE**  
[72] HARRIS, PHILIP C., CA  
[72] HARRIS, KEVIN, CA  
[71] INSIGHT ANALYTICAL SOLUTIONS INC., CA  
[22] 2023-10-04  
[41] 2024-04-04  
[30] US (63/412,976) 2022-10-04

[21] **3,215,415**  
[13] A1

[51] **Int.Cl. F16K 31/00 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS FOR PIEZO VALVES**  
[54] **SYSTEMES ET METHODES POUR VANNES PIEZO-ELECTRIQUES**  
[72] ROMER, SASCHA, DE  
[72] MUELLER, MARC, DE  
[71] AVENTICS GMBH, DE  
[22] 2023-10-04  
[41] 2024-04-04  
[30] DE (10 2022 125 517.4) 2022-10-04

**Demandes canadiennes mises à la disponibilité du public**  
**31 mars 2024 au 6 avril 2024**

---

[21] **3,215,442**  
[13] A1

[51] **Int.Cl. C11D 3/48 (2006.01) A01N 25/30 (2006.01) A01N 35/02 (2006.01) A01N 37/02 (2006.01) A01N 37/04 (2006.01) A01N 37/36 (2006.01) A01P 1/00 (2006.01) C11D 1/08 (2006.01) C11D 1/26 (2006.01) C11D 1/825 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL COMPOSITION COMPRISING A MODIFIED ALKYL GLYCOSIDE AND AN ORGANIC ACID**

[54] **COMPOSITION ANTIMICROBIENNE COMPRENANT UN GLYCOSIDE D'ALKYLE MODIFIE ET UN ACIDE ORGANIQUE**

[72] KRIKWOOD, KATHLEEN, US

[72] PEREZ-PRAT VINUESA, EVA MARIA, GB

[71] THE PROCTOR & GAMBLE COMPANY, US

[22] 2023-10-04

[41] 2024-04-05

[30] EP (22199784.4) 2022-10-05

[30] EP (23197667.1) 2023-09-15

---

[21] **3,215,446**  
[13] A1

[51] **Int.Cl. C11D 3/48 (2006.01) A01N 25/30 (2006.01) A01N 31/02 (2006.01) A01P 1/00 (2006.01) C11D 1/00 (2006.01) C11D 3/37 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL COMPOSITION COMPRISING A MODIFIED ALKYL GLYCOSIDE AND AN ALKANEDIOL**

[54] **COMPOSITION ANTIMICROBIENNE COMPRENANT UN GLYCOSIDE D'ALKYLE MODIFIE ET UN ALCANEDIOL**

[72] KIRKWOOD, KATHLEEN, GB

[72] PEREZ-PRAT VINUESA, EVA MARIA, GB

[71] THE PROCTER & GAMBLE COMPANY, US

[22] 2023-10-04

[41] 2024-04-05

[30] EP (22199783.6) 2022-10-05

[30] EP (23181544.0) 2023-06-26

---

[21] **3,215,472**  
[13] A1

[51] **Int.Cl. A61G 5/10 (2006.01) F04B 33/00 (2006.01)**

[25] EN

[54] **PUMP-ACTION WHEELCHAIR AND CONVERSION KIT**

[54] **FAUTEUIL ROULANT A POMPE ET TROUSSE DE CONVERSION**

[72] JONES, MICHEAL DON, US

[71] JONES, MICHEAL DON, US

[22] 2023-10-04

[41] 2024-04-05

[30] US (63/413,570) 2022-10-05

[30] US (18/369,494) 2023-09-18

---

[21] **3,215,495**  
[13] A1

[51] **Int.Cl. A63C 19/00 (2006.01) A63C 19/12 (2006.01)**

[25] EN

[54] **APPARATUS, SYSTEMS, AND METHODS FOR TURF TRIM STRIP**

[54] **APPAREIL, SYSTEMES ET METHODES POUR UNE BANDE DE BORDURE DE GAZON**

[72] FRAZIER, JOSHUA LELAND, US

[72] SHOOK, JUSTIN, US

[71] SOCCER PARK, LLC DBA URBAN SOCCER PARK, US

[22] 2023-10-04

[41] 2024-04-06

[30] US (17/938,407) 2022-10-06

---

[21] **3,215,502**  
[13] A1

[51] **Int.Cl. B32B 13/08 (2006.01) E04C 2/04 (2006.01)**

[25] EN

[54] **METHOD OF FORMING A GYPSUM PANEL, METHOD OF ANALYSING A GYPSUM CORE, AND A GYPSUM CORE ANALYSIS TOOL**

[54] **METHODE DE FORMATION D-UN PANNEAU DE GYPSE, METHODE D-ANALYSE D-UNE AME DE GYPSE ET OUTIL D-ANALYSE D-AME DE GYPSE**

[72] LESPIAT, REMI, US

[72] NIZNIK, ARKADIUSZ, PL

[72] JAFFEL, HAMOUDA, FR

[72] DECABOOTER, CELIA, FR

[71] SAINT-GOBAIN PLACO, FR

[22] 2023-10-05

[41] 2024-04-05

[30] EP (22306490.8) 2022-10-05

---

[21] **3,215,570**  
[13] A1

[51] **Int.Cl. B29B 13/10 (2006.01) B29B 13/02 (2006.01) B29B 13/06 (2006.01) B29B 17/00 (2006.01) C08L 67/02 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR PREPARING EXTRUDER READY POLYETHYLENE TEREPHTHALATE**

[54] **METHODE ET APPAREIL POUR PREPARER UN POLYETHYLENE TEREPHTHALATE PRET A L'EXTRUSION**

[72] RYDE, RONALD FREDRICK, CA

[71] NETZERO ENTERPRISES INC., CA

[22] 2023-10-04

[41] 2024-04-04

[30] US (63/413,177) 2022-10-04

---

[21] **3,215,578**  
[13] A1

[51] **Int.Cl. G06V 10/26 (2022.01) G06V 10/70 (2022.01) G06V 10/82 (2022.01) G06V 20/58 (2022.01) G06N 3/09 (2023.01) A47L 11/40 (2006.01)**

[25] EN

[54] **SYSTEM AND METHOD OF SEMANTIC SEGMENTATION FOR A CLEANING DEVICE**

[54] **SYSTEME ET METHODE DE SEGMENTATION SEMANTIQUE POUR UN DISPOSITIF DE NETTOYAGE**

[72] JAHANI, ALI, CA

[72] FAKIH, ADEL, CA

[72] BREDIKHIN, EGOR, CA

[72] CHOI, YOOHEE, CA

[72] RASHEED, UMER, CA

[72] GABA, ABHISHANK, CA

[71] AVIDBOTS CORP, CA

[22] 2023-10-05

[41] 2024-04-05

[30] US (63/413587) 2022-10-05

**Canadian Applications Open to Public Inspection  
March 31, 2024 to April 6, 2024**

[21] **3,215,583**  
[13] A1

[51] **Int.Cl. B60W 30/08 (2012.01) B60W 30/182 (2020.01) B60W 60/00 (2020.01)**

[25] EN

[54] **OBSTACLE DETECTION FUNCTIONALITY FOR MATERIAL HANDLING VEHICLES BASED ON LOCATION**

[54] **FONCTION DE DETECTION D'OBSTACLE POUR LES VEHICULES DE MANUTENTION EN FONCTION DE L'EMPLACEMENT**

[72] D'ACCOLTI, ANTHONY V., US

[72] MCLACHLAN, ROBERT P., US

[72] MURLI, SATHVIK, US

[71] THE RAYMOND CORPORATION, US

[22] 2023-10-04

[41] 2024-04-04

[30] US (63/413,138) 2022-10-04

[21] **3,215,608**  
[13] A1

[51] **Int.Cl. A01H 6/82 (2018.01) A01H 1/02 (2006.01) A01H 4/00 (2006.01) A01H 5/00 (2018.01) A01H 5/10 (2018.01) C12N 5/04 (2006.01) C12N 5/10 (2006.01) C12N 15/82 (2006.01)**

[25] EN

[54] **TOMATO HYBRID DRTH2911 AND PARENTS THEREOF**

[54] **TOMATE HYBRIDE DRTH2911 ET PARENTS**

[72] KRIVANEK, ALAN, US

[71] SEMINIS VEGETABLE SEEDS, INC., US

[22] 2023-10-05

[41] 2024-04-06

[30] US (17/961352) 2022-10-06

[21] **3,215,639**  
[13] A1

[51] **Int.Cl. B60R 11/00 (2006.01) B60R 9/00 (2006.01)**

[25] EN

[54] **MOUNTING SYSTEM AND KIT FOR MOUNTING AN ACCESSORY ON A VEHICLE**

[54] **SYSTEME DE MONTAGE ET TROUSSE POUR INSTALLER UN ACCESSOIRE SUR UN VEHICULE**

[72] JAILLET-GOSSELIN, PHILIPPE, CA

[72] BESSETTE, FREDERIK, CA

[72] LECLERC, JEAN-MICHEL, CA

[72] PELLERIN, MICHEL, CA

[72] PROVENCHER, MARTIN, CA

[72] BANVILLE, ALEXANDRA, CA

[71] SOUCY INTERNATIONAL INC., CA

[22] 2023-10-06

[41] 2024-04-06

[30] US (63/413,685) 2022-10-06

[21] **3,215,672**  
[13] A1

[51] **Int.Cl. H01Q 5/385 (2015.01) H01Q 1/36 (2006.01) H01Q 21/30 (2006.01)**

[25] EN

[54] **SPATIAL BANDPASS STRUCTURE AND ANTENNA COMPRISING SAME**

[54] **STRUCTURE DE BANDE PASSANTE SPATIALE ET ANTENNE LA COMPRENANT**

[72] JOLANI, FARID, US

[72] DADGARPOUR, ABDOLMEHDI, CA

[72] FARZANEH, SADEGH, CA

[72] ZARGHOONI, BEHNAM, CA

[72] VAN BEEK, JACCO, CA

[71] GALTRONICS USA, INC., US

[22] 2023-10-06

[41] 2024-04-06

[30] US (63/378,650) 2022-10-06

[21] **3,215,824**  
[13] A1

[51] **Int.Cl. A61K 31/194 (2006.01) A61K 9/08 (2006.01) A61P 1/02 (2006.01) A61P 19/00 (2006.01)**

[25] EN

[54] **COMPOSITION FOR TEETH DESENSITIZATION**

[54] **COMPOSITION POUR LA DESENSIBILISATION DENTAIRE**

[72] COX, CHARLES F., CA

[71] ORAL SCIENCE INC., CA

[22] 2023-10-05

[41] 2024-04-05

[30] US (63/413,348) 2022-10-05

[21] **3,215,835**  
[13] A1

[51] **Int.Cl. C40B 80/00 (2006.01) C40B 40/00 (2006.01) C40B 50/14 (2006.01)**

[25] EN

[54] **COMPARTMENTALIZED ARRAYS OF LINKER MOLECULES**

[54] **RESEAUX COMPARTIMENTES DE MOLECULES DE LIAISON**

[72] LI, HUIYAN, CA

[72] AGGARWAL, ROSHAN, CA

[71] UNIVERSITY OF GUELPH, CA

[22] 2023-10-05

[41] 2024-04-06

[30] US (63/413,754) 2022-10-06

[21] **3,222,319**  
[13] A1

[51] **Int.Cl. B41J 3/00 (2006.01) G06F 3/12 (2006.01) G09F 3/00 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR FACILITATING THE CREATION OF DIGITAL LABELS TO SUPPLEMENT PRINTED PHYSICAL LABELS**

[54] **SYSTEMES ET METHODES POUR FACILITER LA CREATION D'ETIQUETTES NUMERIQUE EN SUPPLEMENT AUX ETIQUETTES PHYSIQUES IMPRIMEES**

[72] COLUMBIA, WESLEY, US

[72] SANGHA, AMANDEEP SINGH, US

[72] BLOECHL, ANDREW, US

[72] VAN DAM, ZACHARY, US

[72] BANNOW, NATHAN, US

[71] BRADY WORLDWIDE, INC., US

[22] 2023-12-07

[41] 2024-04-02

[30] US (18/109209) 2023-02-13



**Demandes canadiennes mises à la disponibilité du public**  
**31 mars 2024 au 6 avril 2024**

---

[21] **3,228,037**

[13] A1

[51] **Int.Cl. B01D 21/01 (2006.01) B03D  
3/06 (2006.01) C10G 1/04 (2006.01)**

[25] EN

[54] **METHODS FOR MONITORING  
AND CONTROL OF  
FLOCCULATED OIL SANDS  
TAILINGS USING IMAGE  
CAPTURE**

[54] **METHODES DE SURVEILLANCE  
ET DE CONTROLE DES RESIDUS  
DE SABLES BITUMINEUX  
FLOCULES AU MOYEN DE  
CAPTURE D-IMAGE**

[72] MIKULA, PAUL, CA

[72] WANG, NAN, CA

[72] BELLO-HAMILTON, ADEOLA, CA

[72] MIKULA, RANDY, CA

[71] **SYNCRUDE CANADA LTD. IN  
TRUST FOR THE OWNERS OF THE  
SYNCRUDE PROJECT AS SUCH  
OWNERS EXIST NOW AND IN THE  
FUTURE, CA**

[22] 2024-02-02

[41] 2024-04-01

# PCT Applications Entering the National Phase

## Demandes PCT entrant en phase nationale

---

[21] **3,217,105**  
[13] A1

[51] **Int.Cl. H01H 9/20 (2006.01) H02G 5/00 (2006.01)**

[25] EN

[54] **AN INSULATION COVER**

[54] GEREDELI, GOKHAN, TR

[72] CAMLIBEL, MUZAFFER, TR

[71] BASOGLU KABLO VE PROFIL SANAYI VE TICARET ANONIM SIRKETI, TR

[85] 2023-10-27

[86] 2023-01-17 (PCT/TR2023/050034)

[87] (3217105)

[30] TR (2022/015119) 2022-10-03

---

[21] **3,226,422**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/20 (2020.01) A24F 40/30 (2020.01) A24F 40/42 (2020.01) A24F 40/465 (2020.01)**

[25] EN

[54] **AEROSOL GENERATING DEVICE AND AEROSOL GENERATING SYSTEM**

[54] **APPAREIL DE GENERATION D'AEROSOL ET SYSTEME DE GENERATION D'AEROSOL**

[72] KIM, DONG SUNG, KR

[72] KIM, YONG HWAN, KR

[72] LIM, HUN IL, KR

[72] KWON, YOUNG BUM, KR

[71] KT&G CORPORATION, KR

[85] 2024-01-19

[86] 2023-09-26 (PCT/KR2023/014930)

[87] (3226422)

[30] KR (10-2022-0127392) 2022-10-05

[30] KR (10-2023-0005526) 2023-01-13

---

[21] **3,226,812**  
[13] A1

[51] **Int.Cl. C12Q 1/689 (2018.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS FOR DETECTING GASTROINTESTINAL PATHOGENS**

[54] **COMPOSITIONS ET PROCEDES DE DETECTION D'AGENTS PATHOGENES GASTRO-INTESTINAUX**

[72] PANUGANTI, SREE DIVYA, US

[71] GEN-PROBE INCORPORATED, US

[85] 2024-01-15

[86] 2022-07-26 (PCT/US2022/074151)

[87] (WO2023/010008)

[30] US (63/226,079) 2021-07-27

---

[21] **3,229,027**  
[13] A1

[51] **Int.Cl. B60S 5/00 (2006.01) E04F 19/08 (2006.01) E04H 5/06 (2006.01)**

[25] EN

[54] **RETRACTABLE COVER FOR AUTOMOBILE SERVICE PIT WITH OIL CHANGE MECHANISM, DETENT PIN AND METHOD OF USE**

[54]

[72] RICE, BENJAMIN KEITH JR., US

[72] RICE, BEN KEITH SR., US

[72] RICE, JANISE L., US

[71] RICE, BENJAMIN KEITH JR., US

[71] RICE, BEN KEITH SR., US

[71] RICE, JANISE L., US

[85] 2024-02-14

[86] 2022-10-06 (PCT/US2022/077681)

[87] (3229027)

---

[21] **3,233,473**  
[13] A1

[51] **Int.Cl. C08K 3/04 (2006.01) C08L 9/00 (2006.01) C08L 23/08 (2006.01)**

[25] FR

[54] **RUBBER COMPOSITION COMPRISING A POLAR ESTER PLASTICIZER AND A HIGHLY SATURATED ELASTOMER**

[54] **COMPOSITION DE CAOUTCHOUC COMPRENANT UN PLASTIFIANT POLAIRE D'ESTER ET UN ELASTOMERE FORTEMENT SATURE**

[72] FERRAND, THOMAS, FR

[72] ARAUJO DA SILVA, JOSE-CARLOS, FR

[72] PRAS, MAXIME, FR

[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR

[85] 2024-03-28

[86] 2022-12-07 (PCT/EP2022/084723)

[87] (WO2023/110566)

[30] FR (FR2113472) 2021-12-14

---

[21] **3,233,478**  
[13] A1

[51] **Int.Cl. B60C 1/00 (2006.01) C08F 210/02 (2006.01) C08K 3/04 (2006.01) C08K 5/14 (2006.01) C08L 7/00 (2006.01) C08L 23/06 (2006.01) C08L 23/16 (2006.01)**

[25] FR

[54] **ANTI-VIBRATION ARTICLE COMPRISING A RUBBER COMPOSITION**

[54] **ARTICLE ANTIVIBRATOIRE COMPRENANT UNE COMPOSITION DE CAOUTCHOUC**

[72] ARAUJO DA SILVA, JOSE-CARLOS, FR

[72] HIDROT, JEAN-DENIS, FR

[72] CARNIOL, NATACHA, FR

[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR

[85] 2024-03-28

[86] 2022-12-07 (PCT/EP2022/084719)

[87] (WO2023/104851)

[30] FR (FR2113291) 2021-12-10

## Demandes PCT entrant en phase nationale

[21] **3,233,479**  
[13] A1

[51] **Int.Cl. G06V 20/17 (2022.01) G06T 7/593 (2017.01) G06V 10/82 (2022.01) G06V 20/58 (2022.01) G06V 20/70 (2022.01)**

[25] FR

[54] **METHOD FOR DETECTING OBSTACLES**

[54] **PROCEDE DE DETECTION D'OBSTACLES**

[72] CLEON, THOMAS, FR

[72] BUDIN, JOEL, FR

[71] SAFRAN ELECTRONICS & DEFENSE, FR

[85] 2024-03-28

[86] 2022-09-28 (PCT/EP2022/077017)

[87] (WO2023/052448)

[30] FR (FR2110221) 2021-09-28

[21] **3,233,483**  
[13] A1

[51] **Int.Cl. C08B 37/00 (2006.01) C08L 5/06 (2006.01)**

[25] EN

[54] **SUGAR BEET PECTIN**

[54] **PECTINE DE BETTERAVE A SUCRE**

[72] RIHA-MILOSKOVSKA, ELENA, NL

[72] VREEKER, ROB, NL

[72] KLAASSEN-HESHOF, DIANA, NL

[72] RASHIDI, BEHZAD, NL

[71] COOPERATIE KONINKLIJKE COSUN U.A., NL

[85] 2024-03-28

[86] 2022-10-13 (PCT/EP2022/078515)

[87] (WO2023/062129)

[30] EP (21202852.6) 2021-10-15

[21] **3,233,484**  
[13] A1

[51] **Int.Cl. A61K 31/352 (2006.01) A61P 35/00 (2006.01) C07D 311/22 (2006.01)**

[25] EN

[54] **ALLOSTERIC CHROMENONE INHIBITORS OF PHOSPHOINOSITIDE 3-KINASE (PI3K) FOR THE TREATMENT OF DISEASE**

[54] **INHIBITEURS CHROMENONES ALLOSTERIQUES DE LA PHOSPHOINOSITIDE 3-KINASE (PI3K) POUR LE TRAITEMENT D'UNE MALADIE**

[72] HICKEY, EUGENE R., US

[72] KESICKI, EDWARD A., US

[71] PETRA PHARMA CORPORATION, US

[85] 2024-03-28

[86] 2022-09-30 (PCT/US2022/077329)

[87] (WO2023/056407)

[30] US (63/250,582) 2021-09-30

[30] US (63/253,277) 2021-10-07

[21] **3,233,485**  
[13] A1

[51] **Int.Cl. A01K 15/02 (2006.01) A23K 10/30 (2016.01) A23K 40/20 (2016.01) A23K 40/25 (2016.01) A23K 50/42 (2016.01)**

[25] EN

[54] **PET CHEW AND METHOD FOR PRODUCING A PET CHEW**

[54] **ARTICLE A MACHER POUR ANIMAL DE COMPAGNIE ET PROCEDE DE PRODUCTION D'UN ARTICLE A MACHER POUR ANIMAL DE COMPAGNIE**

[72] MULLER-OHL, FELIX JOHANNES GERHARD, NL

[72] OLDENGARM, SANDER HILBERT, NL

[72] KEAN, GREGORY GEORGE, NL

[72] FREIJE, JANJAAP, NL

[71] PARAGON PET PRODUCTS EUROPE B.V., NL

[85] 2024-03-28

[86] 2022-09-29 (PCT/NL2022/050544)

[87] (WO2023/055233)

[30] US (63/250,747) 2021-09-30

[30] EP (21210209.9) 2021-11-24

[21] **3,233,486**  
[13] A1

[51] **Int.Cl. C07D 213/04 (2006.01) A61K 31/195 (2006.01) C07C 229/34 (2006.01)**

[25] EN

[54] **COMPOUND AS INHIBITOR OF COMPLEMENT FACTOR D, AND PHARMACEUTICAL COMPOSITION AND USE THEREOF**

[54] **COMPOSE SERVANT D'INHIBITEUR DU FACTEUR D DU COMPLEMENT, COMPOSITION PHARMACEUTIQUE ET UTILISATION ASSOCIEES**

[72] LOU, JUN, CN

[72] WU, JINGKANG, CN

[72] LIU, LI, CN

[72] SUN, YOUYOU, CN

[72] CHEN, YONGKAI, CN

[72] ZHANG, YIHAN, CN

[72] LU, XIAOQIN, CN

[72] ZHOU, FENG, CN

[72] CHEN, YING, CN

[72] ZHANG, LIQIAN, CN

[72] YANG, FAN, CN

[72] WANG, CHAODONG, CN

[71] WUHAN CREATERNA SCIENCE AND TECHNOLOGY CO.,LTD., CN

[85] 2024-03-28

[86] 2022-09-30 (PCT/CN2022/123316)

[87] (WO2023/051793)

[30] CN (202111165838.2) 2021-09-30

[30] CN (202211160701.2) 2022-09-22

## PCT Applications Entering the National Phase

[21] **3,233,487**  
[13] A1

[51] **Int.Cl. G01N 27/416 (2006.01) C09D 11/52 (2014.01) G01N 27/30 (2006.01) G01N 27/403 (2006.01)**

[25] EN

[54] **SELF-POWERED CAPILLARY MICROFLUIDIC-BASED ELECTROCHEMICAL BIOSENSING DEVICES, SYSTEMS, AND METHODS**

[54] **DISPOSITIFS, SYSTEMES ET PROCEDES DE BIODETECTION ELECTROCHIMIQUE BASES SUR LA MICROFLUIDIQUE CAPILLAIRE AUTO-ALIMENTEE**

[72] SANATI-NEZHAD, AMIR, CA  
[72] SALAHANDISH, RAZIEH, CA  
[72] KHETANI, SULTAN, CA  
[72] HAGHAYEGH, FATEMEH, CA  
[71] CRITICAL CARE DX LTD., CA  
[85] 2024-03-28  
[86] 2022-09-28 (PCT/CA2022/051439)  
[87] (WO2023/050001)  
[30] US (63/262,018) 2021-10-01

[21] **3,233,489**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01)**

[25] EN

[54] **MOVABLE GERMICIDAL ASSEMBLIES FOR DISINFECTION APPARATUSSES**

[54] **ENSEMBLES GERMICIDES MOBILES POUR APPAREILS DE DESINFECTION**

[72] RAMANAND, PRAKASH VALENTINO, CA  
[72] BARRIOS SIERRA, JOSE MIGUEL, CA  
[72] DALVADI, ROMIL HITENBHAI, CA  
[71] ANRAM HOLDINGS, CA  
[85] 2024-03-28  
[86] 2022-09-30 (PCT/CA2022/051461)  
[87] (WO2023/050017)  
[30] US (63/251,456) 2021-10-01

[21] **3,233,491**  
[13] A1

[51] **Int.Cl. C03C 8/20 (2006.01) C03C 3/093 (2006.01) C03C 8/02 (2006.01) C03C 8/16 (2006.01) C03C 17/04 (2006.01)**

[25] FR

[54] **ENAMELLED MINERAL SUBSTRATE AND METHOD FOR MAKING SAME**

[54] **SUBSTRAT MINERAL EMAILLE ET METHODE DE FABRICATION D'UN TEL SUBSTRAT**

[72] SEME, CHARLENE, FR  
[72] DELAYE, LOIC, FR  
[71] EUOKERA S.N.C, FR  
[85] 2024-03-28  
[86] 2022-10-18 (PCT/EP2022/078994)  
[87] (WO2023/066945)  
[30] FR (FR2111100) 2021-10-19

[21] **3,233,492**  
[13] A1

[51] **Int.Cl. G16H 20/40 (2018.01) G16H 30/20 (2018.01) G16H 30/40 (2018.01) G16H 40/40 (2018.01) G16H 40/63 (2018.01) G16H 40/67 (2018.01)**

[25] EN

[54] **SURGICAL SYSTEMS, ANATOMICAL MODELS AND ASSOCIATED METHODS**

[54] **SYSTEMES CHIRURGICAUX, MODELES ANATOMIQUES ET PROCEDES ASSOCIES**

[72] METCALFE, NICK, US  
[72] MORELAND, MICHAEL, US  
[72] HEWITT, AARON JEROME, US  
[72] MORRIS, MICHAEL CHARLES, US  
[72] REGO, GEORGE, US  
[72] VEGA-SOTO, GIANNA CHRISTINE, US  
[72] THOMPSON, TIMOTHY J., US  
[71] ARTHREX, INC., US  
[85] 2024-03-28  
[86] 2022-10-07 (PCT/US2022/046041)  
[87] (WO2023/059877)  
[30] US (63/253,290) 2021-10-07

[21] **3,233,493**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01)**

[25] EN

[54] **EBOLA PSEUDOTYPED VECTORS AND METHODS OF USE THEREOF**

[54] **VECTEURS PSEUDOTYPES D'EBOLA ET LEURS METHODES D'UTILISATION**

[72] JOHNSON, PHILIP R., US  
[72] PELUSO, RICHARD W., US  
[72] RUSSELL, RONNIE M., US  
[72] SCHNEPP, BRUCE C., US  
[71] INTERIUS BIOTHERAPEUTICS, INC., US  
[85] 2024-03-28  
[86] 2022-10-14 (PCT/US2022/078092)  
[87] (WO2023/064884)  
[30] US (63/256,447) 2021-10-15

[21] **3,233,494**  
[13] A1

[51] **Int.Cl. C22B 3/06 (2006.01) C22B 3/44 (2006.01) C22B 3/46 (2006.01) C22B 7/00 (2006.01) C22B 15/00 (2006.01) C22B 23/00 (2006.01) H01M 10/54 (2006.01)**

[25] EN

[54] **ALLOY TREATMENT METHOD**

[54] **PROCEDE DE TRAITEMENT D'ALLIAGE**

[72] TAKENOUCHE, HIROSHI, JP  
[72] SHOUJI, HIROFUMI, JP  
[72] MATSUOKA, ITSUMI, JP  
[72] MATSUGI, TAKUMI, JP  
[72] SANJO, SHOTA, JP  
[72] ASANO, SATOSHI, JP  
[72] HEGURI, SHIN-ICHI, JP  
[71] SUMITOMO METAL MINING CO., LTD., JP  
[85] 2024-03-28  
[86] 2022-09-22 (PCT/JP2022/035340)  
[87] (WO2023/054159)  
[30] JP (2021-159725) 2021-09-29  
[30] JP (2021-159496) 2021-09-29  
[30] JP (2021-181784) 2021-11-08  
[30] JP (2021-181931) 2021-11-08  
[30] JP (2022-138375) 2022-08-31

## Demandes PCT entrant en phase nationale

[21] **3,233,495**  
[13] A1

[51] **Int.Cl. C01B 3/52 (2006.01) C01B 3/02 (2006.01) C01B 3/12 (2006.01) C01B 3/34 (2006.01) C01B 3/56 (2006.01) C01F 11/18 (2006.01)**

[25] EN

[54] **BLUE HYDROGEN PRODUCTION METHODS AND SYSTEMS**

[54] **PROCEDES ET SYSTEMES DE PRODUCTION D'HYDROGENE BLEU**

[72] SELF, KYLE, US

[72] SCHNEIDER, JACOB, US

[72] CONSTANTZ, BRENT R., US

[71] BLUE PLANET SYSTEMS CORPORATION, US

[85] 2024-03-28

[86] 2022-09-26 (PCT/US2022/044732)

[87] (WO2023/059470)

[30] US (63/251,795) 2021-10-04

[21] **3,233,496**  
[13] A1

[51] **Int.Cl. E21B 7/02 (2006.01) E21B 17/16 (2006.01) E21B 21/015 (2006.01) E21B 41/00 (2006.01)**

[25] EN

[54] **APPARATUS AND METHOD FOR SUPPORTING A COLLAR REGION OF A BLAST HOLE DURING DRILLING**

[54] **APPAREIL ET PROCEDE POUR SUPPORTER UNE REGION DE COLLIER D'UN TROU DE MINE PENDANT LE FORAGE**

[72] PATCHING, GREGORY, AU

[72] WRIGHT, JONATHAN, AU

[71] AQUIRIAN TECHNOLOGY PTY LTD, AU

[85] 2024-03-28

[86] 2022-09-29 (PCT/AU2022/051166)

[87] (WO2023/049964)

[30] AU (2021903123) 2021-09-29

[30] AU (2021904057) 2021-12-14

[21] **3,233,497**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G01N 3/40 (2006.01) G01N 33/483 (2006.01)**

[25] EN

[54] **NON-DESTRUCTIVE PRESSURE-ASSISTED TISSUE STIFFNESS MEASUREMENT APPARATUS**

[54] **APPAREIL DE MESURE DE RIGIDITE DE TISSUS ASSISTE PAR PRESSION NON DESTRUCTIVE**

[72] KIM, JINHO, US

[72] VUNJAK-NOVAKOVIC, GORDANA, US

[72] O'NEILL, JOHN D., US

[72] PINEZICH, MEGHAN, US

[72] GUENTHART, BRANDON A., US

[72] MIR, SEYED MOHAMMAD, US

[72] CHEN, JIAWEN, US

[72] BACCHETTA, MATTHEW, US

[71] TRUSTEES OF THE STEVENS INSTITUTE OF TECHNOLOGY, US

[71] VANDERBILT UNIVERSITY, US

[71] THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, US

[71] THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, US

[85] 2024-03-28

[86] 2022-09-29 (PCT/US2022/077311)

[87] (WO2023/056395)

[30] US (63/250,123) 2021-09-29

[21] **3,233,498**  
[13] A1

[51] **Int.Cl. H04L 1/00 (2006.01) H04N 19/30 (2014.01)**

[25] EN

[54] **VIDEO CODEC AWARE RADIO ACCESS NETWORK CONFIGURATION AND UNEQUAL ERROR PROTECTION CODING**

[54] **CONFIGURATION DE RESEAU D'ACCES RADIO SENSIBLE AU CODEC VIDEO ET CODAGE DE PROTECTION CONTRE LES ERREURS INEGALES**

[72] STOICA, RAZVAN-ANDREI, DE

[72] BAGHERI, HOSSEIN, US

[72] NANGIA, VIJAY, US

[71] LENOVO (SINGAPORE) PTE. LTD, SG

[85] 2024-03-28

[86] 2022-12-19 (PCT/IB2022/062500)

[87] (WO2023/112008)

[30] US (17/555,137) 2021-12-17

[21] **3,233,499**  
[13] A1

[51] **Int.Cl. B65G 1/10 (2006.01) B60P 3/00 (2006.01) B65G 1/04 (2006.01) B65G 1/06 (2006.01) B65G 1/12 (2006.01) G06Q 10/08 (2023.01)**

[25] EN

[54] **AUTONOMOUS VEHICLE DELIVERY AND PACKAGE TRANSFER SYSTEM**

[54] **SYSTEME DE TRANSFERT DE COLIS ET DE LIVRAISON PAR VEHICULE AUTONOME**

[72] NAISH, ADAM, US

[72] SUBRAMANIAN, AZHAGU, US

[72] YOUNG, WARREN, US

[72] LI, YI, CA

[72] VAN GELDER, ALDO, CA

[71] MAGNA INTERNATIONAL INC., CA

[85] 2024-03-28

[86] 2022-10-07 (PCT/US2022/045970)

[87] (WO2023/059842)

[30] US (63/253,744) 2021-10-08

[30] US (63/278,236) 2021-11-11

[21] **3,233,501**  
[13] A1

[51] **Int.Cl. A63B 21/00 (2006.01) A63B 22/00 (2006.01) A63B 23/02 (2006.01)**

[25] EN

[54] **MULTIPURPOSE EXERCISE BENCH**

[54] **BANC D'EXERCICE POLYVALENT**

[72] NEUHAUS, PETER, US

[72] COBB, TYSON, US

[72] GINES, JEREMY, US

[71] OXEFIT, INC., US

[85] 2024-03-28

[86] 2022-10-12 (PCT/US2022/046357)

[87] (WO2023/064321)

[30] US (63/255,354) 2021-10-13

## PCT Applications Entering the National Phase

---

[21] **3,233,503**  
[13] A1

[51] **Int.Cl. B65D 47/20 (2006.01) B65D 39/04 (2006.01)**

[25] EN

[54] **DISPENSING TAP EQUIPPED WITH FLEXIBLE INTERNAL VALVE**

[54] **ROBINET DE DISTRIBUTION EQUIPE D'UN CLAPET INTERNE FLEXIBLE**

[72] NINI, DIEGO, IT

[71] VITOP MOULDING S.R.L., IT

[85] 2024-03-28

[86] 2022-08-08 (PCT/IT2022/050225)

[87] (WO2023/058072)

[30] IT (102021000025367) 2021-10-04

---

[21] **3,233,504**  
[13] A1

[51] **Int.Cl. B21B 27/02 (2006.01) C23C 4/04 (2006.01)**

[25] EN

[54] **METHOD FOR OPTIMISING THE ROUGHNESS OF A ROLLING MILL ROLL BY MEANS OF HIGH-SPEED THERMAL SPRAYING**

[54] **METHODE D'OPTIMISATION DE LA RUGOSITE D'UN CYLINDRE DE LAMINOIR PAR PROJECTION THERMIQUE A GRANDE VITESSE**

[72] FUENTEVILLA DIAZ, GREGORIO, ES

[71] MECANIZACION INDUSTRIAL ASTILLERO, S.A., ES

[71] FUENTEVILLA DIAZ, GREGORIO, ES

[85] 2024-03-28

[86] 2022-10-03 (PCT/ES2022/070627)

[87] (WO2023/057674)

[30] ES (P202130927) 2021-10-04

---

[21] **3,233,505**  
[13] A1

[51] **Int.Cl. C07D 235/04 (2006.01) A61K 31/4184 (2006.01) A61P 1/16 (2006.01)**

[25] EN

[54] **BICYCLIC FUSED RING DERIVATIVE OR SALT THEREOF AND PHARMACEUTICAL COMPOSITION COMPRISING SAME**

[54] **DERIVE DE CYCLE FUSIONNE BICYCLIQUE OU SEL CONNEXE ET COMPOSITION PHARMACEUTIQUE LES COMPRENANT**

[72] KIM, EUN-KYUNG, KR

[72] LIM, CHEOL-HEE, KR

[72] LEE, KANG-YO, KR

[72] CHOI, HYUN-HO, KR

[71] YUHAN CORPORATION, KR

[85] 2024-03-28

[86] 2022-09-29 (PCT/KR2022/014656)

[87] (WO2023/055124)

[30] KR (10-2021-0130916) 2021-10-01

---

[21] **3,233,506**  
[13] A1

[51] **Int.Cl. C12N 15/63 (2006.01)**

[25] EN

[54] **TRANSPOSON COMPOSITIONS AND METHODS OF USE THEREOF**

[54] **COMPOSITIONS DE TRANSPOSONS ET LEURS PROCEDES D'UTILISATION**

[72] LUCAS, JOSEPH S., US

[72] MADISON, BLAIR B., US

[71] POSEIDA THERAPEUTICS, INC., US

[85] 2024-03-28

[86] 2022-10-04 (PCT/US2022/077544)

[87] (WO2023/060088)

[30] US (63/252,030) 2021-10-04

---

[21] **3,233,507**  
[13] A1

[51] **Int.Cl. G06F 21/62 (2013.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR DATA RETENTION AND PURGING**

[54] **SYSTEMES ET PROCEDES DE RETENTION ET DE PURGE DE DONNEES**

[72] SCOPE, NICHOLAS CRAIG, US

[72] RASIN, ALEXANDER, US

[71] SCOPE, NICHOLAS CRAIG, US

[71] RASIN, ALEXANDER, US

[85] 2024-03-28

[86] 2022-09-28 (PCT/US2022/045116)

[87] (WO2023/055854)

[30] US (63/249,355) 2021-09-28

---

[21] **3,233,508**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G16H 10/40 (2018.01) G16H 15/00 (2018.01) G16H 50/20 (2018.01) G16H 50/30 (2018.01) G06N 3/00 (2023.01) G06N 7/00 (2023.01) G16H 10/60 (2018.01) G16H 30/20 (2018.01) G16H 50/70 (2018.01) G06F 16/23 (2019.01)**

[25] EN

[54] **METHOD AND SYSTEM FOR COLLECTING, RECORDING, AND TRANSMITTING CLINICAL INFORMATION WITH USEFULNESS-DRIVEN PROMPTS**

[54] **PROCEDE ET SYSTEME DE COLLECTE, D'ENREGISTREMENT ET DE TRANSMISSION D'INFORMATIONS CLINIQUES AVEC DES INVITES AXEES SUR L'UTILITE**

[72] SEGAL, MICHAEL M., US

[71] SIMULCONSULT, INC., US

[85] 2024-03-28

[86] 2022-09-29 (PCT/US2022/045276)

[87] (WO2023/055965)

[30] US (63/249,675) 2021-09-29

## Demandes PCT entrant en phase nationale

[21] **3,233,509**  
[13] A1

[51] **Int.Cl. C07D 487/04 (2006.01) A61P 13/12 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **MODULATORS OF TRPML, THEIR COMPOSITIONS AND METHODS OF USE**

[54] **MODULATEURS DE TRPML, LEURS COMPOSITIONS ET PROCEDES D'UTILISATION**

[72] IYENGAR, RAJESH R., US

[72] LEE, THOMAS WAI-HO, US

[72] MCCOMAS, CASEY CAMERON, US

[72] SCHMIDT, DARBY R., US

[72] GRAZIOTTO, JOHN J., US

[71] CARAWAY THERAPEUTICS, INC., US

[85] 2024-03-28

[86] 2022-09-29 (PCT/US2022/045210)

[87] (WO2023/055920)

[30] US (63/250,818) 2021-09-30

[30] US (63/339,791) 2022-05-09

[21] **3,233,510**  
[13] A1

[51] **Int.Cl. H04L 41/0668 (2022.01) H04L 43/0894 (2022.01)**

[25] EN

[54] **EFFICIENT FAIL OVER TO BACKUP LINK**

[54] **BASCULEMENT EFFICACE VERS UNE LIAISON DE SECOURS**

[72] BRETON, BERNARD, CA

[71] ADAPTIV NETWORKS INC., CA

[85] 2024-03-28

[86] 2022-09-27 (PCT/CA2022/051431)

[87] (WO2023/049997)

[30] US (17/449,495) 2021-09-30

[21] **3,233,511**  
[13] A1

[51] **Int.Cl. A61C 9/00 (2006.01)**

[25] EN

[54] **IMPRESSION TRAY**

[54] **PORTE-EMPREINTE**

[72] AL MSTREHI, RAFAT, DE

[71] AL MSTREHI, RAFAT, DE

[85] 2024-03-28

[86] 2022-09-26 (PCT/EP2022/076656)

[87] (WO2023/052293)

[30] EP (21200553.2) 2021-10-01

[21] **3,233,512**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **MULTISPECIFIC BINDING AGENTS AGAINST PD-L1 AND CD137 IN COMBINATION WITH ANTI PD-1 ANTIBODIES FOR TREATING CANCERS**

[54] **AGENTS DE LIAISON MULTISPECIFIQUES CONTRE PD-L1 ET CD137 EN COMBINAISON AVEC DES ANTICORPS ANTI-PD-1 POUR LE TRAITEMENT DE CANCERS**

[72] MUIK, ALEXANDER, DE

[72] NURMBERGER, KRISTINA, DE

[72] PENCHEVA, NORA, NL

[72] JURE-KUNKEL, MARIAN, US

[72] SAHIN, UGUR, DE

[71] GENMAB A/S, DK

[71] BIONTECH SE, DE

[71] MSD INTERNATIONAL BUSINESS GMBH, CH

[85] 2024-03-28

[86] 2022-10-05 (PCT/EP2022/077749)

[87] (WO2023/057535)

[30] US (63/253,106) 2021-10-06

[30] US (63/257,901) 2021-10-20

[21] **3,233,513**  
[13] A1

[51] **Int.Cl. C05F 17/95 (2020.01) C05F 17/907 (2020.01) C05F 17/979 (2020.01)**

[25] FR

[54] **DOMESTIC COMPOSTER**

[54] **COMPOSTEUR DOMESTIQUE**

[72] DUPRET, LAETITIA, BE

[72] BIEBUYCK, ADELAIDE, BE

[72] MILANO, FIONA, BE

[72] DEBETENCOURT, SAM, BE

[72] CONVENT, LIONEL, BE

[72] VANDEVENNE, BRECHT, BE

[72] DE CLERCQ, SANDER, BE

[72] KENIS, KAAT, BE

[71] GREENZY, BE

[85] 2024-03-28

[86] 2022-10-05 (PCT/EP2022/077739)

[87] (WO2023/057529)

[30] BE (BE2021/5781) 2021-10-07

[21] **3,233,514**  
[13] A1

[51] **Int.Cl. H04L 67/00 (2022.01) H04W 4/44 (2018.01) H04L 67/1012 (2022.01) H04L 67/1034 (2022.01) H04L 67/2895 (2022.01)**

[25] EN

[54] **A SYSTEM OF AGGREGATING SERVERS**

[54] **SYSTEME D'AGREGATION DE SERVEURS**

[72] GRUENER, STEN, DE

[72] BRAUN, ROLAND, DE

[71] ABB SCHWEIZ AG, CH

[85] 2024-03-28

[86] 2022-09-16 (PCT/EP2022/075867)

[87] (WO2023/061699)

[30] EP (21202942.5) 2021-10-15

[30] EP (21208778.7) 2021-11-17

[21] **3,233,515**  
[13] A1

[51] **Int.Cl. H01M 4/131 (2010.01) H01M 4/1391 (2010.01) H01M 4/505 (2010.01) H01M 4/525 (2010.01) H01M 10/0525 (2010.01)**

[25] EN

[54] **PROCESS FOR THE MANUFACTURE OF A COATED CATHODE ACTIVE MATERIAL, AND COATED CATHODE ACTIVE MATERIAL**

[54] **PROCEDE DE FABRICATION D'UN MATERIAU ACTIF DE CATHODE REVETUE, ET MATERIAU ACTIF DE CATHODE REVETUE**

[72] LENNARTZ, MICHAEL, DE

[72] GASTEIGER, HUBERT, DE

[72] HARTMANN, LOUIS, DE

[72] CHING, CHEUCK HIN, DE

[71] BASF SE, DE

[85] 2024-03-28

[86] 2022-09-28 (PCT/EP2022/076981)

[87] (WO2023/057280)

[30] EP (21200727.2) 2021-10-04

## PCT Applications Entering the National Phase

---

[21] **3,233,516**  
[13] A1

[51] **Int.Cl. H04W 8/00 (2009.01) H04W 12/06 (2021.01) H04W 76/12 (2018.01)**

[25] EN

[54] **COMMUNICATION METHOD AND APPARATUS**

[54] **PROCEDE ET APPAREIL DE COMMUNICATION**

[72] LI, YONGCUI, CN  
[72] CHEN, ZHAO, CN  
[72] NI, HUI, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN

[85] 2024-03-28  
[86] 2022-09-26 (PCT/CN2022/121185)  
[87] (WO2023/051427)  
[30] CN (202111166464.6) 2021-09-30

---

[21] **3,233,518**  
[13] A1

[51] **Int.Cl. A01C 7/06 (2006.01)**

[25] EN

[54] **LIQUID FERTILIZER CONTROL SYSTEMS, METHODS, AND APPARATUS FOR AGRICULTURAL IMPLEMENTS**

[54] **SYSTEMES, PROCEDES ET APPAREIL DE COMMANDE D'ENGRAIS LIQUIDE POUR OUTILS AGRICOLES**

[72] NOLTE, STEVE, US  
[72] WILLIAMS, DENNY, US  
[71] KINZE MANUFACTURING, INC., US

[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/077319)  
[87] (WO2023/056402)  
[30] US (63/261,973) 2021-10-01

---

[21] **3,233,519**  
[13] A1

[51] **Int.Cl. C12N 15/11 (2006.01) C12Q 1/6848 (2018.01)**

[25] EN

[54] **TARGETED INHIBITION OF REVERSE TRANSCRIPTION USING ANTISENSE OLIGOS**

[54] **INHIBITION CIBLEE DE LA TRANSCRIPTION INVERSE A L'AIDE D'OLIGOS ANTISENS**

[72] HOROS, RASTISLAV, DE  
[72] RAJAKUMAR, TIMOTHY, DE  
[72] STEINKRAUS, BRUNO, DE  
[72] KAHRAMAN, MUSTAFA, DE  
[71] HUMMINGBIRD DIGANOSTICS GMBH, DE

[85] 2024-03-28  
[86] 2022-06-28 (PCT/EP2022/067813)  
[87] (WO2023/066534)  
[30] EP (21204208.9) 2021-10-22

---

[21] **3,233,520**  
[13] A1

[51] **Int.Cl. G01W 1/00 (2006.01) G01M 3/02 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ESTIMATING AN EMISSION RATE OF A SOURCE**

[54] **SYSTEMES ET PROCEDES D'ESTIMATION D'UN TAUX D'EMISSION D'UNE SOURCE**

[72] BOURLON, EVELISE, CA  
[72] NICKERSON, NICHOLAS R., CA  
[72] GOSSE, COLLEEN M., CA  
[72] RISK, DAVID A., CA  
[71] EOSENSE INC., CA

[85] 2024-03-28  
[86] 2022-10-06 (PCT/CA2022/051475)  
[87] (WO2023/056557)  
[30] US (63/253,746) 2021-10-08

---

[21] **3,233,521**  
[13] A1

[51] **Int.Cl. A61K 31/5578 (2006.01) A61K 45/06 (2006.01) A61P 9/08 (2006.01)**

[25] EN

[54] **INHALED ILOPROST FOR RESCUE TREATMENT AND TREATMENT AS NEEDED IN PULMONARY HYPERTENSION**

[54] **ILOPROST INHALE POUR LE TRAITEMENT AU BESOIN DE L'HYPERTENSION PULMONAIRE**

[72] SEEGER, WERNER, DE  
[72] GESSLER, TOBIAS, DE  
[71] JUSTUS-LIEBIG-UNIVERSITAT GIESSEN, DE

[85] 2024-03-28  
[86] 2021-09-10 (PCT/EP2021/074903)  
[87] (WO2023/036432)

---

[21] **3,233,522**  
[13] A1

[51] **Int.Cl. C12N 15/86 (2006.01) A61K 48/00 (2006.01) C12N 15/85 (2006.01) A61P 27/16 (2006.01)**

[25] EN

[54] **GENE THERAPY DELIVERY COMPOSITIONS AND METHODS FOR TREATING HEARING LOSS**

[54] **COMPOSITIONS D'ADMINISTRATION DE THERAPIE GENIQUE ET METHODES DE TRAITEMENT DE LA PERTE AUDITIVE**

[72] GRIBBLE, KATHERINE DIANE, US  
[72] LENZ, DANIELLE R., US  
[72] NG, ROBERT, US  
[72] CHIANG, HAO, US  
[71] AKOUOS, INC., US

[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/077397)  
[87] (WO2023/056452)  
[30] US (63/251,017) 2021-09-30



## Demandes PCT entrant en phase nationale

[21] **3,233,523**  
[13] A1

[51] **Int.Cl. G01N 1/28 (2006.01) G01N 1/36 (2006.01) G01N 33/24 (2006.01)**  
[25] EN  
[54] **METHOD FOR PREPARATION, DETECTION, AND ANALYSIS OF SYNTHETIC POLYMERS USING AUTOMATED MINERALOGY SYSTEMS**  
[54] **PROCEDE DE PREPARATION, DE DETECTION ET D'ANALYSE DE POLYMERES SYNTHETIQUES A L'AIDE DE SYSTEMES MINERALOGIQUES AUTOMATISES**  
[72] ROGERS, GARETH, FR  
[72] MCGARRY, AMY, FR  
[71] CGG SERVICES SA, FR  
[85] 2024-03-28  
[86] 2021-10-14 (PCT/IB2021/000711)  
[87] (WO2023/062401)

[21] **3,233,524**  
[13] A1

[51] **Int.Cl. C10M 107/02 (2006.01) C10M 111/04 (2006.01) C10M 169/04 (2006.01) C10M 107/10 (2006.01)**  
[25] EN  
[54] **FUEL EFFICIENT, SHEAR STABLE AXLE LUBRICANT**  
[54] **LUBRIFIANT D'ESSIEU RESISTANT AU CISAILLEMENT, A FAIBLE CONSOMMATION DE CARBURANT**  
[72] GOYAL, ARJUN K., US  
[72] MOSHER, DONNA MAE, US  
[71] BASF SE, DE  
[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/045311)  
[87] (WO2023/055979)  
[30] US (63/261,970) 2021-10-01

[21] **3,233,525**  
[13] A1

[51] **Int.Cl. G01J 3/46 (2006.01) A45D 44/00 (2006.01) G01J 3/52 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHOD FOR SKIN COLOR DETERMINATION**  
[54] **SYSTEMES ET PROCEDE DE DETERMINATION DE LA COULEUR DE LA PEAU**  
[72] RATTNER, SERGIO, CA  
[72] VILIMAS, JUSTINAS, CA  
[71] FITSKIN INC., CA  
[85] 2024-03-28  
[86] 2022-09-29 (PCT/CA2022/051443)  
[87] (WO2023/050004)  
[30] US (63/249,656) 2021-09-29

[21] **3,233,526**  
[13] A1

[51] **Int.Cl. C07D 209/36 (2006.01)**  
[25] EN  
[54] **DERIVATIVES OF ARYL HYDROCARBON RECEPTOR AGONISTS**  
[54] **DERIVES D'AGONISTES DU RECEPTEUR DE L'ARYL-HYDROCARBONE**  
[72] DAVIDSON, MATTHEW, US  
[72] SAIKI, JULIE, US  
[72] LUM, ROBERT, US  
[72] SCHOW, STEVEN R., US  
[71] AZORA THERAPEUTICS, INC., US  
[85] 2024-03-28  
[86] 2022-10-07 (PCT/US2022/077815)  
[87] (WO2023/060268)  
[30] US (63/254,052) 2021-10-08

[21] **3,233,527**  
[13] A1

[51] **Int.Cl. H02J 13/00 (2006.01)**  
[25] EN  
[54] **METHOD FOR DETERMINING AN OPTIMAL PLACEMENT OF MEASUREMENT UNITS FOR ESTIMATING THE STATE OF A PHYSICAL POWER DISTRIBUTION GRID**  
[54] **PROCEDE DE DETERMINATION D'UN PLACEMENT OPTIMAL D'UNITES DE MESURE PERMETTANT D'ESTIMER L'ETAT D'UN RESEAU DE DISTRIBUTION D'ENERGIE PHYSIQUE**  
[72] ALIZADEH-MOUSAVI, OMID, CH  
[72] MOUTIS, PANAYIOTIS, US  
[71] KRAKEN TECHNOLOGIES LIMITED, GB  
[85] 2024-03-28  
[86] 2022-09-28 (PCT/IB2022/059216)  
[87] (WO2023/057856)  
[30] EP (21200782.7) 2021-10-04

[21] **3,233,528**  
[13] A1

[51] **Int.Cl. C12M 1/00 (2006.01) C12M 1/12 (2006.01) C12M 1/34 (2006.01) C12M 1/36 (2006.01)**  
[25] FR  
[54] **PROCESS FOR PRODUCING ALCOHOLS BY FERMENTATION**  
[54] **PROCEDE DE PRODUCTION D'ALCOOLS PAR FERMENTATION**  
[72] CARRIE, MAXIME, FR  
[72] VELLY, HELENE, FR  
[72] GABELLE, JEAN-CHRISTOPHE, FR  
[72] BEN CHAABANE, MOHAMED FADHEL, FR  
[71] IFP ENERGIES NOUVELLES, FR  
[85] 2024-03-28  
[86] 2022-10-10 (PCT/EP2022/078032)  
[87] (WO2023/066697)  
[30] FR (FR2111141) 2021-10-20

## PCT Applications Entering the National Phase

[21] **3,233,529**  
[13] A1

[51] **Int.Cl. C12P 17/04 (2006.01)**  
[25] EN  
[54] **BIOCHEMICAL PATHWAY FOR THE PRODUCTION OF TULIPALIN A VIA ITACONIC ACID**

[54] **VOIE BIOCHIMIQUE POUR LA PRODUCTION DE TULIPALINE A PAR L'INTERMEDIAIRE D'ACIDE ITACONIQUE**

[72] NAVE, BARBARA, DE  
[72] ZELDER, OSKAR, DE  
[72] BREUER, MICHAEL, DE  
[72] SUNDARAM, SRIVIDHYA, DE  
[72] ERB, TOBIAS, DE  
[71] BASF SE, DE  
[71] MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN E.V., DE

[85] 2024-03-28  
[86] 2022-09-29 (PCT/EP2022/077180)  
[87] (WO2023/052538)  
[30] EP (21200581.3) 2021-10-01

[21] **3,233,530**  
[13] A1

[51] **Int.Cl. B65H 19/18 (2006.01) B65H 59/00 (2006.01)**

[25] EN  
[54] **SPLICING APPARATUS AND METHOD FOR A PAPERBOARD PROTECTIVE CORNER MANUFACTURING SYSTEM**

[54] **APPAREIL ET PROCEDE D'EPISSAGE POUR UN SYSTEME DE FABRICATION DE COIN DE PROTECTION EN CARTON**

[72] TARDY, JEAN, CA  
[72] LAGOTTE, SAMUEL, CA  
[72] DUDOIT, LAURENT, CA  
[71] ABZAC CANADA INC., CA

[85] 2024-03-28  
[86] 2023-08-31 (PCT/CA2023/051156)  
[87] (WO2024/044856)  
[30] US (63/374,077) 2022-08-31

[21] **3,233,531**  
[13] A1

[51] **Int.Cl. A61K 39/395 (2006.01) A61P 35/00 (2006.01) A61P 43/00 (2006.01)**

[25] EN  
[54] **CYTOTOXICITY-INDUCING THERAPEUTIC AGENT FOR USE IN TREATMENT OF CANCER**

[54] **AGENT THERAPEUTIQUE INDUISANT LA CYTOTOXICITE DESTINE A ETRE UTILISE DANS LE TRAITEMENT DU CANCER**

[72] ISHII, SHINYA, JP  
[72] KAMIKAWA, TAKAYUKI, JP  
[72] KIMURA, NAOKI, JP  
[72] KODAMA, TATSUSHI, JP  
[71] CHUGAI SEIYAKU KABUSHIKI KAISHA, JP

[85] 2024-03-28  
[86] 2022-09-28 (PCT/JP2022/036060)  
[87] (WO2023/054421)  
[30] JP (PCT/JP2021/035917) 2021-09-29

[21] **3,233,532**  
[13] A1

[51] **Int.Cl. B01D 53/76 (2006.01)**

[25] EN  
[54] **AEROSOL AND METHOD AND APPARATUS FOR PRODUCING AN AEROSOL**

[54] **AEROSOL PHOTOCATALYTIC**

[72] OESTE, FRANZ DIETRICH, DE  
[72] ELSWORTH, CLIVE THOMAS, GB  
[71] OESTE, FRANZ DIETRICH, DE  
[71] ELSWORTH, CLIVE THOMAS, GB

[85] 2024-03-28  
[86] 2022-08-09 (PCT/DE2022/100581)  
[87] (WO2023/051858)  
[30] DE (DE 10 2021 004 929.2) 2021-10-01  
[30] GB (2117512.0) 2021-12-03  
[30] DE (DE 10 2022 001 364.9) 2022-04-21  
[30] DE (DE 10 2022 001 393.2) 2022-04-23  
[30] DE (DE 10 2022 001 608.7) 2022-05-08  
[30] DE (DE 10 2022 001 961.2) 2022-06-07  
[30] DE (DE 10 2022 002 100.5) 2022-06-10

[21] **3,233,533**  
[13] A1

[51] **Int.Cl. G01N 33/53 (2006.01) G01N 33/68 (2006.01)**

[25] EN  
[54] **METHODS AND DEVICES FOR DETECTING CEREBROSPINAL FLUID LEAKAGE**

[54] **METHODES ET DISPOSITIFS DE DETECTION DE FUITE DE LIQUIDE CEPHALO-RACHIDIEN**

[72] FLOWER, TODD, US  
[72] MATZILEVICH, DAVID, US  
[71] INTEGRATED NEUROLOGICS LLC, US

[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/077334)  
[87] (WO2023/056410)  
[30] US (63/251,180) 2021-10-01

[21] **3,233,534**  
[13] A1

[51] **Int.Cl. A61K 31/551 (2006.01) C12N 15/113 (2010.01) A61K 31/713 (2006.01) A61P 25/00 (2006.01) C07K 14/47 (2006.01)**

[25] EN  
[54] **DIRECT TRANSDIFFERENTIATION FOR TREATMENT OF NEUROLOGICAL DISEASE**

[54] **TRANSDIFFERENCIATION DIRECTE POUR LE TRAITEMENT DES MALADIES NEUROLOGIQUES**

[72] ZHOU, HAIBO, CN  
[72] HU, XINDE, CN  
[72] SU, JINLIN, CN  
[71] SHANGHAI GENEMAGIC BIOSCIENCES CO., LTD., CN

[85] 2024-03-28  
[86] 2022-09-30 (PCT/CN2022/123409)  
[87] (WO2023/051802)  
[30] CN (202111158620.4) 2021-09-30

## Demandes PCT entrant en phase nationale

[21] **3,233,535**  
[13] A1

[51] **Int.Cl. B30B 9/12 (2006.01) B30B 9/14 (2006.01) B30B 9/16 (2006.01) B30B 15/34 (2006.01) C11B 1/00 (2006.01) C11B 1/10 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR PRESSING**

[54] **PROCEDE ET DISPOSITIF DE PRESSAGE**

[72] VOLTZER, MORITZ, DE

[71] HARBURG-FREUDENBERGER MASCHINENBAU GMBH, DE

[85] 2024-03-28

[86] 2022-08-09 (PCT/DE2022/100579)

[87] (WO2023/057000)

[30] DE (10 2021 125 760.3) 2021-10-05

[21] **3,233,536**  
[13] A1

[51] **Int.Cl. C09K 8/58 (2006.01) E21B 43/247 (2006.01) E21B 43/26 (2006.01)**

[25] EN

[54] **METHODS AND SYSTEMS FOR TREATING HYDRAULICALLY FRACTURED FORMATIONS**

[54] **PROCEDES ET SYSTEMES DE TRAITEMENT DE FORMATIONS FRACTUREES HYDRAULIQUEMENT**

[72] WALLACE, TAD, US

[72] LANGE, KEVIN, US

[72] SZABO, DAVE, US

[72] STARR, SUSAN, US

[72] BALESTRINI, ANDREA, US

[71] WALLACE, TAD, US

[71] LANGE, KEVIN, US

[71] SZABO, DAVE, US

[71] STARR, SUSAN, US

[71] BALESTRINI, ANDREA, US

[85] 2024-03-28

[86] 2021-12-17 (PCT/US2021/063953)

[87] (WO2023/055411)

[30] US (17/488,029) 2021-09-28

[21] **3,233,537**  
[13] A1

[51] **Int.Cl. A61K 51/10 (2006.01) A61P 35/02 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **RADIOIMMUNOCONJUGATES TARGETING GRP78 FOR USE IN THE TREATMENT OF CANCER**

[54] **RADIOIMMUNOCONJUGUES CIBLANT GRP78 POUR UNE UTILISATION DANS LE TRAITEMENT DU CANCER**

[72] LUDWIG, DALE L., US

[72] GEOGHEGAN, EILEEN, US

[72] KOTANIDES, HELEN, US

[72] SETH, SANDESH, US

[71] ACTINIUM PHARMACEUTICALS, INC., US

[85] 2024-03-28

[86] 2022-09-28 (PCT/US2022/077188)

[87] (WO2023/056302)

[30] US (63/249,160) 2021-09-28

[21] **3,233,538**  
[13] A1

[51] **Int.Cl. A61F 11/20 (2022.01)**

[25] EN

[54] **COCHLEA INJECTION DEVICES, SYSTEMS, AND METHODS FOR OTOTOLOGY**

[54] **DISPOSITIFS, SYSTEMES ET PROCEDES D'INJECTION COCHLEAIRE POUR OTOLOGIE**

[72] ERICKSON, SIGNE, US

[72] LEVERING, VRAD, US

[72] DE JUAN, EUGENE, US

[72] AYOOB, ANDREW, US

[71] SPIRAL THERAPEUTICS INC., US

[85] 2024-03-28

[86] 2022-09-27 (PCT/US2022/044846)

[87] (WO2023/055719)

[30] US (63/249,938) 2021-09-29

[21] **3,233,539**  
[13] A1

[51] **Int.Cl. B64G 1/10 (2006.01)**

[25] EN

[54] **EARTH MONITORING SYSTEM AND METHOD OF MANAGING A SATELLITE CONSTELLATION**

[54] **SYSTEME DE SURVEILLANCE DE LA TERRE ET PROCEDE DE GESTION D'UNE CONSTELLATION DE SATELLITES**

[72] MODRZEWSKI, RAFAL, FI

[72] LAURILA, PEKKA, FI

[72] CHECHILE, IGNACIO, FI

[71] ICEYE OY, FI

[85] 2024-03-28

[86] 2022-09-23 (PCT/EP2022/076590)

[87] (WO2023/052270)

[30] GB (2113949.8) 2021-09-29

[21] **3,233,540**  
[13] A1

[51] **Int.Cl. A47L 11/30 (2006.01) A47L 7/02 (2006.01) A47L 11/32 (2006.01) A47L 11/33 (2006.01) A47L 11/40 (2006.01) F16K 11/04 (2006.01) F16K 11/07 (2006.01)**

[25] EN

[54] **CLEANING APPARATUS**

[54] **DISPOSITIF DE NETTOYAGE, APPAREIL DE LAVAGE ET ENSEMBLE SOUPE DE COMMUTATION**

[72] GUO, SHUWEI, CN

[72] LIU, WEIDONG, CN

[72] HAN, ZHEN, CN

[72] XIA, PENG, CN

[72] WANG, YISONG, CN

[72] WU, CHUNHAO, CN

[72] CHEN, ZHEN, CN

[72] ZHOU, CHUNFENG, CN

[71] TINECO INTELLIGENT TECHNOLOGY CO., LTD., CN

[85] 2024-03-28

[86] 2022-09-02 (PCT/CN2022/116909)

[87] (WO2023/051169)

[30] CN (202111166131.3) 2021-09-30

[30] CN (202123299803.6) 2021-12-24

[30] CN (202111164044.4) 2021-09-30

[30] CN (202111162801.4) 2021-09-30

## PCT Applications Entering the National Phase

---

[21] **3,233,541**  
[13] A1

[51] **Int.Cl. G01C 11/00 (2006.01) G01S 5/02 (2010.01)**  
[25] EN  
[54] **PLANT AND/OR VEHICLE LOCATING LOCALISATION**  
[54] **D'INSTALLATION ET/OU DE VEHICULE**  
[72] GOYAL, SANKET, US  
[72] WHITNEY, CHRISTOPHER TRAVIS, US  
[71] ZIMENO, INC. DBA MONARCH TRACTOR, US  
[85] 2024-03-28  
[86] 2021-09-30 (PCT/US2021/052803)  
[87] (WO2023/055367)

---

[21] **3,233,542**  
[13] A1

[51] **Int.Cl. G01C 21/12 (2006.01)**  
[25] EN  
[54] **VEHICLE ROW FOLLOW SYSTEM**  
[54] **SYSTEME DE SUIVI DE RANGEE DE VEHICULES**  
[72] VARMA BHUPATIRAJU, RAMA VENKATA SURYA KUMAR, US  
[72] KARISHETTI, DEEPAK RAJASEKHAR, US  
[72] GATTEN, BENJAMIN M., US  
[72] GOYAL, SANKET, US  
[71] ZIMENO, INC. DBA MONARCH TRACTOR, US  
[85] 2024-03-28  
[86] 2021-09-30 (PCT/US2021/052948)  
[87] (WO2023/055383)

---



---

[21] **3,233,543**  
[13] A1

[51] **Int.Cl. C12M 1/42 (2006.01) G01Q 60/36 (2010.01) G01N 3/317 (2006.01) G01N 3/42 (2006.01) G01N 33/487 (2006.01)**  
[25] EN  
[54] **METHODS FOR QUANTIFYING THE IMPACT OF SHEAR STRESS ON MAMMALIAN CELL LINES**  
[54] **PROCEDES DE QUANTIFICATION DE L'IMPACT D'UNE CONTRAINTE DE CISAILLEMENT SUR DES LIGNEES CELLULAIRES DE MAMMIFERE**  
[72] O'SHEA, IAN, US  
[72] CROWLEY, JOHN, US  
[72] POWER, MARTIN, US  
[72] RONAN, ALAN, US  
[71] REGENERON PHARMACEUTICALS, INC., US

---

[21] **3,233,544**  
[13] A1

[51] **Int.Cl. C22B 26/12 (2006.01)**  
[25] EN  
[54] **METHOD FOR EXTRACTING LITHIUM FROM SALT LAKE**  
[54] **PROCEDE D'EXTRACTION DE LITHIUM D'UN LAC SALE**  
[72] WEI, JIALIANG, CN  
[72] LIN, HONGYE, CN  
[72] LIAN, JUNLAN, CN  
[71] BYD COMPANY LIMITED, CN  
[85] 2024-03-28  
[86] 2022-12-05 (PCT/CN2022/136482)  
[87] (WO2023/124792)  
[30] CN (202111630401.1) 2021-12-28

---



---

[21] **3,233,545**  
[13] A1

[51] **Int.Cl. A61K 35/32 (2015.01) C12N 5/077 (2010.01) A61L 27/38 (2006.01) A61P 19/02 (2006.01) G01N 33/50 (2006.01)**  
[25] EN  
[54] **METHODS FOR PRODUCING CARTILAGE AND BONES**  
[54] **PROCEDES DE PRODUCTION DE CARTILAGE ET D'OS**  
[72] BATEMAN, JOHN, AU  
[72] LAMANDE, SHIREEN, AU  
[72] NG, ELIZABETH, AU  
[71] MURDOCH CHILDREN'S RESEARCH INSTITUTE, AU  
[85] 2024-03-28  
[86] 2022-10-14 (PCT/AU2022/051242)  
[87] (WO2023/060322)  
[30] AU (2021903310) 2021-10-14

---

[21] **3,233,546**  
[13] A1

[51] **Int.Cl. B65G 47/244 (2006.01) B07C 5/14 (2006.01) B27B 31/04 (2006.01) B65G 47/96 (2006.01)**  
[25] EN  
[54] **DEFLECTING DEVICE FOR AN ELONGATE ITEM**  
[54] **DISPOSITIF DE DEVIATION POUR UN ARTICLE ALLONGE**  
[72] KNAPP, FLORIAN, AT  
[72] POTSCHER, JULIAN, AT  
[71] SPRINGER MASCHINENFABRIK GMBH, AT  
[85] 2024-03-28  
[86] 2022-10-13 (PCT/EP2022/078487)  
[87] (WO2023/066779)  
[30] AT (A 50834/2021) 2021-10-20  
[30] AT (A 50835/2021) 2021-10-20  
[30] AT (A 50126/2022) 2022-02-25

## Demandes PCT entrant en phase nationale

[21] **3,233,547**  
[13] A1

[51] **Int.Cl. G16C 10/00 (2019.01) G16C 20/30 (2019.01) G16C 60/00 (2019.01)**

[25] EN

[54] **RECYCLING OF PLASTICS BY SOLVENT-TARGETED RECOVERY AND PRECIPITATION ("STRAP")**

[54] **RECYCLAGE DE PLASTIQUES PAR RECUPERATION ET PRECIPITATION CIBLEES PAR SOLVANT (« STRAP »)**

[72] HUBER, GEORGE, US

[72] SANCHEZ-RIVERA, KEVIN, US

[72] VAN-LEHN, REID, US

[72] WALKER, TED, US

[72] ZHOU, PANZHENG, US

[71] WISCONSIN ALUMNI RESEARCH FOUNDATION, US

[85] 2024-03-28

[86] 2022-11-18 (PCT/US2022/050363)

[87] (WO2023/091639)

[30] US (63/280,669) 2021-11-18

[21] **3,233,548**  
[13] A1

[51] **Int.Cl. B27B 31/00 (2006.01) B65G 17/00 (2006.01) B65G 17/14 (2006.01) B65G 21/02 (2006.01) B65G 21/20 (2006.01) B65G 21/22 (2006.01) B65G 47/244 (2006.01) B65G 47/52 (2006.01) B65G 47/82 (2006.01)**

[25] EN

[54] **CONVEYING SYSTEM FOR LONGITUDINALLY TRANSPORTING ELONGATE ITEMS**

[54] **SYSTEME DE CONVOYAGE POUR LE TRANSPORT LONGITUDINAL D'ARTICLES ALLONGES**

[72] KNAPP, FLORIAN, AT

[72] POTSCHER, JULIAN, AT

[71] SPRINGER MASCHINENFABRIK GMBH, AT

[85] 2024-03-28

[86] 2022-10-13 (PCT/EP2022/078489)

[87] (WO2023/066781)

[30] AT (A 50834/2021) 2021-10-20

[30] AT (A 50835/2021) 2021-10-20

[30] AT (A 50126/2022) 2022-02-25

[21] **3,233,549**  
[13] A1

[51] **Int.Cl. G06T 3/40 (2024.01) G06T 5/00 (2024.01) G06T 7/00 (2017.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR IMAGE PROCESSING**

[54] **SYSTEMES ET PROCEDES DE TRAITEMENT DES IMAGES**

[72] CHEN, LIANGYI, CN

[72] LI, HAOYU, CN

[72] ZHAO, WEISONG, CN

[71] PEKING UNIVERSITY, CN

[85] 2024-03-28

[86] 2021-09-30 (PCT/CN2021/122442)

[87] (WO2023/050422)

[21] **3,233,550**  
[13] A1

[51] **Int.Cl. B01D 59/26 (2006.01) G01T 1/36 (2006.01) G21G 1/06 (2006.01)**

[25] EN

[54] **LU-177 RADIOCHEMISTRY SYSTEM AND METHOD**

[54] **PROCEDE ET SYSTEME DE RADIOCHIMIE DU LU-177**

[72] OELSNER, STEPHEN M., US

[72] HUNTER, GARY, US

[72] WIGGINS, BRYAN BLAKE, US

[72] POLICKE, TIMOTHY A., US

[72] GLENN, DAVID J., US

[71] BWXT MEDICAL LTD., CA

[85] 2024-03-28

[86] 2022-10-05 (PCT/IB2022/000574)

[87] (WO2023/057816)

[30] US (63/253,333) 2021-10-07

[30] US (17/959,752) 2022-10-04

[21] **3,233,551**  
[13] A1

[51] **Int.Cl. F23C 10/18 (2006.01) C01B 32/50 (2017.01) C01B 3/32 (2006.01)**

[25] EN

[54] **ARRANGEMENTS FOR CHEMICAL LOOPING COMBUSTION SYSTEMS**

[54] **AGENCEMENTS POUR SYSTEMES DE COMBUSTION EN BOUCLE CHIMIQUE**

[72] HUGHES, ROBIN, CA

[72] SYMONDS, ROBERT, CA

[72] CHAMPAGNE, SCOTT, CA

[72] LUKA, EMI, CA

[72] BOND, NICOLE, CA

[71] HER MAJESTY THE QUEEN IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES CANADA, CA

[85] 2024-03-28

[86] 2022-10-18 (PCT/CA2022/051535)

[87] (WO2023/065024)

[30] US (63/257,404) 2021-10-19

[21] **3,233,552**  
[13] A1

[51] **Int.Cl. F28F 3/02 (2006.01)**

[25] EN

[54] **DIRECT HEAT EXCHANGE FILL**

[54] **REMPLISSAGE DIRECT D'ECHANGE DE CHALEUR**

[72] NEVINS, SCOTT, US

[72] HAMILTON, JENNIFER, US

[72] HERWIG, JEFFREY, US

[72] MUMMERT, ELIZA, US

[71] EVAPCO, INC., US

[85] 2024-03-28

[86] 2022-10-03 (PCT/US2022/045531)

[87] (WO2023/056090)

[30] US (63/251,271) 2021-10-01

[30] US (63/251,284) 2021-10-01

[30] US (17/958,812) 2022-10-03

[21] **3,233,553**  
[13] A1

[51] **Int.Cl. H04B 11/00 (2006.01)**

[25] EN

[54] **SONIC CONDUIT TRACER SYSTEM**

[54] **SYSTEME DE TRACEUR DE CONDUIT SONIQUE**

[72] CHASE, ARNOLD, US

[71] CHASE, ARNOLD, US

[85] 2024-03-28

[86] 2023-04-17 (PCT/US2023/018812)

[87] (WO2024/030165)

[30] US (17/879,158) 2022-08-02

## PCT Applications Entering the National Phase

[21] **3,233,554**  
[13] A1

[51] **Int.Cl. A61K 31/438 (2006.01) A61K 31/513 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **COMBINATION THERAPY USING A PTPN11 INHIBITOR AND A KRAS G12C INHIBITOR**

[54] **POLYTHERAPIE A L'AIDE D'INHIBITEUR DE PTPN11 ET D'INHIBITEUR DE KRAS G12C**

[72] BELTRAN, PEDRO, US  
[72] DAMBKOWSKI, CARL, US  
[72] LIM, JUSTIN, US  
[72] WADE, ANNA, US  
[72] WALLACE, ELI, US  
[72] SUN, YUTING, US  
[72] KOHL, NANCY, US  
[72] MEYERS, BROOKE, US  
[72] SINKEVICIUS, KERSTIN, US  
[72] STICE, JAMES, US  
[72] VAN VEENHUYZEN, DAVID, US  
[72] WOOD, LAUREN, US  
[72] TWYMAN-SAINT VICTOR, CHRISTINA, US  
[72] DING, LINA, US  
[72] MORRIS, ERICK, US  
[72] LIU, YU, US  
[72] MEYER, MATTHEW, US  
[71] NAVIRE PHARMA, INC., US  
[71] BRIDGEBIO SERVICES, INC., US  
[71] BRISTOL-MYERS SQUIBB COMPANY, US  
[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/045391)  
[87] (WO2023/056020)  
[30] US (63/250,883) 2021-09-30

[21] **3,233,555**  
[13] A1

[51] **Int.Cl. A61K 31/438 (2006.01) A61K 31/513 (2006.01) A61K 31/519 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **COMBINATION THERAPY USING SUBSTITUTED PYRIMIDIN-4(3H)-ONES AND SOTORASIB**

[54] **POLYTHERAPIE A L'AIDE DE PYRIMIDIN-4(3H)-ONES ET DE SOTORASIB**

[72] BELTRAN, PEDRO, US  
[72] DAMBKOWSKI, CARL, US  
[72] LIM, JUSTIN, US  
[72] WADE, ANNA, US  
[72] WALLACE, ELI, US  
[72] SUN, YUTING, US  
[72] KOHL, NANCY, US  
[72] MEYERS, BROOKE, US  
[72] SINKEVICIUS, KERSTIN, US  
[72] STICE, JAMES, US  
[72] VAN VEENHUYZEN, DAVID, US  
[72] WOOD, LAUREN, US  
[71] NAVIRE PHARMA, INC., US  
[71] BRIDGEBIO SERVICES, INC., US  
[71] AMGEN INC., US  
[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/045413)  
[87] (WO2023/056037)  
[30] US (63/250,883) 2021-09-30

[21] **3,233,556**  
[13] A1

[51] **Int.Cl. G06Q 10/00 (2023.01) G06Q 10/08 (2023.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR QUANTIFYING AND/OR VERIFYING OCEAN-BASED INTERVENTIONS FOR SEQUESTERING CARBON DIOXIDE**

[54] **SYSTEMES ET PROCEDES DE QUANTIFICATION ET/OU DE VERIFICATION D'INTERVENTIONS OCEANIQUES DE SEQUESTRATION DU DIOXYDE DE CARBONE**

[72] THOMPSON, ANDREW, US  
[72] CHALFIN, MAX, US  
[72] MARTIN-FILIPPI, MARGAUX, US  
[72] RIES, JUSTIN BAKER, US  
[71] RUNNING TIDE TECHNOLOGIES, INC., US  
[85] 2024-03-28  
[86] 2022-09-30 (PCT/US2022/077404)  
[87] (WO2023/056459)  
[30] US (63/251,321) 2021-10-01

[21] **3,233,557**  
[13] A1

[51] **Int.Cl. A47C 27/22 (2006.01)**

[25] EN

[54] **ELASTIC PAD, ADDITIONAL ELASTIC PAD LAYER AND FURNITURE**

[54] **COUSSIN ELASTIQUE, COUCHE DE COUSSIN ELASTIQUE SUPPLEMENTAIRE ET MEUBLE**

[72] LENG, LUHAO, CN  
[71] NEW-TEC INTEGRATION (XIAMEN) CO., LTD., CN  
[85] 2024-03-28  
[86] 2022-09-15 (PCT/CN2022/119103)  
[87] (WO2023/051271)  
[30] CN (202111165817.0) 2021-09-30

[21] **3,233,559**  
[13] A1

[51] **Int.Cl. A61F 13/495 (2006.01)**

[25] EN

[54] **DIAPER WITH COLLECTION POUCH**

[54] **COUCHE AVEC POCHE DE COLLECTE**

[72] STEFU, CRISTIAN, CA  
[72] HIDISAN, IOANA MIHAELA, CA  
[72] RACINE, REGENT, CA  
[71] EASYDAY HEALTH PRODUCTS INC., CA  
[85] 2024-03-30  
[86] 2023-05-02 (PCT/CA2023/050592)  
[87] (WO2023/212809)  
[30] US (63/337,491) 2022-05-02

[21] **3,233,560**  
[13] A1

[51] **Int.Cl. E21B 19/16 (2006.01) E21B 3/02 (2006.01) F16D 1/10 (2006.01)**

[25] EN

[54] **LATCH RELEASE MECHANISM**

[54] **MECANISME DE LIBERATION DE VERROU**

[72] SLACK, MAURICE WILLIAM, CA  
[71] NOETIC TECHNOLOGIES INC., CA  
[85] 2024-03-30  
[86] 2023-04-29 (PCT/CA2023/000010)  
[87] (WO2023/212800)  
[30] US (17/735,027) 2022-05-02

## Demandes PCT entrant en phase nationale

[21] **3,233,561**  
[13] A1

[51] **Int.Cl. A61M 16/00 (2006.01) A61M 16/20 (2006.01)**

[25] EN

[54] **BAG AND VALVE FOR ADVANCED RESPIRATORY SUPPORT**

[54] **SAC ET VALVE POUR ASSISTANCE RESPIRATOIRE PERFECTIONNEE**

[72] MERRELL, JONATHAN, US  
[72] SCOTT, ADAM, US  
[72] FLAGLE, JACOB, US  
[72] LANE, DANIEL, US

[71] COMPACT MEDICAL SOLUTIONS LLC, US

[85] 2024-04-01  
[86] 2021-11-30 (PCT/US2021/061250)  
[87] (WO2023/055407)  
[30] US (63/251,373) 2021-10-01  
[30] US (17/537,169) 2021-11-29

[21] **3,233,562**  
[13] A1

[51] **Int.Cl. A61B 17/02 (2006.01) A61B 17/00 (2006.01)**

[25] EN

[54] **SURGICAL RETRACTOR**

[54] **ECARTEUR CHIRURGICAL**

[72] SHIRAZI, LEILA, SE  
[71] SHIRAZI, LEILA, SE

[85] 2024-04-01  
[86] 2022-10-29 (PCT/SE2022/050988)  
[87] (WO2023/075673)  
[30] SE (2130291-4) 2021-10-30

[21] **3,233,563**  
[13] A1

[51] **Int.Cl. A61K 35/744 (2015.01) A23K 10/16 (2016.01) A23L 33/135 (2016.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **NOVEL STRAIN HAVING ANTAGONISM AGAINST PROTEUS MIRABILIS AND EXCELLENT EFFECT ON NEURODEGENERATIVE DISEASE, AND USE THEREOF**

[54] **NOUVELLE SOUCHE PRESENTANT UN ANTAGONISME VIS-A-VIS DE PROTEUS MIRABILIS ET UN EXCELLENT EFFET SUR UNE MALADIE NEURODEGENERATIVE, ET SON UTILISATION**

[72] OH, MYUNG SOOK, KR  
[72] HUH, EUGENE, KR  
[72] PARK, MYOUNG GYU, KR  
[72] JEH, HOON SUNG, KR

[71] METACEN THERAPEUTICS CO., LTD, KR

[85] 2024-04-01  
[86] 2022-10-19 (PCT/KR2022/015983)  
[87] (WO2023/068819)  
[30] KR (10-2021-0139579) 2021-10-19

[21] **3,233,564**  
[13] A1

[51] **Int.Cl. F25B 17/08 (2006.01) F24F 13/22 (2006.01) F25B 30/04 (2006.01)**

[25] EN

[54] **LATENT ENERGY AND WATER HARVESTING SYSTEM**

[54] **SYSTEME DE COLLECTE D'ENERGIE LATENTE ET D'EAU**

[72] GABIG, DANIEL ALBERT, US  
[72] JORE, MATTHEW BERNARD, US  
[72] JORE, JAMES DOUGLAS, US  
[72] KVAM, MICHAEL ALAN, US  
[72] RUIZ, HECTOR, US  
[72] JENKS, JEROMY W J, US  
[72] BRACEY, TRISTRAM CHARLES RAGLAN, GB

[71] MONTANA TECHNOLOGIES LLC, US

[85] 2024-04-01  
[86] 2022-09-30 (PCT/US2022/077316)  
[87] (WO2023/056400)  
[30] US (63/251,078) 2021-10-01

[21] **3,233,565**  
[13] A1

[51] **Int.Cl. G01B 7/34 (2006.01) G01N 27/85 (2006.01) G01R 33/00 (2006.01) G01R 33/02 (2006.01) G01V 3/08 (2006.01) G01V 15/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR IDENTIFYING DISCONTINUITY IN WALL OF FERROUS**

[54] **PROCEDE ET APPAREIL POUR IDENTIFICATION DE DISCONTINUTE DANS UNE PAROI D'OBJET FERREUX**

[72] WATTS, KENNETH J, US  
[71] UNITED STATES PIPE AND FOUNDRY COMPANY, LLC, US

[85] 2024-04-01  
[86] 2022-09-28 (PCT/US2022/045071)  
[87] (WO2023/055822)  
[30] US (17/490,912) 2021-09-30

[21] **3,233,566**  
[13] A1

[51] **Int.Cl. A61K 31/4353 (2006.01) A61P 35/00 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **COMBINATIONS OF KRAS G12D INHIBITORS WITH PI3KA INHIBITORS AND RELATED METHODS OF TREATMENT**

[54] **COMBINAISONS D'INHIBITEURS DE KRAS G12D ET D'INHIBITEURS DE PI3KA ET PROCEDES DE TRAITEMENT ASSOCIES**

[72] HALLIN, JILL, US  
[72] CHRISTENSEN, JAMES GAIL, US  
[72] BOWCUT, VICKIE, US  
[72] OLSON, PETER, US  
[71] MIRATI THERAPEUTICS, INC., US

[85] 2024-04-01  
[86] 2022-10-04 (PCT/US2022/045619)  
[87] (WO2023/059594)  
[30] US (63/252,384) 2021-10-05

## PCT Applications Entering the National Phase

[21] **3,233,567**  
[13] A1

[51] **Int.Cl. A61P 35/00 (2006.01) A61K 31/4375 (2006.01) C07D 471/06 (2006.01)**

[25] EN

[54] **COMBINATION THERAPIES OF KRAS G12D INHIBITORS WITH PAN ERBB FAMILY INHIBITORS**

[54] **POLYTHERAPIES A BASE D'INHIBITEURS DE KRAS G12D ET D'INHIBITEURS DE LA FAMILLE PAN ERBB**

[72] HALLIN, JILL, US  
[72] CHRISTENSEN, JAMES GAIL, US  
[72] BOWCUT, VICKIE, US  
[72] OLSON, PETER, US  
[71] MIRATI THERAPEUTICS, INC., US  
[85] 2024-04-01  
[86] 2022-10-04 (PCT/US2022/045621)  
[87] (WO2023/059596)  
[30] US (63/252,534) 2021-10-05

[21] **3,233,568**  
[13] A1

[51] **Int.Cl. G06F 16/174 (2019.01) G06F 21/60 (2013.01) G06F 16/13 (2019.01) G06F 16/17 (2019.01) G06F 16/172 (2019.01)**

[25] EN

[54] **NETWORK FILE DEPLICATION USING DECAYING BLOOM FILTERS**

[54] **DEDUPLICATION DE FICHIERS DE RESEAU A L'AIDE DE FILTRES DE BLOOM DECROISSANTS**

[72] OAKLEY, JONATHAN, US  
[72] EDMONDS, JOSEPH, US  
[71] MORGAN STANLEY SERVICES GROUP INC., US  
[85] 2024-04-01  
[86] 2022-10-13 (PCT/US2022/046578)  
[87] (WO2023/064475)  
[30] US (17/503,252) 2021-10-15

[21] **3,233,569**  
[13] A1

[51] **Int.Cl. H01M 4/02 (2006.01) H01M 4/505 (2010.01) H01M 4/525 (2010.01) H01M 10/052 (2010.01) H01M 4/36 (2006.01) H01M 4/62 (2006.01)**

[25] EN

[54] **POSITIVE ELECTRODE ACTIVE MATERIAL COMPOSITE FOR BATTERY, SECONDARY BATTERY ELECTRODE, AND SECONDARY BATTERY**

[54] **COMPOSITE DE MATERIAU ACTIF D'ELECTRODE POSITIVE POUR BATTERIE, ELECTRODE DE BATTERIE SECONDAIRE ET BATTERIE SECONDAIRE**

[72] AN, WOOHYUN, KR  
[72] KIM, SEUNGDOO, KR  
[72] LIM, CHANHYUK, KR  
[72] LEE, JOOCHEOL, KR  
[72] YANG, HWICHAN, KR  
[71] DONGJIN SEMICHEM CO., LTD., KR  
[85] 2024-04-01  
[86] 2022-09-07 (PCT/KR2022/013488)  
[87] (WO2023/063588)  
[30] KR (10-2021-0137901) 2021-10-15

[21] **3,233,570**  
[13] A1

[51] **Int.Cl. A61P 35/00 (2006.01) A61K 31/4375 (2006.01) C07D 471/06 (2006.01)**

[25] EN

[54] **COMBINATION THERAPIES OF KRAS G12D INHIBITORS WITH SOS1 INHIBITORS**

[54] **POLYTHERAPIES A BASE D'INHIBITEURS DE KRAS G12D ET D'INHIBITEURS DE SOS1**

[72] HALLIN, JILL, US  
[72] CHRISTENSEN, JAMES GAIL, US  
[72] BOWCUT, VICKIE, US  
[72] OLSON, PETER, US  
[71] MIRATI THERAPEUTICS, INC., US  
[85] 2024-04-01  
[86] 2022-10-04 (PCT/US2022/045622)  
[87] (WO2023/059597)  
[30] US (63/252,569) 2021-10-05

[21] **3,233,571**  
[13] A1

[51] **Int.Cl. A61K 31/4353 (2006.01) A61P 35/00 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **COMBINATIONS OF KRAS G12D INHIBITORS WITH IRINOTECAN AND RELATED METHODS OF TREATMENT**

[54] **COMBINAISONS D'INHIBITEURS DE KRAS G12D AVEC DE L'IRINOTECAN ET METHODES DE TRAITEMENT ASSOCIES**

[72] HALLIN, JILL, US  
[72] CHRISTENSEN, JAMES GAIL, US  
[72] BOWCUT, VICKIE, US  
[72] OLSON, PETER, US  
[71] MIRATI THERAPEUTICS, INC., US  
[85] 2024-04-01  
[86] 2022-10-04 (PCT/US2022/045625)  
[87] (WO2023/059600)  
[30] US (63/252,405) 2021-10-05

[21] **3,233,572**  
[13] A1

[51] **Int.Cl. C07D 403/12 (2006.01) C07D 403/14 (2006.01) C07D 413/14 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **DDR1 AND DDR2 INHIBITORS FOR THE TREATMENT OF CANCER AND FIBROTIC DISEASES**

[54] **INHIBITEURS DDR1 ET DDR2 POUR LE TRAITEMENT DU CANCER ET DE MALADIES FIBROTIQUES**

[72] BHAMRA, INDER, GB  
[72] JONES, CLIFFORD D., GB  
[72] VARELA RODRIGUEZ, ANA, GB  
[72] GUISOT, NICOLAS E.S., GB  
[71] REDX PHARMA PLC, GB  
[85] 2024-04-01  
[86] 2022-11-03 (PCT/GB2022/052778)  
[87] (WO2023/079291)  
[30] GB (2115838.1) 2021-11-04



## Demandes PCT entrant en phase nationale

[21] **3,233,573**  
[13] A1

[51] **Int.Cl. C08K 3/04 (2006.01) C09D 11/52 (2014.01) C08L 75/04 (2006.01)**  
[25] EN  
[54] **HEATABLE GARMENT, FABRICS FOR SUCH GARMENTS, AND METHODS OF MANUFACTURE**  
[54] **VETEMENT CHAUFFANT, TISSUS POUR DE TELS VETEMENTS ET PROCEDE DE FABRICATION**  
[72] HOWE, THOMAS HARRY, GB  
[72] JONES, ELLIOT OWEN, GB  
[71] HAYDALE GRAPHENE INDUSTRIES PLC, GB  
[85] 2024-04-01  
[86] 2022-10-20 (PCT/EP2022/079288)  
[87] (WO2023/067105)  
[30] GB (2115023.0) 2021-10-20

[21] **3,233,576**  
[13] A1

[51] **Int.Cl. A61K 36/07 (2006.01) A23K 20/20 (2016.01) A61K 36/074 (2006.01) A61K 36/47 (2006.01) A61K 36/82 (2006.01) A61K 36/8962 (2006.01)**  
[25] EN  
[54] **HERBAL COMPOSITION FOR BREAST CANCER PREVENTION**  
[54] **COMPOSITION A BASE D'HERBES POUR LA PREVENTION DU CANCER DU SEIN**  
[72] MANN KEVEHAZI, LAURA, GB  
[71] MANN KEVEHAZI, LAURA, GB  
[85] 2024-04-02  
[86] 2022-12-16 (PCT/EP2022/086513)  
[87] (WO2023/117815)  
[30] US (63/292,451) 2021-12-22

[21] **3,233,591**  
[13] A1

[51] **Int.Cl. B60L 7/10 (2006.01) H01M 8/04858 (2016.01) B60L 50/75 (2019.01) B60L 58/40 (2019.01)**  
[25] EN  
[54] **PROGNOSTIC LIMITATION TO FUEL CELL POWER OUTPUT FOR IMPROVED EFFICIENCY IN MOBILE MACHINE**  
[54] **LIMITATION PRONOSTIQUE DE LA PUISSANCE FOURNIE PAR UNE PILE A COMBUSTIBLE POUR UNE EFFICACITE AMELIOREE DANS UN ENGIN MOBILE**  
[72] LANE, CAMERON THOMAS, US  
[71] CATERPILLAR INC., US  
[85] 2024-04-02  
[86] 2022-09-28 (PCT/US2022/044962)  
[87] (WO2023/059486)  
[30] US (17/492,986) 2021-10-04

[21] **3,233,592**  
[13] A1

[51] **Int.Cl. A61H 19/00 (2006.01)**  
[25] EN  
[54] **NEGATIVE-PRESSURE MASSAGE DEVICE SPECIALLY USED FOR MEN AND MASSAGE STRUCTURE THEREOF**  
[54] **APPAREIL DE MASSAGE A PRESSION NEGATIVE SPECIALEMENT UTILISE PAR LES HOMMES ET SA STRUCTURE DE MASSAGE**  
[72] LIU, PO-CHANG, CN  
[72] YUAN, LI-PIN, CN  
[71] BIBOTING INTERNATIONAL CO., LTD, CN  
[71] LIU, PO-CHANG, CN  
[71] BIBOTING TRADING (SHANGHAI) CO., LTD, CN  
[85] 2024-04-02  
[86] 2022-01-19 (PCT/CN2022/072670)  
[87] (WO2023/137613)

[21] **3,233,593**  
[13] A1

[51] **Int.Cl. B60L 50/60 (2019.01) B60L 53/30 (2019.01) B60L 53/35 (2019.01) B60L 53/62 (2019.01) B60L 53/65 (2019.01) B60L 53/66 (2019.01) B60L 53/68 (2019.01) B60L 58/12 (2019.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR CHARGING AN ELECTRIC VEHICLE**  
[54] **SYSTEME ET PROCEDE DE RECHARGE D'UN VEHICULE ELECTRIQUE**  
[72] OTHMAN, JEFFERY, US  
[72] CONVERSE, PERRY D., US  
[72] BREWER, MICHAEL A., US  
[72] BARNICKEL, WILLIAM E., US  
[72] VITALE, ANDREW J., US  
[71] CATERPILLAR INC., US  
[85] 2024-04-02  
[86] 2022-09-27 (PCT/US2022/044873)  
[87] (WO2023/059481)  
[30] US (17/492,895) 2021-10-04

[21] **3,233,594**  
[13] A1

[51] **Int.Cl. A61H 19/00 (2006.01)**  
[25] EN  
[54] **SPECIAL NEGATIVE PRESSURE MASSAGE DEVICE FOR WOMEN AND MASSAGE STRUCTURE THEREOF**  
[54] **DISPOSITIF SPECIAL DE MASSAGE PAR PRESSION NEGATIVE POUR FEMME ET STRUCTURE DE MASSAGE CORRESPONDANTE**  
[72] YUAN, LI-PIN, CN  
[71] BIBOTING INTERNATIONAL CO., LTD, CN  
[71] LIU, PO-CHANG, CN  
[71] BIBOTING TRADING (SHANGHAI) CO., LTD, CN  
[85] 2024-04-02  
[86] 2022-01-19 (PCT/CN2022/072671)  
[87] (WO2023/137614)

## PCT Applications Entering the National Phase

[21] **3,233,595**  
[13] A1

[51] **Int.Cl. A61B 90/30 (2016.01) A61F 9/007 (2006.01)**  
[25] EN  
[54] **METHODS AND APPARATUS FOR WIDE ANGLE CHANDELIER ILLUMINATOR**  
[54] **PROCEDES ET APPAREILS POUR ILLUMINATION PAR « CHANDELIER » A GRAND ANGLE**  
[72] XIANG, QING, US  
[72] RYAN, TIMOTHY C., US  
[72] YAN, YU, US  
[71] ALCON, INC., CH  
[85] 2024-04-02  
[86] 2022-10-18 (PCT/IB2022/060003)  
[87] (WO2023/089407)  
[30] US (63/264,183) 2021-11-17

[21] **3,233,597**  
[13] A1

[51] **Int.Cl. A61B 90/20 (2016.01) A61B 3/00 (2006.01) A61B 3/13 (2006.01) A61B 3/14 (2006.01)**  
[25] EN  
[54] **IMAGING APPARATUS WITH MULTIPLE STEREOSCOPIC CAMERAS**  
[54] **APPAREIL D'IMAGERIE A CAMERAS STEREOSCOPIQUES MULTIPLES**  
[72] MYERS, GILLIAN, US  
[72] ASPNES, ERIC, US  
[71] ALCON INC., CH  
[85] 2024-04-02  
[86] 2022-10-07 (PCT/IB2022/059634)  
[87] (WO2023/084334)  
[30] US (63/277,369) 2021-11-09

[21] **3,233,600**  
[13] A1

[51] **Int.Cl. A61F 2/16 (2006.01)**  
[25] EN  
[54] **SURGICAL IMPLANT DELIVERY WITH DAMPING**  
[54] **POSE D'IMPLANT CHIRURGICAL AVEC AMORTISSEMENT**  
[72] HOANG, HARLEN, US  
[72] WU, YINGHUI, US  
[72] SHERRY, R. MITCHELL, US  
[72] WENSRICH, DOUGLAS BRENT, US  
[72] LI, TUOQI, US  
[71] ALCON INC., CH  
[85] 2024-04-02  
[86] 2022-10-21 (PCT/IB2022/060154)  
[87] (WO2023/084344)  
[30] US (63/263,948) 2021-11-12

[21] **3,233,602**  
[13] A1

[51] **Int.Cl. H01P 1/16 (2006.01) H01P 1/00 (2006.01) H01P 3/20 (2006.01) H01P 5/103 (2006.01)**  
[25] EN  
[54] **IN-LINE WAVEGUIDE MODE CONVERTER**  
[54] **CONVERTISSEUR DE MODE GUIDE D'ONDES EN LIGNE**  
[72] TRANQUILLA, JAMES M., CA  
[72] CLARK, KENNETH, CA  
[71] NUIONIC TECHNOLOGIES (CANADA) INC., CA  
[85] 2024-03-22  
[86] 2022-09-23 (PCT/CA2022/051417)  
[87] (WO2023/044578)  
[30] US (63/247,508) 2021-09-23

[21] **3,233,604**  
[13] A1

[51] **Int.Cl. A01N 43/40 (2006.01) A01N 37/02 (2006.01) A01N 37/06 (2006.01) A01N 43/713 (2006.01) A01P 7/00 (2006.01)**  
[25] EN  
[54] **SYNERGISTIC PESTICIDAL COMPOSITIONS AND METHODS FOR DELIVERY OF INSECTICIDAL ACTIVE INGREDIENTS**  
[54] **COMPOSITIONS PESTICIDES SYNERGIQUES ET PROCEDES D'ADMINISTRATION D'INGREDIENTS ACTIFS INSECTICIDES**  
[72] MANHAS, KARAN, CA  
[72] ROZEK, ANNETT, CA  
[72] VAN FLEET, ERIC, CA  
[71] TERRAMERA, INC., CA  
[85] 2024-03-26  
[86] 2022-09-26 (PCT/CA2022/051425)  
[87] (WO2023/044584)  
[30] US (63/248,910) 2021-09-27  
[30] US (63/399,167) 2022-08-18

[21] **3,233,606**  
[13] A1

[51] **Int.Cl. A61K 9/20 (2006.01) A61K 31/7048 (2006.01) A61P 3/10 (2006.01)**  
[25] EN  
[54] **PHARMACEUTICAL COMPOSITION COMPRISING ENAVOGLIFLOZIN**  
[54] **COMPOSITION PHARMACEUTIQUE COMPRENANT DE L'ENAVOGLIFLOZINE**  
[72] HA, SONGYI, KR  
[72] KIM, GYOUNGWON, KR  
[72] KIM, GWANYOUNG, KR  
[72] CHO, SANGEUN, KR  
[72] HWANG, ON, KR  
[72] PARK, MINHYUNG, KR  
[72] LEE, SEOYEO, KR  
[72] LEE, HEEWON, KR  
[72] YOUN, SEUNGBIN, KR  
[71] DAEWOONG PHARMACEUTICAL CO., LTD., KR  
[85] 2024-03-25  
[86] 2022-09-29 (PCT/KR2022/014640)  
[87] (WO2023/055116)  
[30] KR (10-2021-0130239) 2021-09-30

[21] **3,233,607**  
[13] A1

[51] **Int.Cl. F24F 1/0378 (2019.01) F24F 5/00 (2006.01)**  
[25] EN  
[54] **TEMPERATURE CONTROL UNIT**  
[54] **UNITE DE REGULATION DE TEMPERATURE**  
[72] FU, TIMOTHY, US  
[72] SUN, NANCY, US  
[72] DIPIETRO, DEAN, US  
[71] BOOTBOX LABS, INC., US  
[85] 2024-03-25  
[86] 2022-09-30 (PCT/US2022/077348)  
[87] (WO2023/056420)  
[30] US (63/262,023) 2021-10-01  
[30] US (63/374,882) 2022-09-07

## Demandes PCT entrant en phase nationale

[21] **3,233,608**  
[13] A1

[51] **Int.Cl. C23C 16/27 (2006.01) C23C 16/455 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHOD FOR PRODUCING DOPED DIAMOND COATINGS**  
[54] **APPAREIL ET PROCEDE DE PRODUCTION DE COUCHES DE DIAMANT DOPE**  
[72] STEINMULLER, DETLEF, AT  
[72] STEINMULLER-NETHL, DORIS, AT  
[72] STEINMULLER, MAXIMILIAN, AT  
[71] CARBONCOMPETENCE GMBH, AT  
[71] YG-1 CO., LTD., KR  
[85] 2024-03-22  
[86] 2022-10-21 (PCT/AT2022/060363)  
[87] (WO2023/064972)  
[30] AT (A 50843/2021) 2021-10-22

[21] **3,233,611**  
[13] A1

[51] **Int.Cl. B01D 53/14 (2006.01) B01D 53/62 (2006.01)**  
[25] EN  
[54] **GASEOUS CO2 CAPTURE SYSTEMS FOR IMPROVING CAPTURE PERFORMANCE, AND METHODS OF USE THEREOF**  
[54] **SYSTEMES DE CAPTURE DE CO2 GAZEUX POUR AMELIORER LES PERFORMANCES DE CAPTURE, ET LEURS PROCEDES D'UTILISATION**  
[72] SELF, KYLE, US  
[72] SCHNEIDER, JACOB, US  
[72] CONSTANTZ, BRENT R., US  
[71] BLUE PLANET SYSTEMS CORPORATION, US  
[85] 2024-04-02  
[86] 2022-09-30 (PCT/US2022/045379)  
[87] (WO2023/056011)  
[30] US (63/251,313) 2021-10-01

[21] **3,233,612**  
[13] A1

[51] **Int.Cl. B23K 23/00 (2006.01) B60K 31/00 (2006.01) B62K 11/14 (2006.01) B62K 23/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR THROTTLE LOCK CRUISE CONTROL**  
[54] **SYSTEME ET PROCEDE DE REGULATION DE VITESSE DE CROISIERE AJUSTABLE A ACCELERATEUR DE MOTOCYCLETTE**  
[72] WINTERS, DAVID JAMES, US  
[71] WINTERS, DAVID JAMES, US  
[85] 2024-04-02  
[86] 2022-09-02 (PCT/US2022/042508)  
[87] (WO2023/075931)  
[30] US (17/512,516) 2021-10-27

[21] **3,233,615**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01)**  
[25] EN  
[54] **SCREENING METHOD FOR RHEUMATOID ARTHRITIS**  
[54] **PROCEDE DE CRIBLAGE DE LA POLYARTHRITE RHUMATOIDE**  
[72] RISKEDAL, ESPEN, NO  
[72] KALLEBERG, KARL TRYGVE, NO  
[72] SORAAS, ARNE, NO  
[72] HADLEY, CATHRINE LUND, NO  
[72] NEUMANN, JANIS FREDERICK, NO  
[71] AGE LABS AS, NO  
[85] 2024-04-02  
[86] 2022-10-04 (PCT/EP2022/077612)  
[87] (WO2023/057467)  
[30] EP (21200767.8) 2021-10-04

[21] **3,233,616**  
[13] A1

[51] **Int.Cl. G01K 13/20 (2021.01) A01K 11/00 (2006.01) A01K 29/00 (2006.01) G01P 15/00 (2006.01) G01K 1/024 (2021.01) G01K 1/08 (2021.01) G01P 1/00 (2006.01) G01P 1/02 (2006.01) G01P 1/07 (2006.01)**  
[25] EN  
[54] **SYSTEMS AND METHODS OF LIVESTOCK MANAGEMENT**  
[54] **SYSTEMES ET PROCEDES DE GESTION D'ANIMAUX D'ELEVAGE**  
[72] TOKAREV, DENIS, CA  
[72] GIRARD, ROBERT KENNETH, CA  
[71] SILK WAY SERVICES INC., CA  
[85] 2024-03-26  
[86] 2022-09-27 (PCT/CA2022/051434)  
[87] (WO2023/044588)  
[30] US (63/248,974) 2021-09-27

[21] **3,233,617**  
[13] A1

[51] **Int.Cl. B21D 1/14 (2006.01) G01B 11/00 (2006.01) G01B 11/275 (2006.01)**  
[25] EN  
[54] **UPGRADED ABUTMENT BENCH**  
[54] **BANC DE BUTEE AMELIORE**  
[72] MANFREDI, LORENZO FEDERICO MICHAEL, IT  
[71] CAR BENCH S.P.A., IT  
[85] 2024-04-02  
[86] 2022-10-05 (PCT/IB2022/059509)  
[87] (WO2023/057924)  
[30] IT (102021000026537) 2021-10-06

[21] **3,233,620**  
[13] A1

[51] **Int.Cl. E04H 12/18 (2006.01) G01J 3/28 (2006.01) G01N 21/25 (2006.01) G01N 33/00 (2006.01) E04H 12/34 (2006.01) G01N 21/17 (2006.01)**  
[25] EN  
[54] **MOBILE SYSTEMS FOR MONITORING EMISSIONS**  
[54] **SYSTEMES MOBILES POUR SURVEILLER DES EMISSIONS**  
[72] ETHERIDGE, JOE, US  
[72] KERVICK, KRISTOPHER, US  
[71] ENCINO ENVIRONMENTAL SERVICES, LLC, US  
[85] 2024-03-26  
[86] 2022-09-27 (PCT/US2022/044905)  
[87] (WO2023/049514)  
[30] US (17/485,762) 2021-09-27

## PCT Applications Entering the National Phase

[21] **3,233,622**  
[13] A1

[51] **Int.Cl. C07D 403/14 (2006.01) A61K 31/437 (2006.01) A61P 29/00 (2006.01) C07D 405/14 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **BENZIMIDAZOLE AND AZABENZIMIDAZOLE IL-17 INHIBITOR COMPOUNDS**

[54] **COMPOSES BENZIMIDAZOLES ET AZABENZIMIDAZOLES INHIBITEURS DE L'IL-17**

[72] GOLDBERG, STEVEN D., US  
[72] BEHENNA, DOUGLAS C., US  
[72] LOSKOT, STEVEN A., US  
[72] MCCARVER, STEFAN J., US  
[72] RHORER, TIMOTHY B., US  
[72] SONG, KRISTEN G., US  
[72] VALDES, ALEXANDER E., US  
[72] WOODS, CRAIG R., US  
[72] XUE, XIAOHUA, US  
[72] SHIREMAN, BROCK T., US  
[72] TANIS, VIRGINIA M., US  
[72] GORDON, DEANE, US  
[71] JANSSEN PHARMACEUTICA NV, BE  
[85] 2024-03-26  
[86] 2022-09-26 (PCT/US2022/076999)  
[87] (WO2023/049885)  
[30] US (63/248,561) 2021-09-27  
[30] US (63/273,395) 2021-10-29

[21] **3,233,625**  
[13] A1

[51] **Int.Cl. A61K 31/5025 (2006.01) A61P 17/06 (2006.01) A61P 19/02 (2006.01) A61P 29/00 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **IMIDAZOPYRIDAZINE IL-17 INHIBITOR COMPOUNDS**

[54] **COMPOSES INHIBITEURS DE L'IL-17 TELS QUE L'IMIDAZOPYRIDAZINE**

[72] GOLDBERG, STEVEN D., US  
[72] GORDON, DEANE, US  
[72] LOSKOT, STEVEN A., US  
[72] MCCARVER, STEFAN J., US  
[72] MEDUNA, STEVEN P., US  
[72] SHIREMAN, BROCK T., US  
[72] VALDES, ALEXANDER E., US  
[72] WU, DONGPEI, US  
[72] XUE, XIAOHUA, US  
[72] HANNA, LUKE E., US  
[72] VENABLE, JENNIFER D., US  
[72] BEHENNA, DOUGLAS C., US  
[71] JANSSEN PHARMACEUTICA NV, BE  
[85] 2024-03-26  
[86] 2022-09-26 (PCT/US2022/077000)  
[87] (WO2023/049886)  
[30] US (63/248,563) 2021-09-27  
[30] US (63/273,407) 2021-10-29  
[30] US (63/371,910) 2022-08-19

[21] **3,233,627**  
[13] A1

[51] **Int.Cl. A61K 9/127 (2006.01) A61K 45/00 (2006.01) G01N 33/50 (2006.01)**

[25] EN

[54] **GIANT ORGANELLES RECOVERY AND USE THEREOF**

[54] **RECUPERATION D'ORGANELLES GEANTES ET UTILISATION DE CELLES-CI**

[72] THIAM, ABDOU RACHID, FR  
[72] SANTINHO, ALEXANDRE, FR  
[72] FAUGERAS, VINCENT, FR  
[71] PARIS SCIENCES ET LETTRES, FR  
[71] ECOLE NORMALE SUPERIEURE, FR  
[71] CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, FR  
[71] SORBONNE UNIVERSITE, FR  
[71] UNIVERSITE PARIS CITE, FR  
[85] 2024-04-02  
[86] 2022-10-13 (PCT/EP2022/078560)  
[87] (WO2023/062149)  
[30] EP (21202428.5) 2021-10-13

[21] **3,233,624**  
[13] A1

[51] **Int.Cl. B32B 33/00 (2006.01) D05C 15/04 (2006.01) D05C 17/02 (2006.01)**

[25] EN

[54] **FABRICS, SURFACE COVERINGS COMPRISING SAME, AND SYSTEMS AND METHODS FOR PRODUCING SAME**

[54] **TISSUS, REVETEMENTS DE SURFACE COMPRENANT CEUX-CI, ET SYSTEMES ET PROCEDES DE PRODUCTION DE CEUX-CI**

[72] FOWLER, GREGORY D., US  
[72] MATHIS, MICHAEL, US  
[71] SHAW INDUSTRIES GROUP, INC., US  
[85] 2024-04-02  
[86] 2022-10-07 (PCT/US2022/046086)  
[87] (WO2023/059897)  
[30] US (63/253,697) 2021-10-08

[21] **3,233,626**  
[13] A1

[51] **Int.Cl. A01G 25/02 (2006.01) A01G 25/16 (2006.01) A01C 23/02 (2006.01) A01C 23/04 (2006.01)**

[25] EN

[54] **SYSTEM, METHOD AND APPARATUS FOR FILTER AND OVERHANG PLUGGING DETECTION**

[54] **SYSTEME, PROCEDE ET APPAREIL DE DETECTION DE COLMATAGE DE FILTRE ET D'OBSTRUCTION EN SURPLOMB**

[72] DIXON, JOSHUA M., US  
[72] KASTL, JOHN, US  
[71] VALMONT INDUSTRIES, INC., US  
[85] 2024-04-02  
[86] 2022-09-26 (PCT/US2022/044664)  
[87] (WO2023/059461)  
[30] US (63/252,703) 2021-10-06

## Demandes PCT entrant en phase nationale

[21] **3,233,636**  
[13] A1

[51] **Int.Cl. C07D 417/14 (2006.01) A61K 31/4439 (2006.01) A61K 31/444 (2006.01) A61P 35/00 (2006.01) C07D 417/12 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **N-(5-SUBSTITUTED-[(1,3,4-THIADIAZOLYL) OR (THIAZOLYL)])(SUBSTITUTED)CARBOXAMIDE COMPOUNDS AND USE THEREOF FOR INHIBITING HUMAN POLYMERASE THETA**

[54] **COMPOSES N-((L,3,4-THIADIAZOLYLE) OU (THIAZOLYLE))-5-SUBSTITUES)CARBOXAMIDE (SUBSTITUE) ET LEUR UTILISATION POUR INHIBER LA POLYMERASE THETA HUMAINE**

[72] LIU, BINGCAN, CA  
[72] PERRYMAN, ALEXANDER, CA  
[72] MOCHIRIAN, PHILIPPE, CA  
[72] GALLANT, MICHEL, CA  
[72] BENDAHAN, DAVID, CA  
[72] SURPRENANT, SIMON, CA  
[72] SZYCHOWSKI, JANEK, CA  
[72] DIETRICH, EVELYNE, CA  
[72] SOW, BOUBACAR, CA  
[72] BUBENIK, MONICA, CA  
[71] REPARE THERAPEUTICS INC., CA  
[85] 2024-03-26  
[86] 2022-09-29 (PCT/CA2022/051446)  
[87] (WO2023/050007)  
[30] US (63/249,878) 2021-09-29  
[30] US (63/316,746) 2022-03-04

[21] **3,233,637**  
[13] A1

[51] **Int.Cl. B29C 33/42 (2006.01) B29C 48/08 (2019.01) B65D 51/24 (2006.01) G09F 3/02 (2006.01)**

[25] EN

[54] **POLYMERIC ARTICLES WITH ELECTRONIC CODE FORMED THEREON AND PROCESS OF MAKING THE SAME**

[54] **ARTICLES POLYMERES SUR LESQUELS UN CODE ELECTRONIQUE EST FORME ET LEUR PROCEDE DE FABRICATION**

[72] WATERMAN, JARED B., US  
[72] EICKHOFF, JONATHAN, US  
[72] SCOTT, JENNYE, US  
[72] BIRCHLER, KIRK, US  
[72] MANN, JEFFREY A., US  
[71] BERRY GLOBAL, INC., US  
[85] 2024-04-02  
[86] 2022-09-29 (PCT/US2022/045217)  
[87] (WO2023/055925)  
[30] US (63/251,150) 2021-10-01

[21] **3,233,638**  
[13] A1

[51] **Int.Cl. H02P 21/06 (2016.01) H02P 27/08 (2006.01)**

[25] EN

[54] **MOTOR DEVICE**

[54] **MOTOR DEVICE**

[72] KATSURA, KENSHIRO, JP  
[72] JIKUMARU, TAKEHIRO, JP  
[72] YAMAGUCHI, KOJI, JP  
[72] YAMADA, TATSURO, JP  
[71] IHI CORPORATION, JP  
[85] 2024-04-02  
[86] 2022-11-16 (PCT/JP2022/042626)  
[87] (WO2023/095705)  
[30] JP (2021-189865) 2021-11-24

[21] **3,233,640**  
[13] A1

[51] **Int.Cl. A61H 7/00 (2006.01) A61H 39/04 (2006.01)**

[25] EN

[54] **ACUPRESSURE MASSAGE DEVICE**

[54] **DISPOSITIF DE MASSAGE PAR ACUPRESSION**

[72] PARK, MIN GYU, KR  
[71] PARK, MIN GYU, KR  
[85] 2024-04-02  
[86] 2022-08-17 (PCT/KR2022/012299)  
[87] (WO2023/068513)  
[30] KR (10-2021-0139699) 2021-10-19

[21] **3,233,642**  
[13] A1

[51] **Int.Cl. B60C 11/12 (2006.01)**

[25] EN

[54] **THREE-DIMENSIONAL TIRE SIPE**

[54] **LAMELLE DE PNEU TRIDIMENSIONNELLE**

[72] IRWIN, MATTHEW A., US  
[72] KOSMAC, KEVIN J., US  
[72] NAKAHARA, DAISUKE, US  
[71] BRIDGESTONE AMERICAS TIRE OPERATIONS, LLC, US  
[85] 2024-04-02  
[86] 2022-09-27 (PCT/US2022/077051)  
[87] (WO2023/059996)  
[30] US (63/252,444) 2021-10-05

[21] **3,233,643**  
[13] A1

[51] **Int.Cl. A01D 33/12 (2006.01) A01D 43/06 (2006.01) A01D 69/00 (2006.01) A01D 33/14 (2006.01) A01D 75/30 (2006.01)**

[25] EN

[54] **SYSTEM AND APPARATUS FOR PROVIDING DRIVER PACING INFORMATION FOR AGRICULTURAL VEHICLES**

[54] **SYSTEME ET APPAREIL POUR FOURNIR DES INFORMATIONS DE STIMULATION DE CONDUCTEUR POUR VEHICULES AGRICOLES**

[72] DEN BOER, NOLAN, US  
[72] BORKOWSKI, COLLIN, US  
[72] VAN DE WAERDT, NICHOLAS, US  
[72] POST, GRANT, US  
[72] FLUIT, STEVEN, US  
[71] KOOIMA AG, INC., US  
[85] 2024-04-02  
[86] 2023-02-07 (PCT/US2023/012484)  
[87] (WO2023/154265)  
[30] US (63/308,223) 2022-02-09  
[30] US (18/165,002) 2023-02-06

## PCT Applications Entering the National Phase

[21] <b>3,233,644</b> [13] A1	[21] <b>3,233,646</b> [13] A1	[21] <b>3,233,648</b> [13] A1
<p>[51] <b>Int.Cl. A61K 38/00 (2006.01) A61K 39/00 (2006.01) A61K 39/39 (2006.01) A61P 29/00 (2006.01) A61P 37/06 (2006.01) C07K 14/47 (2006.01) C07K 14/55 (2006.01) C07K 16/18 (2006.01) C07K 16/44 (2006.01) C07K 16/46 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>INTERLEUKIN 2 CHIMERIC CONSTRUCTS WITH TARGETING SPECIFICITY TO INFLAMED TISSUES</b></p> <p>[54] <b>CONSTRUCTIONS CHIMERIQUES D'INTERLEUKINE 2 ONT UNE SPECIFICITE DE CIBLAGE VIS-A-VIS DES TISSUS ENFLAMMES</b></p> <p>[72] KLATZMANN, DAVID, FR [72] TEDGUL, ALAIN, FR [72] VAZQUEZ, THOMAS, FR [72] BILLIALD, NICOLAS, FR [71] ILTOO PHARMA, FR [71] SORBONNE UNIVERSITE, FR [71] ASSISTANCE PUBLIQUE - HOPITAUX DE PARIS, FR [71] INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE), FR [85] 2024-04-02 [86] 2022-10-06 (PCT/EP2022/077847) [87] (WO2023/057588) [30] EP (21306399.3) 2021-10-06</p>	<p>[51] <b>Int.Cl. H01R 13/512 (2006.01) H01R 13/42 (2006.01) H01R 13/52 (2006.01) H01R 24/28 (2011.01) H01R 24/86 (2011.01) H01R 4/36 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>MODULAR PLUG</b></p> <p>[54] <b>FICHE MODULAIRE</b></p> <p>[72] GARCIA CANSECO, ERIK, MX [72] MARTINEZ VELERIO, ELIAS, MX [72] GARCIA, ALEJANDRO, MX [71] EATON INTELLIGENT POWER LIMITED, IE [85] 2024-04-02 [86] 2022-09-30 (PCT/EP2022/025454) [87] (WO2023/051956) [30] US (63/251,669) 2021-10-03</p>	<p>[51] <b>Int.Cl. H04W 52/02 (2009.01)</b></p> <p>[25] EN</p> <p>[54] <b>COMMUNICATION METHOD, COMMUNICATION APPARATUS, AND COMMUNICATION SYSTEM</b></p> <p>[54] <b>PROCEDE DE COMMUNICATION, APPAREIL DE COMMUNICATION ET SYSTEME DE COMMUNICATION</b></p> <p>[72] PAN, QI, CN [72] HUANG, ZHENGLI, CN [72] ZHANG, WANQIANG, CN [72] LI, YONGCUI, CN [71] HUAWEI TECHNOLOGIES CO., LTD., CN [85] 2024-03-26 [86] 2022-09-22 (PCT/CN2022/120600) [87] (WO2023/056843) [30] CN (202111178674.7) 2021-10-10 [30] CN (202111308873.5) 2021-11-05</p>
[21] <b>3,233,645</b> [13] A1	[21] <b>3,233,647</b> [13] A1	[21] <b>3,233,649</b> [13] A1
<p>[51] <b>Int.Cl. A61K 35/10 (2015.01) A61K 31/352 (2006.01) A61K 38/06 (2006.01) C07D 311/32 (2006.01) C07D 493/04 (2006.01) C07K 5/037 (2006.01)</b></p> <p>[25] EN</p> <p>[54] <b>COMPOSITIONS AND METHODS FOR TREATING ACUTE ALCOHOL INTAKE</b></p> <p>[54] <b>COMPOSITIONS ET METHODES POUR TRAITER UNE PRISE D'ALCOOL AIGUE</b></p> <p>[72] WEINKAUF, DAVID, CA [72] SCOTT, MARK, CA [72] SCHMIDT, NANCY, CA [71] NEXT LEVEL HEALTH SCIENCES INC., CA [85] 2024-04-02 [86] 2022-10-04 (PCT/IB2022/059478) [87] (WO2023/057908)</p>	<p>[51] <b>Int.Cl. H01M 10/04 (2006.01) H01M 10/0587 (2010.01)</b></p> <p>[25] EN</p> <p>[54] <b>ELECTRODE ASSEMBLY AND SECONDARY BATTERY INCLUDING SAME</b></p> <p>[54] <b>ENSEMBLE ELECTRODE ET BATTERIE SECONDAIRE LE COMPRENANT</b></p> <p>[72] LEE, MYUNG AN, KR [72] RYU, DUK HYUN, KR [71] LG ENERGY SOLUTION, LTD., KR [85] 2024-04-02 [86] 2022-10-27 (PCT/KR2022/016602) [87] (WO2023/075462) [30] KR (10-2021-0144428) 2021-10-27</p>	<p>[51] <b>Int.Cl. H04W 8/08 (2009.01)</b></p> <p>[25] EN</p> <p>[54] <b>INFORMATION TRANSMISSION METHOD AND APPARATUS</b></p> <p>[54] <b>PROCEDE ET APPAREIL DE TRANSMISSION D'INFORMATIONS</b></p> <p>[72] LI, YONGCUI, CN [72] CHEN, ZEHAO, CN [72] NI, HUI, CN [71] HUAWEI TECHNOLOGIES CO., LTD., CN [85] 2024-03-26 [86] 2022-09-26 (PCT/CN2022/121186) [87] (WO2023/051428) [30] CN (202111163293.1) 2021-09-30</p>

## Demandes PCT entrant en phase nationale

[21] **3,233,651**  
[13] A1

[51] **Int.Cl. B01D 61/18 (2006.01) B01D 61/22 (2006.01)**  
[25] EN  
[54] **INTEGRATED SOLUTION FOR PROCESS INTENSIFICATION USING INLINE CONSTANTLY PRESSURIZED TANK: "ICPT"**  
[54] **SOLUTION INTEGREE POUR L'INTENSIFICATION DE PROCESSUS A L'AIDE D'UN RESERVOIR A PRESSION CONSTANTE EN LIGNE ("ICPT")**  
[72] BALBUENA, BAPTISTE, FR  
[72] DELACROIX, SEBASTIEN, FR  
[72] HAJJAMI, NARGISSE EL, FR  
[72] KASCHUTNIG, PAUL, DE  
[72] DURR, JOSSELYN HAAS, FR  
[72] TOMIC-SKRIBIC, SLADJANA, DE  
[71] MERCK PATENT GMBH, DE  
[85] 2024-03-26  
[86] 2022-09-27 (PCT/EP2022/076836)  
[87] (WO2023/052357)  
[30] EP (21306336.5) 2021-09-28

[21] **3,233,657**  
[13] A1

[51] **Int.Cl. C07C 31/02 (2006.01) C07C 43/02 (2006.01) C07C 49/04 (2006.01) C12G 3/00 (2019.01) C12G 3/04 (2019.01)**  
[25] EN  
[54] **BRANDY REPLICAS**  
[54] **REPLIQUES DE BRANDY**  
[72] SAAD, DANIEL ASSAD, US  
[72] RYO, SAMUEL, SG  
[72] BAKER, LUCAS, US  
[72] CHUA, MARDONN CARL, US  
[72] SMITH, LINDSAY LORETTA, US  
[71] AVA FOOD LABS, INC., US  
[85] 2024-03-27  
[86] 2022-09-28 (PCT/US2022/045041)  
[87] (WO2023/055801)  
[30] US (63/249,462) 2021-09-28

[21] **3,233,658**  
[13] A1

[51] **Int.Cl. A61K 38/00 (2006.01) C12N 5/0783 (2010.01) C07K 14/52 (2006.01) C07K 14/715 (2006.01)**  
[25] EN  
[54] **NOVEL IMMUNE REGULATOR**  
[54] **NOUVEAU REGULATEUR IMMUNITAIRE**  
[72] GOMPELS, URSULA, GB  
[71] VIROTHERA LTD, GB  
[85] 2024-04-02  
[86] 2022-10-06 (PCT/EP2022/077849)  
[87] (WO2023/057589)  
[30] LU (500712) 2021-10-06

[21] **3,233,659**  
[13] A1

[51] **Int.Cl. E02F 9/22 (2006.01)**  
[25] EN  
[54] **MOBILE MACHINE WITH BATTERY POWERED ACTUATOR SYSTEM**  
[54] **MACHINE MOBILE AVEC SYSTEME D'ACTIONNEMENT ALIMENTE PAR BATTERIE**  
[72] GEIGER, DAVID, US  
[71] MOOG INC., US  
[85] 2024-03-27  
[86] 2022-09-28 (PCT/US2022/045054)  
[87] (WO2023/055812)  
[30] US (63/249,669) 2021-09-29

[21] **3,233,662**  
[13] A1

[51] **Int.Cl. G01V 1/40 (2006.01) E21B 7/06 (2006.01) E21B 44/02 (2006.01)**  
[25] EN  
[54] **SYSTEM AND METHOD FOR EVALUATING BOTTOM HOLE ASSEMBLIES**  
[54] **SYSTEME ET PROCEDE D'EVALUATION D'ENSEMBLES DE FOND DE TROU**  
[72] YU, YINGWEI, US  
[72] JEONG, CHEOLKYUN, US  
[72] SHEN, YUELIN, US  
[72] CHEN, WEI, US  
[72] ZHANG, ZHENGXIN, US  
[72] VESSELINOV, VELIZAR, US  
[71] SCHLUMBERGER CANADA LIMITED, CA  
[85] 2024-03-27  
[86] 2022-09-29 (PCT/US2022/045200)  
[87] (WO2023/055913)  
[30] US (17/449,399) 2021-09-29

[21] **3,233,663**  
[13] A1

[51] **Int.Cl. A61K 38/20 (2006.01) A61P 35/00 (2006.01) C07K 14/54 (2006.01)**  
[25] EN  
[54] **ACTIVATABLE CYTOKINE CONSTRUCTS AND RELATED COMPOSITIONS AND METHODS**  
[54] **CONSTRUCTIONS DE CYTOKINE ACTIVABLES ET COMPOSITIONS ET PROCEDES ASSOCIES**  
[72] CAI, NA, US  
[72] WINTER, MICHAEL B., US  
[72] PAIDHUNGAT, MADAN M., US  
[72] DANIEL, DYLAN L., US  
[72] LE SCOLAN, ERWAN, US  
[71] CYTOMX THERAPEUTICS, INC., US  
[85] 2024-04-02  
[86] 2022-10-06 (PCT/US2022/077644)  
[87] (WO2023/060156)  
[30] US (63/253,939) 2021-10-08  
[30] US (63/311,397) 2022-02-17

[21] **3,233,664**  
[13] A1

[51] **Int.Cl. A61B 1/00 (2006.01) A61B 34/30 (2016.01) A61B 90/50 (2016.01) F16M 11/12 (2006.01)**  
[25] EN  
[54] **RAIL EXTENSION FOR ROBOTIC-SURGERY DEVICES**  
[54] **EXTENSION DE RAIL POUR DISPOSITIFS DE CHIRURGIE ROBOTIQUE**  
[72] COHEN, DVIR, IL  
[72] LEVINSON, YARON, IL  
[72] NACHSHONY, GAL, IL  
[72] RON, ADAM, IL  
[71] MOMENTIS SURGICAL LTD., IL  
[85] 2024-04-02  
[86] 2022-10-11 (PCT/IB2022/059717)  
[87] (WO2023/062518)  
[30] US (63/262,353) 2021-10-11

## PCT Applications Entering the National Phase

---

[21] **3,233,665**  
[13] A1

[51] **Int.Cl. A61B 5/024 (2006.01) A61B 5/00 (2006.01)**

[25] EN

[54] **TECHNIQUES FOR HEART RATE DETECTION**

[54] **TECHNIQUES DE DETECTION DE FREQUENCE CARDIAQUE**

[72] SIMILA, HEIDI, FI

[72] ZHANG, XI, FI

[72] VALLIUS, TERO JUHANI, FI

[72] JARVELA, JUSSI PETTERI, FI

[72] SYRJALA, JUHA-PEKKA, FI

[72] HEINONEN, TOMMI, FI

[72] TIKKANEN, PAULI ENSIO, FI

[71] OURA HEALTH OY, FI

[85] 2024-03-27

[86] 2022-09-30 (PCT/US2022/045428)

[87] (WO2023/056048)

[30] US (63/251,086) 2021-10-01

[30] US (17/957,345) 2022-09-30

---

[21] **3,233,666**  
[13] A1

[51] **Int.Cl. G06N 3/047 (2023.01) G06N 3/09 (2023.01) G06N 3/0464 (2023.01) G06N 3/048 (2023.01)**

[25] EN

[54] **PARTICLE FLOW TRAINING OF BAYESIAN NEURAL NETWORK**

[54] **ENTRAINEMENT DE FLUX DE PARTICULES DE RESEAU NEURONAL BAYESIEN**

[72] BAKER, SUZANNE M., US

[72] ALLERDT, ANDREW C., US

[72] SALPUKAS, MICHAEL R., US

[72] DAUM, FREDERICK E., US

[71] RAYTHEON COMPANY, US

[85] 2024-03-27

[86] 2022-10-25 (PCT/US2022/047732)

[87] (WO2023/076273)

[30] US (17/509,270) 2021-10-25

---



---

[21] **3,233,670**  
[13] A1

[51] **Int.Cl. G01R 31/66 (2020.01) H04L 67/12 (2022.01) G01R 31/44 (2020.01) G08C 17/02 (2006.01) H05B 39/06 (2006.01) H05B 39/09 (2006.01)**

[25] EN

[54] **DETECTION OF DOWNSTREAM SMART DEVICES**

[54] **DETECTION DE DISPOSITIFS INTELLIGENTS EN AVAL**

[72] GARNER, GREGORY MACK, US

[72] STERN, DAVID, US

[72] WESTERHOFF, DAVID, US

[72] VERHOEVE, DUSTIN, US

[71] ROKU, INC., US

[85] 2024-03-27

[86] 2022-09-21 (PCT/US2022/076780)

[87] (WO2023/056196)

[30] US (17/490,990) 2021-09-30

---

[21] **3,233,671**  
[13] A1

[51] **Int.Cl. C11D 1/94 (2006.01) A61K 8/37 (2006.01) A61K 8/42 (2006.01) A61K 8/46 (2006.01) A61Q 5/02 (2006.01) A61Q 19/10 (2006.01) C11D 1/66 (2006.01) C11D 3/00 (2006.01) C11D 11/00 (2006.01) C11D 1/12 (2006.01) C11D 1/90 (2006.01) C11D 1/92 (2006.01)**

[25] EN

[54] **COMPOSITIONS AND METHODS**

[54] **COMPOSITIONS ET PROCEDES**

[72] COTRELL, PHILLIP LORAIN, US

[71] INNOSPEC ACTIVE CHEMICALS LLC, US

[85] 2024-04-02

[86] 2022-10-06 (PCT/GB2022/052535)

[87] (WO2023/057767)

[30] US (63/259,897) 2021-10-06

[30] GB (2115485.1) 2021-10-28

---



---

[21] **3,233,672**  
[13] A1

[51] **Int.Cl. B65D 81/32 (2006.01) B65D 83/00 (2006.01)**

[25] EN

[54] **CARTRIDGE FOR A DISPENSING DEVICE**

[54] **CARTOUCHE POUR UN DISPOSITIF APPLICATEUR**

[72] AYRLE, THOMAS, DE

[72] WILLNER, RALF, DE

[72] ULRICH, NICOLAS, DE

[72] DONNER, TOBIAS, DE

[71] HILTI AKTIENGESELLSCHAFT, LI

[85] 2024-04-02

[86] 2022-11-16 (PCT/EP2022/082080)

[87] (WO2023/099211)

[30] EP (21211200.7) 2021-11-30

---

[21] **3,233,673**  
[13] A1

[51] **Int.Cl. C07D 471/04 (2006.01) A61K 31/64 (2006.01) A61P 3/00 (2006.01) A61P 3/10 (2006.01) A61P 19/00 (2006.01) A61P 19/02 (2006.01) A61P 19/06 (2006.01) A61P 25/16 (2006.01) A61P 25/28 (2006.01) A61P 35/00 (2006.01) C07D 487/04 (2006.01)**

[25] EN

[54] **NOVEL SUBSTITUTED SULFONYLUREA COMPOUNDS AS INHIBITORS OF INTERLEUKIN-1 ACTIVITY**

[54] **NOUVEAUX COMPOSES DE SULFONYLUREE SUBSTITUES EN TANT QU'INHIBITEURS DE L'ACTIVITE DE L'INTERLEUKINE-1**

[72] ZHANG, HONGJIAN, US

[72] CHEN, PING, CN

[72] JIANG, FEI, CN

[72] SUN, PEIHUA, CN

[71] VIVA STAR BIOSCIENCES (SUZHOU) CO., LTD., CN

[85] 2024-03-27

[86] 2022-09-27 (PCT/US2022/077120)

[87] (WO2023/056264)

[30] CN (PCT/CN2021/121548) 2021-09-29

---



## Demandes PCT entrant en phase nationale

[21] **3,233,676**  
[13] A1

[51] **Int.Cl. C07K 14/415 (2006.01) C12N 9/12 (2006.01) C12N 15/82 (2006.01)**  
[25] EN  
[54] **PLANT DISEASE RESISTANCE GENES AGAINST STEM RUST AND METHODS OF USE**  
[54] **GENES DE RESISTANCE AUX MALADIES DES PLANTES DIRIGES CONTRE LA ROUILLE NOIRE ET PROCEDES D'UTILISATION**  
[72] YU, GUOTAI, SA  
[72] WULFF, BRANDE BRUCE HERTEL, SA  
[71] THE SAINSBURY LABORATORY, GB  
[85] 2024-03-27  
[86] 2022-09-28 (PCT/US2022/077129)  
[87] (WO2023/056269)  
[30] US (63/250,413) 2021-09-30  
[30] US (63/357,055) 2022-06-30

[21] **3,233,677**  
[13] A1

[51] **Int.Cl. C08K 3/04 (2006.01) C08L 7/00 (2006.01) C08L 91/00 (2006.01)**  
[25] FR  
[54] **RUBBER COMPOSITION COMPRISING A POLAR PLASTICIZER AND A HIGHLY SATURATED ELASTOMER**  
[54] **COMPOSITION DE CAOUTCHOUC COMPRENANT UN PLASTIFIANT POLAIRE ET UN ELASTOMERE FORTEMENT SATURE**  
[72] FERRAND, THOMAS, FR  
[72] ARAUJO DA SILVA, JOSE-CARLOS, FR  
[72] PRAS, MAXIME, FR  
[71] COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, FR  
[85] 2024-04-02  
[86] 2022-12-07 (PCT/EP2022/084724)  
[87] (WO2023/110567)  
[30] FR (FR2113474) 2021-12-14

[21] **3,233,680**  
[13] A1

[51] **Int.Cl. B31B 70/26 (2017.01)**  
[25] EN  
[54] **METHOD FOR PRODUCING PAPER SACKS AND PAPER SACKS**  
[54] **PROCEDE DE PRODUCTION DE SACS EN PAPIER, ET SACS EN PAPIER**  
[72] MELZER, MAX, DE  
[71] MONDI AG, AT  
[85] 2024-04-02  
[86] 2022-11-30 (PCT/EP2022/083772)  
[87] (WO2023/117339)  
[30] DE (10 2021 134 238.4) 2021-12-22

[21] **3,233,684**  
[13] A1

[51] **Int.Cl. C10L 1/16 (2006.01) C10L 1/196 (2006.01) C10L 1/197 (2006.01) C10L 1/224 (2006.01) C10L 7/00 (2006.01) C10L 10/14 (2006.01) C10L 10/16 (2006.01)**  
[25] EN  
[54] **IMPROVEMENTS IN FUELS**  
[54] **AMELIORATIONS DE CARBURANTS**  
[72] LENNON, JASON ALLEN, US  
[72] DANIELS, DAVID ARTHUR, US  
[71] INNOSPEC FUEL SPECIALTIES LLC, US  
[85] 2024-04-02  
[86] 2022-10-04 (PCT/GB2022/052511)  
[87] (WO2023/057748)  
[30] US (63/251,986) 2021-10-04  
[30] EP (21202995.3) 2021-10-15

[21] **3,233,685**  
[13] A1

[51] **Int.Cl. B65D 1/22 (2006.01) B65D 21/02 (2006.01) B65D 25/28 (2006.01) B65D 81/26 (2006.01)**  
[25] EN  
[54] **CONTAINER HANDLES FOR LIFTING A CONTAINER IN AN INVERTED ORIENTATION**  
[54] **POIGNEES DE RECIPIENT POUR SOULEVER UN RECIPIENT DANS UN SENS INVERSE**  
[72] DAVIS, LUKE, GB  
[71] LOADHOG LIMITED, GB  
[85] 2024-04-02  
[86] 2022-10-17 (PCT/IB2022/059937)  
[87] (WO2023/067472)  
[30] GB (2115063.6) 2021-10-21  
[30] GB (2215288.8) 2022-10-17

[21] **3,233,689**  
[13] A1

[51] **Int.Cl. B01D 53/14 (2006.01)**  
[25] EN  
[54] **GAS CAPTURE SYSTEM COMPRISING A HEAT PUMP USING A LIQUID SORBENT WITH COMBINED TEMPERATURE AND PRESSURE SWINGS**  
[54] **SYSTEME DE CAPTURE DE GAZ COMPRENANT UNE POMPE A CHALEUR UTILISANT UN SORBANT LIQUIDE AVEC DES OSCILLATIONS DE TEMPERATURE ET DE PRESSION COMBINEES**  
[72] ZAABOUT, ABDELGHAFOR, NO  
[72] CLOETE, SCHALK, NO  
[72] DHOKE, CHAITANYA, NO  
[72] KVAMSDAL, HANNE, NO  
[71] SINTEF TTO AS, NO  
[85] 2024-04-02  
[86] 2022-10-03 (PCT/EP2022/077443)  
[87] (WO2023/057372)  
[30] GB (2114158.5) 2021-10-04

[21] **3,233,691**  
[13] A1

[51] **Int.Cl. A61K 31/46 (2006.01) A61K 47/32 (2006.01) A61P 25/00 (2006.01) A61P 25/16 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR TREATING SIALORRHEA**  
[54] **COMPOSITIONS ET PROCEDES DE TRAITEMENT DE LA SIALORRHEE**  
[72] YELLEPEDDI, VENKATA K, US  
[72] MURPHY, NANCY ALICE, US  
[72] GHANDEHARI, HAMIDREZA S., US  
[72] MUNTZ, HARLAN R., US  
[72] YATHAVAN, BHUVANESH KUMAR, US  
[72] WATT, KEVIN, US  
[71] UNIVERSITY OF UTAH RESEARCH FOUNDATION, US  
[85] 2024-04-02  
[86] 2022-10-31 (PCT/US2022/048482)  
[87] (WO2023/076698)  
[30] US (63/274,350) 2021-11-01

## PCT Applications Entering the National Phase

---

[21] **3,233,693**  
[13] A1

[51] **Int.Cl. C10G 2/00 (2006.01) C10G 45/10 (2006.01)**  
[25] EN  
[54] **METHOD FOR THE PRODUCTION OF SYNTHETIC JET FUEL**  
[54] **PROCEDE DE PRODUCTION DE CARBUREACTEUR SYNTHETIQUE**  
[72] AGEE, KENNETH L., US  
[72] PARKER, JENNIFER, US  
[71] EMERGING FUELS TECHNOLOGY, INC., US  
[85] 2024-04-02  
[86] 2022-10-03 (PCT/US2022/045525)  
[87] (WO2023/056088)  
[30] US (17/492,324) 2021-10-01

---

[21] **3,233,696**  
[13] A1

[51] **Int.Cl. C07K 16/28 (2006.01) A61P 35/02 (2006.01)**  
[25] EN  
[54] **BISPECIFIC CD16A BINDERS**  
[54] **LIANTS DE CD16A BISPECIFIQUES**  
[72] KOCH, JOACHIM, DE  
[72] PAHL, JENS, DE  
[72] ROSS, THORSTEN, DE  
[72] SIEGLER, JANA-JULIA, DE  
[72] DULAT, HOLGER, DE  
[71] AFFIMED GMBH, DE  
[85] 2024-04-02  
[86] 2022-11-03 (PCT/EP2022/080619)  
[87] (WO2023/078968)  
[30] EP (21206329.1) 2021-11-03  
[30] EP (21213774.9) 2021-12-10  
[30] EP (22187301.1) 2022-07-27

---

[21] **3,233,697**  
[13] A1

[51] **Int.Cl. C07K 16/10 (2006.01) C07K 19/00 (2006.01) C12N 15/70 (2006.01) G01N 33/569 (2006.01)**  
[25] EN  
[54] **RECOMBINANT FUSION PROTEIN DERIVED FROM HR REGION OF S2 PROTEIN OF SARS-COV-2 AND APPLICATION OF RECOMBINANT FUSION PROTEIN**  
[54] **PROTEINE DE FUSION RECOMBINANTE DERIVEE DE LA REGION HR DE LA PROTEINE S2 DU SRAS-COV-2 ET APPLICATION DE LA PROTEINE DE FUSION RECOMBINEE**  
[72] PANG, WEI, CN  
[72] ZHENG, YONGTANG, CN  
[72] HE, WENQIANG, CN  
[72] HE, XIAOYAN, CN  
[72] LUO, RONGHUA, CN  
[72] LU, YING, CN  
[72] SHEN, FAN, CN  
[71] ETERNIVAX BIOMEDICAL, INC, CN  
[85] 2024-04-02  
[86] 2022-11-30 (PCT/CN2022/135269)  
[87] (WO2023/051850)  
[30] CN (202111167024.2) 2021-10-01

---

[21] **3,233,698**  
[13] A1

[51] **Int.Cl. A61K 48/00 (2006.01) C07K 14/005 (2006.01) C07K 16/00 (2006.01) C12N 15/86 (2006.01)**  
[25] EN  
[54] **VIRAL PARTICLES RETARGETED TO SKELETAL MUSCLE**  
[54] **PARTICULES VIRALES RECIBLEES SUR LE MUSCLE SQUELETTIQUE**  
[72] SABIN, LEAH, US  
[72] STEC, MICHAEL, US  
[72] MURPHY, ANDREW J., US  
[72] KYRATSOUS, CHRISTOS, US  
[72] MOLLER-TANK, SVEN, US  
[72] SAMAI, POULAMI, US  
[71] REGENERON PHARMACEUTICALS, INC., US  
[85] 2024-04-02  
[86] 2022-11-04 (PCT/US2022/079339)  
[87] (WO2023/081850)  
[30] US (63/275,731) 2021-11-04  
[30] US (63/369,761) 2022-07-28

---

[21] **3,233,700**  
[13] A1

[51] **Int.Cl. A61B 5/22 (2006.01)**  
[25] EN  
[54] **COMPUTATIONAL APPROACHES TO ASSESSING CENTRAL NERVOUS SYSTEM FUNCTIONALITY USING A DIGITAL TABLET AND STYLUS**  
[54] **APPROCHES DE CALCUL POUR EVALUER UNE FONCTIONNALITE DU SYSTEME NERVEUX CENTRAL (SNC) A L'AIDE D'UNE TABLETTE NUMERIQUE ET D'UN STYLET**  
[72] LANGTON, JOHN, US  
[72] BATES, DAVID, US  
[72] TOBYNE, SEAN, US  
[72] GOMES-OSMAN, JOYCE, US  
[72] PASCUAL-LEONE, ALVARO, US  
[72] JANNATI, ALI, US  
[72] DHAMNE, SAMEER, US  
[71] LINUS HEALTH, INC., US  
[85] 2024-04-02  
[86] 2022-09-29 (PCT/US2022/045216)  
[87] (WO2023/055924)  
[30] US (63/250,066) 2021-09-29

---

[21] **3,233,701**  
[13] A1

[51] **Int.Cl. B01J 19/12 (2006.01) B01J 35/00 (2024.01) C01B 3/04 (2006.01) C01B 3/56 (2006.01)**  
[25] EN  
[54] **AMMONIA-BASED PHOTOCATALYTIC REACTOR SYSTEMS AND METHODS**  
[54] **SYSTEMES ET PROCEDES DE REACTEUR PHOTOCATALYTIQUE A BASE D'AMMONIAC**  
[72] KHATIWADA, SUMAN, US  
[72] SHAH, SHREYA, US  
[72] GARDEZI, SYED ALI, US  
[72] CHAPMAN, JONATHAN MORRIS, US  
[72] ROBATJAZI, HOSSEIN, US  
[72] GLOSE, MORGAN, US  
[71] SYZYGY PLASMONICS INC., US  
[85] 2024-04-02  
[86] 2022-10-25 (PCT/US2022/047729)  
[87] (WO2023/076270)  
[30] US (63/271,337) 2021-10-25

## Demandes PCT entrant en phase nationale

[21] **3,233,702**  
[13] A1

[51] **Int.Cl. C12P 7/06 (2006.01) C12P 7/28 (2006.01)**  
[25] EN  
[54] **FLEXIBLE PRODUCT SEPARATION AND RECOVERY**  
[54] **SEPARATION ET RECUPERATION DE PRODUIT SOUPLE**  
[72] GAO, ALLAN HAIMING, US  
[72] CONRADO, ROBERT JOHN, US  
[72] COOMBES, JOSS ANTON, US  
[72] BOURDAKOS, NICHOLAS, US  
[71] LANZATECH, INC., US  
[85] 2024-04-02  
[86] 2022-10-05 (PCT/US2022/077591)  
[87] (WO2023/064695)  
[30] US (17/450,802) 2021-10-13

[21] **3,233,703**  
[13] A1

[51] **Int.Cl. B29C 64/135 (2017.01) B29C 64/264 (2017.01) B29C 64/268 (2017.01) B29C 64/273 (2017.01) B29C 64/286 (2017.01)**  
[25] EN  
[54] **METHOD AND APPARATUS FOR LITHOGRAPHY-BASED GENERATIVE MANUFACTURING OF A THREE-DIMENSIONAL COMPONENT**  
[54] **PROCEDE ET DISPOSITIF DE FABRICATION GENERATIVE A BASE DE LITHOGRAPHIE D'UN COMPOSANT TRIDIMENSIONNEL**  
[72] GRUBER, PETER, AT  
[71] UPNANO GMBH, AT  
[85] 2024-04-02  
[86] 2022-09-28 (PCT/IB2022/059236)  
[87] (WO2023/057857)  
[30] EP (21020496.2) 2021-10-06

[21] **3,233,704**  
[13] A1

[51] **Int.Cl. A01N 1/02 (2006.01)**  
[25] EN  
[54] **ORGAN PRESERVATION SYSTEM WITH AUTOMATIC PRIMING AND AIR REMOVAL**  
[54] **SYSTEME DE CONSERVATION DES ORGANES AVEC AMORCAGE AUTOMATIQUE ET EVACUATION DE L'AIR**  
[72] JONES, LAWRENCE R., US  
[72] MERTE, KENNETH E., US  
[72] WRIGHT, DAVID W., US  
[71] BRIDGE TO LIFE LTD., US  
[85] 2024-04-02  
[86] 2022-09-30 (PCT/US2022/077320)  
[87] (WO2023/060012)  
[30] US (17495765) 2021-10-06

[21] **3,233,705**  
[13] A1

[51] **Int.Cl. C01B 17/64 (2006.01) C05D 9/02 (2006.01)**  
[25] EN  
[54] **METHODS FOR THE PRODUCTION OF THIOSULFATES VIA SALT METATHESIS**  
[54] **METHODES DE PRODUCTION DE THIOSULFATES PAR METATHESE DE SELS**  
[72] FAIRWEATHER, THOMAS DAVID, US  
[72] HOJJATIE, MICHAEL, US  
[72] FRANCO, JORGE, US  
[71] TESSENDERLO GROUP NV, BE  
[85] 2024-04-02  
[86] 2022-10-03 (PCT/EP2022/077482)  
[87] (WO2023/057397)  
[30] EP (21200780.1) 2021-10-04

[21] **3,233,706**  
[13] A1

[51] **Int.Cl. A61K 31/74 (2006.01) A61K 47/56 (2017.01) A61K 47/59 (2017.01) A61K 47/69 (2017.01)**  
[25] EN  
[54] **MNO NANOMATERIAL BASED INHIBITORS OF INFLAMMATION AND CANCER METASTASIS**  
[54] **INHIBITEURS D'INFLAMMATION ET DE METASTASE DE CANCER A BASE DE NANOMATERIAUX MNO**  
[72] LEONG, KAM W., US  
[72] ZHONG, YILING, US  
[71] THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, US  
[71] NEWSOUTH INNOVATIONS PTY LIMITED, AU  
[85] 2024-04-02  
[86] 2022-09-30 (PCT/US2022/077427)  
[87] (WO2023/056470)  
[30] US (63/250,311) 2021-09-30  
[30] US (63/305,340) 2022-02-01

[21] **3,233,707**  
[13] A1

[51] **Int.Cl. A61K 38/21 (2006.01) A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 14/47 (2006.01) C07K 16/00 (2006.01) C07K 19/00 (2006.01)**  
[25] EN  
[54] **ACTIVATABLE CYTOKINE CONSTRUCTS AND COMBINATION METHODS**  
[54] **CONSTRUCTIONS DE CYTOKINE ACTIVABLES ET PROCEDES DE COMBINAISON**  
[72] BEREZHNOY, ALEXEY YEVGENYEVICH, US  
[72] LAPUYADE, NICOLE G., US  
[72] CAI, NA, US  
[72] WINTER, MICHAEL B., US  
[72] WONG, KENNETH, US  
[72] PAIDHUNGAT, MADAN M., US  
[72] DANIEL, DYLAN L., US  
[72] LE SCOLAN, ERWAN, US  
[71] CYTOMX THERAPEUTICS, INC., US  
[85] 2024-04-02  
[86] 2022-10-06 (PCT/US2022/077690)  
[87] (WO2023/060188)  
[30] US (63/253,893) 2021-10-08  
[30] US (63/328,525) 2022-04-07

## PCT Applications Entering the National Phase

---

[21] **3,233,708**  
[13] A1

[51] **Int.Cl. B65G 21/20 (2006.01) F16G 9/00 (2006.01) F16H 19/06 (2006.01)**

[25] EN

[54] **ACTUATOR FOR ADJUSTABLE CONVEYOR GUIDERAIL**

[54] **ACTIONNEUR POUR RAIL DE GUIDAGE DE TRANSPORTEUR REGLABLE**

[72] FYE, STEPHEN C., US

[72] COTTON, AARON, US

[72] LAYNE, JAMES L., US

[71] SPAN TECH LLC, US

[85] 2024-04-02

[86] 2022-11-16 (PCT/US2022/050054)

[87] (WO2023/091453)

[30] US (63/279,914) 2021-11-16

---

[21] **3,233,709**  
[13] A1

[51] **Int.Cl. A23L 27/30 (2016.01) A23L 29/30 (2016.01) A21D 2/18 (2006.01) A23L 2/60 (2006.01) A23L 2/66 (2006.01)**

[25] EN

[54] **SWEETENER FORMULATIONS**

[54] **FORMULATIONS D'EDULCORANT**

[72] TSIVION, DAVID, IL

[72] BITAN, LIRON, IL

[72] LAHAV, NAAMA, IL

[72] TRACHTENBERG, ALEXANDER, IL

[72] FATTAL, MORAN, IL

[71] INCREDO LTD., IL

[85] 2024-04-02

[86] 2022-10-06 (PCT/IB2022/059568)

[87] (WO2023/057956)

[30] US (63/262,172) 2021-10-06

[30] US (63/253,133) 2021-10-07

[30] IB (PCT/IB2022/050065) 2022-01-05

[30] IB (PCT/IB2022/057310) 2022-08-05

---

[21] **3,233,710**  
[13] A1

[51] **Int.Cl. A23L 2/60 (2006.01) A23L 27/30 (2016.01) A23L 29/25 (2016.01)**

[25] EN

[54] **SWEETENER CONCENTRATE FORMULATIONS**

[54] **FORMULATIONS DE CONCENTRE D'EDULCORANT**

[72] TSIVION, DAVID, IL

[72] BITAN, LIRON, IL

[72] LAHAV, NAAMA, IL

[72] TRACHTENBERG, ALEXANDER, IL

[72] FATTAL, MORAN, IL

[71] DOUXMATOK LTD., IL

[85] 2024-04-02

[86] 2022-10-06 (PCT/IB2022/059574)

[87] (WO2023/057960)

[30] US (63/262,176) 2021-10-06

---

[21] **3,233,711**  
[13] A1

[51] **Int.Cl. H01Q 15/24 (2006.01) H01Q 1/40 (2006.01)**

[25] EN

[54] **LOW-COST HIGHER ORDER FLOQUET STRUCTURE INTEGRATED MEANDER LINE POLARIZER AND RADOME**

[54] **POLARISEUR A LIGNE EN MEANDRE INTEGRE A STRUCTURE DE FLOQUET D'ORDRE SUPERIEUR A FAIBLE COUT ET RADOME**

[72] BUCKLEY, MICHAEL, US

[72] KOMANDURI, VARADA RAJAN, US

[71] HUGHES NETWORK SYSTEMS, LLC, US

[85] 2024-04-02

[86] 2022-10-11 (PCT/US2022/077898)

[87] (WO2023/064763)

[30] US (63/262,434) 2021-10-12

[30] US (18/045,651) 2022-10-11

---

[21] **3,233,712**  
[13] A1

[51] **Int.Cl. A23L 27/30 (2016.01) A23L 29/30 (2016.01) A21D 2/18 (2006.01) A23L 2/60 (2006.01) A23L 2/66 (2006.01)**

[25] EN

[54] **SWEETENER FORMULATIONS**

[54] **FORMULATIONS D'EDULCORANT**

[72] TSIVION, DAVID, IL

[72] BITAN, LIRON, IL

[71] INCREDO LTD., IL

[85] 2024-04-02

[86] 2022-10-07 (PCT/IB2022/059586)

[87] (WO2023/057966)

[30] US (63/253,133) 2021-10-07

[30] IB (PCT/IB2022/050065) 2022-01-05

[30] US (63/316,015) 2022-03-03

[30] IB (PCT/IB2022/057310) 2022-08-05

---

[21] **3,233,713**  
[13] A1

[51] **Int.Cl. G01N 33/566 (2006.01) G01N 33/68 (2006.01)**

[25] EN

[54] **METHOD FOR THE MANAGEMENT OF ANTIBIOTIC ADMINISTRATION**

[54] **PROCEDE DE GESTION D'ADMINISTRATION D'ANTIBIOTIQUES**

[72] DURAND, NICOLAS, CH

[72] MARKI, IWAN, CH

[72] BENNINGA, ROMY, CH

[72] VAN DEN BOGAARD, PATRICK, CH

[72] VENTURA, FRANCOIS, CH

[71] ABIONIC SA, CH

[85] 2024-04-02

[86] 2021-11-25 (PCT/IB2021/060988)

[87] (WO2023/094862)

---

[21] **3,233,714**  
[13] A1

[51] **Int.Cl. C08G 18/08 (2006.01) C08G 18/42 (2006.01) C08L 75/06 (2006.01)**

[25] EN

[54] **WATER-BASED PRIMER-SURFACER AND USES THEREOF**

[54] **APPRET SURFACANT A BASE D'EAU ET SES UTILISATIONS**

[72] ZHAO, WEI, US

[71] PPG INDUSTRIES OHIO, INC., US

[85] 2024-04-02

[86] 2022-10-06 (PCT/US2022/077659)

[87] (WO2023/064698)

[30] US (63/255,026) 2021-10-13

## Demandes PCT entrant en phase nationale

[21] **3,233,715**  
[13] A1

[51] **Int.Cl. A61K 31/714 (2006.01) C07F 15/06 (2006.01)**  
[25] EN  
[54] **A COBALT-CONTAINING ACIDIC AMINO ACID COMPLEX AND ITS USE FOR TREATING CANCER**  
[54] **COMPLEXE D'ACIDES AMINES ACIDE CONTENANT DU COBALT ET SON UTILISATION POUR LE TRAITEMENT DU CANCER**  
[72] LI, I-CHEN, CN  
[72] CHEN, CHI-JUNG, CN  
[71] AMELIO BIOTECH CO., LTD., CN  
[85] 2024-04-02  
[86] 2022-09-30 (PCT/CN2022/123300)  
[87] (WO2023/056898)  
[30] US (63/252,232) 2021-10-05

[21] **3,233,716**  
[13] A1

[51] **Int.Cl. C07D 277/46 (2006.01) C07C 233/65 (2006.01) C07D 207/456 (2006.01) C07D 209/08 (2006.01) C07D 213/30 (2006.01) C07D 213/64 (2006.01) C07D 213/75 (2006.01) C07D 231/12 (2006.01) C07D 231/18 (2006.01) C07D 231/40 (2006.01) C07D 235/14 (2006.01) C07D 249/08 (2006.01) C07D 249/14 (2006.01) C07D 263/46 (2006.01) C07D 271/10 (2006.01)**  
[25] EN  
[54] **HERBICIDES AND USE THEREOF**  
[54] **HERBICIDES ET LEUR UTILISATION**  
[72] DOTAN, NESLY, IL  
[72] BLOCH, ITAI, IL  
[72] GAL, MAAYAN, IL  
[72] COHEN, ELAD, IL  
[72] BEN-SHUSHAN SHELLY, ROTEM, IL  
[72] AMRAM, EYTAN, IL  
[71] PROJINI AGCHEM LTD, IL  
[85] 2024-04-02  
[86] 2022-10-10 (PCT/IL2022/051075)  
[87] (WO2023/062627)  
[30] US (63/254,193) 2021-10-11

[21] **3,233,717**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/10 (2020.01) A24F 40/42 (2020.01) A24F 40/44 (2020.01) A24F 40/46 (2020.01) A24F 40/51 (2020.01) A24F 40/53 (2020.01) A24F 40/60 (2020.01) A24F 40/70 (2020.01)**  
[25] EN  
[54] **AEROSOL GENERATING DEVICE**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL**  
[72] LEE, JONGSUB, KR  
[72] PARK, SANGKYU, KR  
[72] CHUNG, WOSEO, KR  
[72] CHO, BYUNGSUNG, KR  
[72] HAN, DAENAM, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-02  
[86] 2022-10-18 (PCT/KR2022/015835)  
[87] (WO2023/068738)  
[30] KR (10-2021-0139801) 2021-10-19  
[30] KR (10-2022-0025356) 2022-02-25

[21] **3,233,718**  
[13] A1

[51] **Int.Cl. A61K 31/728 (2006.01) A61L 27/20 (2006.01) A61P 19/02 (2006.01)**  
[25] EN  
[54] **INJECTION CONTAINER FILLED WITH AN AQUEOUS INJECTABLE COMPOSITION**  
[54] **RECIPIENT D'INJECTION REMPLI D'UNE COMPOSITION INJECTABLE CONTENANT DE L'EAU**  
[72] REESE, SVEN, DE  
[71] ALBOMED GMBH, DE  
[85] 2024-04-02  
[86] 2022-10-17 (PCT/EP2022/078815)  
[87] (WO2023/066856)  
[30] DE (10 2021 126 946.6) 2021-10-18

[21] **3,233,719**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/10 (2020.01) A24F 40/20 (2020.01) A24F 40/30 (2020.01) A24F 40/42 (2020.01) A24F 40/46 (2020.01) A24F 40/51 (2020.01) A24F 40/60 (2020.01) A24F 40/65 (2020.01)**  
[25] EN  
[54] **AEROSOL-GENERATING DEVICE AND OPERATION METHOD THEREOF**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL ET SON PROCEDE DE FONCTIONNEMENT**  
[72] CHO, BYUNGSUNG, KR  
[72] KIM, MINKYU, KR  
[72] PARK, JUEON, KR  
[72] LEE, JONGSUB, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-02  
[86] 2022-10-19 (PCT/KR2022/015910)  
[87] (WO2023/068783)  
[30] KR (10-2021-0139780) 2021-10-19  
[30] KR (10-2022-0004280) 2022-01-11

[21] **3,233,720**  
[13] A1

[51] **Int.Cl. G06F 16/13 (2019.01) G06F 21/32 (2013.01) G06F 21/44 (2013.01) G06F 21/62 (2013.01) G06F 21/72 (2013.01) G06F 21/78 (2013.01) G06F 21/86 (2013.01) G06F 16/182 (2019.01) H04L 9/08 (2006.01) H04L 9/32 (2006.01)**  
[25] EN  
[54] **A DEVICE AND SYSTEM FOR THE SECURE STORAGE OF DATA IN A DISTRIBUTED MANNER**  
[54] **DISPOSITIF ET SYSTEME POUR LE STOCKAGE SECURISE DE DONNEES DE MANIERE DISTRIBUEE**  
[72] ELBAUM, HECTOR, AU  
[71] NEW CLOUD DYNAMICS PTY LTD, AU  
[85] 2024-04-02  
[86] 2022-10-19 (PCT/AU2022/051258)  
[87] (WO2023/064986)  
[30] AU (2021254561) 2021-10-19  
[30] AU (PCT/AU2021/051222) 2021-10-20

## PCT Applications Entering the National Phase

[21] **3,233,721**  
[13] A1

[51] **Int.Cl. A61K 39/39 (2006.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**  
[25] EN  
[54] **METHODS OF TREATING CANCER AND THE PHARMACEUTICAL COMPOSITIONS THEREOF**  
[54] **METHODES DE TRAITEMENT DU CANCER ET COMPOSITIONS PHARMACEUTIQUES ASSOCIEES**  
[72] XIAO, SA, CN  
[72] DING, MURAN, CN  
[72] ZHANG, YONG, CN  
[72] ZHUO, SHI, CN  
[72] MAK, NGA SZE AMANDA, US  
[72] KHALILI, JAHAN, US  
[72] ZHU, HAI, US  
[72] ZHU, YI, CN  
[71] SYSTIMMUNE, INC., US  
[85] 2024-04-02  
[86] 2022-10-03 (PCT/US2022/077490)  
[87] (WO2023/056485)  
[30] US (63/251,664) 2021-10-03

[21] **3,233,722**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/20 (2020.01) A24F 40/30 (2020.01) A24F 40/42 (2020.01) A24F 40/46 (2020.01) A24F 40/51 (2020.01) A24F 40/57 (2020.01)**  
[25] EN  
[54] **AEROSOL-GENERATING DEVICE**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL**  
[72] CHO, BYUNGSUNG, KR  
[72] PARK, SANGKYU, KR  
[72] LEE, JONGSUB, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-02  
[86] 2022-10-19 (PCT/KR2022/015920)  
[87] (WO2023/068789)  
[30] KR (10-2021-0139782) 2021-10-19  
[30] KR (10-2021-0139784) 2021-10-19  
[30] KR (10-2021-0173228) 2021-12-06  
[30] KR (10-2021-0173229) 2021-12-06

[21] **3,233,723**  
[13] A1

[51] **Int.Cl. B65D 77/22 (2006.01) F16K 15/14 (2006.01) F16K 24/04 (2006.01) F16K 31/126 (2006.01)**  
[25] EN  
[54] **PRESSURE RELIEF VALVE WITH HIGH PRESSURE OPENING AND CLOSING FUNCTIONALITY**  
[54] **SOUPAPE DE DECHARGE DOTEE D'UNE FONCTIONNALITE D'OUVERTURE ET DE FERMETURE A HAUTE PRESSION**  
[72] HOFFMAN, KARL K., US  
[72] LARSEN, ROBERT C. JR., US  
[72] RIVIERA, JENINE, US  
[71] PLITEK, L.L.C., US  
[85] 2024-04-02  
[86] 2021-10-04 (PCT/US2021/053398)  
[87] (WO2023/059308)

[21] **3,233,724**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/20 (2020.01) A24F 40/46 (2020.01) A24F 40/51 (2020.01) A24F 40/57 (2020.01) H02M 1/00 (2007.10)**  
[25] EN  
[54] **AEROSOL-GENERATING DEVICE AND OPERATION METHOD THEREOF**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL ET SON PROCEDE DE FONCTIONNEMENT**  
[72] CHO, BYUNGSUNG, KR  
[72] PARK, SANGKYU, KR  
[72] LEE, JONGSUB, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-02  
[86] 2022-10-19 (PCT/KR2022/015928)  
[87] (WO2023/068793)  
[30] KR (10-2021-0139789) 2021-10-19  
[30] KR (10-2021-0139791) 2021-10-19  
[30] KR (10-2022-0012614) 2022-01-27  
[30] KR (10-2022-0012615) 2022-01-27

[21] **3,233,725**  
[13] A1

[51] **Int.Cl. A63D 5/04 (2006.01)**  
[25] EN  
[54] **INTERACTION OF AUDIO, VIDEO, EFFECTS AND ARCHITECTURAL LIGHTING WITH BOWLING SCORING SYSTEM AND METHODS OF USE**  
[54] **INTERACTION D'AUDIO, DE VIDEO, D'EFFETS ET D'ECLAIRAGE ARCHITECTURAL AVEC LE SYSTEME DE COMPTAGE DE POINTS DE JEU DE QUILLES, ET PROCEDES D'UTILISATION**  
[72] BOVINO, MICHAEL J., US  
[72] JULIANO, ANDREW, US  
[72] ESPOSITO, GENNARO, US  
[71] DFX: SOUND VISION, US  
[85] 2024-04-02  
[86] 2022-10-06 (PCT/US2022/077685)  
[87] (WO2023/060183)  
[30] US (17/495,403) 2021-10-06

[21] **3,233,726**  
[13] A1

[51] **Int.Cl. A24F 40/50 (2020.01) A24F 40/20 (2020.01) A24F 40/46 (2020.01) A24F 40/51 (2020.01) A24F 40/53 (2020.01) A24F 40/60 (2020.01) H02M 1/00 (2007.10)**  
[25] EN  
[54] **AEROSOL-GENERATING DEVICE AND OPERATION METHOD THEREOF**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL ET SON PROCEDE DE FONCTIONNEMENT**  
[72] JUNG, HYUNGJIN, KR  
[72] PARK, JUEON, KR  
[72] KIM, TAEHUN, KR  
[72] HAN, JUNGHO, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-02  
[86] 2022-10-12 (PCT/KR2022/015435)  
[87] (WO2023/068644)  
[30] KR (10-2021-0140622) 2021-10-20  
[30] KR (10-2022-0022212) 2022-02-21

## Demandes PCT entrant en phase nationale

[21] **3,233,727**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/20 (2020.01) A24F 40/42 (2020.01) A24F 40/51 (2020.01)**

[25] EN  
[54] **AEROSOL-GENERATING DEVICE**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL**

[72] CHO, BYUNGSUNG, KR  
[72] LEE, JONGSUB, KR  
[72] PARK, SANGKYU, KR  
[72] CHUNG, WOOSEOK, KR  
[72] HAN, DAENAM, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-02  
[86] 2022-10-19 (PCT/KR2022/015937)  
[87] (WO2023/068797)  
[30] KR (10-2021-0140331) 2021-10-20  
[30] KR (10-2022-0042167) 2022-04-05

[21] **3,233,728**  
[13] A1

[51] **Int.Cl. G01N 33/487 (2006.01) A61P 1/16 (2006.01) G01N 33/92 (2006.01)**

[25] EN  
[54] **TREATMENT WITH ILEAL BILE ACID TRANSPORTER (IBAT) INHIBITORS FOR INCREASED EVENT-FREE SURVIVAL (EFS)**  
[54] **TRAITEMENT AVEC DES INHIBITEURS DE TRANSPORTEUR D'ACIDE BILIAIRE ILEAL (IBAT) POUR UNE SURVIE SANS EVENEMENT (EFS) ACCRUE**

[72] VIG, PAMELA, US  
[72] GARNER, WILL, US  
[71] MIRUM PHARMACEUTICALS, INC., US  
[85] 2024-04-02  
[86] 2022-11-04 (PCT/US2022/048978)  
[87] (WO2023/081370)  
[30] US (63/276,480) 2021-11-05  
[30] US (63/315,762) 2022-03-02

[21] **3,233,729**  
[13] A1

[51] **Int.Cl. A61K 31/7088 (2006.01) A61P 21/00 (2006.01) C07H 21/00 (2006.01) C12N 15/11 (2006.01) C12N 15/85 (2006.01)**

[25] EN  
[54] **COMPOSITIONS AND METHODS FOR LIVER-SPECIFIC EXPRESSION OF FOLLISTATIN**  
[54] **COMPOSITIONS ET PROCEDES POUR L'EXPRESSION SPECIFIQUE AU FOIE DE LA FOLLISTATINE**

[72] SCHOLZ, MATTHEW REIN, US  
[72] LEWIS, JOHN DAVID, CA  
[71] OISIN BIOTECHNOLOGIES, INC., US  
[85] 2024-04-02  
[86] 2022-09-30 (PCT/US2022/045468)  
[87] (WO2023/056070)  
[30] CA (PCT/CA2021/051377) 2021-10-01

[21] **3,233,730**  
[13] A1

[51] **Int.Cl. C12N 5/078 (2010.01)**

[25] EN  
[54] **DERIVATION OF HEPATOCYTES AND HEMATOPOIETIC PROGENITORS FROM HUMAN EMBRYONIC STEM CELLS**  
[54] **DERIVATION D'HEPATOCYTES ET DE PROGENITEURS HEMATOPOIETIQUES A PARTIR DE CELLULES SOUCHES EMBRYONNAIRES HUMAINES**

[72] SENGUPTA, SRIKUMAR, US  
[72] THOMSON, JAMES, US  
[71] WISCONSIN ALUMNI RESEARCH FOUNDATION, US  
[85] 2024-04-02  
[86] 2022-10-11 (PCT/US2022/046295)  
[87] (WO2023/064284)  
[30] US (63/254,830) 2021-10-12

[21] **3,233,731**  
[13] A1

[51] **Int.Cl. A61K 31/4709 (2006.01) C07C 209/52 (2006.01) C07D 215/40 (2006.01) C07C 211/33 (2006.01)**

[25] EN  
[54] **SYNTHESIS OF MAVORIXAFOR AND INTERMEDIATES THEREOF**  
[54] **SYNTHESE DE MAVORIXAFOR ET DE SES INTERMEDIAIRES**

[72] HANSELMANN, ROGER, US  
[72] BRANDS, KAREL MARIE JOSEPH, IT  
[71] X4 PHARMACEUTICALS, INC., US  
[85] 2024-04-02  
[86] 2022-10-07 (PCT/US2022/046094)  
[87] (WO2023/059903)  
[30] US (63/262,225) 2021-10-07

[21] **3,233,732**  
[13] A1

[51] **Int.Cl. A61K 38/17 (2006.01) A61P 35/00 (2006.01) A61P 37/00 (2006.01) C07K 16/40 (2006.01) C07K 16/28 (2006.01)**

[25] EN  
[54] **TARGETED CATALYTIC COMPLEMENT-ACTIVATING MOLECULES AND METHODS OF USE THEREOF**  
[54] **MOLECULES D'ACTIVATION DE COMPLEMENT CATALYTIQUE CIBLEES ET PROCEDES D'UTILISATION ASSOCIES**

[72] ALI, MOHAMMED YOUSSEF IBRAHIM, US  
[72] DEMOPULOS, GREGORY A., US  
[72] DOULAMI, CHRISTIANA, US  
[72] SCHWAEBLE, HANS-WILHELM, US  
[72] YABUKI, MUNEHISA, US  
[71] OMEROS CORPORATION, US  
[85] 2024-04-02  
[86] 2022-10-06 (PCT/US2022/077663)  
[87] (WO2023/060167)  
[30] US (63/253,211) 2021-10-07

## PCT Applications Entering the National Phase

[21] **3,233,733**  
[13] A1

[51] **Int.Cl. A61K 51/10 (2006.01) A61K 47/68 (2017.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **EGFRVIII-TARGETED COMPOUNDS AND USES THEREOF**  
[54] **COMPOSES CIBLANT EGFRVIII ET LEURS UTILISATIONS**  
[72] GRINSHTEIN, NATALIE, US  
[72] METCALF, JULIE, CA  
[72] DUFFY, IAN R., CA  
[72] TURNBULL, WILLIAM LESLIE, CA  
[72] MARCIL, ANNE, CA  
[72] JARAMILLO, MARIA, CA  
[72] SULEA, TRAIAN, CA  
[72] MORENO, MARIA, CA  
[72] WU, CUNLE, CA  
[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA  
[71] FUSION PHARMACEUTICALS INC., CA  
[85] 2024-03-27  
[86] 2021-09-29 (PCT/CA2021/051360)  
[87] (WO2023/049985)

[21] **3,233,734**  
[13] A1

[51] **Int.Cl. C09K 11/07 (2006.01)**  
[25] EN  
[54] **MOISTURE RESISTANT CHEMILUMINESCENT MARKING SYSTEMS AND COMPOSITIONS**  
[54] **SYSTEMES ET COMPOSITIONS DE MARQUAGE CHIMILUMINESCENT RESISTANT A L'HUMIDITE**  
[72] JACOB, LINDA ANNE, US  
[72] GELO, JOSEPH, US  
[71] CYALUME TECHNOLOGIES, INC., US  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/US2022/077794)  
[87] (WO2023/060259)  
[30] US (63/253,368) 2021-10-07

[21] **3,233,735**  
[13] A1

[51] **Int.Cl. H04W 12/03 (2021.01)**  
[25] EN  
[54] **COMMUNICATION METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL DE COMMUNICATION**  
[72] HU, LI, CN  
[72] LI, HE, CN  
[72] WU, RONG, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2024-03-27  
[86] 2022-09-28 (PCT/CN2022/122165)  
[87] (WO2023/051614)  
[30] CN (202111155030.6) 2021-09-29

[21] **3,233,737**  
[13] A1

[51] **Int.Cl. A61N 1/36 (2006.01) A61B 18/00 (2006.01) A61N 1/05 (2006.01)**  
[25] EN  
[54] **TREATMENT OF HYPERTENSION**  
[54] **TRAITEMENT DE L'HYPERTENSION**  
[72] FORSELL, PETER, SE  
[71] IMPLANTICA PATENT LTD, SE  
[85] 2024-03-27  
[86] 2022-08-26 (PCT/EP2022/073833)  
[87] (WO2023/031056)  
[30] EP (PCT/EP2021/073893) 2021-08-30  
[30] SE (2250220-7) 2022-02-18

[21] **3,233,738**  
[13] A1

[51] **Int.Cl. C07D 403/10 (2006.01) C07D 257/04 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING SARTAN ACTIVE COMPOUNDS HAVING A TETRAZOLE RING**  
[54] **PROCEDE DE PREPARATION DE COMPOSES ACTIFS DE TYPE SARTAN AYANT UN CYCLE TETRAZOLE**  
[72] CRUCIANI, PAUL, FR  
[72] GALIBOURG, ISABELLE, FR  
[72] GRIMAUD, BERNARD, FR  
[71] SANOFI, FR  
[85] 2024-03-27  
[86] 2022-09-26 (PCT/EP2022/076728)  
[87] (WO2023/052309)  
[30] EP (21306383.7) 2021-10-01

[21] **3,233,739**  
[13] A1

[51] **Int.Cl. A61B 17/17 (2006.01) A61F 2/30 (2006.01) A61F 2/38 (2006.01) A61F 2/46 (2006.01) A61B 17/16 (2006.01)**  
[25] EN  
[54] **PATELLAR IMPLANT**  
[54] **IMPLANT ROTULIEN**  
[72] JULIN, JOHAN, SE  
[72] BRATT, INGRID, SE  
[72] RYD, LEIF, SE  
[72] FLODSTROM, KATARINA, SE  
[71] EPISURF IP-MANAGEMENT AB, SE  
[85] 2024-03-27  
[86] 2022-09-27 (PCT/EP2022/076802)  
[87] (WO2023/046982)  
[30] SE (2151180-3) 2021-09-27

[21] **3,233,740**  
[13] A1

[51] **Int.Cl. A61B 17/15 (2006.01) A61B 17/17 (2006.01) A61F 2/30 (2006.01) A61F 2/42 (2006.01) A61F 2/46 (2006.01)**  
[25] EN  
[54] **METATARSAL IMPLANT**  
[54] **IMPLANT METATARSIEN**  
[72] RYD, LEIF, SE  
[72] JULIN, JOHAN, SE  
[71] EPISURF IP-MANAGEMENT AB, SE  
[85] 2024-03-27  
[86] 2022-09-27 (PCT/EP2022/076803)  
[87] (WO2023/046983)  
[30] SE (2151181-1) 2021-09-27

[21] **3,233,741**  
[13] A1

[51] **Int.Cl. C12Q 1/6886 (2018.01) C12Q 1/6827 (2018.01)**  
[25] EN  
[54] **MICROSATELLITE MARKERS**  
[54] **MARQUEURS MICROSATELLITES**  
[72] BURN, JOHN, GB  
[72] JACKSON, MICHAEL STEWART, GB  
[72] SANTIBANEZ-KOREF, FRANCISCO MAURO, GB  
[72] GALLON, RICHARD, GB  
[71] CANCER RESEARCH TECHNOLOGY LIMITED, GB  
[85] 2024-03-27  
[86] 2022-10-03 (PCT/GB2022/052500)  
[87] (WO2023/052795)  
[30] GB (2114136.1) 2021-10-01



## Demandes PCT entrant en phase nationale

[21] **3,233,744**  
[13] A1

[51] **Int.Cl. C07F 9/74 (2006.01) A61K 31/00 (2006.01) A61P 1/16 (2006.01) A61P 25/00 (2006.01) A61P 29/00 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **HALOGENATED PHENYLARSINE OXIDE COMPOUND AND APPLICATION THEREOF**

[54] **COMPOSE D'OXYDE DE PHENYLARSINE HALOGENE ET SON UTILISATION**

[72] HUANG, FUDE, CN  
[72] HONG, FENG, CN  
[72] WANG, WENAN, CN  
[72] ZHANG, JIANGANG, CN  
[72] XIE, YUYU, CN  
[72] ZHANG, HAO, CN  
[72] JIAO, CHANGPING, CN  
[72] CAO, LUXIANG, CN  
[72] ZHENG, LINAN, CN  
[72] HUANG, CHANGDE, CN  
[72] HOU, LIJUAN, CN  
[72] MA, LIPING, CN  
[72] LU, JINLIAN, CN  
[72] FANG, LI, CN  
[72] AN, PEIYUN, CN  
[71] NUO-BETA PHARMACEUTICAL TECHNOLOGY (SHANGHAI) CO., LTD., CN

[85] 2024-03-28  
[86] 2022-09-30 (PCT/CN2022/123419)  
[87] (WO2023/051805)  
[30] CN (202111162542.5) 2021-09-30

[21] **3,233,745**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/485 (2020.01)**

[25] EN

[54] **ABSORBENT CONTAINING MOUTHPIECE FOR AEROSOL DELIVERY DEVICE**

[54] **EMBOUT BUCCAL CONTENANT UN ABSORBANT POUR UN DISPOSITIF D'ADMINISTRATION D'AEROSOL**

[72] SHORT, JASON M., US  
[72] HUBBARD, SAWYER A., US  
[71] RAI STRATEGIC HOLDINGS, INC., US

[85] 2024-03-27  
[86] 2022-09-29 (PCT/IB2022/059319)  
[87] (WO2023/053072)  
[30] US (17/449,690) 2021-10-01

[21] **3,233,746**  
[13] A1

[51] **Int.Cl. C01F 11/18 (2006.01) B01D 53/62 (2006.01) B01D 53/75 (2006.01) B01D 53/78 (2006.01)**

[25] EN

[54] **METHOD FOR FIXING CARBON DIOXIDE, METHOD FOR PRODUCING CALCIUM CARBONATE, AND METHOD FOR UTILIZING WASTE GYPSUM BOARD**

[54] **PROCEDE DE FIXATION DE DIOXYDE DE CARBONE, PROCEDE DE PRODUCTION DE CARBONATE DE CALCIUM, ET PROCEDE D'UTILISATION DE PANNEAUX DE GYPSE USAGES**

[72] KIKUCHI, SADATO, JP  
[72] NAKAMURA, SHOGO, JP  
[72] OIZUMI, RISA, JP  
[72] KONISHI, MASAYOSHI, JP  
[72] HIGA, MITSURU, JP  
[72] TANIGUCHI, IKUO, JP  
[71] SUMITOMO OSAKA CEMENT CO., LTD., JP  
[71] YAMAGUCHI UNIVERSITY, JP  
[71] KYUSHU UNIVERSITY, NATIONAL UNIVERSITY CORPORATION, JP

[85] 2024-03-27  
[86] 2022-09-26 (PCT/JP2022/035627)  
[87] (WO2023/054239)  
[30] JP (2021-161854) 2021-09-30

[21] **3,233,748**  
[13] A1

[51] **Int.Cl. A61K 51/10 (2006.01) A61K 47/68 (2017.01) A61P 35/00 (2006.01) C07K 16/28 (2006.01)**

[25] EN

[54] **EGFRVIII-TARGETED COMPOUNDS AND USES THEREOF**

[54] **COMPOSES CIBLANT EGFRVIII ET LEURS UTILISATIONS**

[72] GRINSHTEIN, NATALIE, US  
[72] METCALF, JULIE, CA  
[72] DUFFY, IAN R., CA  
[72] TURNBULL, WILLIAM LESLIE, CA  
[72] MARCIL, ANNE, CA  
[72] JARAMILLO, MARIA, CA  
[72] SULEA, TRAIAN, CA  
[72] MORENO, MARIA, CA  
[72] WU, CUNLE, CA  
[71] NATIONAL RESEARCH COUNCIL OF CANADA, CA  
[71] FUSION PHARMACEUTICALS INC., CA

[85] 2024-03-28  
[86] 2022-09-29 (PCT/CA2022/051447)  
[87] (WO2023/050008)  
[30] CA (PCT/CA2021/051360) 2021-09-29

[21] **3,233,750**  
[13] A1

[51] **Int.Cl. B65D 51/00 (2006.01)**

[25] FR

[54] **CLOSURE CAP FOR A MEDICAL DEVICE, SAID CAP BEING SUITABLE FOR MAGNETIC GRIP**

[54] **CAPUCHON DE FERMETURE POUR UN DISPOSITIF MEDICAL, ADAPTE A UNE PREHENSION MAGNETIQUE**

[72] SIRCOULOMB, PASCAL, FR  
[72] REY, GAETAN, FR  
[72] CLAVEL, MAXIME, FR  
[72] PELLET, STEPHANIE, FR  
[72] YONNET, JEAN-PAUL, FR  
[72] DE BORTOLI, MARC, FR  
[72] MALAQUIN, LINDA, FR  
[72] TENAUD, PHILIPPE, FR  
[71] A RAYMOND ET CIE, FR

[85] 2024-04-03  
[86] 2022-08-24 (PCT/EP2022/073601)  
[87] (WO2023/088587)  
[30] FR (FR2112141) 2021-11-17

## PCT Applications Entering the National Phase

---

[21] **3,233,752**  
[13] A1

[51] **Int.Cl. E04B 1/19 (2006.01) A63H 33/10 (2006.01) F16B 7/04 (2006.01) F16B 12/38 (2006.01)**

[25] EN  
[54] **HYBRID JOINT ASSEMBLY**  
[54] **ENSEMBLE JOINT HYBRIDE**  
[72] KONGSHAUG, RUNE, NO  
[71] PRODUKTIF NORWAY AS, NO  
[85] 2024-03-27  
[86] 2022-09-29 (PCT/NO2022/050224)  
[87] (WO2023/055243)  
[30] NO (20211173) 2021-09-30

---

[21] **3,233,754**  
[13] A1

[51] **Int.Cl. B26B 21/40 (2006.01)**

[25] EN  
[54] **CONSUMER APPLIANCE**  
[54] **APPAREIL DE CONSOMMATION**  
[72] HABERMANN, JUDITH, DE  
[72] TESSMANN, ALEXANDER, DE  
[72] BRUENING, HAUKE, DE  
[71] THE GILLETTE COMPANY LLC, US  
[85] 2024-03-27  
[86] 2022-09-29 (PCT/US2022/077210)  
[87] (WO2023/056320)  
[30] US (17/492,094) 2021-10-01

---



---

[21] **3,233,755**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) A61P 9/10 (2006.01) C07H 21/00 (2006.01) A61K 31/7115 (2006.01) A61K 31/7125 (2006.01) A61K 31/713 (2006.01)**

[25] EN  
[54] **PREKALLIKREIN-MODULATING COMPOSITIONS AND METHODS OF USE THEREOF**  
[54] **COMPOSITIONS DE MODULATION DE LA PREKALLICREINE ET LEURS PROCEDES D'UTILISATION**  
[72] LI, ZHEN, US  
[72] ZHU, RUI, US  
[72] ZHOU, ZHIQING (JOEL), US  
[72] FULTZ, KIMBERLY, US  
[72] STUDER, SEAN, US  
[71] ADARX PHARMACEUTICALS, INC., US  
[85] 2024-03-27  
[86] 2022-09-30 (PCT/US2022/077381)  
[87] (WO2023/056440)  
[30] US (63/252,554) 2021-10-05  
[30] US (63/251,571) 2021-10-01  
[30] US (63/270,504) 2021-10-21  
[30] US (63/283,175) 2021-11-24  
[30] US (63/287,969) 2021-12-09

---



---

[21] **3,233,760**  
[13] A1

[51] **Int.Cl. B01J 8/24 (2006.01) C07C 1/20 (2006.01)**

[25] EN  
[54] **SHORT CONTACT REACTOR, AND SYSTEM AND PROCESS USING THE SAME IN PREPARATION OF ETHYLENE AND PROPYLENE FROM METHANOL**  
[54] **REACTEUR A CONTACT COURT, ET SYSTEME ET PROCEDE D'UTILISATION DE CELUI-CI DANS LA PREPARATION D'ETHYLENE ET DE PROPYLENE A PARTIR DE METHANOL**  
[72] LI, XIAOHONG, CN  
[72] QI, GUOZHEN, CN  
[72] YU, ZHINAN, CN  
[72] PENG, FEI, CN  
[72] WANG, HONGTAO, CN  
[72] ZHENG, YIJUN, CN  
[71] CHINA PETROLEUM & CHEMICAL CORPORATION, CN  
[71] SHANGHAI RESEARCH INSTITUTE OF PETROCHEMICAL TECHNOLOGY, SINOPEC, CN  
[85] 2024-03-27  
[86] 2022-09-28 (PCT/CN2022/121966)  
[87] (WO2023/051566)  
[30] CN (202111150391.1) 2021-09-29

---



---

[21] **3,233,761**  
[13] A1

[51] **Int.Cl. A61F 13/15 (2006.01) A61F 13/511 (2006.01) A61F 13/512 (2006.01)**

[25] EN  
[54] **ABSORBENT ARTICLE**  
[54] **ARTICLE ABSORBANT**  
[72] BLOMSTROM, PHILIP, SE  
[72] PALMQVIST, LISA, SE  
[72] KNOS, ANNA, SE  
[71] ESSITY HYGIENE AND HEALTH AKTIEBOLAG, SE  
[85] 2024-04-03  
[86] 2022-05-02 (PCT/EP2022/061693)  
[87] (WO2023/057096)  
[30] EP (PCT/EP2021/077900) 2021-10-08  
[30] EP (PCT/EP2021/077906) 2021-10-08

## Demandes PCT entrant en phase nationale

[21] **3,233,763**  
[13] A1

[51] **Int.Cl. H04L 5/00 (2006.01)**  
[25] EN  
[54] **COMMUNICATION METHOD AND APPARATUS**  
[54] **PROCEDE ET APPAREIL DE COMMUNICATION**  
[72] LU, SHAOZHONG, CN  
[72] GUO, ZHIHENG, CN  
[72] SUN, YUE, CN  
[71] HUAWEI TECHNOLOGIES CO., LTD., CN  
[85] 2024-03-28  
[86] 2022-09-23 (PCT/CN2022/121083)  
[87] (WO2023/051417)  
[30] CN (202111162151.3) 2021-09-30

[21] **3,233,764**  
[13] A1

[51] **Int.Cl. A61N 5/06 (2006.01) A45D 8/00 (2006.01)**  
[25] EN  
[54] **GUIDE DEVICE FOR TRANSCRANIAL LIGHT AND TRANSCRANIAL LIGHT REGULATION APPARATUS**  
[54] **ENSEMBLE DE REPARTITION DE CHEVEUX, DISPOSITIF DE REPARTITION DE CHEVEUX ET APPAREIL DE REGULATION DE LUMIERE TRANSCRANIENNE**  
[72] WANG, DAIFA, CN  
[71] DANYANG HUICHUANG MEDICAL EQUIPMENT CO., LTD., CN  
[85] 2024-04-03  
[86] 2021-10-27 (PCT/CN2021/126700)  
[87] (WO2023/065381)  
[30] CN (202111217554.3) 2021-10-19

[21] **3,233,766**  
[13] A1

[51] **Int.Cl. B65H 31/30 (2006.01) B65H 31/24 (2006.01) H01M 10/04 (2006.01)**  
[25] EN  
[54] **CONVEYING FACILITY FOR CONVEYING CELL STACKS FORMED BY SEGMENTS FOR THE ENERGY CELL-PRODUCING INDUSTRY, CELL STACK PRODUCTION SYSTEM, AND METHOD FOR PROVIDING CELL STACKS**  
[54] **INSTALLATION DE TRANSPORT POUR LE TRANSPORT DE PILES DE CELLULES FORMEES PAR DES SEGMENTS POUR L'INDUSTRIE DE PRODUCTION DE CELLULES ENERGETIQUES, SYSTEME DE FABRICATION DE PILE DE CELLULES CORRESPONDANT ET PROCEDES DE PREPARATION DE TELLES PILES DE CELLULES**  
[72] GOGEL, PATRICK, DE  
[72] KREYSERN, JAN, DE  
[72] WAGNER, MARCUS, DE  
[72] KLEINE WACHTER, MICHAEL, DE  
[72] MEINKE, KARSTEN, DE  
[72] HOFMANN, NILS, DE  
[72] FOLGER, MANFRED, DE  
[71] KORBER TECHNOLOGIES GMBH, DE  
[85] 2024-03-26  
[86] 2022-09-28 (PCT/EP2022/076993)  
[87] (WO2023/052430)  
[30] DE (10 2021 211 070.3) 2021-10-01

[21] **3,233,767**  
[13] A1

[51] **Int.Cl. B32B 7/12 (2006.01) B32B 15/08 (2006.01) B32B 27/08 (2006.01) B32B 27/30 (2006.01) B32B 27/36 (2006.01) B32B 27/40 (2006.01) C08J 5/18 (2006.01)**  
[25] EN  
[54] **BIODEGRADABLE LAMINATING FILM**  
[54] **FILM DE STRATIFICATION BIODEGRADABLE**  
[72] SCHICK, MICHAEL BERNHARD, DE  
[72] LOHMANN, JEROME, DE  
[72] WITT, TIMO BENJAMIN, DE  
[72] BLOSS, FRANK, DE  
[71] BASF SE, DE  
[85] 2024-03-27  
[86] 2022-09-27 (PCT/EP2022/076843)  
[87] (WO2023/052360)  
[30] EP (21199555.0) 2021-09-28

[21] **3,233,769**  
[13] A1

[51] **Int.Cl. C12N 9/10 (2006.01) C12N 15/52 (2006.01)**  
[25] EN  
[54] **MUTATED SULFOTRANSFERASES AND USES THEREOF**  
[54] **SULFOTRANSFERASES MUTEES ET LEURS UTILISATIONS**  
[72] DEPLACE, AYMERIC, FR  
[72] MONZA, EMANUELE, ES  
[72] PANIGADA, DAVIDE, FR  
[72] STEINMETZ, ANKE, FR  
[71] SANOFI, FR  
[85] 2024-03-27  
[86] 2022-09-29 (PCT/EP2022/077092)  
[87] (WO2023/052488)  
[30] EP (21306357.1) 2021-09-30

[21] **3,233,770**  
[13] A1

[51] **Int.Cl. A61B 5/11 (2006.01) A63B 24/00 (2006.01) G09B 5/00 (2006.01) G09B 7/00 (2006.01) G09B 19/00 (2006.01)**  
[25] EN  
[54] **ENHANCED CLASSROOM APPLICATIONS, METHODS, AND SYSTEMS USING SENSOR RELAYS INCLUDING SOLAR AND VIRTUAL EMBODIMENTS**  
[54] **SYSTEMES, PROCEDES ET APPLICATIONS AMELIORES DE SALLE DE CLASSE UTILISANT DES RELAIS DE CAPTEURS COMPRENANT DES MODES DE REALISATION SOLAIRES ET VIRTUELS**  
[72] CLARKE, JAMES, US  
[72] OHANYERENWA, CHIEDO, US  
[72] CLARKE, JOHN, US  
[72] MILLER, DAVID KYLE, US  
[72] KINTER, SAUL, US  
[71] FORWARD ENTERTAINMENT & TECHNOLOGY, LLC, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045715)  
[87] (WO2023/059670)  
[30] US (63/252,604) 2021-10-05

## PCT Applications Entering the National Phase

---

[21] **3,233,771**  
[13] A1

[51] **Int.Cl. C07K 16/46 (2006.01) A61K 39/395 (2006.01) C07K 16/28 (2006.01) C07K 16/30 (2006.01) C07K 16/32 (2006.01)**

[25] EN

[54] **CANCER THERAPY TARGETING NKG2A**

[54] **THERAPIE ANTICANCEREUSE CIBLANT NKG2A**

[72] ANDERSEN, DANIEL, DK

[72] LAUGEL, BRUNO, FR

[72] MELANDER, EVA MARIA CARLSEN, SE

[72] NANCY-PORTEBOIS, VANESSA, FR

[72] OCANA FERNANDEZ, ALBERTO, ES

[72] PIERRAT, MARIE-JEANNE, FR

[72] UHLENBROCK, FRANZISKA KATHARINA, DK

[71] LES LABORATOIRES SERVIER, FR

[85] 2024-03-27

[86] 2022-10-03 (PCT/EP2022/077455)

[87] (WO2023/057381)

[30] EP (21306386.0) 2021-10-04

---

[21] **3,233,772**  
[13] A1

[51] **Int.Cl. G01P 21/02 (2006.01) G01S 19/52 (2010.01) B61L 25/02 (2006.01) G01P 7/00 (2006.01)**

[25] FR

[54] **METHOD FOR ESTIMATING THE SPEED OF A RAIL VEHICLE AND ASSOCIATED INERTIAL MEASUREMENT UNIT**

[54] **PROCEDE D'ESTIMATION DE LA VITESSE D'UN VEHICULE FERROVIAIRE ET CENTRALE INERTIELLE ASSOCIEE**

[72] VEILLARD, DAMIEN, FR

[72] BARRAUD, ALAIN, FR

[71] MEGGITT (SENSOREX), FR

[85] 2024-03-27

[86] 2022-10-25 (PCT/EP2022/079783)

[87] (WO2023/083604)

[30] FR (FR2112026) 2021-11-15

---

[21] **3,233,773**  
[13] A1

[51] **Int.Cl. C25C 1/12 (2006.01) C25D 3/38 (2006.01) C25D 21/04 (2006.01)**

[25] EN

[54] **ACID MIST SUPPRESSION IN COPPER ELECTROWINNING**

[54] **SUPPRESSION DE BROUILLARD ACIDE DANS L'EXTRACTION ELECTROLYTIQUE DE CUIVRE**

[72] SANDOVAL, SCOT PHILIP, US

[72] TALLMAN, STANBERG LEE, US

[72] SANDERS, WILLIAM DUANE, US

[72] GEBREHIWOT, EPHREM LEMLEM, US

[72] TYAB, ARON, US

[71] FREEPORT MINERALS CORPORATION, US

[85] 2024-04-03

[86] 2022-10-07 (PCT/US2022/046030)

[87] (WO2023/059872)

[30] US (63/253,349) 2021-10-07

[30] US (63/297,842) 2022-01-10

---

[21] **3,233,774**  
[13] A1

[51] **Int.Cl. E21D 9/00 (2006.01) E21D 9/06 (2006.01)**

[25] EN

[54] **METHOD FOR MONITORING OVERBURDEN DURING EXCAVATION IN SOIL AND AN EXCAVATION DEVICE**

[54] **PROCEDE DE SURVEILLANCE DE TERRAIN DE RECOUVREMENT LORS DE L'EXPLOITATION DU SOL PAR TAILLE CHASSANTE, ET DISPOSITIF D'EXPLOITATION PAR TAILLE CHASSANTE**

[72] UFFMANN, HANS-PETER, DE

[71] HERRENKNECHT AG, DE

[85] 2024-03-28

[86] 2022-09-09 (PCT/DE2022/100666)

[87] (WO2023/051865)

[30] DE (10 2021 125 286.5) 2021-09-29

---

[21] **3,233,775**  
[13] A1

[51] **Int.Cl. B65D 65/46 (2006.01) B65D 85/804 (2006.01)**

[25] EN

[54] **A BEVERAGE CAPSULE COMPRISING A BARRIER LINER ATTACHED TO A PULP BODY**

[54] **CAPSULE DE BOISSON COMPRENANT UN REVETEMENT BARRIERE FIXE A UN CORPS DE PATE**

[72] HAUSMANN, MICHAEL KARLHEINZ, CH

[72] BOURG, VIOLETTE CATHERINE MARGUERITE, FR

[72] ZIMMER, JOHANNES, CH

[72] DANNENBERG, CHRISTINA FRIEDERIKE, CH

[71] SOCIETE DES PRODUITS NESTLE S.A., CH

[85] 2024-04-03

[86] 2022-10-10 (PCT/EP2022/078007)

[87] (WO2023/061891)

[30] EP (21202831.0) 2021-10-15

---

[21] **3,233,776**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G01J 3/00 (2006.01) G01N 21/00 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR ASSISTING DERMATOLOGICAL DIAGNOSIS**

[54] **PROCEDE ET APPAREIL D'AIDE AU DIAGNOSTIC DERMATOLOGIQUE**

[72] IHNS, JURGEN, US

[71] IHNS, JURGEN, US

[85] 2024-04-03

[86] 2022-09-23 (PCT/US2022/044588)

[87] (WO2023/049384)

[30] US (63/248,468) 2021-09-25

## Demandes PCT entrant en phase nationale

[21] **3,233,777**  
[13] A1

[51] **Int.Cl. H01M 50/514 (2021.01) H01M 50/107 (2021.01) H01M 50/213 (2021.01) H01M 50/531 (2021.01) H01M 50/55 (2021.01) H01M 50/559 (2021.01)**

[25] EN  
[54] **BATTERY MODULE**  
[54] **MODULE DE BATTERIE**  
[72] PHAN, VU, US  
[71] ENNOVI INDUSTRIES, INC., US  
[85] 2024-04-03  
[86] 2022-10-11 (PCT/US2022/046248)  
[87] (WO2023/064254)  
[30] US (63/254,187) 2021-10-11

[21] **3,233,778**  
[13] A1

[51] **Int.Cl. A61F 5/44 (2006.01) A61F 5/443 (2006.01) A61F 5/445 (2006.01) A61F 5/449 (2006.01)**

[25] EN  
[54] **STOMA TEMPLATE AND METHOD OF FABRICATING A CUSTOM OSTOMY SKIN BARRIER**  
[54] **GABARIT DE STOMIE ET PROCEDE DE FABRICATION D'UNE BARRIERE CUTANEE POUR STOMIE PERSONNALISEE**  
[72] WINES, JAMES P., US  
[71] HOLLISTER INCORPORATED, US  
[85] 2024-04-03  
[86] 2022-08-31 (PCT/US2022/042160)  
[87] (WO2023/064049)  
[30] US (63/254,239) 2021-10-11

[21] **3,233,779**  
[13] A1

[51] **Int.Cl. E21B 34/06 (2006.01) E21B 43/12 (2006.01)**

[25] EN  
[54] **DUAL STRING GAS INJECTION SYSTEM WITH FLOW CONTROL**  
[54] **SYSTEME D'INJECTION DE GAZ A CHAINE DOUBLE AVEC REGULATION DE DEBIT**  
[72] BROWN, DONAVAN, US  
[72] KOSSA, EDWARD, US  
[72] BISSET, STEPHEN, US  
[72] SHIRK, TYLER, US  
[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US  
[85] 2024-04-03  
[86] 2022-10-06 (PCT/US2022/045896)  
[87] (WO2023/059796)  
[30] US (63/253,116) 2021-10-06

[21] **3,233,780**  
[13] A1

[51] **Int.Cl. A61F 13/15 (2006.01) A61F 13/511 (2006.01) A61F 13/512 (2006.01)**

[25] EN  
[54] **ABSORBENT ARTICLE**  
[54] **ARTICLE ABSORBANT**  
[72] BLOMSTROM, PHILIP, SE  
[72] PALMQVIST, LISA, SE  
[72] KNOS, ANNA, SE  
[71] ESSITY HYGIENE AND HEALTH AKTIEBOLAG, SE  
[85] 2024-04-03  
[86] 2021-10-08 (PCT/EP2021/077900)  
[87] (WO2023/057075)

[21] **3,233,781**  
[13] A1

[51] **Int.Cl. G16H 20/70 (2018.01)**

[25] EN  
[54] **MENTAL HEALTH INTERVENTION USING A VIRTUAL ENVIRONMENT**  
[54] **INTERVENTION SUR LA SANTE MENTALE A L'AIDE D'UN ENVIRONNEMENT VIRTUEL**  
[72] ROBINSON, NOAH, US  
[72] GOLDS, CALLUM, US  
[72] NETTERVILLE, TANNER, US  
[71] VANDERBILT UNIVERSITY, US  
[71] INNERWORLD, INC., US  
[85] 2024-04-03  
[86] 2022-10-04 (PCT/US2022/045651)  
[87] (WO2023/059620)  
[30] US (63/251,844) 2021-10-04

[21] **3,233,782**  
[13] A1

[51] **Int.Cl. B01D 5/00 (2006.01) C01F 5/00 (2006.01) C22B 5/04 (2006.01) C22B 9/02 (2006.01) C22B 9/04 (2006.01) C22B 19/18 (2006.01) C22B 26/22 (2006.01) F28B 1/00 (2006.01) F28D 5/00 (2006.01) F28D 21/00 (2006.01)**

[25] EN  
[54] **A METHOD FOR CONTINUOUS PRODUCTION OF MAGNESIUM METAL BY METALLOTHERMIC REDUCTION OF MAGNESIUM BEARING ORE AND CONDENSATION OF LIQUID MAGNESIUM**  
[54] **PROCEDE DE PRODUCTION CONTINUE DE MAGNESIUM METALLIQUE PAR REDUCTION METALLOTHERMIQUE DE MINERAI DE MAGNESIUM ET CONDENSATION DE MAGNESIUM LIQUIDE**  
[72] CHUBUKOV, BORIS A., US  
[72] SQUANDA, NICHOLAS, US  
[72] PALUMBO, AARON W., US  
[71] BIG BLUE TECHNOLOGIES, INC., US  
[85] 2024-04-03  
[86] 2022-11-14 (PCT/US2022/079825)  
[87] (WO2023/091896)  
[30] US (63/279,845) 2021-11-16

[21] **3,233,783**  
[13] A1

[51] **Int.Cl. B01J 8/00 (2006.01) B01J 8/02 (2006.01) B01J 8/06 (2006.01)**

[25] FR  
[54] **FIXED-BED TUBULAR REACTOR COMPRISING A SEPARATIVE MEMBRANE**  
[54] **REACTEUR TUBULAIRE A LIT FIXE COMPORTANT UNE MEMBRANE SEPARATIVE**  
[72] DUCROS, FREDERIC, FR  
[72] CHAMPON, ISABELLE, FR  
[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[85] 2024-04-03  
[86] 2022-10-03 (PCT/FR2022/051863)  
[87] (WO2023/057711)  
[30] FR (FR2110519) 2021-10-05

## PCT Applications Entering the National Phase

[21] **3,233,784**  
[13] A1

[51] **Int.Cl. A61K 9/51 (2006.01) B82Y 5/00 (2011.01) A61P 35/00 (2006.01)**  
[25] EN  
[54] **NANOTECHNOLOGY FOR CHEMOTHERAPY DRUG CAPTURE**  
[54] **NANOTECHNOLOGIE DE CAPTURE DE MEDICAMENT DE CHIMIOTHERAPIE**  
[72] SHEIKHI, AMIR, US  
[72] KHADEMHOSEINI, ALIREZA, US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[71] THE PENN STATE RESEARCH FOUNDATION, US  
[85] 2024-04-03  
[86] 2022-10-04 (PCT/US2022/045628)  
[87] (WO2023/059602)  
[30] US (63/253,250) 2021-10-07

[21] **3,233,785**  
[13] A1

[51] **Int.Cl. C07C 67/39 (2006.01) C07C 69/54 (2006.01)**  
[25] EN  
[54] **PROCESS FOR AN OXIDATIVE ESTERIFICATION REACTOR**  
[54] **PROCEDE POUR UN REACTEUR D'ESTERIFICATION OXYDATIVE**  
[72] CHAKRABARTI, REETAM, US  
[72] LIMBACH, KIRK W., US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045719)  
[87] (WO2023/059673)  
[30] US (63/253,558) 2021-10-08

[21] **3,233,786**  
[13] A1

[51] **Int.Cl. A01N 25/04 (2006.01) A01N 25/30 (2006.01) A01N 43/56 (2006.01) A01N 43/653 (2006.01) A01N 45/00 (2006.01) A01N 47/24 (2006.01) A01N 59/20 (2006.01) A01P 3/00 (2006.01) A01P 21/00 (2006.01)**  
[25] EN  
[54] **PHYTOSTEROL-BASED AGRICULTURAL COMPOSITION AND THEIR USE.**  
[54] **COMPOSITION AGRICOLE A BASE DE PHYTOSTEROL ET SON UTILISATION.**  
[72] MOLIN, AYMERIC, FR  
[72] VILLETTE, SOLANGE, FR  
[72] BOUSSIRON, CHARLENE, FR  
[71] ELICIT PLANT, FR  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/EP2022/077984)  
[87] (WO2023/057640)  
[30] EP (21306420.7) 2021-10-08

[21] **3,233,787**  
[13] A1

[51] **Int.Cl. A61M 1/16 (2006.01) A61M 1/28 (2006.01)**  
[25] EN  
[54] **CONFIGURING AN ARRANGEMENT TO GENERATE TREATMENT FLUID FOR RENAL REPLACEMENT THERAPY**  
[54] **CONFIGURATION D'UN AGENCEMENT DESTINE A GENERER UN FLUIDE DE TRAITEMENT POUR UN TRAITEMENT SUBSTITUTIF DE L'INSUFFISANCE RENALE**  
[72] FORS, JONAS, SE  
[72] HERTZ, THOMAS, SE  
[71] BAXTER HEALTHCARE SA, CH  
[71] BAXTER INTERNATIONAL INC., US  
[85] 2024-04-03  
[86] 2022-09-15 (PCT/EP2022/075676)  
[87] (WO2023/057187)  
[30] SE (2151218-1) 2021-10-05

[21] **3,233,788**  
[13] A1

[51] **Int.Cl. H01M 50/533 (2021.01) H01M 50/107 (2021.01) H01M 50/167 (2021.01) H01M 50/213 (2021.01) H01M 50/446 (2021.01) H01M 50/449 (2021.01) H01M 50/538 (2021.01)**  
[25] EN  
[54] **ELECTRODE ASSEMBLY, CYLINDRICAL BATTERY CELL, AND BATTERY PACK AND VEHICLE INCLUDING THE SAME**  
[54] **ENSEMBLE ELECTRODE, ELEMENT DE BATTERIE CYLINDRIQUE, ET BLOC-BATTERIE ET VEHICULE LE COMPRENANT**  
[72] LEE, MYUNG-AN, KR  
[72] RYU, DUK-HYUN, KR  
[72] WOO, JAE-YOUNG, KR  
[71] LG ENERGY SOLUTION, LTD., KR  
[85] 2024-04-03  
[86] 2022-10-17 (PCT/KR2022/015768)  
[87] (WO2023/063808)  
[30] KR (10-2021-0137939) 2021-10-15  
[30] KR (10-2021-0175085) 2021-12-08  
[30] KR (10-2022-0089239) 2022-07-19

[21] **3,233,789**  
[13] A1

[51] **Int.Cl. C07C 67/39 (2006.01) C07C 69/54 (2006.01)**  
[25] EN  
[54] **PROCESS FOR LOW BYPRODUCT FORMATION FROM AN OXIDATIVE ESTERIFICATION REACTOR WITH BASE ADDITION**  
[54] **PROCEDE UTILISANT UNE ADDITION DE BASE POUR QU'UN REACTEUR D'ESTERIFICATION OXYDATIVE FORME PEU DE SOUS-PRODUITS**  
[72] LIMBACH, KIRK W., US  
[72] WALKER, JUSTIN, US  
[72] CHAKRABARTI, REETAM, US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045720)  
[87] (WO2023/059674)  
[30] US (63/253,559) 2021-10-08

## Demandes PCT entrant en phase nationale

[21] **3,233,791**  
[13] A1

[51] **Int.Cl. C08F 8/32 (2006.01) C08F 220/18 (2006.01) C09D 15/00 (2006.01) C09D 133/06 (2006.01)**

[25] EN

[54] **USE OF AQUEOUS POLYMER COMPOSITIONS AS STAINS FOR POROUS MATERIALS**

[54] **UTILISATION DE COMPOSITIONS POLYMERES AQUEUSES EN TANT QUE TEINTURES POUR MATERIAUX POREUX**

[72] BALK, ROELOF, DE  
[72] LOHMEIJER, BASTIAAN, DE  
[72] WAGNER, OLIVER, DE  
[72] ROSCHMANN, KONRAD, DE  
[71] BASF SE, DE  
[85] 2024-04-03  
[86] 2022-09-26 (PCT/EP2022/076667)  
[87] (WO2023/057249)  
[30] EP (21200699.3) 2021-10-04

[21] **3,233,792**  
[13] A1

[51] **Int.Cl. C07C 45/50 (2006.01) C07C 45/75 (2006.01) C07C 47/02 (2006.01) C07C 47/22 (2006.01) C07C 67/39 (2006.01) C07C 69/54 (2006.01)**

[25] EN

[54] **PROCESS FOR METHYL METHACRYLATE PRODUCTION**

[54] **PROCEDE DE PRODUCTION DE METHACRYLATE DE METHYLE**

[72] LIMBACH, KIRK W., US  
[72] CHAKRABARTI, REETAM, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045721)  
[87] (WO2023/059675)  
[30] US (63/253,560) 2021-10-08

[21] **3,233,793**  
[13] A1

[51] **Int.Cl. B01J 21/06 (2006.01) B01J 23/52 (2006.01) B01J 35/00 (2024.01) C07C 67/39 (2006.01)**

[25] EN

[54] **PROCESS AND CATALYST FOR OXIDATIVE ESTERIFICATION WITH LONG-LIFE CATALYST**

[54] **PROCEDE ET CATALYSEUR POUR L'ESTERIFICATION OXYDATIVE AVEC UN CATALYSEUR A LONGUE DUREE DE VIE**

[72] LIMBACH, KIRK W., US  
[72] FRICK, CHRISTOPHER D., US  
[72] LEE, WEN -SHENG, US  
[72] SUSSMAN, VICTOR J., US  
[71] DOW GLOBAL TECHNOLOGIES LLC, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045723)  
[87] (WO2023/059677)  
[30] US (63/253,556) 2021-10-08

[21] **3,233,794**  
[13] A1

[51] **Int.Cl. C07C 45/75 (2006.01) C07C 47/22 (2006.01) C07C 67/39 (2006.01) C07C 69/54 (2006.01)**

[25] EN

[54] **PROCESS FOR METHYL METHACRYLATE PRODUCTION**

[54] **PROCEDE DE PRODUCTION DE METHACRYLATE DE METHYLE**

[72] LIMBACH, KIRK W., US  
[72] CHAKRABARTI, REETAM, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045724)  
[87] (WO2023/059678)  
[30] US (63/253,561) 2021-10-08

[21] **3,233,795**  
[13] A1

[51] **Int.Cl. A01N 43/90 (2006.01) C07D 471/04 (2006.01)**

[25] EN

[54] **IMIDAZO[1,2-A]PYRIDINE DERIVATIVES**

[54] **DERIVES D'IMIDAZO[1,2-A]PYRIDINE**

[72] JEANMART, STEPHANE ANDRE MARIE, CH  
[72] BLUM, MATHIAS, CH  
[72] LUMBROSO, ALEXANDRE FRANCO JEAN CAMILLE, CH  
[72] GERMAIN, NICOLAS, CH  
[72] POULIOT, MARTIN, CH  
[71] SYNGENTA CROP PROTECTION AG, CH  
[85] 2024-04-03  
[86] 2022-10-06 (PCT/EP2022/077777)  
[87] (WO2023/061838)  
[30] EP (21202562.1) 2021-10-14  
[30] EP (22183563.0) 2022-07-07

---

[21] **3,233,796**  
[13] A1

[51] **Int.Cl. B60K 17/02 (2006.01) F16H 57/031 (2012.01) F16H 57/037 (2012.01) B60K 17/04 (2006.01) F16H 3/089 (2006.01) F16H 57/02 (2012.01)**

[25] EN

[54] **ELECTRIC DRIVE SYSTEM FOR A MOTOR VEHICLE, IN PARTICULAR FOR A CAR**

[54] **SYSTEME D'ENTRAINEMENT ELECTRIQUE POUR UN VEHICULE AUTOMOBILE, EN PARTICULIER POUR UNE VOITURE AUTOMOBILE**

[72] STROELIN, MARC, DE  
[72] LUCKMANN, JENS, DE  
[72] SCHNEIDER, MARTIN, DE  
[71] DAIMLER TRUCK AG, DE  
[85] 2024-04-03  
[86] 2022-11-16 (PCT/EP2022/082140)  
[87] (WO2023/088970)  
[30] DE (10 2021 005 711.2) 2021-11-18

## PCT Applications Entering the National Phase

[21] **3,233,797**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01)**  
[25] EN  
[54] **AN ONCOLYTIC VIRUS VECTOR CODING FOR INTERLEUKIN-7 (IL-7) POLYPEPTIDE**  
[54] **VECTEUR VIRAL ONCOLYTIQUE CODANT POUR UN POLYPEPTIDE D'INTERLEUKINE-7 (IL-7)**  
[72] KUDLING, TATIANA, FI  
[72] HEMMINKI, AKSELI, FI  
[72] CLUBB, JAMES, FI  
[72] QUIXABEIRA, DAFNE, FI  
[72] HAVUNEN, RIIKKA, FI  
[71] TILT BIOTHERAPEUTICS OY, FI  
[85] 2024-04-03  
[86] 2022-10-04 (PCT/FI2022/050662)  
[87] (WO2023/057687)  
[30] FI (20216026) 2021-10-04

[21] **3,233,798**  
[13] A1

[51] **Int.Cl. C25B 9/00 (2021.01) H01M 8/2432 (2016.01) H01M 8/2475 (2016.01) H01M 8/248 (2016.01) H01M 8/249 (2016.01) H01M 8/12 (2016.01)**  
[25] FR  
[54] **SYSTEM FOR CONDITIONING A PLURALITY OF STACKS OF HIGH-TEMPERATURE SOEC/SOFC SOLID OXIDE CELLS**  
[54] **SYSTEME DE CONDITIONNEMENT D'UNE PLURALITE D'EMPILEMENTS DE CELLULES A OXYDES SOLIDES DE TYPE SOEC/SOFC A HAUTE TEMPERATURE SUPERPOSES**  
[72] MOUGIN, JULIE, FR  
[72] DI IORIO, STEPHANE, FR  
[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/FR2022/051881)  
[87] (WO2023/057720)  
[30] FR (FR2110517) 2021-10-05

[21] **3,233,799**  
[13] A1

[51] **Int.Cl. C07C 67/39 (2006.01) C07C 1/24 (2006.01) C07C 11/04 (2006.01) C07C 45/50 (2006.01) C07C 45/75 (2006.01) C07C 47/22 (2006.01) C07C 69/54 (2006.01)**  
[25] EN  
[54] **PROCESS FOR METHYL METHACRYLATE PRODUCTION FROM ETHANOL**  
[54] **PROCEDE DE PRODUCTION DE METHACRYLATE DE METHYLE A PARTIR D'ETHANOL**  
[72] LIMBACH, KIRK W., US  
[72] CHAKRABARTI, REETAM, US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045725)  
[87] (WO2023/059679)  
[30] US (63/253,563) 2021-10-08

[21] **3,233,800**  
[13] A1

[51] **Int.Cl. G01N 21/64 (2006.01) G01N 21/78 (2006.01) G01N 31/22 (2006.01)**  
[25] EN  
[54] **APPARATUS AND METHODS FOR DETECTION OF CHEMICALS USING OPTICAL SENSORS**  
[54] **APPAREIL ET PROCEDES DE DETECTION DE PRODUITS CHIMIQUES A L'AIDE DE CAPTEURS OPTIQUES**  
[72] GILLANDERS, ROSS N, GB  
[72] GLACKIN, JAMES ME, GB  
[72] TURNBULL, GRAHAM, GB  
[72] SAMUEL, IFOR DAVID WILLIAM, GB  
[71] UNIVERSITY COURT OF THE UNIVERSITY OF ST ANDREWS, GB  
[85] 2024-04-03  
[86] 2022-10-11 (PCT/GB2022/052575)  
[87] (WO2023/062357)  
[30] GB (2114557.8) 2021-10-12

[21] **3,233,801**  
[13] A1

[51] **Int.Cl. C07C 67/39 (2006.01) C07C 45/75 (2006.01) C07C 47/22 (2006.01) C07C 69/54 (2006.01)**  
[25] EN  
[54] **PROCESS FOR ALKYL METHACRYLATE PRODUCTION**  
[54] **PROCEDE DE PRODUCTION DE METHACRYLATE D'ALKYLE**  
[72] CHAKRABARTI, REETAM, US  
[72] LIMBACH, KIRK W., US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045727)  
[87] (WO2023/059680)  
[30] US (63/253,564) 2021-10-08

[21] **3,233,802**  
[13] A1

[51] **Int.Cl. H04L 51/212 (2022.01) H04W 4/12 (2009.01) H04W 12/126 (2021.01) H04W 12/128 (2021.01) H04M 3/22 (2006.01) H04M 3/42 (2006.01) H04M 3/436 (2006.01) H04M 7/00 (2006.01) H04L 9/40 (2022.01)**  
[25] EN  
[54] **METHOD AND SYSTEM FOR DETECTING SMS PARAMETERS MANIPULATION**  
[54] **PROCEDE ET SYSTEME DESTINES A DETECTER LA MANIPULATION DE PARAMETRES SMS**  
[72] OKHRIMENKO, SERGEI, RU  
[71] AB HANDSHAKE CORPORATION, US  
[85] 2024-04-03  
[86] 2022-10-13 (PCT/US2022/046573)  
[87] (WO2023/069302)  
[30] US (17/504,025) 2021-10-18



## Demandes PCT entrant en phase nationale

[21] **3,233,803**  
[13] A1

[51] **Int.Cl. C07C 67/39 (2006.01) C07C 69/54 (2006.01)**  
[25] EN  
[54] **PROCESS FOR LOW BYPRODUCT FORMATION OF METHYL METHACRYLATE FROM AN OXIDATIVE ESTERIFICATION REACTOR**  
[54] **PROCEDE DE FORMATION A FAIBLE SOUS-PRODUIT DE METHACRYLATE DE METHYLE A PARTIR D'UN REACTEUR D'ESTERIFICATION OXYDATIVE**  
[72] LIMBACH, KIRK W., US  
[71] ROHM AND HAAS COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045729)  
[87] (WO2023/059682)  
[30] US (63/253,566) 2021-10-08

[21] **3,233,805**  
[13] A1

[51] **Int.Cl. C12Q 1/68 (2018.01)**  
[25] EN  
[54] **SEQUENCING OF VIRAL DNA FOR PREDICTING DISEASE RELAPSE**  
[54] **SEQUENCAGE D'ADN VIRAL POUR PREDIRE LA RECHUTE D'UNE MALADIE**  
[72] LO, YUK-MING DENNIS, CN  
[72] CHAN, KWAN CHEE, CN  
[72] LAM, WAI KEL, CN  
[72] CHAN, CHIU TUNG, CN  
[71] THE CHINESE UNIVERSITY OF HONG KONG, CN  
[71] GRAIL, INC., US  
[85] 2024-04-03  
[86] 2022-09-29 (PCT/CN2022/122509)  
[87] (WO2023/056884)  
[30] US (63/251,985) 2021-10-04

[21] **3,233,808**  
[13] A1

[51] **Int.Cl. C03B 5/173 (2006.01)**  
[25] EN  
[54] **INCLUDING SMALL AESTHETIC BUBBLES IN GLASS ARTICLES**  
[54] **INCLUSION DE PETITES BULLES ESTHETIQUES DANS DES ARTICLES EN VERRE**  
[72] SWILER, DAN, US  
[72] GODSIL, AMANDA, US  
[72] COOPER, SCOTT, US  
[72] CASTILLO, JOSE GARAY, US  
[72] GONZALES, ENRIQUE, US  
[71] OWENS-BROCKWAY GLASS CONTAINER INC., US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045779)  
[87] (WO2023/059718)  
[30] US (63/254,023) 2021-10-08

[21] **3,233,804**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) G16H 50/20 (2018.01) A61B 7/00 (2006.01) A61B 7/04 (2006.01)**  
[25] EN  
[54] **COMPUTER-ASSISTED SYSTEM AND METHOD OF HEART MURMUR CLASSIFICATION**  
[54] **SYSTEME ASSISTE PAR ORDINATEUR ET PROCEDE DE CLASSIFICATION DE SOUFFLES CARDIAQUES**  
[72] CHEN, ROBERT, CA  
[72] DHILON, SANTOKH, CA  
[72] IQBAL, MOHAMMED SHAMEER, CA  
[71] KARDIO DIAGNOSTIX INC., CA  
[85] 2024-04-03  
[86] 2023-09-01 (PCT/CA2023/051161)  
[87] (WO2024/044858)  
[30] CA (3171784) 2022-09-01

[21] **3,233,806**  
[13] A1

[51] **Int.Cl. B61L 23/04 (2006.01) B61L 25/02 (2006.01)**  
[25] EN  
[54] **METHOD FOR DETERMINING A RELATIVE POSITION INDICATION IN A TRACK**  
[54] **PROCEDE DE DETERMINATION D'UNE INDICATION DE POSITION RELATIVE DANS UNE PISTE**  
[72] STUNTNER, BENJAMIN, AT  
[72] HARTL, DANIEL, AT  
[71] TRACK MACHINES CONNECTED GESELLSCHAFT M.B.H., AT  
[85] 2024-04-03  
[86] 2022-11-22 (PCT/EP2022/082875)  
[87] (WO2023/099292)  
[30] AT (A 50963/2021) 2021-12-01

[21] **3,233,809**  
[13] A1

[51] **Int.Cl. A61K 35/14 (2015.01) C12N 5/078 (2010.01) C12N 15/113 (2010.01) A61K 35/17 (2015.01) A61P 35/00 (2006.01) C12N 5/10 (2006.01) C12N 15/10 (2006.01) C12N 15/12 (2006.01) C12N 15/54 (2006.01) C12N 15/62 (2006.01)**  
[25] EN  
[54] **MODIFIED IMMUNE CELLS AND METHODS OF USE THEREOF**  
[54] **CELLULES IMMUNITAIRES MODIFIEES ET LEURS METHODES D'UTILISATION**  
[72] DINIZ DE CARVALHO, DANIEL, CA  
[72] LOO YAU, HELEN, CA  
[72] ETTAYEBI, ILIAS, CA  
[71] UNIVERSITY HEALTH NETWORK, CA  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/IB2022/059520)  
[87] (WO2023/057931)  
[30] US (63/253,001) 2021-10-06

## PCT Applications Entering the National Phase

---

[21] **3,233,810**  
[13] A1

[51] **Int.Cl. A41D 1/00 (2018.01) A41D 1/04 (2006.01) G06F 1/16 (2006.01) G08B 21/02 (2006.01) G08B 25/01 (2006.01)**

[25] EN

[54] **EMERGENCY SITUATION DETECTION AND RESPONSE BASED ON PROTECTIVE EQUIPMENT SENSOR DATA**

[54] **DETECTION ET REPOSE DE SITUATION D'URGENCE BASEES SUR DES DONNEES DE CAPTEUR D'EQUIPEMENT DE PROTECTION**

[72] ADEEL, MUHAMMAD, US  
[72] GUZIK, THOMAS, US  
[71] GETAC CORPORATION, TW  
[71] WHP WORKFLOW SOLUTIONS, INC., US  
[85] 2024-04-03  
[86] 2022-10-04 (PCT/US2022/045678)  
[87] (WO2023/059641)  
[30] US (17/494,692) 2021-10-05

---

[21] **3,233,811**  
[13] A1

[51] **Int.Cl. E21B 33/127 (2006.01) C09K 8/52 (2006.01) E21B 33/12 (2006.01) E21B 43/27 (2006.01)**

[25] EN

[54] **FLUID SYSTEMS FOR EXPANDING SHAPE MEMORY POLYMERS AND REMOVING WATER-BASED FILTER CAKES**

[54] **SYSTEMES DE FLUIDE POUR DILATER DES POLYMERES A MEMOIRE DE FORME ET ELIMINER LES GATEAUX DE BOUES A BASE D'EAU**

[72] CASTILLO, DORIANNE A., US  
[72] MESA, SEBASTIAN, US  
[72] ARIAS, DIEGO, US  
[71] BAKER HUGHES OILFIELD OPERATIONS LLC, US  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/US2022/046017)  
[87] (WO2023/059866)  
[30] US (63/253,681) 2021-10-08

---

[21] **3,233,814**  
[13] A1

[51] **Int.Cl. H01M 10/655 (2014.01) H01M 10/613 (2014.01) H01M 10/625 (2014.01)**

[25] EN

[54] **BATTERY MODULE, AND BATTERY PACK AND VEHICLE INCLUDING THE SAME**

[54] **MODULE DE BATTERIE ET BLOC-BATTERIE ET VEHICULE LE COMPRENANT**

[72] KIM, SEUNG-JOON, KR  
[72] CHI, HO-JUNE, KR  
[72] KIM, KYUNG-WOO, KR  
[72] SHIN, EUN-GYU, KR  
[71] LG ENERGY SOLUTION, LTD., KR  
[85] 2024-04-03  
[86] 2022-12-21 (PCT/KR2022/021003)  
[87] (WO2023/121318)  
[30] KR (10-2021-0187838) 2021-12-24

---

[21] **3,233,815**  
[13] A1

[51] **Int.Cl. A01K 11/00 (2006.01) A01K 29/00 (2006.01) G06F 13/00 (2006.01) G06Q 10/00 (2023.01) G06Q 50/00 (2024.01)**

[25] EN

[54] **A METHOD FOR REAL TIME IDENTITY DETERMINATION OF, AND MATCHING RELATED, ENTITIES AND A SYSTEM FOR MATCHING RELATED ENTITIES**

[54] **PROCEDE DE DETERMINATION, ET D'APPARIEMENT ASSOCIE, D'IDENTITES EN TEMPS REEL ET SYSTEME D'APPARIEMENT D'ENTITES ASSOCIEES**

[72] SANDNES, JAN IVAR, NO  
[71] REALTIMEID AS, NO  
[85] 2024-04-03  
[86] 2022-10-03 (PCT/NO2022/050225)  
[87] (WO2023/059202)  
[30] NO (20211199) 2021-10-06

---

[21] **3,233,816**  
[13] A1

[51] **Int.Cl. H01M 50/593 (2021.01) H01M 50/538 (2021.01) H01M 50/586 (2021.01)**

[25] EN

[54] **CYLINDRICAL BATTERY, AND BATTERY PACK AND VEHICLE INCLUDING THE SAME**

[54] **BATTERIE CYLINDRIQUE, ET BLOC-BATTERIE ET VEHICULE COMPRENANT CELLE-CI**

[72] LIM, JAE-WON, KR  
[72] JO, MIN-KI, KR  
[71] LG ENERGY SOLUTION, LTD., KR  
[85] 2024-04-03  
[86] 2022-10-21 (PCT/KR2022/016197)  
[87] (WO2023/068887)  
[30] KR (10-2021-0142185) 2021-10-22

---

[21] **3,233,817**  
[13] A1

[51] **Int.Cl. C25B 1/04 (2021.01) C25B 15/023 (2021.01) C25B 15/027 (2021.01) C25B 15/031 (2021.01)**

[25] EN

[54] **A SYSTEM FOR AN ELECTROCHEMICAL PROCESS AND A METHOD FOR PREVENTING DEGRADATION OF ELECTRODES**

[54] **SYSTEME POUR PROCESSUS ELECTROCHIMIQUE ET PROCEDE POUR EMPECHER LA DEGRADATION D'ELECTRODES**

[72] KOPONEN, JOONAS, FI  
[72] KRIMER, ANTON, FI  
[72] LIUKKONEN, OLLI, FI  
[71] NEOVOLT OY, FI  
[85] 2024-04-03  
[86] 2022-09-22 (PCT/FI2022/050636)  
[87] (WO2023/057683)  
[30] FI (20216033) 2021-10-06

## Demandes PCT entrant en phase nationale

[21] **3,233,818**  
[13] A1

[51] **Int.Cl. G06T 9/00 (2006.01) H04N 19/13 (2014.01) H04N 19/184 (2014.01) H04N 19/593 (2014.01) H04N 19/91 (2014.01) G06T 9/40 (2006.01)**

[25] EN

[54] **METHOD AND APPARATUS FOR POINT CLOUD COMPRESSION USING HYBRID DEEP ENTROPY CODING**

[54] **PROCEDE ET APPAREIL DE COMPRESSION DE NUAGE DE POINTS A L'AIDE D'UN CODAGE D'ENTROPIE PROFONDE HYBRIDE**

[72] LODHI, MUHAMMAD ASAD, US  
[72] PANG, JIAHAO, US  
[72] TIAN, DONG, US  
[71] INTERDIGITAL VC HOLDINGS, INC., US

[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045790)  
[87] (WO2023/059727)  
[30] US (63/252,482) 2021-10-05

[21] **3,233,820**  
[13] A1

[51] **Int.Cl. C08L 95/00 (2006.01) C04B 22/06 (2006.01) C04B 26/26 (2006.01) C08J 3/20 (2006.01) C08K 3/22 (2006.01)**

[25] FR

[54] **CO<sub>2</sub>-TRAPPING BITUMINOUS COMPOSITIONS MODIFIED BY INCORPORATION OF ALKALI METAL HYDROXIDE, ASSOCIATED METHODS AND USES**

[54] **COMPOSITIONS BITUMINEUSES MODIFIEES PAR INCORPORATION D'HYDROXYDE ALCALIN ET PIEGEANT DU CO<sub>2</sub>, PROCEDES ET UTILISATIONS ASSOCIES**

[72] ZHU, JEANNE, FR  
[71] TOTALENERGIES ONETECH, FR

[85] 2024-04-03  
[86] 2022-10-06 (PCT/FR2022/051884)  
[87] (WO2023/057723)  
[30] FR (FR2110676) 2021-10-08

[21] **3,233,821**  
[13] A1

[51] **Int.Cl. F16B 15/06 (2006.01) E04B 1/76 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR FASTENING A COMPONENT TO A SUBSTRATE**

[54] **PROCEDE ET DISPOSITIF DE FIXATION D'UN COMPOSANT SUR UNE STRUCTURE DE SUPPORT**

[72] GUELTEKIN, FURKAN, CH  
[72] BARRAFON GOMEZ, MARC, CH  
[72] DOMANI, GUENTER, DE  
[71] HILTI AKTIENGESSELLSCHAFT, LI

[85] 2024-04-03  
[86] 2022-11-17 (PCT/EP2022/082254)  
[87] (WO2023/099231)  
[30] EP (21211270.0) 2021-11-30

[21] **3,233,823**  
[13] A1

[51] **Int.Cl. G01F 11/00 (2006.01) A61M 15/00 (2006.01)**

[25] EN

[54] **INTEGRATED DOSE COUNTER**

[54] **COMPTEUR DE DOSES INTEGRE**

[72] COSTELLA, STEPHEN, CA  
[72] MEYER, ADAM, CA  
[72] ALIZOTI, NERITAN, CA  
[72] DEMARAIS, JAKE, CA  
[72] PATEL, ATIN, CA  
[72] BASIL, JOVIN, CA  
[71] TRUDELL MEDICAL INTERNATIONAL, CA

[85] 2024-04-03  
[86] 2022-09-29 (PCT/IB2022/059308)  
[87] (WO2023/057864)  
[30] US (63/251,991) 2021-10-04  
[30] US (17/954,066) 2022-09-27

[21] **3,233,824**  
[13] A1

[51] **Int.Cl. A61K 9/00 (2006.01) A61K 9/08 (2006.01) A61K 38/00 (2006.01) A61K 47/12 (2006.01) A61K 47/18 (2017.01)**

[25] EN

[54] **IONIC LIQUIDS FOR DRUG DELIVERY**

[54] **LIQUIDES IONIQUES POUR L'ADMINISTRATION DE MEDICAMENTS**

[72] MITRAGOTRI, SAMIR, US  
[72] KIM, JAYOUNG, US  
[72] CURRERI, ALEXANDER M., US  
[71] PRESIDENT AND FELLOWS OF HARVARD COLLEGE, US

[85] 2024-04-03  
[86] 2022-10-07 (PCT/US2022/045977)  
[87] (WO2023/059846)  
[30] US (63/253,623) 2021-10-08

[21] **3,233,825**  
[13] A1

[51] **Int.Cl. A61K 35/747 (2015.01) A61P 25/02 (2006.01) A61P 25/28 (2006.01)**

[25] EN

[54] **CONSUMPTION OF GLUTAMATE AND FORMATION OF GABA BY LACTIPLANTIBACILLUS PLANTARUM**

[54] **CONSOMMATION DE GLUTAMATE ET FORMATION DE GABA PAR LACTIPLANTIBACILLUS PLANTARUM**

[72] OUWEHAND, ARTHUR, FI  
[72] JENSEN, HENRIK MAX, DK  
[72] MOROVIC, WESLEY WILLIAM, US  
[72] PATTERSON, ELAINE, FI  
[71] INTERNATIONAL N&H DENMARK APS, DK

[85] 2024-04-03  
[86] 2022-10-04 (PCT/EP2022/077592)  
[87] (WO2023/057454)  
[30] US (63/253,688) 2021-10-08  
[30] EP (21213825.9) 2021-12-10

## PCT Applications Entering the National Phase

---

[21] **3,233,826**  
[13] A1

[51] **Int.Cl. A61F 13/511 (2006.01) A61F 13/512 (2006.01)**

[25] EN

[54] **ABSORBENT ARTICLE**  
[54] **ARTICLE ABSORBANT**

[72] BLOMSTROM, PHILIP, SE  
[72] PALMQVIST, LISA, SE  
[72] KNOS, ANNA, SE

[71] **ESSITY HYGIENE AND HEALTH AKTIEBOLAG, SE**

[85] 2024-04-03  
[86] 2021-10-08 (PCT/EP2021/077906)  
[87] (WO2023/057076)

---

[21] **3,233,827**  
[13] A1

[51] **Int.Cl. A63H 1/02 (2006.01) A63H 1/20 (2006.01)**

[25] EN

[54] **TOY SPINNING TOPS AND LAUNCHING DEVICES**  
[54] **TOUPIES JOUETS ET DISPOSITIFS DE LANCEMENT**

[72] HACSI, JAMES SCOTT, US  
[72] BENSUSSAN, BERNARD, US  
[72] BUTLER, JEFFREY, US  
[72] DEAR, DAVID, US

[71] **MELISSA & DOUG, LLC, US**

[85] 2024-04-03  
[86] 2022-09-30 (PCT/US2022/045436)  
[87] (WO2023/059518)  
[30] US (63/252,152) 2021-10-05

---



---

[21] **3,233,829**  
[13] A1

[51] **Int.Cl. C25B 9/70 (2021.01) C25B 9/19 (2021.01) C25B 9/77 (2021.01)**

[25] EN

[54] **FRAME FOR PEM ELECTROLYTIC CELLS AND PEM ELECTROLYTIC CELL STACKS FOR THE PRODUCTION OF HIGH-PRESSURE HYDROGEN BY MEANS OF DIFFERENTIAL PRESSURE ELECTROLYSIS**  
[54] **CADRE POUR CELLULES ELECTROLYTIQUES A PEM ET EMPILEMENT DE CELLULES ELECTROLYTIQUES A PEM POUR LA PRODUCTION D'HYDROGENE HAUTE PRESSION PAR ELECTROLYSE A PRESSION DIFFERENTIELLE**

[72] LENTZ, KARL-HEINZ, DE  
[72] BORGARDT, ELENA, DE  
[71] **IGAS ENERGY GMBH, DE**

[85] 2024-04-03  
[86] 2022-10-12 (PCT/EP2022/078404)  
[87] (WO2023/062081)  
[30] EP (21202604.1) 2021-10-14  
[30] EP (22162623.7) 2022-03-17  
[30] EP (22170344.0) 2022-04-27

---

[21] **3,233,831**  
[13] A1

[51] **Int.Cl. G01K 1/26 (2006.01) G01L 9/00 (2006.01) G01L 19/00 (2006.01)**

[25] EN

[54] **PRESSURE MEASURING CELL HAVING EVALUATION ELECTRONICS AND 4-20 MA INTERFACE**  
[54] **CELLULE DE MESURE DE PRESSION AVEC ELECTRONIQUE D'EVALUATION ET INTERFACE 4-20 MA**

[72] MELLERT, MARTIN, DE  
[72] WELLER, BERNHARD, DE  
[72] HUBER, JOCHEN, DE  
[71] **VEGA GRIESHABER KG., DE**

[85] 2024-04-03  
[86] 2022-10-17 (PCT/EP2022/078839)  
[87] (WO2023/072660)  
[30] DE (10 2021 128 370.1) 2021-10-29

---



---

[21] **3,233,832**  
[13] A1

[51] **Int.Cl. C25B 9/70 (2021.01) C25B 9/17 (2021.01) C25B 9/60 (2021.01) C25B 9/77 (2021.01)**

[25] EN

[54] **FRAMES FOR ELECTROCHEMICAL CELLS AND STACK TYPE DEVICES**  
[54] **CADRE POUR CELLULES ELECTROCHIMIQUES ET DISPOSITIFS DE TYPE A EMPILEMENT**

[72] LENTZ, KARL-HEINZ, DE  
[72] BORGARDT, ELENA, DE  
[71] **IGAS ENERGY GMBH, DE**

[85] 2024-04-03  
[86] 2022-10-12 (PCT/EP2022/078416)  
[87] (WO2023/062088)  
[30] EP (21202604.1) 2021-10-14  
[30] EP (22162625.2) 2022-03-17  
[30] EP (22162709.4) 2022-03-17  
[30] EP (22170349.9) 2022-04-27

---

[21] **3,233,833**  
[13] A1

[51] **Int.Cl. B01F 23/232 (2022.01) B01F 23/20 (2022.01) B01F 23/237 (2022.01) B01F 25/452 (2022.01)**

[25] EN

[54] **A METHOD AND AN APPARATUS FOR MAKING A TREATMENT SOLUTION AND FOR PROVIDING SAID TREATMENT SOLUTION TO A BIOLOGICAL SYSTEM**  
[54] **PROCEDE ET APPAREIL DE FABRICATION D'UNE SOLUTION DE TRAITEMENT ET DE FOURNITURE DE LADITE SOLUTION DE TRAITEMENT A UN SYSTEME BIOLOGIQUE**

[72] ALBERTELLI, ROBERTO, IT  
[71] **SWISS.318 SAGL, CH**

[85] 2024-04-03  
[86] 2022-10-07 (PCT/IB2022/059641)  
[87] (WO2023/057989)  
[30] IT (102021000025622) 2021-10-07

---

## Demandes PCT entrant en phase nationale

[21] **3,233,834**  
[13] A1

[51] **Int.Cl. A42B 3/12 (2006.01)**  
[25] EN  
[54] **IMPACT PROTECTION SYSTEMS**  
[54] **SYSTEMES DE PROTECTION**  
**CONTRE LES IMPACTS**  
[72] YOUNG, MICHAEL D., US  
[71] 100% SPEEDLAB, LLC, US  
[85] 2024-04-03  
[86] 2022-10-06 (PCT/US2022/077716)  
[87] (WO2023/060209)  
[30] US (63/253,042) 2021-10-06

[21] **3,233,835**  
[13] A1

[51] **Int.Cl. G01T 1/02 (2006.01)**  
[25] EN  
[54] **DYNAMIC DOSE ANALYSIS FOR**  
**DOSIMETER**  
[54] **ANALYSE DE DOSE DYNAMIQUE**  
**POUR DOSIMETRE**  
[72] ALAGARSAMY, SIVA, US  
[71] THERMO SCIENTIFIC PORTABLE  
ANALYTICAL INSTRUMENTS INC.,  
US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/077565)  
[87] (WO2023/069833)  
[30] US (63/256,732) 2021-10-18

[21] **3,233,836**  
[13] A1

[51] **Int.Cl. C07F 9/06 (2006.01) C07H**  
**15/18 (2006.01) C07H 21/00 (2006.01)**  
[25] EN  
[54] **POLYHYDROXYLATED**  
**CYCLOPENTANE DERIVATIVES**  
**AND METHODS OF USE**  
[54] **DERIVES DE CYCLOPENTANE**  
**POLYHYDROXYLES ET**  
**PROCEDES D'UTILISATION**  
[72] WANG, WEIMIN, US  
[72] CAI, XIAOCHUAN, US  
[71] SANEGENE BIO USA INC., US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/045748)  
[87] (WO2023/059695)  
[30] US (63/252,358) 2021-10-05

[21] **3,233,837**  
[13] A1

[51] **Int.Cl. E21B 7/20 (2006.01) E21B 7/28**  
**(2006.01) E21B 10/26 (2006.01)**  
[25] EN  
[54] **EXPANDING DRILL DEVICE**  
[54] **DISPOSITIF DE FORAGE A**  
**EXPANSION**  
[72] ZUR LINDE, LUTZ, DE  
[72] ENGEL, TOBIAS, DE  
[71] HERRENKNECHT AG, DE  
[85] 2024-04-03  
[86] 2022-10-03 (PCT/EP2022/077488)  
[87] (WO2023/057400)  
[30] DE (10 2021 125 909.6) 2021-10-06

[21] **3,233,838**  
[13] A1

[51] **Int.Cl. G01N 21/952 (2006.01) H01M**  
**50/107 (2021.01)**  
[25] EN  
[54] **DEVICE FOR INSPECTING**  
**LATERAL SURFACE OF**  
**CYLINDRICAL BATTERY**  
[54] **DISPOSITIF D'INSPECTION DE**  
**SURFACE LATERALE D'UNE**  
**PILE CYLINDRIQUE**  
[72] KIM, TAE YOUNG, KR  
[72] HONG, SEUNG GYUN, KR  
[71] LG ENERGY SOLUTION, LTD., KR  
[85] 2024-04-03  
[86] 2022-08-22 (PCT/KR2022/012506)  
[87] (WO2023/063561)  
[30] KR (10-2021-0137099) 2021-10-15

[21] **3,233,839**  
[13] A1

[51] **Int.Cl. H04W 4/06 (2009.01)**  
[25] EN  
[54] **COMMUNICATION METHOD**  
**AND APPARATUS**  
[54] **PROCEDE ET APPAREIL DE**  
**COMMUNICATION**  
[72] LI, MENG, CN  
[72] GE, CUILI, CN  
[71] HUAWEI TECHNOLOGIES CO.,  
LTD., CN  
[85] 2024-04-03  
[86] 2022-09-21 (PCT/CN2022/120102)  
[87] (WO2023/061167)  
[30] CN (202111183542.3) 2021-10-11

[21] **3,233,840**  
[13] A1

[51] **Int.Cl. C08L 67/04 (2006.01) C08L**  
**67/02 (2006.01) C08L 97/02 (2006.01)**  
**C08L 101/16 (2006.01)**  
[25] EN  
[54] **BIODEGRADABLE POLYMER**  
**BASED BIOCOSITES**  
[54] **BIOCOSITES A BASE DE**  
**POLYMERE BIODEGRADABLES**  
[72] MEKONNEN, TIZAZU H., CA  
[72] GUPTA, ARVIND, CA  
[71] CTK RESEARCH AND  
DEVELOPMENT CANADA LTD., CA  
[85] 2024-04-03  
[86] 2022-10-19 (PCT/CA2022/051543)  
[87] (WO2023/065030)  
[30] US (63/257,478) 2021-10-19

[21] **3,233,841**  
[13] A1

[51] **Int.Cl. H04L 9/40 (2022.01) H04L**  
**67/50 (2022.01)**  
[25] EN  
[54] **SECURITY INTELLIGENCE**  
**PLATFORM ARCHITECTURE**  
**AND FUNCTIONALITY**  
[54] **ARCHITECTURE ET**  
**FONCTIONNALITE DE**  
**PLATEFORME DE**  
**RENSEIGNEMENT DE SECURITE**  
[72] SCOTT, SEAN, US  
[72] HUBBACH, JEFF, US  
[71] LOGRHYTHM, INC., US  
[85] 2024-04-03  
[86] 2022-09-02 (PCT/US2022/075936)  
[87] (WO2023/064652)  
[30] US (63/262,596) 2021-10-15  
[30] US (63/269,689) 2022-03-21

## PCT Applications Entering the National Phase

[21] **3,233,842**  
[13] A1

[51] **Int.Cl. G01R 21/06 (2006.01)**  
[25] EN  
[54] **CONTROLLING PULSED OPERATION OF A POWER SUPPLY DURING A POWER OUTAGE**

[54] **COMMANDE DE FONCTIONNEMENT PULSE D'ALIMENTATION ELECTRIQUE PENDANT UNE PANNE DE COURANT**

[72] BUSEKRUS, DOUG, US  
[71] LANDIS+GYR INNOVATIONS, INC., US  
[85] 2024-04-03  
[86] 2022-10-18 (PCT/US2022/046956)  
[87] (WO2023/069389)  
[30] US (17/506,528) 2021-10-20

[21] **3,233,843**  
[13] A1

[51] **Int.Cl. H02K 9/28 (2006.01) H01R 39/48 (2006.01) H01R 39/38 (2006.01)**

[25] FR  
[54] **SUCTION SYSTEM FOR EFFICIENTLY SUCKING UP THE DUST OF A ROTATING ELECTRIC MACHINE IN A POLLUTED ENVIRONMENT**

[54] **SYSTEME D'ASPIRATION EFFICACE DES POUSSIERES D'UNE MACHINE ELECTRIQUE TOURNANTE EN ENVIRONNEMENT POLLUE**

[72] BOREL, GREGORY, FR  
[72] NATHMANN, MICHAEL, DE  
[71] MERSEN FRANCE AMIENS SAS, FR  
[71] MERSEN OSTERREICH HITZISAU GES.M.B.H., AT  
[85] 2024-04-03  
[86] 2022-10-21 (PCT/FR2022/052001)  
[87] (WO2023/067290)  
[30] FR (FR2111250) 2021-10-22

[21] **3,233,844**  
[13] A1

[51] **Int.Cl. C08L 1/10 (2006.01) C08K 3/22 (2006.01) C08K 5/053 (2006.01) C08K 5/092 (2006.01) C08L 1/12 (2006.01)**

[25] EN  
[54] **MELT PROCESSABLE CELLULOSE ESTER COMPOSITIONS COMPRISING ALKALINE FILLER**

[54] **COMPOSITIONS D'ESTER DE CELLULOSE POUVANT ETRE TRAITES A L'ETAT FONDU COMPRENANT UNE CHARGE ALKALINE**

[72] CLENDENNEN, STEPHANIE KAY, US  
[72] EBRAHIMI, HAMID, US  
[71] EASTMAN CHEMICAL COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/US2022/045979)  
[87] (WO2023/059848)  
[30] US (63/262,254) 2021-10-08

[21] **3,233,845**  
[13] A1

[51] **Int.Cl. A61B 5/00 (2006.01) A61B 5/22 (2006.01) A63B 21/00 (2006.01) A63B 21/008 (2006.01) A63B 24/00 (2006.01)**

[25] EN  
[54] **SYSTEM AND METHOD FOR DETERMINING ENDURANCE OF A MUSCLE GROUP**

[54] **SYSTEME ET PROCEDE DE DETERMINATION D'ENDURANCE D'UN GROUPE MUSCULAIRE**

[72] KEISER, DENNIS L., US  
[71] KEISER CORPORATION, US  
[85] 2024-04-03  
[86] 2022-10-06 (PCT/US2022/077698)  
[87] (WO2023/060196)  
[30] US (63/253,521) 2021-10-07

[21] **3,233,846**  
[13] A1

[51] **Int.Cl. A62C 3/16 (2006.01) F24F 5/00 (2006.01) F24F 13/30 (2006.01) H05K 7/20 (2006.01)**

[25] EN  
[54] **AIR CONDITIONER USING WATER VAPOR REFRIGERANT FOR MODULAR DATA CENTER AND DATA CENTER COMPRISING SAME**

[54] **CLIMATISEUR UTILISANT UN REFRIGERANT A VAPEUR D'EAU POUR UN CENTRE DE DONNEES MODULAIRE ET CENTRE DE DONNEES COMPRENANT CE DERNIER**

[72] YANG, JIANGUO, CN  
[72] LI, XIAOLONG, CN  
[72] XIE, WEIBO, CN  
[72] ZHANG, JILONG, CN  
[72] WANG, QUANJIANG, CN  
[72] CHEN, XIMOU, CN  
[72] ZHOU, CHENGJUN, CN  
[72] KANG, JIANHUI, CN  
[71] BEIJING JINGKELUN ENGINEERING DESIGN AND RESEARCH INSTITUTE CO., LTD., CN  
[85] 2024-04-03  
[86] 2022-10-28 (PCT/CN2022/128153)  
[87] (WO2023/226299)  
[30] CN (202210586820.8) 2022-05-27

[21] **3,233,847**  
[13] A1

[51] **Int.Cl. B01F 25/433 (2022.01)**

[25] EN  
[54] **ADAPTER AND METHOD OF MIXING CONSTITUENTS OF A PHARMACEUTICAL COMPLEX VIA AN ADAPTER**

[54] **ADAPTATEUR ET PROCEDE DE MELANGE DE CONSTITUANTS D'UN COMPLEXE PHARMACEUTIQUE PAR L'INTERMEDIAIRE D'UN ADAPTATEUR**

[72] LEE, CLAUDIA, US  
[72] SULLIVAN, MICHAEL, US  
[72] KUMAR, RAJIV, US  
[72] DELVECCHIO, DANIEL E., US  
[72] GUTHLEIN, JAMES, US  
[71] WEST PHARMACEUTICAL SERVICES, INC., US  
[85] 2024-04-03  
[86] 2022-10-04 (PCT/US2022/045696)  
[87] (WO2023/059657)  
[30] US (63/251,880) 2021-10-04

## Demandes PCT entrant en phase nationale

---

[21] **3,233,848**  
[13] A1

[51] **Int.Cl. C07D 277/58 (2006.01)**  
[25] EN  
[54] **AN IMPROVED PROCESS FOR THE PREPARATION OF NITAZOXANIDE AND INTERMEDIATES THEREOF**  
[54] **PROCEDE AMELIORE POUR PREPARER DU NITAZOXANIDE ET DE SES INTERMEDIAIRES**  
[72] SOMAPPA, SASIDHAR BALAPPA, IN  
[72] VALMIKI, PRAVEEN KUMAR, IN  
[72] DURUGAPPA, BASAVARAJA, IN  
[71] COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGN. OF SOC. ACT (ACT XXI OF 1860), IN  
[85] 2024-04-03  
[86] 2022-09-21 (PCT/IN2022/050843)  
[87] (WO2023/058046)  
[30] IN (202111045217) 2021-10-05

---

[21] **3,233,849**  
[13] A1

[51] **Int.Cl. G21C 3/54 (2006.01) G21C 19/48 (2006.01) G21C 19/50 (2006.01)**  
[25] EN  
[54] **A METHOD OF ADJUSTING OXOACIDITY**  
[54] **PROCEDE D'AJUSTEMENT DE L'OXOACIDITE**  
[72] SILVIOLI, LUCA, DK  
[72] LOVSHALL-JENSEN, ASK EMIL, DK  
[72] SEYEDI, MAHLA, DK  
[72] AMPHLETT, JAMES, DK  
[72] COOPER, DANIEL JOHN, DK  
[72] BHATTACHARYA, BIYASH, DK  
[71] SEABORG APS, DK  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/EP2022/077931)  
[87] (WO2023/057622)  
[30] EP (21201498.9) 2021-10-07

---

[21] **3,233,850**  
[13] A1

[51] **Int.Cl. B01J 8/02 (2006.01) B01J 8/06 (2006.01)**  
[25] FR  
[54] **FIXED-BED TUBULAR REACTOR COMPRISING A MAKE-UP CHAMBER**  
[54] **REACTEUR TUBULAIRE A LIT FIXE COMPORTANT UNE CHAMBRE D'APPOINT**  
[72] DUCROS, FREDERIC, FR  
[72] CHAMPON, ISABELLE, FR  
[72] CHAISE, ALBIN, FR  
[72] BEDEL, LAURENT, FR  
[71] COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, FR  
[85] 2024-04-03  
[86] 2022-10-03 (PCT/FR2022/051862)  
[87] (WO2023/057710)  
[30] FR (FR2110518) 2021-10-05

---

[21] **3,233,851**  
[13] A1

[51] **Int.Cl. E06B 9/266 (2006.01) B31D 3/02 (2006.01) E06B 9/262 (2006.01)**  
[25] EN  
[54] **ASSEMBLY OF CELLULAR WINDOW BLINDS WITH UV CURE ADHESIVE**  
[54] **ENSEMBLE DE STORES A FENETRE CELLULAIRE AVEC ADHESIF DURCISSANT AUX UV**  
[72] ZITTING, LORIN K., US  
[71] ZITTING, LORIN K., US  
[85] 2024-04-03  
[86] 2022-10-25 (PCT/US2022/078627)  
[87] (WO2023/076879)  
[30] US (63/271,295) 2021-10-25

---

[21] **3,233,852**  
[13] A1

[51] **Int.Cl. C08L 1/10 (2006.01) C08K 3/22 (2006.01) C08K 5/053 (2006.01) C08K 5/092 (2006.01) C08L 1/12 (2006.01)**  
[25] EN  
[54] **ARTICLES CONTAINING MELT PROCESSABLE CELLULOSE ESTER COMPOSITIONS COMPRISING ALKALINE FILLER**  
[54] **ARTICLES CONTENANT DES COMPOSITIONS D'ESTER DE CELLULOSE POUVANT ETRE TRAITES PAR FUSION COMPRENANT UNE CHARGE ALCALINE**  
[72] CLENDENNEN, STEPHANIE KAY, US  
[72] FANG, YICHEN, US  
[71] EASTMAN CHEMICAL COMPANY, US  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/US2022/045975)  
[87] (WO2023/059845)  
[30] US (63/262,256) 2021-10-08

## PCT Applications Entering the National Phase

[21] **3,233,854**  
[13] A1

[51] **Int.Cl. A47L 13/22 (2006.01) A47L 11/34 (2006.01) A47L 11/40 (2006.01)**  
[25] EN  
[54] **STEAM CLEANING APPARATUS**  
[54] **APPAREIL DE NETTOYAGE A LA VAPEUR**

[72] AHMED, FARIHA, US  
[72] REDMAN, JOSHUA, US  
[72] HUTCHINSON, PETER, US  
[72] LAYEVSKY, DMITRY, US  
[72] KEENE, ANDREW, US  
[72] XU, KAI, CN  
[72] VRDOLJAK, OGNJEN, CA  
[72] TAN, QUEENA, US  
[72] FENG, DEVIN, CN  
[72] LI, JUNPING, US  
[72] YAO, MING, CN  
[72] WANG, TAO, US  
[72] ZOU, HUI, US  
[72] LI, YONGGANG, US  
[72] BARKER, DAVID T., GB  
[72] CHEN, HELIANG, CN  
[72] GU, JIBING, US  
[72] QIN, MINGLIANG, US  
[72] LU, ZHENGZHOU, US  
[72] LIU, LEI, US  
[71] SHARKNINJA OPERATING LLC, US  
[85] 2024-04-03  
[86] 2022-04-22 (PCT/US2022/025873)  
[87] (WO2022/226260)  
[30] US (63/178,932) 2021-04-23  
[30] US (63/220,272) 2021-07-09

[21] **3,233,855**  
[13] A1

[51] **Int.Cl. B01D 53/00 (2006.01) C02F 1/52 (2006.01) C02F 3/12 (2006.01) C02F 3/28 (2006.01) C02F 11/04 (2006.01) C02F 11/12 (2019.01) C02F 11/20 (2006.01)**  
[25] EN  
[54] **SYSTEM FOR PRODUCING BIOGAS USING MIXED LIQUID OF DIGESTIVE FLUID TREATED WATER AND ORGANIC DRY SUBSTANCE**  
[54] **SYSTEME DE PRODUCTION DE BIOGAZ AU MOYEN D'UN LIQUIDE MELANGE D'EAU TRAITEE DE FLUIDE DIGESTIF ET DE SUBSTANCE ORGANIQUE SECHE**

[72] NA, MIN SOO, KR  
[71] NA, MIN SOO, KR  
[85] 2024-04-03  
[86] 2022-10-18 (PCT/KR2022/015829)  
[87] (WO2023/075265)  
[30] KR (10-2021-0142550) 2021-10-25

[21] **3,233,856**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01) A24F 40/10 (2020.01) A24F 40/30 (2020.01) A24F 40/44 (2020.01) A24F 40/46 (2020.01) A24F 40/57 (2020.01) H05B 3/74 (2006.01)**  
[25] EN  
[54] **CARTRIDGE AND AEROSOL-GENERATING DEVICE INCLUDING THE SAME**  
[54] **CARTOUCHE ET DISPOSITIF DE GENERATION D'AEROSOL COMPRENANT CELLE-CI**

[72] KIM, TAEHUN, KR  
[72] PARK, JUEON, KR  
[72] JUNG, HYUNGJIN, KR  
[72] HAN, JUNGHO, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-03  
[86] 2022-10-14 (PCT/KR2022/015645)  
[87] (WO2023/068676)  
[30] KR (10-2021-0140612) 2021-10-20  
[30] KR (10-2022-0019691) 2022-02-15  
[30] KR (10-2022-0059802) 2022-05-16

[21] **3,233,857**  
[13] A1

[51] **Int.Cl. C12Q 1/6883 (2018.01)**  
[25] EN  
[54] **METHODS AND SYSTEMS FOR PREDICTING SPERM QUALITY**  
[54] **PRECEDES ET SYSTEMES POUR PREDIRE LA QUALITE DU SPERME**

[72] MILLER, RYAN, US  
[72] BROGAARD, KRISTIN, US  
[72] OLSON, ANDREW, US  
[71] INHERENT BIOSCIENCES, INC., US  
[85] 2024-04-03  
[86] 2022-10-05 (PCT/US2022/077583)  
[87] (WO2023/060109)  
[30] US (63/252,732) 2021-10-06  
[30] US (63/291,536) 2021-12-20

[21] **3,233,858**  
[13] A1

[51] **Int.Cl. A24F 40/40 (2020.01) A24F 40/42 (2020.01) A24F 40/485 (2020.01) A24F 40/51 (2020.01)**  
[25] EN  
[54] **DEVICE FOR GENERATING AEROSOL**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL**

[72] KIM, TAEHUN, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-03  
[86] 2022-10-12 (PCT/KR2022/015422)  
[87] (WO2023/068637)  
[30] KR (10-2021-0141248) 2021-10-21

[21] **3,233,859**  
[13] A1

[51] **Int.Cl. A24F 40/51 (2020.01) A24F 40/20 (2020.01) A24F 40/40 (2020.01) A24F 40/46 (2020.01)**  
[25] EN  
[54] **AEROSOL-GENERATING DEVICE**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL**

[72] LEE, JAEMIN, KR  
[72] RYU, HANSEUL, KR  
[72] PARK, SANGKYU, KR  
[72] AN, HWIKYEONG, KR  
[72] HAN, DAENAM, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-03  
[86] 2022-10-12 (PCT/KR2022/015412)  
[87] (WO2023/075218)  
[30] KR (10-2021-0147015) 2021-10-29  
[30] KR (10-2022-0042168) 2022-04-05

[21] **3,233,860**  
[13] A1

[51] **Int.Cl. H01M 4/64 (2006.01) H01M 10/0525 (2010.01) H01M 50/534 (2021.01) H01M 4/66 (2006.01) H01M 4/70 (2006.01)**  
[25] FR  
[54] **DRY-PROCESSED INSULATING FILM FOR ELECTRODE EDGES**  
[54] **FILM ISOLANT EN VOIE SECHE POUR RIVES D'ELECTRODES**

[72] ADAMCZYK, EVAN, FR  
[72] DE ALMEIDA, ANDRE, FR  
[72] PERISSE, JULIE, FR  
[71] AUTOMOTIVE CELLS COMPANY SE, FR  
[85] 2024-04-03  
[86] 2022-10-12 (PCT/EP2022/078417)  
[87] (WO2023/062089)  
[30] FR (FR2110909) 2021-10-14



## Demandes PCT entrant en phase nationale

[21] **3,233,861**  
[13] A1

[51] **Int.Cl. A61M 11/02 (2006.01)**  
[25] EN  
[54] **BREATH-POWERED NASAL DEVICES FOR TREATMENT OF TRAUMATIC BRAIN INJURY (TBI), INCLUDING CONCUSSION, AND METHODS AND METHODS**  
[54] **DISPOSITIFS NASAUX ALIMENTES PAR LA RESPIRATION POUR LE TRAITEMENT D'UNE LESION CEREBRALE TRAUMATIQUE (TBI), COMPRENANT UNE COMMOTION, ET PROCEDES**  
[72] VANLANDINGHAM, JACOB, US  
[72] LEWANDOSKI, MICHAEL, US  
[72] STOWELL, KELLY M., US  
[72] LUCAS, JONATHAN, US  
[72] COCHRAN, TRAVIS, US  
[71] ODYSSEY HEALTH, INC., US  
[71] VANLANDINGHAM, JACOB, US  
[71] LEWANDOSKI, MICHAEL, US  
[71] STOWELL, KELLY M., US  
[71] LUCAS, JONATHAN, US  
[71] COCHRAN, TRAVIS, US  
[85] 2024-04-03  
[86] 2022-10-19 (PCT/US2022/000020)  
[87] (WO2023/069126)  
[30] US (63/257,117) 2021-10-19

[21] **3,233,862**  
[13] A1

[51] **Int.Cl. A24F 40/46 (2020.01) A24F 40/465 (2020.01) A24F 40/51 (2020.01)**  
[25] EN  
[54] **DEVICE FOR GENERATING AEROSOL AND MANUFACTURING METHOD WITH THE SAME**  
[54] **DISPOSITIF DE GENERATION D'AEROSOL ET SON PROCEDE DE FABRICATION**  
[72] AN, HWIKYEONG, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-03  
[86] 2022-10-12 (PCT/KR2022/015414)  
[87] (WO2023/068635)  
[30] KR (10-2021-0141247) 2021-10-21

[21] **3,233,863**  
[13] A1

[51] **Int.Cl. A61K 33/20 (2006.01) A61K 33/00 (2006.01) A61P 21/00 (2006.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **TREATMENT METHODS FOR ALS PATIENTS**  
[54] **METHODES DE TRAITEMENT POUR PATIENTS ATTEINTS DE SLA**  
[72] AZHIR, ARASTEH, US  
[72] MCGRATH, MICHAEL S., US  
[72] FORREST, BRUCE D., US  
[72] PRICE, LEAH, IL  
[71] NEUVIVO, INC., US  
[71] THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US  
[85] 2024-04-03  
[86] 2022-10-04 (PCT/US2022/077557)  
[87] (WO2023/060097)  
[30] US (63/252,061) 2021-10-04  
[30] US (63/301,476) 2022-01-20  
[30] US (63/302,000) 2022-01-21

[21] **3,233,864**  
[13] A1

[51] **Int.Cl. A24D 1/02 (2006.01) A24D 1/20 (2020.01) A24F 40/465 (2020.01) D21H 19/04 (2006.01)**  
[25] EN  
[54] **CIGARETTE AND DEVICE FOR GENERATING AEROSOL WITH THE SAME**  
[54] **CIGARETTE ET DISPOSITIF POUR GENERER UN AEROSOL AVEC CELLE-CI**  
[72] LEE, JAEMIN, KR  
[71] KT&G CORPORATION, KR  
[85] 2024-04-03  
[86] 2022-10-12 (PCT/KR2022/015425)  
[87] (WO2023/075222)  
[30] KR (10-2021-0147014) 2021-10-29  
[30] KR (10-2022-0026723) 2022-03-02

[21] **3,233,865**  
[13] A1

[51] **Int.Cl. A61K 31/519 (2006.01) A61P 9/00 (2006.01) C07D 487/04 (2006.01) C07D 487/06 (2006.01) C07D 498/14 (2006.01) C07D 498/16 (2006.01) C07D 519/00 (2006.01)**  
[25] EN  
[54] **PYRIMIDINE TRICYCLIC DERIVATIVE AND PHARMACEUTICAL APPLICATION THEREOF**  
[54] **DERIVE TRICYCLIQUE DE PYRIMIDINE ET SON APPLICATION PHARMACEUTIQUE**  
[72] LUO, YUNFU, CN  
[72] ZHANG, GUOLI, CN  
[72] LI, SHAOLONG, CN  
[72] GE, WEIZHI, CN  
[72] CHEN, SHUHUI, CN  
[71] CHIA TAI TIANQING PHARMACEUTICAL GROUP CO., LTD., CN  
[85] 2024-04-03  
[86] 2022-10-13 (PCT/CN2022/125047)  
[87] (WO2023/061432)  
[30] CN (202111565306.8) 2021-12-20  
[30] CN (202211160959.2) 2022-09-22  
[30] CN (202111194177.6) 2021-10-13

[21] **3,233,866**  
[13] A1

[51] **Int.Cl. A61K 35/22 (2015.01) A61P 13/12 (2006.01)**  
[25] EN  
[54] **TREATMENT OF KIDNEY DISEASE**  
[54] **TRAITEMENT DE MALADIES RENALES**  
[72] BERTRAM, TIMOTHY A., KY  
[72] JAIN, DEEPAK, US  
[71] BERTRAM, TIMOTHY A., KY  
[71] JAIN, DEEPAK, US  
[85] 2024-04-03  
[86] 2022-10-14 (PCT/US2022/078153)  
[87] (WO2023/064925)  
[30] US (63/255,885) 2021-10-14  
[30] US (63/307,801) 2022-02-08  
[30] US (63/321,204) 2022-03-18

## PCT Applications Entering the National Phase

[21] **3,233,867**  
[13] A1

[51] **Int.Cl. H04L 12/10 (2006.01)**  
[25] EN  
[54] **COAXIAL CABLE ADAPTER FOR DISTRIBUTING A COMPOSITE ETHERNET/POWER SIGNAL TO POWER OVER ETHERNET DEVICES**  
[54] **ADAPTATEUR DE CABLE COAXIAL POUR LA DISTRIBUTION D'UN SIGNAL COMPOSITE ETHERNET/D'ALIMENTATION A DES DISPOSITIFS A ALIMENTATION PAR ETHERNET**  
[72] BARANY, DAVID A., US  
[72] HART, THOMAS, US  
[71] PPC BROADBAND, INC., US  
[85] 2024-04-03  
[86] 2022-10-13 (PCT/US2022/046579)  
[87] (WO2023/064476)  
[30] US (63/255,260) 2021-10-13

[21] **3,233,868**  
[13] A1

[51] **Int.Cl. G16H 50/70 (2018.01) C12Q 1/6869 (2018.01) C12Q 1/6886 (2018.01) C12Q 1/6888 (2018.01) G16B 30/10 (2019.01) G01N 33/559 (2006.01)**  
[25] EN  
[54] **METAEPIGENOMICS-BASED DISEASE DIAGNOSTICS**  
[54] **DIAGNOSTICS DE MALADIES BASES SUR LA METAEPIGENOMIQUE**  
[72] ADAMS, EDDIE, US  
[72] WANDRO, STEPHEN, US  
[72] FRARACCIO, SERENA, US  
[72] SINGH-TAYLOR, AKANKSHA, US  
[71] MICRONOMA, INC., US  
[85] 2024-04-03  
[86] 2022-10-07 (PCT/US2022/046126)  
[87] (WO2023/059922)  
[30] US (63/253,655) 2021-10-08

[21] **3,233,869**  
[13] A1

[51] **Int.Cl. H01M 50/30 (2021.01) H01M 50/358 (2021.01) H01M 50/367 (2021.01)**  
[25] EN  
[54] **BATTERY AND ELECTRICAL DEVICE**  
[54] **BATTERIE ET DISPOSITIF ELECTRIQUE**  
[72] KE, JIANHUANG, CN  
[72] CHEN, XIAOBO, CN  
[72] LI, YAO, CN  
[71] CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED, CN  
[85] 2024-04-03  
[86] 2022-11-30 (PCT/CN2022/135702)  
[87] (WO2023/245989)  
[30] CN (PCT/CN2022/100760) 2022-06-23

[21] **3,233,870**  
[13] A1

[51] **Int.Cl. C23C 22/56 (2006.01) C23F 11/18 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS, SYSTEMS AND METHODS FOR TREATING A SUBSTRATE**  
[54] **COMPOSITIONS, SYSTEMES ET PROCEDES DE TRAITEMENT D'UN SUBSTRAT**  
[72] CHARI, KRISHNAN, US  
[72] MORRIS, ERIC LEON, US  
[71] PRC-DESOTO INTERNATIONAL, INC., US  
[85] 2024-04-03  
[86] 2022-10-27 (PCT/US2022/078770)  
[87] (WO2023/076990)  
[30] US (63/272,554) 2021-10-27  
[30] US (63/269,866) 2022-03-24

[21] **3,233,871**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) A61P 35/00 (2006.01) C07K 16/00 (2006.01)**  
[25] EN  
[54] **TREATMENT OF MAST CELL RELATED DISORDERS**  
[54] **TRAITEMENT DE TROUBLES LIES AUX MASTOCYTES**  
[72] PARK, SANG GYU, KR  
[72] KIM, KWANG-HYEOK, KR  
[71] NOVELTY NOBILITY INC., KR  
[85] 2024-04-03  
[86] 2022-10-06 (PCT/KR2022/015064)  
[87] (WO2023/059113)  
[30] KR (10-2021-0133123) 2021-10-07

[21] **3,233,872**  
[13] A1

[51] **Int.Cl. A24F 40/42 (2020.01) A24F 40/10 (2020.01)**  
[25] EN  
[54] **E-LIQUID COLLECTION DRY-BURNING PREVENTION ATOMIZER, AND ELECTRONIC CIGARETTE**  
[54] **ATOMISEUR A PREVENTION DE COMBUSTION A SEC ET COLLECTE DE E-LIQUIDE, ET CIGARETTE ELECTRONIQUE**  
[72] LIU, TUANFANG, CN  
[71] LIU, TUANFANG, CN  
[85] 2024-04-03  
[86] 2023-02-03 (PCT/CN2023/074375)  
[87] (WO2023/169110)  
[30] CN (202210228082.X) 2022-03-08  
[30] CN (202220503861.1) 2022-03-08

[21] **3,233,873**  
[13] A1

[51] **Int.Cl. E21B 17/02 (2006.01) E21B 47/017 (2012.01) E21B 17/07 (2006.01) E21B 17/10 (2006.01) E21B 25/16 (2006.01) E21B 31/18 (2006.01) E21B 41/00 (2006.01)**  
[25] EN  
[54] **"SHOCK ABSORBER FOR A DOWNHOLE TOOL, AND RUNNING GEAR FOR DOWNHOLE SURVEYING "**  
[54] **« AMORTISSEUR POUR OUTIL DE FOND, ET TRAIN ROULANT POUR INSPECTION DE TROU DE FOND »**  
[72] MOKARAMIAN, AMIR, AU  
[72] REILLY, JAMES BARRY, AU  
[72] JAVORKA, MARIAN, AU  
[71] REFLEX INSTRUMENTS ASIA PACIFIC PTY LTD, AU  
[85] 2024-04-04  
[86] 2022-11-22 (PCT/AU2022/051396)  
[87] (WO2023/092173)  
[30] AU (2021903774) 2021-11-23

## Demandes PCT entrant en phase nationale

[21] **3,233,875**  
[13] A1

[51] **Int.Cl. B22F 1/05 (2022.01) B22F 1/102 (2022.01) B22F 1/145 (2022.01) B22F 1/16 (2022.01) C22C 33/02 (2006.01) H01F 1/24 (2006.01) H01F 1/26 (2006.01) H01F 1/33 (2006.01) H01F 3/08 (2006.01) H01F 41/02 (2006.01)**

[25] EN

[54] **A FERROMAGNETIC POWDER COMPOSITION AND A METHOD FOR OBTAINING THEREOF**

[54] **COMPOSITION DE POUDRE FERROMAGNETIQUE ET SON PROCEDE D'OBTENTION**

[72] ZHOU, YE, SE

[72] SKARMAN, BJORN, SE

[72] JONSSON, CHRISTIAN, SE

[72] BRASH, BENJAMIN, SE

[72] HELLSSEN, ANN-CATHRIN, SE

[71] HOGANAS AB (PUBL), SE

[85] 2024-03-28

[86] 2022-10-17 (PCT/EP2022/078826)

[87] (WO2023/062242)

[30] EP (21202965.6) 2021-10-15

[21] **3,233,886**  
[13] A1

[51] **Int.Cl. E04F 15/10 (2006.01) B32B 5/00 (2006.01) E04F 15/02 (2006.01)**

[25] EN

[54] **FRAMED (MODULAR) PLASTIC COMPOSITE**

[54] **NOUVEAU REVETEMENT DE SOL MOULE**

[72] CHEN, JUN, CN

[71] 10957402 CANADA INC., CA

[71] CHENG, GANG, CN

[85] 2024-01-30

[86] 2022-06-29 (PCT/CN2022/102104)

[87] (WO2023/216388)

[30] CN (202210519305.8) 2022-05-12

[21] **3,233,888**  
[13] A1

[51] **Int.Cl. A61M 5/32 (2006.01)**

[25] EN

[54] **METHOD INVOLVING A NEEDLE-BASED DEVICE WITH A SAFETY MECHANISM IMPLEMENTED THEREIN**

[54] **PROCEDE APPLICABLE A UN DISPOSITIF A BASE D'AIGUILLES AVEC MECANISME DE SECURITE IMPLANTE DANS CELUI-CI**

[72] MOLEDA, JAROSLAW, PL

[71] MEDIVENA SP. Z O.O., PL

[85] 2024-04-04

[86] 2022-10-06 (PCT/IB2022/059572)

[87] (WO2023/057959)

[30] US (17/494,904) 2021-10-06

[21] **3,233,889**  
[13] A1

[51] **Int.Cl. C07D 401/14 (2006.01) A01N 43/54 (2006.01) A01N 43/56 (2006.01) C07D 403/06 (2006.01)**

[25] EN

[54] **HERBICIDAL IMIDAZOLE COMPOUNDS**

[54] **COMPOSES IMIDAZOLE HERBICIDES**

[72] DALE, SUZANNA, GB

[72] ELVES, PHILIP MICHAEL, GB

[72] KINGSTON, CHARLES WILLIAM FREDERICK, GB

[72] MORRIS, JAMES ALAN, GB

[72] WATKIN, SAMUEL VAUGHAN, GB

[71] SYNGENTA CROP PROTECTION AG, CH

[85] 2024-04-04

[86] 2022-10-13 (PCT/EP2022/078500)

[87] (WO2023/066783)

[30] GB (2114863.0) 2021-10-18

[21] **3,233,893**  
[13] A1

[51] **Int.Cl. A61K 38/20 (2006.01) A61P 35/00 (2006.01)**

[25] EN

[54] **IL-2 PRODRUG**

[54] **PROMEDICAMENT D'IL-2**

[72] SALMERON-GARCIA, JOSE ANDRES, US

[72] WINSTON, WILLIAM, US

[72] HICKLIN, DANIEL, US

[72] SEIDEL-DUGAN, CYNTHIA, US

[72] BRODKIN, HEATHER, US

[72] NIRSCHL, CHRISTOPHER, US

[72] CAFARELLI, TIZIANA, US

[71] WEREWOLF THERAPEUTICS, INC., US

[85] 2024-04-04

[86] 2022-10-07 (PCT/US2022/077772)

[87] (WO2023/060242)

[30] US (63/253,964) 2021-10-08

[30] US (63/290,941) 2021-12-17

[30] US (63/328,524) 2022-04-07

[21] **3,233,895**  
[13] A1

[51] **Int.Cl. B60L 7/22 (2006.01) B60L 58/33 (2019.01)**

[25] EN

[54] **WORK VEHICLE**

[54] **VEHICULE DE CHANTIER**

[72] HOSHINO, YUTA, JP

[71] KOMATSU LTD., JP

[85] 2024-04-04

[86] 2022-12-09 (PCT/JP2022/045449)

[87] (WO2023/106397)

[30] JP (2021-200388) 2021-12-09

[21] **3,233,898**  
[13] A1

[51] **Int.Cl. A61B 3/00 (2006.01) A61B 3/12 (2006.01) A61B 3/135 (2006.01)**

[25] EN

[54] **VITREORETINAL VISUALIZATION FOR OPHTHALMIC PROCEDURES**

[54] **VISUALISATION VITREO-RETINIENNE POUR DES PROCEDURES OPHTHALMIQUES**

[72] CHARLES, STEVEN T., US

[71] ALCON INC., CH

[85] 2024-04-04

[86] 2022-10-03 (PCT/IB2022/059435)

[87] (WO2023/089395)

[30] US (63/281,293) 2021-11-19

## PCT Applications Entering the National Phase

[21] **3,233,906**  
[13] A1

[51] **Int.Cl. B60L 53/80 (2019.01) H04W 4/02 (2018.01) G06Q 10/04 (2023.01) G06Q 10/06 (2023.01) H04W 4/44 (2018.01) G05D 1/00 (2024.01) G08G 1/00 (2006.01)**

[25] EN

[54] **OPTIMAL ENERGY STORAGE UTILIZATION**

[54] **UTILISATION OPTIMALE DE STOCKAGE D'ENERGIE**

[72] PERSSON, ANDERS, SE

[72] MALM, PATRIK, SE

[71] EPIROC ROCK DRILLS AKTIEBOLAG, SE

[85] 2024-04-04

[86] 2022-09-16 (PCT/SE2022/050816)

[87] (WO2023/059239)

[30] SE (2151241-3) 2021-10-08

[21] **3,233,911**  
[13] A1

[51] **Int.Cl. A01B 69/04 (2006.01) A01B 79/00 (2006.01)**

[25] FR

[54] **AUTONOMOUS AGRICULTURAL ROBOT COMPRISING A CROP PROTECTION DEVICE**

[54] **ROBOT AGRICOLE AUTONOME COMPRENANT UN DISPOSITIF DE PROTECTION DE CULTURES**

[72] ANDREU, JOAN, FR

[72] JUNG, FRANCK, FR

[72] MOINDRAULT, DENIS, FR

[72] MATHIEU, BRUNO, FR

[72] SEGUINEAU, CEDRIC, FR

[72] SEVERAC, GAETAN, FR

[71] NAO-TECHNOLOGIES, FR

[85] 2024-04-04

[86] 2022-10-04 (PCT/EP2022/077499)

[87] (WO2023/057408)

[30] FR (FR2110534) 2021-10-05

[21] **3,233,912**  
[13] A1

[51] **Int.Cl. A61L 2/10 (2006.01) A61L 2/24 (2006.01) A61L 2/26 (2006.01)**

[25] EN

[54] **UVC SANITIZING BAG**

[54] **SAC DE DESINFECTION UVC**

[72] NAPIER-RODEN, CHRISTYNE, US

[71] NAPIER-RODEN, CHRISTYNE, US

[85] 2024-04-04

[86] 2022-07-22 (PCT/US2022/038005)

[87] (WO2023/004110)

[30] US (63/224,785) 2021-07-22

[21] **3,233,916**  
[13] A1

[51] **Int.Cl. A61B 90/50 (2016.01)**

[25] EN

[54] **LOAD BALANCING ARM FOR MEDICAL DEVICE SUPPORT SYSTEM**

[54] **BRAS D'EQUILIBRAGE DE CHARGE POUR SYSTEME DE SUPPORT DE DISPOSITIF MEDICAL**

[72] PICHLER, JERIME JOSEF, US

[71] AMERICAN STERILIZER COMPANY, US

[85] 2024-04-04

[86] 2022-10-10 (PCT/US2022/046160)

[87] (WO2023/069269)

[30] US (63/256,713) 2021-10-18

[21] **3,233,918**  
[13] A1

[51] **Int.Cl. A61K 47/18 (2017.01) A61K 47/68 (2017.01)**

[25] EN

[54] **PHARMACEUTICAL COMPOSITIONS OF EFRUXIFERMIN**

[54] **COMPOSITIONS PHARMACEUTIQUES D'EFRUXIOL**

[72] DIMITROVA, MARIANA N., US

[72] ROLPH, TIMOTHY P., US

[71] AKERO THERAPEUTICS, INC., US

[85] 2024-04-04

[86] 2022-10-12 (PCT/US2022/077968)

[87] (WO2023/064808)

[30] US (63/255,286) 2021-10-13

[21] **3,233,920**  
[13] A1

[51] **Int.Cl. A61K 31/10 (2006.01) A61P 31/02 (2006.01)**

[25] EN

[54] **COMPOSITIONS FOR ACUTE AND CHRONIC WOUNDS**

[54] **COMPOSITIONS POUR PLAIES AIGUES ET CHRONIQUES**

[72] BIGNOZZI, CARLO ALBERTO, IT

[72] COGO, ALBERTO, IT

[72] QUINT, BERTUS JOZEF, NL

[71] DEBX MEDICAL HOLDING B.V., NL

[85] 2024-04-04

[86] 2022-06-27 (PCT/EP2022/067593)

[87] (WO2023/057098)

[30] IT (102021000025541) 2021-10-07

[21] **3,233,921**  
[13] A1

[51] **Int.Cl. A61B 3/11 (2006.01) A61B 3/113 (2006.01) A61B 3/14 (2006.01) A61B 5/00 (2006.01) A61B 5/11 (2006.01)**

[25] EN

[54] **MULTIMODAL METHOD AND SYSTEM FOR EVALUATING AND IMPROVING NEUROMOTOR CONTROL ABILITY**

[54] **PROCEDE MULTIMODAL ET SYSTEME D'EVALUATION ET D'AMELIORATION DE LA CAPACITE DE COMMANDE NEUROMOTRICE**

[72] MCGRATH, ELIZABETH, AU

[71] PRISM NEURO PTY LTD, AU

[85] 2024-04-04

[86] 2022-10-05 (PCT/AU2022/051188)

[87] (WO2023/056512)

[30] AU (2021903207) 2021-10-07

[21] **3,233,923**  
[13] A1

[51] **Int.Cl. A61B 3/16 (2006.01) A61B 5/0507 (2021.01) A61B 5/03 (2006.01) A61B 8/10 (2006.01)**

[25] EN

[54] **HAND-HELD RADAR SYSTEM TO MEASURE INTRAOCULAR PRESSURE AND TO ASSESS EYE DISEASES AND METHOD THEREFOR**

[54] **SYSTEME RADAR PORTATIF POUR MESURER LA PRESSION INTRAOCULAIRE ET POUR EVALUER DES MALADIES OCULAIRES ET PROCEDE ASSOCIE**

[72] KASEVICH, RAYMOND STANLEY, US

[72] GROSSMAN, MARK, US

[72] EDSON, MICHAEL, US

[71] NATURAL EYE CARE, INC., US

[85] 2024-04-04

[86] 2022-10-04 (PCT/US2022/045642)

[87] (WO2023/059613)

[30] US (63/360,536) 2021-10-08

[30] US (17/941,159) 2022-09-09

## Demandes PCT entrant en phase nationale

[21] **3,233,924**  
[13] A1

[51] **Int.Cl. A61K 9/08 (2006.01) G16H 70/40 (2018.01) A61K 39/00 (2006.01) A61K 39/395 (2006.01) A61K 47/10 (2017.01) A61M 5/28 (2006.01) A61P 1/04 (2006.01) A61P 1/14 (2006.01) A61P 37/06 (2006.01) C07K 16/28 (2006.01) C12N 15/13 (2006.01)**

[25] EN

[54] **METHOD FOR PREPARING PREFILLED SYRINGE FORMULATION**

[54] **PROCEDE DE PREPARATION D'UNE FORMULATION DE SERINGUE PRE-REMPLE**

[72] ARAI, KENGO, JP  
[72] HIRAYAMA, KAZUNORI, JP  
[72] EGAMI, KIICHI, JP  
[72] FUKUDA, MASAKAZU, JP  
[71] CHUGAI SEIYAKU KABUSHIKI KAISHA, JP

[85] 2024-04-04  
[86] 2022-10-06 (PCT/JP2022/037469)  
[87] (WO2023/058723)  
[30] JP (2021-166336) 2021-10-08  
[30] JP (2022-042112) 2022-03-17

[21] **3,233,926**  
[13] A1

[51] **Int.Cl. A61K 39/00 (2006.01) G16H 50/80 (2018.01) A61K 39/12 (2006.01) A61P 31/16 (2006.01)**

[25] EN

[54] **MULTIVALENT INFLUENZA VACCINES**

[54] **VACCINS MULTIVALENTS CONTRE LA GRIPPE**

[72] ALEFANTIS, TIMOTHY, US  
[72] BARRO, MARIO, US  
[72] BYERS, ANTHONY, US  
[72] DAVIDSON, PHILIP, US  
[72] GIEL-MOLONEY, MARYANN, US  
[72] GILBERT, PHILIPPE-ALEXANDRE, US

[72] KLEANTHOUS, HAROLD, US  
[72] NAIK, ARMAGHAN, US  
[72] PUGACHEV, KONSTANTIN, US  
[72] SRIDHAR, SARANYA, US  
[72] WARREN, WILLIAM, US  
[72] ZELDOVICH, KONSTANTIN, US  
[71] SANOFI PASTEUR INC., US

[85] 2024-04-04  
[86] 2022-10-07 (PCT/US2022/045992)  
[87] (WO2023/059857)  
[30] US (63/253,986) 2021-10-08  
[30] US (63/277,848) 2021-11-10

[21] **3,233,930**  
[13] A1

[51] **Int.Cl. C07D 317/48 (2006.01) C07D 209/04 (2006.01) A61K 31/36 (2006.01) A61P 25/24 (2006.01)**

[25] EN

[54] **MESEMBRINE DERIVATIVES**

[54] **DERIVES DE MESEMBRINE**

[72] KIRKLAND, JUSTIN, US  
[71] KIRKLAND, JUSTIN, US

[85] 2024-04-04  
[86] 2022-10-18 (PCT/US2022/047047)  
[87] (WO2023/069455)  
[30] US (63/257,453) 2021-10-19

[21] **3,233,931**  
[13] A1

[51] **Int.Cl. G06N 3/04 (2023.01) G06N 5/04 (2023.01)**

[25] EN

[54] **POWER GRAPH CONVOLUTIONAL NETWORK FOR EXPLAINABLE MACHINE LEARNING**

[54] **RESEAU CONVOLUTIF DE GRAPHE DE PUISSANCE A DES FINS D'APPRENTISSAGE AUTOMATIQUE POUVANT ETRE EXPLIQUE**

[72] DU PREEZ, WARREN, US  
[72] HUANG, BOWEN, US  
[71] EQUIFAX INC., US

[85] 2024-04-04  
[86] 2021-10-07 (PCT/US2021/071761)  
[87] (WO2023/059356)

[21] **3,233,932**  
[13] A1

[51] **Int.Cl. G01N 21/47 (2006.01) C12M 1/34 (2006.01)**

[25] EN

[54] **METHODS FOR DETECTING MICROORGANISMS**

[54] **PROCEDE DE DETECTION DE MICRO-ORGANISMES**

[72] DUKAN, SAM, FR  
[72] DUMONT, AUDREY, FR  
[72] GRAC, EDITH, FR  
[72] MULLER, ALEXANDRE, FR  
[71] DIAMIDEX, FR

[85] 2024-04-04  
[86] 2022-10-17 (PCT/EP2022/078875)  
[87] (WO2023/062246)  
[30] EP (21306445.4) 2021-10-15

[21] **3,233,934**  
[13] A1

[51] **Int.Cl. G06N 3/02 (2006.01) G06N 20/00 (2019.01) G06N 3/084 (2023.01) G06N 3/088 (2023.01) G06N 5/022 (2023.01)**

[25] EN

[54] **DATA COMPRESSION TECHNIQUES FOR MACHINE LEARNING MODELS**

[54] **TECHNIQUES DE COMPRESSION DE DONNEES POUR MODELES D'APPRENTISSAGE AUTOMATIQUE**

[72] GUO, BO, US  
[72] BONDUGULA, RAJKUMAR, US  
[71] EQUIFAX INC., US

[85] 2024-04-04  
[86] 2022-10-06 (PCT/US2022/077637)  
[87] (WO2023/060150)  
[30] US (17/450,169) 2021-10-07

[21] **3,233,935**  
[13] A1

[51] **Int.Cl. A61K 35/30 (2015.01) C12N 5/079 (2010.01) A61P 25/28 (2006.01)**

[25] EN

[54] **METHOD FOR REJUVENATING GLIAL PROGENITOR CELLS AND REJUVENATED GLIAL PROGENITOR CELLS PER SE**

[54] **METHODE DE RAJEUNISSEMENT DES CELLULES PROGENITRICES GLIALES ET CELLULES PROGENITRICES GLIALES RAJEUNIES EN TANT QUE TELLES**

[72] GOLDMAN, STEVEN A., US  
[72] MARIANI, JOHN, US  
[72] HUYNH, NGUYEN P.T., US  
[71] UNIVERSITY OF ROCHESTER, US

[85] 2024-04-04  
[86] 2022-10-16 (PCT/US2022/078182)  
[87] (WO2023/069882)  
[30] US (63/257,853) 2021-10-20

## PCT Applications Entering the National Phase

[21] <b>3,233,938</b> [13] A1	[21] <b>3,233,941</b> [13] A1	[21] <b>3,233,947</b> [13] A1
[51] <b>Int.Cl. A01N 63/30 (2020.01) A01N 63/22 (2020.01)</b> [25] FR [54] <b>AGRICULTURAL INPUT AND ASSOCIATED METHODS FOR PROTECTING AND FOR STIMULATING THE GROWTH OF A PLANT</b> [54] <b>INTRANT AGRICOLE ET PROCEDES DE PROTECTION ET DE STIMULATION DE LA CROISSANCE D'UNE PLANTE ASSOCIES</b> [72] PICAUD, THIERRY, BE [71] MEDINBIO, BE [85] 2024-04-04 [86] 2022-10-05 (PCT/EP2022/077747) [87] (WO2023/057533) [30] FR (FR2110547) 2021-10-05	[51] <b>Int.Cl. B01J 13/18 (2006.01) A23P 10/30 (2016.01) A01N 25/28 (2006.01) C09B 67/02 (2006.01)</b> [25] EN [54] <b>MICROENCAPSULATION</b> [54] <b>MICRO-ENCAPSULATION</b> [72] TAYLOR, PHILIP, GB [72] LINDSAY, CHRISTOPHER IAN, GB [71] SYNGENTA CROP PROTECTION AG, CH [85] 2024-04-04 [86] 2022-10-10 (PCT/EP2022/078027) [87] (WO2023/061901) [30] GB (2114759.0) 2021-10-15	[51] <b>Int.Cl. H04S 7/00 (2006.01) H04S 5/00 (2006.01)</b> [25] EN [54] <b>SPATIAL RENDERING OF AUDIO ELEMENTS HAVING AN EXTENT</b> [54] <b>RENDU SPATIAL D'ELEMENTS AUDIO AYANT UNE ETENDUE</b> [72] MORADI ASHOUR, CHAMRAN, SE [72] FALK, TOMMY, SE [72] DE BRUIJN, WERNER, SE [71] TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE [85] 2024-04-04 [86] 2022-10-11 (PCT/EP2022/078174) [87] (WO2023/061972) [30] US (63/254,318) 2021-10-11
[21] <b>3,233,940</b> [13] A1	[21] <b>3,233,943</b> [13] A1	[21] <b>3,233,948</b> [13] A1
[51] <b>Int.Cl. C12P 5/02 (2006.01) C12N 1/30 (2006.01)</b> [25] EN [54] <b>INTEGRATED SYSTEMS AND METHODS FOR COMBINING METHANOTROPHIC BACTERIAL BIOMASS PRODUCTION AND METHANATION PROCESS</b> [54] <b>SYSTEMES ET PROCEDES INTEGRES DE COMBINAISON DE PRODUCTION DE BIOMASSE BACTERIENNE METHANOTROPHE ET DE PROCESSUS DE METHANATION</b> [72] SHAW, ALAN, US [72] GIVER, LORRAINE JOAN, US [71] CALYSTA, INC., US [85] 2024-04-04 [86] 2022-12-05 (PCT/US2022/080940) [87] (WO2023/107901) [30] US (63/286,429) 2021-12-06	[51] <b>Int.Cl. A23C 9/00 (2006.01) C12N 5/071 (2010.01) A23L 33/19 (2016.01) A23C 9/20 (2006.01)</b> [25] EN [54] <b>METHOD FOR PRODUCING MILK LIKE PRODUCTS</b> [54] <b>PROCEDE DE PRODUCTION DE PRODUITS DE TYPE LAIT</b> [72] HALLER, CORINNE, FR [72] CHAMBRIN, BRICE, CH [72] BIANCHI, ARIANNA, CH [72] MASHINCHIAN, OMID, CH [72] KRAUS, MARINE, CH [72] DESTAILLATS, FREDERIC, CH [72] YART, LUCILE, CH [71] SOCIETE DES PRODUITS NESTLE S.A., CH [85] 2024-04-04 [86] 2022-10-27 (PCT/EP2022/080115) [87] (WO2023/073119) [30] EP (21205094.2) 2021-10-27	[51] <b>Int.Cl. A23L 19/00 (2016.01) A23P 30/32 (2016.01) A23L 3/54 (2006.01)</b> [25] EN [54] <b>CRISPY BANANA SNACK PRODUCTS</b> [54] <b>PRODUITS DE GRIGNOTAGE CROUSTILLANTS A LA BANANE</b> [72] ZHANG, GUOPENG, CA [72] SANDOVAL, ERIKA, CA [72] AHMAD, SHAFIQUE, CA [72] KNIGHTS, BRADEN, CA [71] ENWAVE CORPORATION, CA [85] 2024-04-04 [86] 2022-01-19 (PCT/CA2022/050076) [87] (WO2023/137538)
[21] <b>3,233,945</b> [13] A1	[21] <b>3,233,945</b> [13] A1	
	[51] <b>Int.Cl. A61F 6/14 (2006.01) A61F 6/06 (2006.01) A61F 6/18 (2006.01)</b> [25] EN [54] <b>INTRAUTERINE CONTRACEPTIVE DEVICE</b> [54] <b>DISPOSITIF CONTRACEPTIF INTRA-UTERIN</b> [72] KATZ, BOB H., US [72] SCHREIFELS, MARY JO, US [72] PETERS, KEVIN, US [71] SEBELA VLC LIMITED, BM [85] 2024-04-04 [86] 2022-09-12 (PCT/US2022/043204) [87] (WO2023/039241) [30] US (63/242,811) 2021-09-10	

## Demandes PCT entrant en phase nationale

---

[21] **3,233,950**  
[13] A1

[51] **Int.Cl. C01B 32/05 (2017.01) C01B 32/956 (2017.01) C01B 3/24 (2006.01) H05H 1/48 (2006.01)**

[25] EN

[54] **SYSTEMS AND METHODS FOR ELECTRIC PROCESSING**

[54] **SYSTEMES ET PROCEDES DE TRAITEMENT ELECTRIQUE**

[72] LEIS, MATHEW, US

[72] CARDINAL, CHRISTOPHER J.-P., US

[72] DAMES, ENOCH, US

[72] DASAPPA, SHRUTHI, US

[72] HOERMANN, ALEXANDER, US

[71] MONOLITH MATERIALS, INC., US

[85] 2024-04-04

[86] 2022-09-30 (PCT/US2022/045451)

[87] (WO2023/059520)

[30] US (63/253,996) 2021-10-08

[30] US (63/298,912) 2022-01-12

[30] US (63/350,801) 2022-06-09

[30] US (63/375,024) 2022-09-08

---

[21] **3,233,955**  
[13] A1

[51] **Int.Cl. C08G 63/553 (2006.01) C08G 81/02 (2006.01) C09D 125/14 (2006.01)**

[25] EN

[54] **COATING COMPOSITION**

[54] **COMPOSITION DE REVETEMENT**

[72] FEOLA, ROLAND, AT

[72] ETZ, OLIVER, DE

[72] MAROH, BORIS, SI

[71] ALLNEX AUSTRIA GMBH, AT

[85] 2024-04-04

[86] 2022-12-15 (PCT/EP2022/086166)

[87] (WO2023/111186)

[30] EP (21215200.3) 2021-12-16

---

[21] **3,233,957**  
[13] A1

[51] **Int.Cl. A61K 51/04 (2006.01) C07B 59/00 (2006.01) C07F 5/00 (2006.01)**

[25] EN

[54] **METHOD FOR THE PREPARATION OF A COMPOSITION COMPRISING DISSOLVED [18F]FLUORIDE AND COMPOSITION OBTAINABLE BY THE METHOD**

[54] **PROCEDE DE PREPARATION D'UNE COMPOSITION COMPRENANT DU FLUORURE [18F] DISSOUS ET COMPOSITION POUVANT ETRE OBTENUE AU MOYEN DU PROCEDE**

[72] DI CARLO, DANIEL, DE

[72] WESTER, HANS-JURGEN, DE

[71] TECHNISCHE UNIVERSITAT MUNCHEN, DE

[85] 2024-04-04

[86] 2022-10-31 (PCT/EP2022/080357)

[87] (WO2023/088671)

[30] EP (21208421.4) 2021-11-16

---

[21] **3,233,963**  
[13] A1

[51] **Int.Cl. B01D 11/02 (2006.01) C11B 1/10 (2006.01)**

[25] EN

[54] **METHOD AND DEVICE FOR EXTRACTION**

[54] **PROCEDE ET DISPOSITIF D'EXTRACTION**

[72] VOLTZER, MORITZ, DE

[71] HARBURG-FREUDENBERGER MASCHINENBAU GMBH, DE

[85] 2024-04-04

[86] 2022-08-17 (PCT/DE2022/100610)

[87] (WO2023/078491)

[30] DE (10 2021 128 991.2) 2021-11-08

# Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

[21] **3,232,131**  
[13] A1

[51] **Int.Cl. D21C 3/06 (2006.01) D21C 3/16 (2006.01) D21C 3/18 (2006.01)**  
[25] EN  
[54] **TEMPERATURE-CONTROLLED DELIGNIFICATION OF BIOMASS**  
[54] **DELIGNIFICATION DE BIOMASSE A TEMPERATURE CONTROLEE**  
[72] WEISSENBERGER, MARKUS, CA  
[72] YOUSSEF, EMHEMMED, CA  
[72] PAGELS, MARKUS, CA  
[71] SIXRING INC., CA  
[22] 2022-06-16  
[41] 2022-12-18  
[62] 3,162,990  
[30] CA (3,122,786) 2021-06-18

[21] **3,232,630**  
[13] A1

[25] EN  
[54] **METHODS AND MATERIALS FOR BIOSYNTHESIS OF MOGROSIDE COMPOUNDS**  
[54] **PROCEDES ET MATIERES POUR LA BIOSYNTHESE DE COMPOSES MOGROSIDES**  
[72] HOUGHTON-LARSEN, JENS, DK  
[72] KRZYSTANEK, KATARZYNA, CH  
[72] SEMMLER, ANGELIKA, DK  
[72] HANSEN, IVER KLAVS RIISHEDE, DK  
[72] DAMKIAER, SOREN, CH  
[72] LIU, GARY, CH  
[72] LIU, YAOQUAN, US  
[72] HANSEN, JORGEN, DK  
[72] KUMAR, SATHISH, IN  
[72] MURALI, MUTHUSWAMY PANCHAPAGESA, IN  
[72] RASMUSSEN, NINA NICOLINE, DK  
[71] EVOLVA SA, XX  
[22] 2015-09-30  
[41] 2016-04-07  
[62] 2,963,300  
[30] US (14/504,109) 2014-10-01  
[30] US (62/059,136) 2014-10-02  
[30] US (62/087,726) 2014-12-04  
[30] US (62/090,836) 2014-12-11  
[30] US (62/091,895) 2014-12-15  
[30] US (62/199,115) 2015-07-30

[21] **3,233,345**  
[13] A1

[51] **Int.Cl. A61K 38/46 (2006.01) A61K 47/64 (2017.01) A61P 25/00 (2006.01)**  
[25] EN  
[54] **COMPOSITIONS AND METHODS FOR INHIBITING THE ACTIVITY OF LAR FAMILY PHOSPHATASES**  
[54] **COMPOSITIONS POUR LE TRAITEMENT DES BLESSURES NEURALES PAR L'INHIBITION DE L'ACTIVITE DES PHOSPHATASES DE LA FAMILLE LAR**  
[72] LANG, BRADLEY T., US  
[72] CREGG, JARED M., US  
[72] SILVER, JERRY, US  
[72] WANG, YI-LAN, US  
[71] CASE WESTERN RESERVE UNIVERSITY, US  
[22] 2013-04-09  
[41] 2013-10-17  
[62] 2,870,155  
[30] US (61/621,623) 2012-04-09

[21] **3,233,437**  
[13] A1

[51] **Int.Cl. C08B 37/16 (2006.01) C08J 3/00 (2006.01)**  
[25] EN  
[54] **PROCESS FOR PREPARING SUGAMMADEX**  
[54] **PROCEDE DE PREPARATION DE SUGAMMADEX**  
[72] LAMBERTO, DAVID J., US  
[72] AVALLE, PAOLO, CH  
[72] CODAN, LORENZO, CH  
[72] LARPENT, PATRICK, CH  
[72] SCHOELL, JOCHEN, CH  
[72] NEUHAUS, JEFFREY S., US  
[71] MERCK SHARP & DOHME LLC, US  
[71] WERTHENSTEIN BIOPHARMA GMBH, CH  
[22] 2021-09-08  
[41] 2022-03-17  
[62] 3,192,113  
[30] US (63/076,133) 2020-09-09

[21] **3,233,462**  
[13] A1

[25] EN  
[54] **FLUID CARTRIDGE FOR A PLURAL COMPONENT SPRAYER**  
[54] **CARTOUCHE DE FLUIDE POUR PULVERISATEUR DE PLUSIEURS COMPOSANTS**  
[72] ROSS, DANIEL P., US  
[72] TIX, JOSEPH E., US  
[72] STEWART, SAMUEL R., US  
[72] WEINBERGER, MARK T., US  
[72] PELLIN, CHRISTOPHER J., US  
[72] VELGERSDYK, JEFFREY N., US  
[72] BOSAK, JACK A., US  
[72] WHITEOAK, JACOB R., US  
[71] GRACO MINNESOTA INC., US  
[22] 2019-10-25  
[41] 2020-04-30  
[62] 3,111,295  
[30] US (62/751,148) 2018-10-26  
[30] US (62/800,659) 2019-02-04

[21] **3,233,463**  
[13] A1

[25] EN  
[54] **PULSE-BASED BREAD CRUMB, COATING AND PRE-DUST ANALOG PROCESS FOR MANUFACTURING THE SAME**  
[54] **MIETTES DE PAIN, ENROBAGES, PATES D'ADHERENCE ET PROCEDE ANALOGIQUE POUR LEUR FABRICATION**  
[72] TULBEK, MEHMET, CA  
[72] VITALE, DAVIDE, CA  
[72] KNUDSON, LES, CA  
[72] BARTSCH, ERIC, CA  
[71] AGT FOOD AND INGREDIENTS INC., CA  
[22] 2019-07-12  
[41] 2020-01-13  
[62] 3,049,198  
[30] US (62/697,838) 2018-07-13



**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

[21] **3,233,584**  
[13] A1

[51] **Int.Cl. C07K 1/16 (2006.01) A61K 39/395 (2006.01) C07K 1/18 (2006.01) C07K 1/20 (2006.01) C07K 1/22 (2006.01) C07K 1/28 (2006.01) C07K 16/00 (2006.01)**

[25] EN

[54] **METHOD FOR PURIFYING ANTIBODY HAVING LOW ISOELECTRIC POINT**

[54] **PROCEDE DE PURIFICATION D'ANTICORPS A FAIBLE POINT ISOELECTRIQUE**

[72] UEDA, YASUFUMI, JP

[72] KOBAYASHI, SHOHEI, JP

[72] YANAGITA, SATOKO, JP

[72] KAWASE, TAKUO, JP

[72] FUKUNAGA, MASAHIRO, JP

[71] CHUGAI SEIYAKU KABUSHIKI KAISHA, JP

[22] 2014-12-26

[41] 2015-07-02

[62] 2,935,143

[30] JP (2013-271613) 2013-12-27

[21] **3,233,586**  
[13] A1

[25] EN

[54] **A MEMBRANE ASSEMBLY**

[54] **SYSTEME DE MEMBRANE**

[72] BROUNS, DERK SERVATIUS GERTRUDA, NL

[72] JANSSEN, PAUL, NL

[72] KAMALI, MOHAMMAD REZA, NL

[72] PETER, MARIA, NL

[72] VAN DER ZANDE, WILLEM JOAN, NL

[72] VAN ZWOL, PIETER-JAN, NL

[72] VLES, DAVID FERDINAND, NL

[72] VOORTHUIJZEN, WILLEM-PIETER, NL

[71] ASML NETHERLANDS B.V., NL

[22] 2016-12-02

[41] 2017-06-22

[62] 3,008,050

[30] EP (15199845.7) 2015-12-14

[30] EP (16157967.7) 2016-03-01

[30] EP (16163962.0) 2016-04-06

[21] **3,233,599**  
[13] A1

[25] EN

[54] **NUCLEAR DISMANTLING WITH HAPTIC AND NON-HAPTIC FEEDBACK**

[54]

[72] MORIKAWA, DAVID TARO, CA

[72] JOHANNESSEN, MARK, CA

[71] ATS CORPORATION, CA

[22] 2021-03-30

[41] 2021-06-17

[62] 3,124,410

[30] US (63/002,920) 2020-03-31

[21] **3,233,605**  
[13] A1

[51] **Int.Cl. A61K 39/21 (2006.01) A61P 31/18 (2006.01) A61P 37/04 (2006.01)**

[25] EN

[54] **HIV-1 ENV DNA VACCINE PLUS PROTEIN BOOST**

[54] **VACCIN ADN ENV PLUS RAPPEL AVEC PROTEINE CONTRE LE VIH-1**

[72] WEINER, DAVID B., US

[72] MUTHUMANI, KARUPPIAH, US

[72] WISE, MEGAN, US

[72] YAN, JIAN, US

[72] BRODERICK, KATE, US

[71] THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, US

[71] INOVIO PHARMACEUTICALS, INC., US

[22] 2014-11-06

[41] 2015-05-21

[62] 2,930,695

[30] US (61/904,416) 2013-11-14

[21] **3,233,654**  
[13] A1

[25] EN

[54] **METHODS AND SYSTEMS FOR PRODUCING PRESSWARE**

[54] **METHODES ET SYSTEMES POUR PRODUIRE DES PRODUITS PRESSES**

[72] CHUN, VICTOR L., US

[72] BROWN, STEFFEN, US

[72] EICHBAUER, PHILIP, US

[71] BROWN LLC, US

[22] 2022-07-06

[41] 2023-01-07

[62] 3,166,854

[30] US (17/369,406) 2021-07-07

[30] US (17/369,365) 2021-07-07

[30] US (17/369,380) 2021-07-07

[30] US (17/369,348) 2021-07-07

[21] **3,233,655**  
[13] A1

[25] EN

[54] **METHODS AND SYSTEMS FOR PRODUCING PRESSWARE**

[54]

[72] CHUN, VICTOR L., US

[72] BROWN, STEFFEN, US

[72] EICHBAUER, PHILIP, US

[71] BROWN LLC, US

[22] 2022-07-06

[41] 2023-01-07

[62] 3,166,854

[30] US (17/369,406) 2021-07-07

[30] US (17/369,365) 2021-07-07

[30] US (17/369,380) 2021-07-07

[30] US (17/369,348) 2021-07-07

[21] **3,233,656**  
[13] A1

[51] **Int.Cl. A01N 43/50 (2006.01) A01K 1/015 (2006.01) A01N 25/02 (2006.01) A01N 25/10 (2006.01) A01N 25/22 (2006.01) A01N 43/64 (2006.01) A01N 43/68 (2006.01) A01P 1/00 (2006.01) C09D 5/14 (2006.01)**

[25] EN

[54] **ANTIMICROBIAL COMPOSITIONS AND METHODS WITH NOVEL POLYMERIC BINDING SYSTEM**

[54]

[72] CAO, ZHENG BING, US

[72] SUN, XINBO, US

[72] JOHNSTON, SIMON, US

[72] WILLIAMS, JEFFREY F., US

[71] CAO, ZHENG BING, US

[71] SUN, XINBO, US

[71] JOHNSTON, SIMON, US

[71] WILLIAMS, JEFFREY F., US

[22] 2015-08-27

[41] 2016-03-03

[62] 2,959,032

[30] US (62/043,151) 2014-08-28

## Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

---

[21] **3,233,660**  
[13] A1

[25] EN  
[54] **METHODS AND SYSTEMS FOR PRODUCING PRESSWARE**  
[54] **METHODES ET SYSTEMES POUR PRODUIRE DES PRODUITS PRESSES**  
[72] CHUN, VICTOR L., US  
[72] BROWN, STEFFEN, US  
[72] EICHBAUER, PHILIP, US  
[71] BROWN LLC, US  
[22] 2022-07-06  
[41] 2023-01-07  
[62] 3,166,854  
[30] US (17/369,406) 2021-07-07  
[30] US (17/369,365) 2021-07-07  
[30] US (17/369,380) 2021-07-07  
[30] US (17/369,348) 2021-07-07

---

[21] **3,233,699**  
[13] A1

[25] EN  
[54] **MEDICAL TREATMENT SYSTEMS, METHODS, AND APPARATUSES USING A PLURALITY OF FLUID LINES**  
[54]  
[72] KAROL, DANIEL SCOTT, US  
[72] NORRIS, MATTHEW ALLEN, US  
[72] SANTOS, TYLER CHRISTOPHER, US  
[72] TIPTON, CHRISTOPHER ALLEN, US  
[72] SULJEVIC, ADNAN, US  
[71] DEKA PRODUCTS LIMITED PARTNERSHIP, US  
[22] 2020-03-19  
[41] 2020-09-24  
[62] 3,123,018  
[30] US (62/820,551) 2019-03-19

---

[21] **3,233,743**  
[13] A1

[51] **Int.Cl. C12N 15/113 (2010.01) C12N 15/63 (2006.01) C12N 15/51 (2006.01)**  
[25] EN  
[54] **HEPATITIS B VIRUS (HBV) IRNA COMPOSITIONS AND METHODS OF USE THEREOF**  
[54] **COMPOSITIONS D'ARNI CONTRE LE VIRUS DE L'HEPATITE B (VHB) ET METHODES D'UTILISATION DE CELLES-CI**  
[72] HINKLE, GREGORY, US  
[72] SEPP-LORENZINO, LAURA, US  
[72] JADHAV, VASANT, US  
[72] MAIER, MARTIN, US  
[72] MILSTEIN, STUART, US  
[72] MANOHARAN, MUTHIAH, US  
[72] RAJEEV, KALLANTHOTTATHIL G., US  
[71] ALNYLAM PHARMACEUTICALS, INC., US  
[22] 2015-11-10  
[41] 2016-05-19  
[62] 2,967,408  
[30] US (62/077,672) 2014-11-10  
[30] US (62/077,799) 2014-11-10  
[30] US (62/137,464) 2015-03-24

---

[21] **3,233,749**  
[13] A1

[25] EN  
[54] **ELECTRIC DRIVEN HYDRAULIC FRACKING SYSTEM**  
[54] **SYSTEME DE FRACTURATION HYDRAULIQUE A COMMANDE ELECTRIQUE**  
[72] FISCHER, JOHN, US  
[72] CROSETTO, JOHN J., US  
[72] KUBRICHT, DAVID, US  
[72] CHEATHAM, RICHARD, US  
[72] POLLACK, JEFFREY, US  
[72] LAWMAN, CHAD, US  
[72] TODD, DAVID, US  
[72] NOLEN, TYLER, US  
[71] HALLIBURTON ENERGY SERVICES, INC., US  
[22] 2020-02-14  
[41] 2020-08-14  
[62] 3,072,669  
[30] US (62/805,521) 2019-02-14  
[30] US (16/790,392) 2020-02-13

---

[21] **3,233,828**  
[13] A1

[51] **Int.Cl. B66F 3/35 (2006.01) B66F 5/04 (2006.01) E04F 21/00 (2006.01)**  
[25] EN  
[54] **METHOD AND DEVICE FOR POSITIONING AN OBJECT RELATIVELY TO A SUPPORT BY INFLATABLE AIR CUSHION MEMBERS**  
[54] **METHODE ET DISPOSITIF POUR POSITIONNER UN OBJET RELATIVEMENT A UN SUPPORT AU MOYEN D'ELEMENTS DE COUSSINS GONFLABLES**  
[72] DISSING, CLAUS HORNSTRUP, DK  
[71] DISSING A/S, DK  
[22] 2017-11-10  
[41] 2018-05-17  
[62] 3,043,258  
[30] DK (PA 2016 70897) 2016-11-11  
[30] US (62/420,638) 2016-11-11

---

[21] **3,233,830**  
[13] A1

[25] EN  
[54] **PIPE ASSEMBLY INSULATION AND VAPOR BARRIER**  
[54] **ISOLATION ET BARRIERE PARE-VAPEUR POUR ENSEMBLE DE TUYAU**  
[72] WEBSTER, JEFFREY J., US  
[72] GREY, ADAM M., US  
[72] MARUNICH, JACOB M., US  
[72] KUEHNER, RYAN D., US  
[71] VICTAULIC COMPANY, US  
[22] 2020-02-20  
[41] 2020-09-03  
[62] 3,131,510  
[30] US (62/811,818) 2019-02-28

**Demandes canadiennes apparentées par division et  
demandes mises à la disponibilité du public non disponibles auparavant**

---

[21] **3,233,903**

[13] A1

[51] **Int.Cl. G01S 5/00 (2006.01) A63B  
71/06 (2006.01) G01S 5/06 (2006.01)  
H04B 17/29 (2015.01)**

[25] EN

[54] **OBJECT TRACKING SYSTEM  
OPTIMIZATION AND TOOLS**

[54] **OPTIMISATION D'UN SYSTEME  
DE POURSUITE D'OBJETS, ET  
OUTILS**

[72] DEANGELIS, DOUGLAS J., US

[72] EVANSEN, EDWARD G., US

[72] REILLY, GERARD M., US

[72] RHODES, BRIAN D., US

[72] GAUDREAU, JOSEPH M., US

[72] SIGEL, KIRK M., US

[72] FARKAS, ALEXANDER T., US

[71] ISOLYNX, LLC, US

[22] 2014-06-04

[41] 2014-12-11

[62] 3,192,820

[30] US (61/830,961) 2013-06-04

[30] US (61/900,786) 2013-11-06

[30] US (61/930,378) 2014-01-22

[30] US (61/945,559) 2014-02-27

[30] US (61/971,940) 2014-03-28

# Index of Canadian Patents Issued

April 16, 2024

## Index des brevets canadiens délivrés

16 avril 2024

10353744 CANADA LTD.	3,154,919	BAE SYSTEMS		BENIE, ASTRID	2,980,836
ABAD SANCHEZ, SERGI	3,202,627	INFORMATION AND		BERG, SEBASTIAN	3,014,714
ABE, ISSEI	3,124,081	ELECTRONIC SYSTEMS		BERGEK, MARTIN	2,948,674
ABENDROTH, THOMAS	3,125,938	INTEGRATION INC.	3,185,610	BERKES, EVA A.	2,991,990
ACASTI PHARMA U.S., INC.	3,011,015	BAE SYSTEMS PLC	2,983,372	BERNAT PEREZ, NEUS	3,202,627
ACIST MEDICAL SYSTEMS, INC.	3,005,702	BAIG, ARIF ALI	3,100,054	BERNHARD, JOSEF	3,068,729
ACKER, JARON M.	3,012,189	BAILEY, BRAD C.	2,980,697	BERNHARDT, ROGER D.	3,074,058
ACKER, JARON M.	3,138,339	BAILLY, YANNICK	3,009,443	BERNKLAU, NATHANIEL R.	2,940,948
ADACHI, KENJI	3,137,689	BAIRD, ROSLYN	3,064,573	BEUG-DEEB, MARIA U.D.	2,942,000
ADC SOLUTIONS AUTO, LLC	3,128,180	BALASUBRAMANIAM, MAHADEVAN	2,936,539	BEYER, MATTHIAS	3,160,941
AFTON CHEMICAL CORPORATION	3,184,305	BALL, DAVID JAMES	2,950,506	BICKEL, JON A.	3,048,480
AGOSTINELLI, GREGORY A.	3,218,837	BANERJIE, ASIS	3,036,493	BILIC, ZORAN	2,950,506
ALBERT, VICTOR V.	3,004,750	BANGALORE, VISH	2,978,091	BILODEAU, MICHAEL A.	3,001,114
ALBRECHT, KARL	2,963,749	BANK OF MONTREAL	3,114,541	BIMANAND, ALEXANDER	3,090,809
ALGUACIL PRIEGO, FRANCISCO JOSE	2,993,909	BANKS AND ACQUIRERS INTERNATIONAL HOLDING	2,947,920	BLACKBERRY LIMITED	2,936,539
ALLEN, SIAN VICTORIA	3,138,802	BANKS AND ACQUIRERS INTERNATIONAL HOLDING	2,988,357	BLACKBERRY LIMITED	2,958,371
ALTAN, NICOLA	3,057,732	BANNISTER, ROBIN MARK	2,994,899	BLEDSE, DAVID	2,995,395
ALTHUES, HOLGER	3,125,938	BARBERA, GUSTAVO	3,184,405	BLOCK, INC.	3,161,148
ANAND, FARMINDER SINGH	3,168,744	BARGUET, HENRI	3,104,564	BOEHM, FREDERICK T.	2,991,990
ANDERSON, SCOTT	3,116,039	BARNEFIHER, GERALD E.	3,138,091	BOFFA, ALEXANDER BOWMAN	3,068,667
ANTECIP BIOVENTURES II LLC	3,082,645	BARNHART, TYLER	3,118,874	BOHLI, RAMZI	3,032,098
APARICIO, MIKE	2,957,795	BARR, STUART JOHN	3,118,285	BOIS, JEAN-JACQUES	3,132,523
API INTELLECTUAL PROPERTY HOLDINGS, LLC	3,036,493	BASF AGRO B.V.	3,006,946	BOMLENY, DUANE M.	2,940,948
AQUA SOLUTION CO., LTD.	3,029,715	BASF SE	3,010,561	BOREALIS AG	3,214,308
ARELAC, INC.	3,168,044	BASTANI, ARASH	3,050,895	BORIS, THOMAS D.	3,172,059
ARESKOGH, DIMITRI	3,016,291	BATTELLE MEMORIAL INSTITUTE	2,963,749	BORNHARDT BRACHMANN, KLAUS ERWIN	3,070,249
ARORA, PANKAJ	3,023,518	BAUER HOCKEY LTD.	3,096,085	BORTOLOTTI, LUCA	3,006,149
ARTEMIE, EUGEN	3,137,605	BAUER, JOACHIM	3,101,011	BOSTON WINE DEVICES, LLC	3,134,421
ARZYZ, S.A. DE C.V.	2,993,909	BAUER, MIKAEL	2,980,836	BOUCHARD, FELIX-ANTOINE R.	2,933,858
ASAHI KASEI KABUSHIKI KAISHA	3,139,906	BAUMGARTE, JOSEPH W.	3,115,581	BRAHME, ROHINI	3,041,319
ASHBAUGH, RYAN BRIDWELL	3,129,529	BAUMGARTNER, DEAN JOSEPH	3,168,744	BRAMELD, KENNETH ALBERT	3,080,949
ASHBAUGH, RYAN BRIDWELL	3,151,080	BAXTER, SCOTT	3,115,581	BRANCH, JASON H.	3,185,610
ASHE, WESTLEY S.	3,121,661	BAZOBERRY, CARLOS FERNANDO	3,134,421	BRAUN, RICHARD	3,183,810
ASHMORE, CRAIG	2,983,372	BECK, DAVID C.	3,151,080	BRAUNGER, DIETER	3,200,118
ASSESSX TECHNOLOGY LTD.	3,018,094	BECKER, ARMIN	3,160,941	BREMSETH, SIGURN KJAER	3,154,322
ASTRAZENECA AB	3,005,516	BEDINGFIELD, STEPHEN	3,090,584	BREW, JOHN	2,994,899
AULTON NEW ENERGY AUTOMOTIVE TECHNOLOGY GROUP	3,087,315	BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.	3,128,424	BRIDGETT, PAUL A. V.	3,072,517
AUSTRALIAN MITIGATION ENGINEERING DEVELOPMENTS PTY LTD	3,224,834	BELANGER, MICHAEL J.	3,017,506	BRIER, ERIC	2,988,357
AZAR, ASHLEY	3,037,469	BELAYGUE, PHILIPPE	3,041,411	BRIERLEY, RICHARD T.	3,004,750
BABU, AMISH	3,161,148	BELDEN CANADA ULC	2,963,902	BRISTOL-MYERS SQUIBB COMPANY	2,937,739
BACHON, THOMAS	3,143,883	BELIN, PATRICK	3,009,443	BRITO DA COSTA, CLAUDIA	3,135,704
		BENDER, JOHAN	3,028,580	BROUWER, GUSTAAF FRANS	3,119,474
		BENDIX COMMERCIAL VEHICLE SYSTEMS, LLC	3,146,367	BROUWER, GUSTAAF FRANS	3,123,615
		BENEDIKT, ANNE	3,121,055	BROWN, ADAM	3,027,628
				BRUGGEMANN, MARIANNE	2,895,144
				BRUNNER, GEORG	3,121,661
				BSN-JOBST GMBH	3,101,011
				BUCHBURGER, ROBERT	3,204,334
				BUCK, DAVID A.	3,084,447
				BUCKLAND, JUSTIN RORKE	3,044,846

**Index des brevets canadiens délivrés  
16 avril 2024**

BUELOW, ROLAND	2,895,144	CHEN, WEI	3,127,254	DAVISON, NIGEL	3,087,158
BULLERJAHN, FRANK	3,154,322	CHEN, WEI-LIN	3,154,948	DAWSON, JIN	3,126,466
BULLING, KATHARINA	3,031,855	CHEVRON ORONITE		DAWSON, MATTHEW	3,126,466
BUTERNOWSKY, BARRY		COMPANY LLC	3,068,667	DAY, KRISTIN	3,115,581
DANIEL	3,171,421	CHEVRON ORONITE		DE GAYE, DANIEL JAMES	3,154,778
BYTEDANCE INC.	3,128,424	TECHNOLOGY B.V.	3,068,667	DE GRAAF, GERBRAND	
C2CNT LLC	3,052,483	CHEVRON U.S.A. INC.	3,171,424	KRISTIAAN	3,119,474
C2CNT LLC	3,198,973	CHINEN, TORU	2,989,099	DE GRAAF, WILLEM A.	3,161,751
C2CNT LLC	3,198,982	CHIOME BIOSCIENCE INC.	3,027,417	DE GRAAFF, GERBRAND	
CABEZAS, SARA	2,940,948	CHOI, BYEONGDOO	3,137,426	KRISTIAAN	3,123,615
CAI, DENGKE	3,058,685	CHOI, HO SOP	3,138,790	DE LUCCA, INDAWATI	2,937,739
CALDER, ELLISA KATHLEEN	3,138,802	CHOU, HUNG-LIANG	3,168,744	DE MONTENEGRO BAPTISTA	
CAMERON, PETER JOHN		CHRISTENSEN, LARS L. H.	2,980,836	MALHEIRO DE	
KENNETH	2,986,770	CHU MONTPPELLIER	3,020,221	MAGALHAES, FERNAO	
CAMPBELL, CURTIS BAY	3,068,667	CHUBERRE, NICOLAS	2,952,132	DOMINGOS	3,135,704
CANABES GUERRA,		CHUGAI SEIYAKU		DEANGELIS, RICHARD	3,161,751
CRISTIAN ALEJANDRO	3,001,926	KABUSHIKI KAISHA	3,002,422	DECHRA VETERINARY	
CANCER RESEARCH		CISCO TECHNOLOGY, INC.	3,111,399	PRODUCTS, LLC	2,988,575
TECHNOLOGY LIMITED	3,005,516	CLARET, CLAUDE	2,985,013	DEEB, THOMAS M.	2,942,000
CAO, WEI	3,135,906	CLARET, MARTINE	2,985,013	DEERE & COMPANY	2,940,948
CAO, YONGZHAO	3,072,682	CLARKE, DANIEL JOHN	3,109,306	DEES, H. CRAIG	2,828,940
CAPARROS-WANDERLEY,		CLAUSSEN, ED	3,160,612	DEGRYSE, JOZEFIEEN	3,064,573
WILSON	2,994,899	COLGROVE, JAMES R.	3,145,292	DEHENNIS, ANDREW	2,935,565
CAPSUGEL BELGIUM NV	3,098,306	COLOGNI, ALBERTO	3,006,149	DEHENNIS, ANDREW	2,977,758
CARBERRY, JONATHAN		COMMISSARIAT A L'ENERGIE		DEKA PRODUCTS LIMITED	
MICHAEL	2,983,372	ATOMIQUE ET AUX		PARTNERSHIP	3,208,266
CARBOFEX OY	3,135,561	ENERGIES		DELAUTRE, JOEL	3,041,411
CAREFUSION 303, INC.	3,138,091	ALTERNATIVES	2,950,847	DELTA FAUCET COMPANY	3,072,517
CAREFUSION CORPORATION	3,081,434	COMPAGNIE GENERALE DES		DELTA FAUCET COMPANY	3,100,132
CARGILL, INCORPORATED	2,983,888	ETABLISSEMENTS		DELTA FAUCET COMPANY	3,102,472
CARL FREUDENBERG KG	3,144,815	MICHELIN	3,104,564	DEMPSEY, GAIL L.	2,988,575
CARL ZEISS VISION		CONMED CORPORATION	3,137,113	DEMPSTER, IAN	3,011,094
INTERNATIONAL GMBH	3,200,118	CONSEJO SUPERIOR DE		DENNIS, NATHANAEAL W.	3,072,517
CARON, PIERRE	3,041,411	INVESTIGACIONES		DERECICHEI, ARON	2,983,372
CASARAMONA CODINACH,		CIENTIFICAS (CSIC)	2,993,909	DERKACZ, PATRICK R.	3,171,421
JORDI	3,202,627	CONSTANCE THERAPEUTICS,		DERRICK CORPORATION	3,145,292
CASTINEIRA BUSQUETS,		INC.	2,974,292	DESJARDINS, MICHEL	2,976,984
LAURA	3,202,627	COOK, AUSTIN JAMES	2,983,372	DIEHL AEROSPACE GMBH	2,967,421
CAVION, INC.	3,002,831	COOPER, ALAN	2,963,749	DIENEMANN, WOLFGANG	3,154,322
CEASS, RICHARD WALLACE	3,067,136	COOPER, RUSSELL EVAN	3,171,424	DIGIANANTONIO, LUCAS	3,132,523
CENTRE NATIONAL DE LA		CORBIN III, PHILIP	3,183,810	DIGICOURSE LLC	3,001,058
RECHERCHE		CORNILLE, RICHARD	3,104,564	DILGER, ANDREW K.	2,937,739
SCIENTIFIQUE (CNRS)	2,950,847	CORTE, JAMES R.	2,937,739	DIRECT AIR CAPTURE, LLC	3,216,992
CENTRE NATIONAL DE LA		COSMED PHARMACEUTICAL		DISSING A/S	3,156,914
RECHERCHE		CO., LTD.	3,013,704	DISSING, CLAUS HORNSTRUP	3,156,914
SCIENTIFIQUE (CNRS)	3,020,221	COTE, PAUL F.	2,961,411	DMOCHOWSKI, JACEK PIOTR	2,886,597
CENTRIPETAL LIMITED	3,171,299	COTSWORKS, INC.	3,137,605	DOAN, THI HAI DUONG	3,112,164
CEZANNE, JUERGEN	3,017,385	COURBET, ALEXIS	3,020,221	DOGURGA, KEREM	3,138,802
CFS CONCRETE FORMING		COWIE, JOCELYN WALKER	3,018,094	DOINEAU, RAPHAEL	
SYSTEMS INC.	3,084,840	COWLEY, RICHARD	3,064,680	CLEMENT LI-MING	3,050,598
CHABOT, BRUNO	2,963,902	CRANE SECURITY		DOLAN, LAWRENCE	
CHANTHALANGSY, ERIC	3,017,553	TECHNOLOGIES, INC.	2,961,411	EDWARD	3,103,450
CHARLAS, MATHIEU JULIEN	3,051,883	CROLL, BRIAN PATRICK	3,100,054	DOLL, FRANZ	3,052,334
CHARLES, MARK DAVID	3,005,516	CSPC ZHONGQI		DONG, CHANGXIN	3,135,921
CHASSOT, PIERRE-YVES	3,005,702	PHARMACEUTICAL		DONHAM, LEAH	3,184,305
CHATARD-BAPTISTE,		TECHNOLOGY		DOOSAN BOBCAT NORTH	
CAROLINE	2,985,013	(SHIJIAZHANG) CO.,		AMERICA, INC.	3,060,557
CHEN, BAO	3,132,174	LTD.	3,131,792	DORFLER, SUSANNE	3,125,938
CHEN, CHUN-CHIH	2,937,934	D3 BIO (WUXI) CO., LTD.	3,160,899	DOROGUSKER, JESSE	3,161,148
CHEN, FANGYUAN	3,154,919	DA SILVA, RODRIGO COQUI	3,064,573	DOW GLOBAL	
CHEN, HANDE	3,132,174	DAGDELEN UYSAL, DILEK	3,122,237	TECHNOLOGIES LLC	2,980,697
CHEN, HENGSHENG	3,094,842	DAGDELEN UYSAL, DILEK	3,122,244	DREXEL UNIVERSITY	3,037,469
CHEN, PENG	3,011,094	DALE, JASON	2,983,251	DRURY, CHRISTOPHER JOHN	3,090,510
CHEN, SHUHUI	3,160,899	DANIEL, MICHAEL S.	2,988,575	DUBREUIL, JEAN	2,976,984

## Index of Canadian Patents Issued April 16, 2024

DUNHAM, STEVEN A.	3,093,772	FITIPALDI, MAURO	3,148,594	GILLIAM, RYAN J.	3,168,044
DUNKLE, WILLIAM	3,093,772	FLATT, STEVEN J.	2,933,858	GIRVIN, STEVEN M.	3,004,750
DUPLAN, HELENE	2,996,085	FLIGHT PATH IP LIMITED	2,983,251	GLASS, GARETH	3,087,158
EADLSON, NAHSHON	3,009,924	FLOOD, MITCH	3,118,874	GLOZSHTEN, URY	2,845,212
EAGLE, CRAIG J.	2,828,940	FLUX DRIVE LLC	3,183,810	GOCKEL, BIRGIT	3,010,561
EASYL	3,029,073	FOGEL, CHRISTOPHER		GOETZ, ROLAND	3,006,946
ECOLAB USA INC.	3,058,188	MICHAEL	2,936,539	GOETZ, ROLAND	3,010,561
ECOLAB USA INC.	3,147,908	FONTEYN, DIRK	2,983,888	GOKHALE, UMESH	3,041,319
EDDY, PATRICK E.	3,014,896	FRANKENBERG, BERNHARD	3,101,011	GOLDSTEIN, DAVID	
EDWARDS, TROY	3,161,148	FRANSSON, JONAS	3,082,264	MICHAEL	3,080,949
EDZEN, NILS JOHAN	3,138,802	FRAUNHOFER-		GOLITSCHKE EDLER VON	
EHRESMANN, MANFRED	3,006,946	GESELLSCHAFT ZUR		ELBWART, ALEXANDER	3,033,455
EICHELBERGER, CLEATIS A.	3,172,059	FOERDERUNG DER		GOMEZ, MARIO	3,121,055
EICKHOFF, BRIAN C.	3,115,581	ANGEWANDTEN		GONG, QIU-PING	3,154,948
EILERS, DEREK	3,137,113	FORSCHUNG E.V.	3,068,729	GONZALEZ GRACIA, JOSE	
EKLUND, PETER	2,948,674	FRAUNHOFER-		RAMON	2,993,909
EKSTROM, JESPER	3,016,291	GESELLSCHAFT ZUR		GONZALEZ VOGEL, ALVARO	
ELISSEEFF, JENNIFER H.	2,770,490	FOERDERUNG DER		MAURICIO	3,070,249
ELLIS, BRIAN	3,049,076	ANGEWANDTEN		GORDON, GREGORY	
ELLOUZE, SAMI	3,050,598	FORSCHUNG E.V.	3,148,999	CHARLES	3,100,054
ELMER, JOSEPH A.	3,072,517	FRED HUTCHINSON CANCER		GOTO, KUNIO	3,064,359
EMPL, GUNTER	3,011,064	CENTER	2,937,800	GOTO, TAKAHUMI	3,029,715
ENDURO COMPOSITES, INC.	3,184,405	FREEDOM HEALTH, LLC	3,116,039	GPCP IP HOLDINGS LLC	3,168,744
ENTRUST, INC.	2,992,736	FREEZIO AG	3,011,064	GRAHAM, NEIL	2,914,203
ERDMANN, MATTHEW	2,927,785	FRONCZKIEWICZ, PETER J	3,160,941	GRANGER, SCOTT	3,197,012
ERMIDORO, MICHELE	3,006,149	FRYE, JOHN	2,963,749	GRAY, PHILIP	2,991,682
ERPELDING, BEN	3,011,094	FT HOLDINGS INC.	3,109,306	GRIFFIN, DAVID	2,995,395
ERRA SERRABASA, JOSEP M.	3,202,627	FU, JIAN	3,132,174	GROUPON, INC.	2,957,795
ESLAMI-NEJAD, PARHAM	3,050,895	FU, ZHIHAO	3,132,174	GU, ZHEN	3,016,313
ESSEGHIR, MOHAMED	2,980,697	FUCHIDA, HIROKAZU	3,130,049	GUANGDONG MEIZHI	
EVOLUTION ENGINEERING		FUCHS, GUILLAUME	3,148,999	COMPRESSOR CO., LTD.	3,137,384
INC.	3,171,421	FUJIAN SANAN SINO-		GUERCHE, DIDIER MAURICE	
EVONIK OPERATIONS GMBH	3,121,055	SCIENCE		MARCEAU	3,032,098
EWALD DORKEN AG	3,143,883	PHOTOBIOTECH CO.,		GUGGER, ERIC T.	3,075,634
EWANCHUK, ANDREW JOHN	2,936,539	LTD.	3,094,842	GUILLOT, CLEMENT B., III	3,001,058
EWING, WILLIAM R.	2,937,739	FUJII HIROYASU	3,131,675	GUL, OMER	3,147,908
EXTRAKT PROCESS		GAESSER, ROBERT	3,143,986	GUNTHER, HOPPE	3,089,532
SOLUTIONS LLC	3,028,141	GALLEY, GUIDO	3,013,696	GUO, JIANG	3,127,254
EXXONMOBIL TECHNOLOGY		GALLIS, KARL WILLIAM	3,103,450	GUO, QUN	3,023,518
AND ENGINEERING		GALUSKA, PETE	3,075,634	GUREWICH, VICTOR	2,966,332
COMPANY	3,009,745	GAMBARINI, ERIK	3,032,903	GUTIERREZ MONTERO, ALBA	3,202,627
EZAKI, HIDEAKI	3,150,318	GANDHI, NAMITA	2,914,203	GVBB HOLDINGS S.A.R.L.	2,982,219
F. HOFFMANN-LA ROCHE AG	3,013,696	GAO, BIN	3,137,384	GW RESEARCH LIMITED	3,028,580
FALLIGANT, JOHN C.	3,138,339	GAO, BO	3,147,469	HAAS, ROBERT	2,962,798
FAN, MINJIE	3,154,919	GAO, CHUNXIAO	3,097,887	HAGAR, WILLIAM JACKSON	3,103,450
FAN, XIAOLIN	3,168,744	GAO, NAN	2,980,836	HAINAN UNICAN SCIENCE	
FANG, TIANAN	2,937,739	GAO, HONGWEI	3,093,906	AND TECHNOLOGY	
FARAJ, ZAKARIYA	2,952,132	GARDEZI, SYED ALI	3,068,117	INNOVATION INSTITUTE	
FARANDOS, NICHOLAS	3,126,466	GARVER, MICHAEL A.	3,120,781	CO. LTD.	3,132,174
FEE, GARRY C.	2,953,980	GAVINI, NAVEEN	3,000,966	HALL, JOHN	3,116,039
FEHRINGER, SEBASTIAN	2,967,421	GE-HITACHI NUCLEAR		HALLEN, RICHARD	2,963,749
FENG, MEIXIN	3,093,906	ENERGY AMERICAS LLC	3,139,442	HALLEY, JEROME	3,087,473
FERRIS, JEFFREY D.	3,100,132	GEBHARDT, JOACHIM	3,006,946	HALLIBURTON ENERGY	
FERRIS, JOSHUA I.	3,208,266	GENERAL ELECTRIC		SERVICES, INC.	3,129,529
FINLAY, MAURICE		TECHNOLOGY GMBH	3,021,420	HALLIBURTON ENERGY	
RAYMOND		GENERAL MILLS, INC.	3,001,114	SERVICES, INC.	3,151,080
VERSCHOYLE	3,005,516	GENERAL MILLS, INC.	3,075,634	HALLIBURTON ENERGY	
FINLEY, CONSTANCE	2,974,292	GENZ, JASON	3,141,228	SERVICES, INC.	3,169,181
FIORINI-PUYBARET,		GERAUD, REMI	2,947,920	HALLOUMI, SAMY	3,029,073
CHRISTEL	2,996,085	GEYERSBERGER, STEFAN	3,148,999	HAMBLETON, SCOTT	
FIRST QUALITY TISSUE, LLC	3,022,004	GIERKE, TIMOTHY DEE	3,106,017	LAWSON	2,884,611
FISCHER, DANIEL	3,011,064	GIGUERE, DANIEL	3,050,895	HAMILTON-REEVES, JILL	2,974,870
FISHER & PAYKEL		GILES, NICHOLAS	3,184,305	HAN, KUO C.	3,100,054
HEALTHCARE LIMITED	3,106,017	GILES, NORMAND	3,174,658	HANADA, KENICHI	2,967,778

**Index des brevets canadiens délivrés  
16 avril 2024**

HANDIQUE, KALYAN	3,017,050	HYDROCARBON		JOSHI, ROHIT	3,184,405
HANDYLAB, INC.	3,017,050	TECHNOLOGY &		JOULIA, PHILIPPE	2,996,085
HANNA, STEVEN NASHED	3,218,837	INNOVATION, LLC	3,025,419	JOUTSIMO, OLLI PEKKA	3,070,249
HARA, SHOKI	3,130,049	IBERT, MATHIAS	3,021,266	KABUSHIKI KAISHA KOBE	
HARADA, YOSHITERU	3,150,318	ICOMERA AB	2,948,674	SEIKO SHO (KOBE STEEL,	
HARMAN, ELIZABETH	2,938,052	IDE, MATTHEW S.	3,009,745	LTD.)	3,169,085
HARRIS, ROBERT	3,171,421	IDEACURIA INC.	3,218,837	KAILAY, NAVJOT	3,138,802
HARTEL, PAUL	3,125,938	IGAWA, TOMOYUKI	3,002,422	KAISER, UWE	3,143,883
HARTGERS, WALTER		INDUSTRY-ACADEMIC		KALHAN, AJAY	3,023,518
ALEXANDER	3,068,667	COOPERATION		KAMIYAMA, FUMIO	3,013,704
HARTMANN, GABRIEL	3,141,319	FOUNDATION		KANKE, TORU	3,027,417
HASHIMOTO, MASARU	3,008,223	GYEONGSANG		KARGL, DANIEL	3,143,883
HAUBNER, MICHAEL	3,014,334	NATIONAL UNIVERSITY	3,112,164	KARLSSON, MATS	2,948,674
HAYAKAWA, YASUHISA	3,067,960	INFIRST HEALTHCARE		KASKEL, STEFAN	3,125,938
HAYASHI, MASATO	3,150,318	LIMITED	2,994,899	KASUGA, HIDEFUMI	3,130,049
HE, JIANMIN	3,058,685	INOEX GMBH		KATADA, HITOSHI	3,002,422
HEARTLAND AG TECH, INC.	3,204,334	INNOVATIONEN UND		KATO, SHO	3,008,223
HEIDELBERG MATERIALS AG	3,154,322	AUSRUSTUNGEN FUR		KAVURU, VIMAL	3,011,015
HEILAND, MARC	3,144,815	DIE		KAWASAKI JUKOGYO	
HEITZMAN, NICK	3,115,581	EXTRUSIONSTECHNIK	3,111,034	KABUSHIKI KAISHA	3,150,318
HENDERSON, TODD	2,995,395	INRIA INSTITUT NATIONAL		KAYE, JAMES J.	3,096,852
HEPLER, DOUGLAS I.	2,988,575	DE RECHERCHE EN		KECK, MARK	3,029,834
HER MAJESTY THE QUEEN IN		INFORMATIQUE ET EN		KEELEN, MENGESHA	3,144,059
RIGHT OF CANADA, AS		AUTOMATIQUE	2,950,847	KELLY, SEAN J.	3,047,095
REPRESENTED BY THE		INSTITUTO POLITECNICO DE		KESSLER, CHRISTIAN	3,121,055
MINISTER OF NATURAL		WISEU	3,135,704	KHOLODENKO, EDWARD	2,845,212
RESOURCES	3,050,895	INTELLIGENT TEXTILES		KILCRAN, MICHAEL	3,014,896
HERB, KARL P.	3,185,610	LIMITED	3,000,639	KILFROST GROUP PLC	2,991,682
HERB, VINCENT MARC	3,032,098	INVESTIGACIONES		KILIAN, GERD	3,068,729
HERMEZ, LAITH ADEEB	3,106,017	FORESTALES BIOFOREST		KIM, BONG HUI	3,096,363
HERZOG RAILROAD		S.A.	3,070,249	KIM, DAVID	3,125,938
SERVICES, INC.	3,090,584	ISLAM, MUHAMMAD		KIM, GYU CHEOL	3,138,790
HERZOG, JACOB D.	3,090,584	NAZMUL	3,017,385	KIM, HYUN JEONG	3,112,164
HEYRMAN, RANDALL L.	3,096,852	ISTA INTERNATIONAL GMBH	3,057,732	KIM, JAE YEAN	3,112,164
HIFIBIO SAS	3,050,598	IWATA, AKIKO	2,937,800	KIM, JIHAЕ	3,112,164
HILL, JAYSON	2,937,331	IYENGAR, AJAY	3,041,319	KISHIWADA, JUN	3,124,081
HINO, TAKENORI	3,150,318	JACQUES-JAMIN, CARINE	2,996,085	KISLYUK, DMITRY	
HOENER, MARIUS	3,013,696	JAKES, BORIS	3,192,244	OLEGOVICH	3,000,966
HOLZBEIERLEIN, JEFFREY M.	2,974,870	JAKES, ZDENEK	3,192,244	KITAOKA, SHOUTA	3,013,704
HONG, KWANG WON	3,096,363	JAKLENEC, ANA	3,082,793	KJOLBY, CHRISTIAN	3,031,855
HOPKINS, BENJAMIN	3,115,581	JANG, HA KYUNG	3,096,363	KLAUBER, ERIC GEORGE	3,010,561
HORA DE CARVALHO, LUISA		JANSSEN BIOTECH, INC.	3,004,152	KLOSE, RALPH	3,111,034
MARIA	3,135,704	JANSSON, RICHARD	3,004,152	KNEISSL, JAKOB	3,068,729
HORI, YUJI	3,002,422	JAQUET, VIRGINIE	3,041,411	KNIGHT, JONATHON	3,117,414
HOSSEINI, SEYEDEH		JENTOFT, LEIF	3,029,834	KNOTZEL, JURGEN C. F.	2,980,836
MAHBOOBEH	3,068,667	JEONG, SE JEONG	3,112,164	KOBAYAKAWA, YU	3,130,049
HOWE, ROBERT	3,029,834	JFE STEEL CORPORATION	3,137,689	KOCH, JASON	3,154,778
HU, BINGSHAN	3,018,259	JIANG, CHUANGXIN	3,147,469	KOCHHAR, AJAY	3,096,116
HU, WEI	3,135,921	JIANG, JING	3,015,374	KONDRATIUK, DMITRY	3,162,200
HUANG, CHUNHUA	3,087,315	JIANG, LIANG	3,004,750	KONINKLIJKE DOUWE	
HUANG, HAI	3,097,887	JIANGXI YUHONGJIN		EGBERTS B.V.	3,119,474
HUANG, XIUCAI	3,132,174	MATERIAL		KONINKLIJKE DOUWE	
HUAWEI TECHNOLOGIES		TECHNOLOGY CO., LTD.	3,093,906	EGBERTS B.V.	3,123,615
CO., LTD.	2,977,742	JIN, YI	2,980,697	KONTOMARIS,	
HUAWEI TECHNOLOGIES		JING, YUSHI	3,000,966	KONSTANTINOS	3,103,285
CO., LTD.	3,072,682	JOHNSON, MICHAEL		KOPLIEN, JORDAN W.	3,096,852
HUAWEI TECHNOLOGIES		CHARLES	3,113,099	KORCZ, KRZYSZTOF	2,956,608
CO., LTD.	3,127,254	JOHNSON, SEAN	3,113,099	KORNAKER, JASON	3,115,581
HUBBARD, DAVID	2,963,902	JOHNSON, STEVEN	2,956,608	KOTTAYIL, S. GEORGE	3,011,015
HUBBELL INCORPORATED	2,956,608	JOHNSTON, TIMOTHY		KOTTLOWSKI, STEVEN J.	3,115,581
HUBBELL INCORPORATED	3,067,136	GEORGE	3,096,116	KODOUSSI, HIBA	2,947,920
HUNG, DER-KAI	3,090,510	JOIMAX GMBH	3,078,524	KRANKKALA, KEN	3,128,180
HURST, JON DAVID	3,084,447	JONES, STUART	3,116,495	KRAUSS-MAFFEI WEGMANN	
		JOSEPH, BABU	3,068,117	GMBH & CO. KG	3,014,334

**Index of Canadian Patents Issued  
April 16, 2024**

KRIVELES, ROMAS	3,109,306	LICHT, STUART	3,216,992	MARAZZATO, MICHELE	3,031,855
KRIVULIN, SEMION	3,084,840	LILGA, MICHAEL	2,963,749	MARELLI-BERG, FEDERICA	2,962,798
KRUGER, MARC	3,011,064	LILIENKAMP, THOMAS	3,014,714	MARIA BEUG-DEEB INC. DBA T&M ASSOCIATES	2,942,000
KUEHNLE, ANDREAS U.	3,146,367	LIN, CHUAN	3,058,685	MARICICH, YURI	3,002,831
KUHN, JOHN N.	3,068,117	LIN, HUIYUAN	3,132,174	MARSHALL, DANIEL T.	3,090,584
KUJIME, YASUNORI	3,150,318	LIN, SHIWEI	3,132,174	MARTENS, KOEN	3,090,011
KUMAR, AMRESH	3,011,015	LIN, ZHENGXI	3,132,174	MARTENS, ROBERT C.	3,115,581
KUMAR, ANJANI	2,936,857	LINDSTROM, JEREMY	3,150,318	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	3,082,793
KUMAR, SHANKAR	3,027,417	LIQUATS VEGETALS, SA	3,202,627	MASSEY, RICHARD W.	3,138,091
KUMAR, VIJAY	2,978,091	LIU, CHENGBIN	3,097,889	MATHREAD INC.	3,120,781
KUMAR, VINEET	3,004,152	LIU, GUOJIE	3,094,842	MATSUI, YUTAKA	3,137,689
KURAMOCHI, TAICHI	3,002,422	LIU, HONGBIN	3,128,424	MATSUMOTO, SADAYOSHI	2,985,986
KUSLYS, MARTINAS	3,034,344	LIU, JIANXUN	3,093,906	MATTHYS, CLARK	3,011,094
KUWABARA, JUNICHI	3,067,960	LIU, JILI	3,171,421	MATURI, RAJ K.	3,025,258
KVG QUARTZ CRYSTAL TECHNOLOGY GMBH	3,024,062	LIU, JINHUA	3,056,957	MAURO, CLAUDIO	2,962,798
LACOSTE, FRANCOIS	3,029,073	LIU, LIU	3,059,256	MAX-PLANCK- GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	3,014,714
LAGAS, NICOLAS	2,951,644	LIU, LIU	3,090,836	MAXINUS INC.	3,147,569
LAIR, VALENTIN	3,029,073	LIU, NING	3,160,899	MCCARTHY, STEPHEN J.	3,009,745
LAKDAWALA, KHUSHROO H.	3,090,809	LIU, SHAN	3,137,426	MCGEE, TIMOTHY RYAN	3,138,802
LAM, WILLIS	3,138,091	LIU, XIAOPENG	3,131,792	MCHUGH, KEVIN	3,082,793
LAMINETTE, ANTOINE	3,150,318	LIU, XIBAO	3,131,792	MCINTRYE, IRISH	3,098,101
LAMOTHE, ROSS C.	3,151,284	LIU, XUYOU	2,977,742	MCKEE, LUKE	2,974,292
LAN, LIN	3,090,510	LOCUS ROBOTICS CORP.	3,113,099	MCLAUGHLIN, MICHAEL	3,064,573
LAN, WENHAI	2,977,742	LOGAN, AARON	3,171,421	MCMILLAN, DAVID	2,983,372
LAN, ZHIBO	3,087,315	LOGAN, JUSTIN C.	3,171,421	MENG, LINPING	3,094,842
LANDES, NATHAN A.	3,090,584	LOGSTED-NIELSEN, ERIK	3,032,903	METRC LLC	3,122,237
LANGBALLE, NICOLE	3,114,541	LOPES FILIPE, SUSANA	3,214,308	METRC LLC	3,122,244
LANGENBERG, DANIEL	3,115,581	LOPEZ GOMEZ, FELIX ANTONIO	2,993,909	METSO OUTOTEC FINLAND OY	3,001,926
LANGER, RANDALL S.	2,967,709	LORENCE, MATT	3,001,114	MEYER, CHARLES S.	2,982,219
LANGER, ROBERT S.	3,082,793	LORENZ, CHRISTIAN	2,958,371	MEYER, RAIMUND	3,068,729
LANGHAM, STEVEN ROBERT	2,884,611	LOU, YAN	3,080,949	MICHAEL, MARIOS H.	3,004,750
LANIGAN, RICHARD J.	3,208,266	LOWLES, ROBERT WILLIAM	2,958,371	MICROSOFT TECHNOLOGY LICENSING, LLC	3,023,518
LARA, HECTOR	3,121,308	LU, JIANFENG	3,059,256	MIDHA, SANJEEV	3,103,450
LAROSE, PAUL	2,936,857	LU, ZHAOHUA	3,147,469	MILLER, BRUCE G.	3,028,141
LAUGIER, CHRISTIAN	2,950,847	LULULEMON ATHLETICA CANADA INC.	3,138,802	MILLER, BYRD TYLER, IV	3,022,004
LAVIGNE, ODILE	3,041,411	LUNDGREN AKERLUND, EVY	3,050,099	MILLER, JOSEPH HENRY	3,168,744
LEE, BETTY	3,129,236	LUO, TAO	3,011,274	MILSAP, JEFF	3,138,339
LEE, DAVID	3,102,472	LUO, TAO	3,015,374	MIRANDA, NATE	3,117,414
LEE, HO YOUNG	3,138,790	LUO, TAO	3,017,385	MIREL, IONUT ALEXANDRU	3,218,837
LEE, JOON YOUB	3,041,626	LUPINSKY, ARON	3,028,141	MIZUTA, NAOKI	3,169,085
LEE, MIN JI	3,041,626	LUTHER, STEFAN	3,014,714	MIZUTANI, TAKASHI	3,130,049
LENNOX INDUSTRIES INC.	3,017,553	LUTZOW, THOMAS ANDREW	2,986,770	MODERNPACK HOPPE GMBH	3,089,532
LENNOX INDUSTRIES INC.	3,041,319	LY, HUNG	3,015,374	MOHLMAN, SHAWN D.	3,041,504
LENNOX INDUSTRIES INC.	3,090,510	LY, WILLIAM	3,138,802	MOLINA, FRANCK	3,020,221
LEOPOLD, DAVID DANIEL	3,072,802	M & M OIL TOOLS, LLC	3,084,447	MONDRAGON, DINER	3,128,180
LESSARD, GERALD	3,160,612	MA, BIAO	2,895,144	MONOSOL, LLC	3,117,414
LESUR, THOMAS	3,021,266	MA, JIAN	3,094,842	MONSUL, NICHOLAS, T.	2,991,990
LETWIN, NICHOLAS G.	3,047,095	MACHL, DORIS	3,214,308	MOOG INC.	3,161,751
LI, CHUNNA	3,131,792	MACMILLAN, KATE ALEXANDRIA	3,138,802	MOORE, SEAN	3,171,299
LI, JIAN	3,160,899	MADSEN, JORGEN	3,032,903	MOORE, STEPHEN	2,983,251
LI, JIN	3,090,836	MADSEN, MARTIN	3,115,581	MOORE, THOMAS	3,113,099
LI, JUNYI	3,017,385	MAEZAWA, YUSAKU	3,055,163	MOORMAN, CHRISTIAAN J. M.	3,119,474
LI, PENGFEI	3,131,792	MALLERY, JON	3,097,887	MOORMAN, CHRISTIAAN J. M.	3,123,615
LI, SHAOHUA	3,056,957	MALLINCKRODT PHARMACEUTICALS IRELAND LIMITED	3,012,189	MORENO, VICTOR	3,121,308
LI, SHAOHUA	3,155,870	MALLINCKRODT PHARMACEUTICALS IRELAND LIMITED	3,138,339	MORGEN, MICHAEL M.	3,098,306
LI, XIAOXIAO	3,155,870	MANCINE, NATHAN	2,949,316		
LI, YANG	3,094,842	MAO, MIN	3,100,054		
LI, YANG	3,094,842				
LI, YI	3,160,899				
LI, YU NGOK	3,147,469				
LI-CYCLE CORP.	3,096,116				
LICHT, GAD	3,216,992				
LICHT, STUART	3,052,483				
LICHT, STUART	3,198,973				
LICHT, STUART	3,198,982				



## Index des brevets canadiens délivrés

16 avril 2024

MORI, EIICHIROH	3,214,344	NOVA WILDCAT SHUR-LINE, LLC	2,953,980	PARLITZ, ULRICH	3,014,714
MORPHEY, JOHN C.	2,953,980	NOVELEN, RYAN MICHAEL	3,169,181	PARNES, TAL	3,009,924
MORRISON, MICHAEL L.	2,937,800	NOVOZYMES A/S	2,980,836	PARRA, LUCAS CRISTOBAL	2,886,597
MOSES, TIMOTHY EDWARD	2,992,736	NUTRAMAX LABORATORIES, INC.	2,995,395	PATEL, CHIRAG	3,011,274
MOULD, DIANE R.	2,887,072	NYANGIRO, DINAH ACHOLA	3,100,054	PATEL, MITESHKUMAR HASMUKHLAL	2,936,857
MOUNTAINLAND, DAVID	3,025,419	O'REAR, DENNIS JOHN	3,171,424	PAULSEN, NEIL E.	2,988,575
MOZES, ALON	3,148,594	OBERNOSTERER, FRANK	3,068,729	PAVELSKI, JEREMIE	3,204,334
MUDIE, DEANNA	3,098,306	OCHROMBEL, INES	3,121,055	PAYNE, MARK	3,166,767
MUELLER INTERNATIONAL, LLC	2,989,333	ODHNER, LAEL	3,029,834	PAYNE, MELISSA CHERIE	3,100,054
MUNCY, MARK	3,146,367	ODUEYUNGBO, SEYI ABIODUN	3,171,424	PENNING, JAN PAUL	3,162,200
MURDOCH, KEITH	2,971,730	OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES	3,041,411	PENNINGTON, JANELLE	3,147,908
MURPHY, ANDREW J.	2,914,203	OGINO, YOSHIO	3,130,049	PERCY, DEAN	2,845,212
MURPHY, JAMES EDWARD	3,058,685	OHNO, JUN	3,139,906	PERDANA, JIMMY	3,031,855
NABORS DRILLING TECHNOLOGIES USA, INC.	3,049,076	OHNO, TATSUYA	3,150,318	PERESAN, MICHAEL L.	3,145,292
NACARELLI, TIMOTHY	3,037,469	OKAMURA, KENTARO	3,027,417	PEREZ, ERIC	3,017,553
NACCACHE, DAVID	2,947,920	OMARI, AHMAD K.	2,967,709	PERKINS, JONATHAN	3,177,017
NAGL, ANDREAS	3,214,308	OMNIAB, INC.	2,895,144	PERMENTER, ALEXANDER	3,118,098
NAHAS, ZAYNA	2,770,490	OMNITRACS, LLC	2,978,091	PERROLLAZ, MATHIAS	2,950,847
NAKAMURA, KENTO	3,124,081	ONDAS NETWORKS INC.	3,126,151	PETERSON, ANNIKA LEE LOUISE	3,111,399
NAKAMURA, KOJI	3,027,417	ONODERA, TATSUYA	3,150,318	PETZOLD, RAY	2,988,575
NANOLIKE	3,132,523	OPHTALMIS MONACO	2,985,013	PFLIEGER, PHILIPPE	3,013,696
NASSIVERA, TERRY WILLIAM	3,103,450	OPTIMUM ENERGY LLC	3,011,094	PHARMABLOCK SCIENCES (NANJING), INC.	3,090,836
NEBRA SOLER, MONTSE	3,202,627	OPTIOS, INC.	2,886,597	PIERRE FABRE MEDICAMENT	2,996,085
NEGRE, AMAURY	2,950,847	OPTRONICS INTERNATIONAL, LLC	2,937,934	PINTEREST, INC.	3,000,966
NELSON, KIMBERLY	3,036,493	ORCHARD, KIERAN MICHAEL	3,106,017	PINTO, ALONSO	3,121,308
NEOCIS INC.	3,148,594	ORENGO, JAMIE M.	2,914,203	PINTO, DONALD J.P.	2,937,739
NETFLIX, INC.	3,141,319	ORIARAN, TAIYE PHILIPS	3,168,744	PIONEER HI-BRED INTERNATIONAL, INC.	2,938,052
NEUBORON THERAPY SYSTEM LTD.	3,154,948	ORIZON AEROSTRUCTURES, LLC	3,118,874	PLATZ, SASCHA	3,101,011
NEW ENGLAND WHEELS, INC.	2,936,857	ORTIZ, EDISON U.	3,014,392	PLEMONS, DANNY L.	3,185,610
NEW ERA TECHNOLOGY, INC.	2,934,093	ORWAT, MICHAEL J.	2,937,739	POEPPEL, SCOTT C.	3,047,095
NEWELL, RICHARD PAUL	3,118,874	OSBORN, MICHAEL J.	2,895,144	POIRIER, RANDAL	3,017,553
NGUYEN, NICK T.	3,138,091	OSTRANDER, KRISTOFFER	3,139,442	POOLE BESTWICK, HALEY	2,974,292
NGUYEN, RYAN	3,138,091	OTA, TOMOHIRO	3,029,715	POON, PETER	3,114,541
NICOLE, MARTIN	3,066,131	OTT, WESLEY	3,197,012	POTTER, MARK	3,119,008
NICOVENTURES TRADING LIMITED	3,119,008	OWENS, TIMOTHY DUNCAN	3,080,949	POWERS, BRADLEY	3,113,099
NIEDERFELD, GERHARD	3,057,732	OZEKI, TAKAFUMI	3,137,689	POWERS, CHRISTOPHER	2,957,795
NING, QIUSHI	3,094,842	OZU, MASAO	3,137,384	PPG INDUSTRIES OHIO, INC.	3,090,809
NIPPON STEEL CORPORATION	3,064,359	PABBISSETTY, KUMAR BALASHANMUGA	2,937,739	PRAMANIK, DIBYAJYOTI	3,112,164
NIPPON STEEL CORPORATION	3,131,675	PABST, MANUEL	3,014,334	PRATT & WHITNEY CANADA CORP.	2,976,984
NIPPON STEEL CORPORATION	3,197,012	PAINTER, PAUL C.	3,028,141	PRECISION PLANTING LLC	3,019,222
NIPPON STEEL ENGINEERING CO., LTD.	3,214,344	PALMGREN, CARL ALBERT, III	3,129,529	PREVIDI, FABIO	3,006,149
NISSAN MOTOR CO., LTD.	3,067,960	PANASONIC ECOLOGY SYSTEMS GUANGDONG CO., LTD.	2,978,613	PRIMEGENE (BEIJING) CO., LTD.	3,135,921
NISSINK, JOHANNES WILHELMUS MARIA	3,005,516	PANASONIC INTELLECTUAL PROPERTY CORPORATION OF AMERICA	3,033,455	PRINCIPIA BIOPHARMA INC.	3,080,949
NOOK, JONATHAN LEWIS	3,076,499	PANG, RAY DICKSANG	2,971,730	PRISTINE ACCESS TECHNOLOGIES LTD	2,989,525
NOOK, WILLIAM KNIGHT	3,076,499	PAPER CONVERTING MACHINE COMPANY	3,096,852	PROSTKO, ROBERT S.	3,115,581
NORCROSS, ROGER	3,013,696	PARADIS, MARK	3,001,114	PROVECTUS PHARMACEUTICALS, INC.	2,828,940
NORTH CAROLINA STATE UNIVERSITY	3,016,313	PARASOL MEDICAL, LLC	3,014,896	PROVECTUS PHARMATECH, INC.	2,828,940
NORTHERN DIGITAL, INC.	3,121,661	PARK, EUN YOUNG	3,096,363	PUREWICK CORPORATION	3,098,676
NOSRATI, SEYED MASOUD	3,114,541	PARK, SEO-JIN	3,112,164	PURI, RONESH	2,936,539
				QIN, YI	3,072,682
				QSC, LLC	3,087,473
				QUALCOMM INCORPORATED	2,952,242
				QUALCOMM INCORPORATED	3,011,274
				QUALCOMM INCORPORATED	3,015,374

## Index of Canadian Patents Issued April 16, 2024

QUALCOMM INCORPORATED	3,017,385	ROYAL BANK OF CANADA	3,014,392	SELL, CHRISTIAN	3,037,469
QUAN, YING-SHU	3,013,704	RUD, JASON H.	3,113,927	SENEONICS,	
QUANCI, JOHN FRANCIS	3,177,017	RUETER, MICHAEL	3,025,419	INCORPORATED	2,935,565
QUANTA ASSOCIATES, L.P.	2,950,506	RUFFIN, LOUIS WEBSTER, JR.	3,067,136	SENEONICS,	
QUESTRADE FINANCIAL		RUGG, CATHERINE	3,093,772	INCORPORATED	2,977,758
GROUP INC.	2,845,212	RUI, LIANGYOU	3,059,256	SENSUS USA, INC.	3,044,846
QUORUM INNOVATIONS, LLC	2,991,990	RUMMELHARD, LUKAS	2,950,847	SHAHAR, MENASHE	3,126,151
RACK, MICHAEL	3,010,561	RUTHERFORD, WILLIAM	2,938,052	SHAHIR, SEYED HAMED	
RADE-KUKIC, KORALJKA	3,034,344	SADIQ, BILAL	3,017,385	YAGHOUBI	3,114,541
RADTKE, IAN	3,019,222	SAELINGER, DANIEL	3,006,946	SHANGHAI DIANBA NEW	
RADULESCU, ANDREI	3,011,274	SAFRAN	3,032,098	ENERGY TECHNOLOGY	
RAJASEKAR, KATHIRAVAN	2,933,858	SAFRAN	3,041,411	CO., LTD.	3,087,315
RAJZER, MICHAEL	3,141,228	SAFRAN AIRCRAFT ENGINES	3,032,098	SHARP, BRIAN	3,166,767
RAMASAMY, KARTHIKEYAN		SAFRAN AIRCRAFT ENGINES	3,041,411	SHARRAH, RAYMOND L.	3,172,059
KALLUPALAYAM	2,963,749	SAFRAN AIRCRAFT ENGINES	3,051,883	SHELAKE, MAHADEV RAHUL	3,112,164
RAME, JEREMY	3,041,411	SAFRAN HELICOPTER		SHEPARD, KIMBERLY	3,098,306
RAMIREZ ZABLAH, MARIO		ENGINES	3,041,411	SHEVGOOR, SIDDARTH K.	3,081,434
SERGIO	2,993,909	SAFRAN LANDING SYSTEMS		SHI, YUNMING	3,155,870
RAN-RESSLER, RINAT	3,034,344	UK LIMITED	3,027,628	SHIERS, BRET J.	3,151,284
RANNES, JULIE B.	2,980,836	SAGALOWICZ, LAURENT	3,031,855	SHIMAMURA, JUNJI	3,137,689
RASIONI, BARKHA	2,935,565	SAGEL, PAUL ALBERT	3,100,054	SHIN, YOUN JAE	3,041,626
RAUCH		SAITO, MIO	3,013,704	SHIN-ETSU CHEMICAL CO.,	
LANDMASCHINENFABRI		SALCEDO, JUAN	3,148,594	LTD.	3,020,809
K GMBH	3,052,334	SALMILEHTO, JUHA	3,004,750	SHIRK, TONY	3,090,584
RAUCKHORST, HOLLY		SANDERS, RUSSELL	3,204,334	SIEMENS ENERGY GLOBAL	
BALASUBRAMANIAN	3,100,054	SANDVINE CORPORATION	2,933,858	GMBH & CO. KG	3,147,487
RAVELLI, EMMANUEL	3,148,999	SANTEN PHARMACEUTICAL		SILVERI, MATTI	3,004,750
REEBYE, UDAY	3,148,594	CO., LTD.	3,025,258	SILVERMAN, BRETT M.	3,025,419
REGENERON		SANTOS SCHNEIDER,		SINGER, JAMIE	2,828,940
PHARMACEUTICALS,		FRANCISCO	3,020,221	SIVANKALYANI, VELU	3,112,164
INC.	2,914,203	SANTOS SILVA MARTINS,		SIWEK, PHILIP DAVID	3,138,802
REICHEN, MARCEL	3,050,598	JORGE MANUEL	3,135,704	SKAGERLIND, JAN PETER	2,980,836
REID, PAUL A.	2,942,645	SATOH, HIROYUKI	3,124,081	SKATE INNOVATION PTY	
REID, PAUL A.	2,942,648	SAUR-BROSCH, ROLAND	3,024,062	LTD	3,154,778
REILEY, RICHARD ROBERT	2,994,899	SAVANT TECHNOLOGIES		SKILLCELL	3,020,221
REN, XIAOJUN	3,097,887	LLC	3,058,685	SKJEGGERUD, KJELL	3,154,322
RICHARDSON, GEORGE		SAVANT TECHNOLOGIES		SKOOG, LUCAS	3,161,148
DAVID	3,084,840	LLC	3,097,887	SLAWSON, SIAN ELIZABETH	3,138,802
RICHARZ, WERNER		SAVANT TECHNOLOGIES		SLSBIO CO., LTD.	3,096,363
GUENTHER	2,989,333	LLC	3,097,889	SMICH, ANDREW	3,064,849
RICOH COMPANY, LTD.	3,124,081	SCEYE SA	3,125,938	SMIDDY, BRIAN S.	3,143,986
RIES, WOLFGANG	3,078,524	SCHEIB, JACOB	3,115,581	SMILEY, BRENDA KAY	2,938,052
RITZENTHALER, ABAIGEAL	3,184,305	SCHENDZIELORZ, LARS	3,078,524	SMITH, BRIAN J.	3,139,442
ROBERGE, TIMOTHY	3,068,117	SCHILLING, MARTIN	3,121,055	SMITH, CONNOR	
ROBERTS, ADRIAN	3,087,158	SCHLAGE LOCK COMPANY		KRISTOPHER	3,129,236
ROCKWELL AUTOMATION		LLC	3,115,581	SMITH, DANIEL P.	2,986,770
TECHNOLOGIES, INC.	2,967,709	SCHLEGEL, ISABEL	3,160,941	SMITH, DAVID	3,090,584
ROEHL, ROBIN	3,138,339	SCHLEICHER, GARY P.	3,009,745	SMITH, JEFF	3,166,767
ROETHLE, PAUL	2,974,292	SCHLEMMER, ALEXANDER	3,014,714	SMITH, JOHN	3,027,628
ROGERS, STEVEN	3,171,299	SCHMIDT, JEFFREY	3,138,339	SMITH, LEE	3,025,419
ROLLINGER, ADRIEN		SCHMIDT, KEVIN GEORGE	3,184,405	SMITH, LEON M., II	2,937,739
BERNARD VINCENT	3,032,098	SCHNEIDER ELECTRIC USA,		SMITH, TODD JAMES	3,138,802
ROMET LIMITED	3,064,849	INC.	2,942,645	SMOLEN, CHRIS	3,087,473
ROQUETTE FRERES	3,021,266	SCHNEIDER ELECTRIC USA,		SNAP-ON INCORPORATED	3,141,228
ROSEMOUNT INC	3,113,927	INC.	2,942,648	SOCIETE DES PRODUITS	
ROSEMOUNT INC.	3,151,284	SCHNEIDER ELECTRIC USA,		NESTLE S.A.	2,974,870
ROSKE, CRAIG	3,060,557	INC.	3,048,480	SOCIETE DES PRODUITS	
ROSSI, NICK	3,137,605	SCHNEIDER, STEVEN	3,017,553	NESTLE S.A.	3,031,855
ROSSLER-CZERMAK,		SCHNEIDERMAN, EVA	3,103,450	SOCIETE DES PRODUITS	
ANDREAS	3,214,308	SCHNELL, MARKUS	3,148,999	NESTLE S.A.	3,034,344
ROSTYKUS, BENOIT	3,141,319	SCHUH, SUSANNE	3,034,344	SOERGEL, SEBASTIAN	3,010,561
ROTH, MARK B.	2,937,800	SCHUMM, BENJAMIN	3,125,938	SOLOMON, KIM R.	3,058,188
ROTY, GAEL	3,104,564	SEALEY, JAMES E., II	3,022,004	SON, GEON HUI	3,112,164
ROVNAN, JOHN	2,949,316	SEKIMOTO, KENICHI	3,214,344	SONOS, INC.	3,129,236

**Index des brevets canadiens délivrés  
16 avril 2024**

SONY CORPORATION	2,989,099	TALIUS, TOMAS	3,023,518	TOKMAN, ANDRE	3,146,367
SONY CORPORATION	3,003,703	TALTS, JAN	3,050,099	TOLMIE, CRAIG R.	3,012,189
SONY CORPORATION	3,009,777	TAMI LIZUZU, JOSEPH		TOLMIE, CRAIG R.	3,138,339
SONY CORPORATION	3,018,259	TOUSSAINT	3,032,098	TOLOMEI, JOHN	3,129,236
SPARKS, MICHAEL TROY	3,183,810	TAMURA, MAKI	3,027,417	TOLTON, T. BOYD	2,934,093
SPECKMANN, BODO	3,121,055	TANG, ISSAC	3,150,318	TOMASEK, ADRIAN	3,148,999
SPECTOR, MARK	3,098,676	TANG, KUNZHOU	3,154,919	TOMLINSON, TIFFANY G.	2,988,575
SPM OIL & GAS PC LLC	2,971,730	TANKIEWICZ, SZYMON	2,977,758	TOONSQUARE CORP.	3,138,790
SREEVALSAN, SHYAM	2,933,858	TATA STEEL IJMUIDEN B.V.	3,162,200	TOPSOE A/S	3,032,903
STAATS, ANDREW RYAN	3,118,285	TAVARES DA SILVA VINHAS,		TORAY INDUSTRIES, INC.	3,008,223
STAHL, NEIL	2,914,203	ANA JOAO	3,135,704	TRAN, DUC THANH	2,971,730
STAIHR, MICHAEL	3,090,584	TEIJIN PHARMA LIMITED	2,985,986	TRAN, MIL THI	3,112,164
STANFIELD, JAMES RICHARD	3,076,499	TELEFONAKTIEBOLAGET LM		TRAN, TUAN ANH	3,214,308
STEEGMULLER, RAINER	3,078,524	ERICSSON (PUBL)	3,056,957	TRAPPO, GREGORY	3,031,855
STEINIGER, SEBASTIAN C. J.	3,093,772	TELETRACKING		TROKHAN, PAUL D.	3,100,054
STENGLEIN, CHRISTIAN	3,144,815	TECHNOLOGIES, INC.	2,949,316	TSUCHIYA, YUKIHIRO	3,029,715
STEWART & STEVENSON LLC	3,166,767	TENCENT AMERICA LLC	3,137,426	TSUJI, MINORU	2,989,099
STEWART, MARK DALE	3,129,529	TENZER, YAROSLAV	3,029,834	TSUKAGOSHI, IKUO	3,009,777
STILWELL, CHARLES		TESSEFI INNOVATIONS, INC.	3,144,059	TSURUSHITA, NAOYA	3,027,417
MITCHELL	3,067,136	THALES	2,952,132	TUKIAINEN, SAMPO	3,135,561
STOCKLIN, VOLKER	3,052,334	THE BOEING COMPANY	3,041,504	TUSZKIEWICZ, GEORGE	3,001,114
STOLLER, JASON	3,019,222	THE BOEING COMPANY	3,072,802	UATC, LLC	3,047,095
STORA ENSO OYJ	3,016,291	THE BOEING COMPANY	3,074,058	UCHINO, YOUSUKE	3,139,906
STRAND, ROSS	3,155,870	THE CHEMOURS COMPANY		UHRYN, MICHAEL	3,147,569
STREAMLIGHT, INC.	3,172,059	FC, LLC	3,103,285	UNDERHILL, DEREK	
STRIEDER, BIRGIT	3,143,883	THE JOHNS HOPKINS		MICHAEL	3,076,499
STROUD, ANNETTE MARIE	3,128,180	UNIVERSITY	2,770,490	UNIVERSIDADE DO PORTO	3,135,704
STUCKEY, JEANNE	3,059,256	THE MOSAIC COMPANY	3,064,573	UNIVERSITY OF MAINE	
STURTZ MASCHINENBAU		THE NOCO COMPANY	3,076,499	SYSTEM BOARD OF	
GMBH	2,945,712	THE PROCTER & GAMBLE		TRUSTEES	3,001,114
SU, SHUAI	3,093,906	COMPANY	3,100,054	UNIVERSITY OF SOUTH	
SUBRA, LAURENT	2,996,085	THE PROCTER & GAMBLE		FLORIDA	3,068,117
SUBRAMANIAN, SUNDAR	3,017,385	COMPANY	3,103,450	UPRETY, KRISHNA K.	3,090,809
SULZER MANAGEMENT AG	2,951,644	THE PROCTER & GAMBLE		UTILITY GLOBAL, INC.	3,126,466
SUN, CHEN	3,018,259	COMPANY	3,155,870	UTZ, PETER	3,147,487
SUN, QIAN	3,093,906	THE REGENTS OF THE		UVEBRANT, CHRISTINA	3,050,099
SUN, YI	3,059,256	UNIVERSITY OF		VAAL, SCOTT G.	3,143,986
SUNCOKE TECHNOLOGY		MICHIGAN	3,059,256	VAHLIS, EVGENE	3,114,541
AND DEVELOPMENT LLC	3,177,017	THE STANDARD REGISTER		VAILLANCOURT, CHARLES	3,096,085
SUNG, YEON WOO	3,112,164	COMPANY	2,905,183	VALLOUREC OIL AND GAS	
SUNTHANKAR, PRASANNA	3,011,015	THE TORONTO-DOMINION		FRANCE	3,064,359
SURESH, AKASH	2,933,858	BANK	2,884,611	VALLOUREC OIL AND GAS	
SURFORMA, S.A.	3,135,704	THE UNITED STATES OF		FRANCE	3,197,012
SUSNJARA, KENNETH J.	3,143,986	AMERICA, AS		VALOR FIRE SAFETY, LLC	2,927,785
SUZUKI, HIDETOSHI	3,033,455	REPRESENTED BY THE		VAN GORP, LOGAN	3,197,012
SUZUKI, YASUHIRO	3,067,960	SECRETARY,		VEROS, MICHAEL J.	3,072,517
SWALLOW, STANLEY		DEPARTMENT OF		VESTERGAARD FRANDSEN,	
SHIGezo	3,000,639	HEALTH AND HUMAN		MIKKEL	3,125,938
SWARTZ, JEANETTE MARIE	3,100,054	SERVICES	2,967,778	VEXO INTERNATIONAL (UK)	
SWEDISH ORPHAN		THE UNIVERSITY OF		LIMITED	3,064,680
BIOVITRUM AB (PUBL)	3,082,264	BIRMINGHAM	2,962,798	VIEGAS, SIDNEY	2,845,212
SWEET, JARED E.	3,151,284	THERMWOOD CORPORATION	3,143,986	VINATI S.R.L.	3,006,149
SWITZER, DAVID A.	3,171,421	THEVENIER, ANNE	3,034,344	VINATI, FELICE	3,006,149
SYSAVATH, SYTHONH	3,084,447	THIEL, JULIEN	3,029,073	VINATI, GIACOMO	3,006,149
SZE, DANIEL HUE MING	3,168,744	THOMAS, KURT J.	3,072,517	VINATI, MARIACHIARA	3,006,149
TABATADZE, DAVID R.	2,968,304	THOMPSON, ASHA PETA	3,000,639	VINATI, MATTEO	3,006,149
TABUTEAU, HERRIOT	3,082,645	THOMSON REUTERS		VINATI, SAMUELE	3,006,149
TAEJOON PHARMACEUTICAL		ENTERPRISE CENTRE		VINSKI, JOHNNY	2,976,984
CO., LTD.	3,041,626	GMBH	3,098,101	VINTILA, IUSTINA-MIRUNA	3,014,392
TAIHO PHARMACEUTICAL		THROMBOLYTIC SCIENCE,		VOLLEBREGT, MATHIEU	
CO., LTD.	3,130,049	LLC	2,966,332	JEAN LUC	3,032,098
TAKATANI SHINSUKE	3,131,675	TIAN, KAIBO	3,135,906	VOTE, NICOLAS	3,143,986
TAKEDA KAZUTOSHI	3,131,675	TITAN MEDICAL INC.	2,986,770	VU, TIEN VAN	3,112,164
TAL, MICHAEL GABRIEL	2,989,525	TODD, ANDY PAUL	3,084,447	VU, TOMMY	3,049,076

## Index of Canadian Patents Issued April 16, 2024

VULCO S.A.	3,121,308	WILSON, KERRY	3,017,050	ZHANG, YANZHONG	3,021,420
WACHTER, ERIC A.	2,828,940	WINDHAB, NORBERT	3,121,055	ZHANG, YICHI	2,980,697
WAGNER, WLADIMIR	2,945,712	WONG, EDMUND L.	3,111,399	ZHANG, ZHAN	3,056,957
WAKATABE, MICHIO	3,008,223	WOOD, JAMES MATTHEW	3,005,516	ZHANG, ZHIXIONG	2,977,742
WALES, JOSHUA DREW	3,102,472	WOODFORD, PETER	3,224,834	ZHAO, BO	3,114,541
WALKER, DEVIN M.	3,068,117	WU, CHENGDE	3,160,899	ZHENG, XIAOJUN	3,127,254
WALL, THERESA K.	3,048,480	WU, HAO	3,147,469	ZHONG, BODONG	2,978,613
WALLER, THOMAS		WU, IWEN	2,770,490	ZHONG, YAOZONG	3,093,906
MCCARTHY	3,138,802	WU, KUNRAN	2,978,613	ZHOU, CAIHONG	3,131,792
WANG, CHAO	3,016,313	WU, WEI	3,135,921	ZHOU, HAIBIN	3,059,256
WANG, FANBIN	3,097,889	WU, XIAOYONG	3,058,685	ZHOU, XILONG	3,097,889
WANG, JIANGUO	3,072,682	WUNDLING, ANJA	3,160,941	ZHOU, YIN	3,132,174
WANG, JUNLING	3,131,792	WYART, HERVE	3,021,266	ZHOU, YU	3,093,906
WANG, LILEI	3,033,455	XIAO, KUN	3,097,887	ZHU, LI	3,135,921
WANG, LING	3,137,384	XINTELA AB	3,050,099	ZHU, QIANG	3,127,254
WANG, LINGZHUAN	3,132,174	XSYS GERMANY GMBH	3,160,941	ZHU, YEHEG	2,937,739
WANG, PENGFEI	3,097,889	XU, JIZHENG	3,128,424	ZOETIS SERVICES LLC	3,093,772
WANG, QIONG J.	2,967,778	XU, KELEI	3,000,966	ZOLTEK, RICHARD J.	3,053,820
WANG, SHAOMENG	3,059,256	XU, SHIZE	3,023,518	ZOZO, INC.	3,055,163
WANG, YE-KUI	2,952,242	XUE, CHUNLIN	3,127,254	ZTE CORPORATION	3,135,906
WANG, YUE	3,128,424	XUE, LIXIA	3,072,682	ZTE CORPORATION	3,147,469
WANG, YUFENG	2,937,739	YALE UNIVERSITY	3,004,750	ZUTA-CORE LTD.	3,009,924
WANG, ZHI	3,094,842	YALVAC, SELIM	2,980,697		
WANG, ZHIYONG	3,058,685	YAMAMOTO, FUYUKI	3,130,049		
WASHME PROPERTIES, LLC	3,017,506	YAMAMOTO, MAKIKO	3,003,703		
WATANABE, TOSHIAKI	3,020,809	YAMAMOTO, YUKI	2,989,099		
WATTLUX	3,009,443	YANACHKOV, IVAN	2,968,304		
WEBSTER, MATTHEW		YANAI, HIROYUKI	3,027,417		
THOMAS ROBINSON	2,971,730	YANG, HANYU	3,131,792		
WECHSLER, JOHANNES	3,068,729	YANG, HUI	3,093,906		
WEINSTEIN, RANDY H.	3,037,962	YANG, JAMES C.	2,967,778		
WEIS, NORBERT	3,144,815	YANG, MINMIN	3,090,836		
WEISS, MICHAEL JOSEPH	3,168,044	YANG, WU	2,937,739		
WEISSINGER, KEYTON	2,905,183	YANG, YANG	3,015,374		
WELCH, RANDY R.	2,940,948	YANG, YANQING	3,135,921		
WELLER, CHRISTINE	3,125,938	YANG, ZHANKUN	3,131,792		
WELLS, JEFFREY LANE	3,122,237	YANG, ZHEN	3,135,906		
WELLS, JEFFREY LANE	3,122,244	YANKEE, THOMAS	2,974,870		
WENDLAND, TORBEN	3,160,941	YE, YANQI	3,016,313		
WENGER, STEPHAN	3,137,426	YEAN, SUJIN	3,171,424		
WEST LIBERTY FOODS, L.L.C.	3,160,612	YI, QING	3,058,685		
WEST, JON	3,098,101	YOHO, MARK	3,116,039		
WEST, KURTIS	3,171,421	YOUSEF, FAISAL	3,049,076		
WESTINGHOUSE AIR BRAKE		YU, TAO	3,160,899		
TECHNOLOGIES		YU, XIAOAN	2,977,742		
CORPORATION	3,066,131	YU, ZHIYA	2,967,778		
WESTINGHOUSE AIR BRAKE		YUSUF, SHABBIR	2,989,333		
TECHNOLOGIES		ZAFAR, ASHAR	3,016,291		
CORPORATION	3,118,285	ZATA PHARMACEUTICALS,			
WESTWOOD, JOHN	3,021,420	INC.	2,968,304		
WEXLER, RUTH R.	2,937,739	ZEITVOGEL, THOMAS	3,052,334		
WHEELER, CHRISTOPHER	3,118,098	ZEMAN, DALE E.	3,096,852		
WHITAKER, MATTHEW	3,113,099	ZENASNI, OUSSAMA	3,147,908		
WHITEHURST, TODD	2,935,565	ZHAI, ANDREW HUAN	3,000,966		
WHITEHURST, TODD	2,977,758	ZHAN, XIAONING	3,093,906		
WHITLING, ROBERT W.	3,139,442	ZHANG, CHENCHEN	3,135,906		
WHITMORE, DAVID WILLIAM	3,074,049	ZHANG, HUI	3,135,921		
WILDERMUTH, PAUL	3,019,222	ZHANG, JIANPING	3,087,315		
WILKHU, JITINDER	3,028,580	ZHANG, KAI	3,128,424		
WILKINSON, DARREN	3,064,680	ZHANG, LI	3,128,424		
WILLIAMS, JEFF	3,017,050	ZHANG, LI	3,135,906		
WILLIAMS, MASON	3,137,113	ZHANG, NAN	2,977,742		
WILLIAMSON, EDMUND		ZHANG, WEI	3,072,682		
CHRISTOPHER	3,169,181	ZHANG, XU	3,132,174		
		ZHANG, XUDONG			

# Index of Canadian Applications Open to Public Inspection

March 31, 2024 to April 6, 2024

## Index des demandes canadiennes mises à la disponibilité du public

31 mars 2024 au 6 avril 2024

ABL IP HOLDING LLC	3,214,416	COWX, SCOTT	3,215,268	KAY, KONNER CASEY	3,213,681
ABOULELA, EFFAT	3,178,210	COX, CHARLES F.	3,215,824	KELLER, JOHN	3,214,416
AFFIRM, INC.	3,213,499	D'ACCOLTI, ANTHONY V.	3,215,583	KESTAY, MERAD	3,179,847
AGGARWAL, ROSHAN	3,215,835	DADGARPOUR,		KIRKWOOD, KATHLEEN	3,215,446
AGUILERA, CYNTHIA	3,214,556	ABDOLMEHDI	3,215,672	KLX ENERGY SERVICES LLC	3,214,556
ALLEN, ROBERT DEAN	3,179,847	DARE, TOM	3,214,872	KLX ENERGY SERVICES LLC	3,214,559
AMAT, PASCAL	3,207,899	DART INDUSTRIES INC.	3,210,714	KRIKWOOD, KATHLEEN	3,215,442
AMIL, ORLANDO	3,179,677	DECABOOTER, CELIA	3,215,502	KRIVANEK, ALAN	3,215,608
ANDERSON, ERIC R.	3,215,351	DECKARD, MITCHEL R.	3,214,978	KUNDLEY, ANIRUDDHA	
ARIESEN, JAN	3,209,968	DECKARD, MITCHEL R.	3,214,980	PRAKASH	3,179,847
ARSENAULT, JEAN-LUC	3,214,886	DELTA SPECIALTIES	3,178,210	L'AIR LIQUIDE SOCIETE	
AVENTICS GMBH	3,215,415	DESAGAGNE, JANNY	3,214,886	ANONYME POUR	
AVIDBOTS CORP	3,215,578	ELIE, PHILIPPE	3,178,281	L'ETUDE ET	
BALABAN, MATTHEW	3,215,268	ELLIS, DAVID	3,215,351	L'EXPLOITATION DES	
BAMBHA, ABHISHEK	3,213,919	ERIKSSON, ERIK	3,215,205	PROCEDES GEORGES	
BANGGAARD STEFFENSEN,		ESLAMI, HORMOZ	3,209,645	CLAUDE	3,214,143
KASPER	3,214,143	ETI GROUP	3,215,334	LARO, MATTHIJS	3,209,968
BANNOV, NATHAN	3,222,319	EVENTPREP CANADA INC.	3,178,519	LECLERC, JEAN-MICHEL	3,215,639
BANVILLE, ALEXANDRA	3,215,639	FAKIH, ADEL	3,215,578	LEFEBVRE, MARC	3,215,268
BARRETTE OUTDOOR		FARVARDIN, EHSAN	3,215,062	LESPIAT, REMI	3,215,502
LIVING, INC.	3,214,260	FARZANEH, SADEGH	3,215,672	LETOURNEAU, OLIVIER	3,214,886
BARRETTE OUTDOOR		FEYEL, PHILIPPE	3,178,281	LI, HUIYAN	3,215,835
LIVING, INC.	3,214,261	FISHER, MYA	3,210,921	LIDDY, JAQUELYN	3,179,847
BEIRNAERT, GWENNAEL	3,207,119	FRAZIER, JOSHUA LELAND	3,215,495	LOCKWOOD, THOMAS	3,214,672
BELLO-HAMILTON, ADEOLA	3,228,037	FRENAL, ANTOINE	3,214,143	LORRE, ARTHUR	3,210,714
BERTKE, PATRICK JOSEPH	3,214,260	FULLER, NADIYA V.	3,214,625	LUCAS, TIMOTHY RYAN	3,207,119
BERTKE, PATRICK JOSEPH	3,214,261	GABA, ABHISHANK	3,215,578	MACNEIL IP LLC	3,213,290
BESSETTE, FREDERIK	3,215,639	GALTRONICS USA, INC.	3,215,672	MAHTO, ROHIT	3,213,919
BLACKSMITH GOLF		GD ENERGY PRODUCTS, LLC	3,213,681	MARCHAND, NICOLAS	3,215,062
COMPANY INC.	3,215,268	GEOPHYSIQUE G.P.R.		MASANEK, FREDERICK W.,	
BLOECHL, ANDREW	3,222,319	INTERNATIONAL INC.	3,214,886	JR.	3,213,290
BMIC LLC	3,215,351	GLOVER, ELLEN	3,213,499	MCCLURE, JOHN D.	3,214,556
BOGAJ, PREMTON	3,209,968	GREENFIELD, MEREDITH		MCCLURE, JOHN D.	3,214,559
BOUCHARD, CATHARINE		KATHARINE CARTER	3,179,847	MCLACHLAN, ROBERT P.	3,215,583
EUGENIE	3,179,847	GROSS, PHILIP S.	3,214,416	MEKONNEN, TIZAZU	3,209,645
BRADY WORLDWIDE, INC.	3,222,319	GRUBER, AARON	3,178,441	MENARDO, PHILIPPE	3,215,334
BREDIKHIN, EGOR	3,215,578	HAMLIN, ROBERT W.	3,214,416	MEZZINO, GIACOMO	3,207,176
BROAN-NUTONE LLC	3,214,872	HAMMOND, JOEL DAVID	3,179,847	MICRO MATIC A/S	3,214,143
BROWN, JOSHUA D.	3,214,089	HARRIS, KEVIN	3,215,361	MICROTECNICA S.R.L.	3,207,170
BUNDA, ANDRZEJ	3,213,290	HARRIS, PHILIP C.	3,215,361	MICROTECNICA S.R.L.	3,207,176
CAMPOS HALAS, DANIEL	3,214,886	HART, WILLIAM	3,178,519	MIKULA, PAUL	3,228,037
CAPON, CHARLES	3,215,334	HOLMES, SCOTT	3,214,672	MIKULA, RANDY	3,228,037
CAPPO, MATTEO	3,207,170	HOXHA, BLERINA	3,179,847	MOORE, PAIGE BARBARA	3,214,260
CARAMICO, STEVEN M.	3,214,207	HUGHES, CHRIS	3,214,556	MOORE, PAIGE BARBARA	3,214,261
CAREY, CHAD ARTHUR	3,199,063	INSIGHT ANALYTICAL		MORNACCHI, ANDREA	3,207,170
CAREY, CHAD ARTHUR	3,199,065	SOLUTIONS INC.	3,215,361	MOUSTAFA, ESLAM	3,178,210
CATERPILLAR INC.	3,214,978	JAFFEL, HAMOUDA	3,215,502	MUELLER, MARC	3,215,415
CATERPILLAR INC.	3,214,980	JAHANI, ALI	3,215,578	MURLI, SATHVIK	3,215,583
CHOI, YOOHEE	3,215,578	JAILLET-GOSSELIN, PHILIPPE	3,215,639	NAICK, BIJOY	3,179,847
COLUMBIA, WESLEY	3,222,319	JANG, SUK HO	3,197,430	NETZERO ENTERPRISES INC.	3,215,570
CONTINUUS MATERIALS		JARVO, JAMES ROBERT	3,210,761	NICOLA, WILTEN	3,178,441
INTELLECTUAL		JOLANI, FARID	3,215,672	NIKAM, ANUP	3,214,872
PROPERTY, LLC	3,210,921	JONES, MICHEAL DON	3,215,472	NIZNIK, ARKADIUSZ	3,215,502
COSCARELLA, GABE	3,215,010	JONES, RICHARD	3,179,847	NKT HV CABLES AB	3,215,205
COWX, DAVID	3,215,268	KARTHIKEYAN, AJAI	3,213,499	NYBERG, RYAN	3,214,556

**Index of Canadian Applications Open to Public Inspection  
March 31, 2024 to April 6, 2024**

NYBERG, RYAN	3,214,559	ST-LAURENT, GABRIEL	3,215,062
OASIS AEROSPACE INC.	3,214,672	STOYANCHEV, KALIN	3,178,519
OLDCASTLE APG, INC.	3,215,286	STRATTON, ROBERT	3,214,556
ORAL SCIENCE INC.	3,215,824	STRATTON, ROBERT	3,214,559
ORTIZ ALEMANY, LYAN	3,215,351	SUBRAMANIAN, SRI	
PAGACZ, DOMINIK	3,178,530	KRISHNA	3,215,062
PELLERIN, MICHEL	3,215,639	SUPUT, MARKO	3,210,921
PEREZ-PRAT VINUESA, EVA		SYED, YUSUF	3,210,761
MARIA	3,215,442	SYNCRUDE CANADA LTD. IN	
PEREZ-PRAT VINUESA, EVA		TRUST FOR THE	
MARIA	3,215,446	OWNERS OF THE	
PICOT, OLIVIER	3,207,899	SYNCRUDE PROJECT AS	
PLATTENBERGER, DAN		SUCH OWNERS EXIST	
AUSTIN	3,215,286	NOW AND IN THE	
PONNAMANENI,		FUTURE	3,228,037
VAMSHIDAR	3,179,847	TANG, NELSON	3,213,499
PRATT & WHITNEY CANADA		TECHNETIX B.V.	3,209,968
CORP.	3,210,761	TEVLIN, RYAN JAMES	3,179,847
PRATT & WHITNEY CANADA		THE PROCTER & GAMBLE	
CORP.	3,215,062	COMPANY	3,215,446
PROVENCHER, MARTIN	3,215,639	THE PROCTOR & GAMBLE	
PYE, WADE	3,178,693	COMPANY	3,215,442
QUAGLIA, ENRICO	3,207,170	THE RAYMOND	
QUALITAS		CORPORATION	3,215,583
MANUFACTURING		THE TORONTO-DOMINION	
INCORPORATED	3,179,677	BANK	3,179,847
RAFLEWSKI, GARETH	3,215,268	TISCHER, ERIC	3,214,672
RASHEED, UMER	3,215,578	TRUDEL, BENOIT	3,215,062
RATIER-FIGEAC SAS	3,207,899	TYRBERG, ANDREAS	3,215,205
RICCI, THOMAS TREVOR	3,210,761	UNITED PARCEL SERVICE OF	
RODRIGUEZ, RAPHAEL A.	3,208,165	AMERICA, INC.	3,214,089
ROKU, INC.	3,213,919	UNIVERSITY OF GUELPH	3,215,835
ROMER, SASCHA	3,215,415	VAN BEEK, JACCO	3,215,672
ROSS, TYLER	3,178,519	VAN DAM, ZACHARY	3,222,319
RYDE, RONALD FREDRICK	3,215,570	VAN STADEN, MARTIN	
SAFRAN ELECTRONICS &		PETER	3,207,119
DEFENSE	3,178,281	VAPOR OIL TECHNOLOGY	
SAFRAN ELECTRONICS &		LLC	3,199,063
DEFENSE CANADA	3,178,281	VAPOR OIL TECHNOLOGY	
SAINT-GOBAIN PLACO	3,215,502	LLC	3,199,065
SAINT-MICHEL, LAURENT	3,215,334	VERCRUYSSSEN, ALEC	3,210,714
SAITTA, MICHAEL	3,207,119	VO, NAM	3,213,919
SALVATORIELLO,		WANG, CHIH-YUNG	3,178,514
GIANFRANCO	3,207,176	WANG, NAN	3,228,037
SANGHA, AMANDEEP SINGH	3,222,319	WANG, ZIDONG	3,213,919
SANTOS, SARA SABRINA		WATTS, COLLIN	3,214,427
ALBUEN	3,179,847	WESTRICK, RICHARD L., JR.	3,214,416
SCHNEIDER, CHRISTOPHER		WIEMER, KLAUS	3,214,143
MICHAEL	3,214,260	WILKS, ZACHARY J.	3,214,978
SCHNEIDER, CHRISTOPHER		WILKS, ZACHARY J.	3,214,980
MICHAEL	3,214,261	WINTEROWD, JACK G.	3,210,921
SEAMAN, BENJAMIN Z.	3,215,062	WINTER, MORTEN	3,214,143
SEMINIS VEGETABLE SEEDS,		WITKOWSKI, BRIAN C.	3,214,625
INC.	3,215,608	WONG, VELDA	3,215,062
SHERMAN, DAVID	3,192,964	WOODCOCK, GERALD C.	3,215,032
SHOOK, JUSTIN	3,215,495	WOODROUGH, STEPHENS B.,	
SIMON, BRIAN	3,215,351	JR	3,214,089
SOCCER PARK, LLC DBA		WYMAN, BLAKE	3,178,332
URBAN SOCCER PARK	3,215,495	X-ENERGY, LLC	3,207,119
SOTO, NICHOLAS	3,215,351	XIAO, FEI	3,213,919
SOUCY INTERNATIONAL INC.	3,215,639	YEE, TEO SOK	3,210,714
SOUTHWIRE COMPANY, LLC	3,214,207	YOON, YONG SAN	3,178,562
SPENCER, MATTHEW	3,210,921	ZARBECK, CRAIG N.	3,179,677
SPM OIL & GAS INC.	3,214,625	ZARGHOONI, BEHNAM	3,215,672

# Index of PCT Applications Entering the National Phase

## Index des demandes PCT entrant en phase nationale

100% SPEEDLAB, LLC	3,233,834	ARAUJO DA SILVA, JOSE-	BEIJING JINGKELUN	
10957402 CANADA INC.	3,233,886	CARLOS	ENGINEERING DESIGN	
A RAYMOND ET CIE	3,233,750	ARAUJO DA SILVA, JOSE-	AND RESEARCH	
AB HANDSHAKE		CARLOS	INSTITUTE CO., LTD.	3,233,846
CORPORATION	3,233,802	ARAUJO DA SILVA, JOSE-	BELTRAN, PEDRO	3,233,554
ABB SCHWEIZ AG	3,233,514	CARLOS	BELTRAN, PEDRO	3,233,555
ABIONIC SA	3,233,713	ARIAS, DIEGO	BEN CHAABANE, MOHAMED	
ABZAC CANADA INC.	3,233,530	ARTHREX, INC.	FADHEL	3,233,528
ACTINIUM		ASANO, SATOSHI	BEN-SHUSHAN SHELLY,	
PHARMACEUTICALS,		ASPNES, ERIC	ROTEM	3,233,716
INC.	3,233,537	ASSISTANCE PUBLIQUE -	BENDAHAN, DAVID	3,233,636
ADAMCZYK, EVAN	3,233,860	HOPITAUX DE PARIS	BENNINGA, ROMY	3,233,713
ADAMS, EDDIE	3,233,868	AUTOMOTIVE CELLS	BENSUSSAN, BERNARD	3,233,827
ADAPTIV NETWORKS INC.	3,233,510	COMPANY SE	BEREZHNOY, ALEXEY	
ADARX PHARMACEUTICALS,		AVA FOOD LABS, INC.	YEVGENYEVICH	3,233,707
INC.	3,233,755	AYOOB, ANDREW	BERRY GLOBAL, INC.	3,233,637
ADEEL, MUHAMMAD	3,233,810	AYRLE, THOMAS	BERTRAM, TIMOTHY A.	3,233,866
AFFIMED GMBH	3,233,696	AZHIR, ARASTEH	BHAMRA, INDER	3,233,572
AGE LABS AS	3,233,615	AZORA THERAPEUTICS, INC.	BHATTACHARYA, BIYASH	3,233,849
AGEE, KENNETH L.	3,233,693	BACCHETTA, MATTHEW	BIANCHI, ARIANNA	3,233,943
AHMAD, SHAFIQUE	3,233,948	BAGHERI, HOSSEIN	BIBOTING INTERNATIONAL	
AHMED, FARIHA	3,233,854	BAKER HUGHES OILFIELD	CO., LTD	3,233,592
AKERO THERAPEUTICS, INC.	3,233,918	OPERATIONS LLC	BIBOTING INTERNATIONAL	
AKOUCS, INC.	3,233,522	BAKER HUGHES OILFIELD	CO., LTD	3,233,594
AL MSTREHI, RAFAT	3,233,511	OPERATIONS LLC	BIBOTING TRADING	
ALAGARSAMY, SIVA	3,233,835	BAKER, LUCAS	(SHANGHAI) CO., LTD	3,233,592
ALBERTELLI, ROBERTO	3,233,833	BAKER, SUZANNE M.	BIBOTING TRADING	
ALBOMED GMBH	3,233,718	BALBUENA, BAPTISTE	(SHANGHAI) CO., LTD	3,233,594
ALCON INC.	3,233,597	BALESTRINI, ANDREA	BIEBUYCK, ADELAIDE	3,233,513
ALCON INC.	3,233,600	BALK, ROELOF	BIG BLUE TECHNOLOGIES,	
ALCON INC.	3,233,898	BARANY, DAVID A.	INC.	3,233,782
ALCON, INC.	3,233,595	BARKER, DAVID T.	BIGNOZZI, CARLO ALBERTO	3,233,920
ALEFANTIS, TIMOTHY	3,233,926	BARNICKEL, WILLIAM E.	BILLIALD, NICOLAS	3,233,644
ALI, MOHAMMED YOUSSEF		BARRAFON GOMEZ, MARC	BIONTECH SE	3,233,512
IBRAHIM	3,233,732	BARRAUD, ALAIN	BIRCHLER, KIRK	3,233,637
ALIZADEH-MOUSAVI, OMID	3,233,527	BARRIOS SIERRA, JOSE	BISSET, STEPHEN	3,233,779
ALIZOTI, NERITAN	3,233,823	MIGUEL	BITAN, LIRON	3,233,709
ALLERDT, ANDREW C.	3,233,666	BARRO, MARIO	BITAN, LIRON	3,233,710
ALLNEX AUSTRIA GMBH	3,233,955	BASF SE	BITAN, LIRON	3,233,712
AMELIO BIOTECH CO., LTD.	3,233,715	BASF SE	BLOCH, ITAI	3,233,716
AMERICAN STERILIZER		BASF SE	BLOMSTROM, PHILIP	3,233,761
COMPANY	3,233,916	BASF SE	BLOMSTROM, PHILIP	3,233,780
AMGEN INC.	3,233,555	BASF SE	BLOMSTROM, PHILIP	3,233,826
AMPHLETT, JAMES	3,233,849	BASIL, JOVIN	BLOSS, FRANK	3,233,767
AMRAM, EYTAN	3,233,716	BASOGLU KABLO VE PROFIL	BLUE PLANET SYSTEMS	
AN, HWIKYEONG	3,233,859	SANAYI VE TICARET	CORPORATION	3,233,495
AN, HWIKYEONG	3,233,862	ANONIM SIRKETI	BLUE PLANET SYSTEMS	
AN, PEIYUN	3,233,744	BATEMAN, JOHN	CORPORATION	3,233,611
AN, WOOHYUN	3,233,569	BATES, DAVID	BLUM, MATHIAS	3,233,795
ANDERSEN, DANIEL	3,233,771	BAXTER HEALTHCARE SA	BOND, NICOLE	3,233,551
ANDREU, JOAN	3,233,911	BAXTER INTERNATIONAL	BONDUGULA, RAJKUMAR	3,233,934
ANRAM HOLDINGS	3,233,489	INC.	BOOTBOX LABS, INC.	3,233,607
AQUIRIAN TECHNOLOGY		BEDEL, LAURENT	BOREL, GREGORY	3,233,843
PTY LTD	3,233,496	BEHENNA, DOUGLAS C.	BORGARDT, ELENA	3,233,829
ARAI, KENGO	3,233,924	BEHENNA, DOUGLAS C.	BORGARDT, ELENA	3,233,832
			BORKOWSKI, COLLIN	3,233,643

## Index of PCT Applications Entering the National Phase

BOURDAKOS, NICHOLAS	3,233,702	CENTRE NATIONAL DE LA	CHUGAI SEIYAKU	
BOURG, VIOLETTE		RECHERCHE	KABUSHIKI KAISHA	3,233,531
CATHERINE		SCIENTIFIQUE	CHUGAI SEIYAKU	
MARGUERITE	3,233,775	CGG SERVICES SA	KABUSHIKI KAISHA	3,233,924
BOURLON, EVELISE	3,233,520	CHAISE, ALBIN	CHUNG, WOOSEOK	3,233,717
BOUSSIRON, CHARLENE	3,233,786	CHAKRABARTI, REETAM	CHUNG, WOOSEOK	3,233,727
BOVINO, MICHAEL J.	3,233,725	CHAKRABARTI, REETAM	CLARK, KENNETH	3,233,602
BOWCUT, VICKIE	3,233,566	CHAKRABARTI, REETAM	CLARKE, JAMES	3,233,770
BOWCUT, VICKIE	3,233,567	CHAKRABARTI, REETAM	CLARKE, JOHN	3,233,770
BOWCUT, VICKIE	3,233,570	CHAKRABARTI, REETAM	CLAVEL, MAXIME	3,233,750
BOWCUT, VICKIE	3,233,571	CHAKRABARTI, REETAM	CLENNEN, STEPHANIE	
BRACEY, TRISTRAM		CHALFIN, MAX	KAY	3,233,844
CHARLES RAGLAN	3,233,564	CHAMBRIN, BRICE	CLENNEN, STEPHANIE	
BRANDS, KAREL MARIE		CHAMPAGNE, SCOTT	KAY	3,233,852
JOSEPH	3,233,731	CHAMPON, ISABELLE	CLEON, THOMAS	3,233,479
BRASH, BENJAMIN	3,233,875	CHAMPON, ISABELLE	CLOETE, SCHALK	3,233,689
BRATT, INGRID	3,233,739	CHAN, CHIU TUNG	CLUBB, JAMES	3,233,797
BRAUN, ROLAND	3,233,514	CHAN, KWAN CHEE	COBB, TYSON	3,233,501
BRETON, BERNARD	3,233,510	CHAPMAN, JONATHAN	COCHRAN, TRAVIS	3,233,861
BREUER, MICHAEL	3,233,529	MORRIS	COGO, ALBERTO	3,233,920
BREWER, MICHAEL A.	3,233,593	CHARI, KRISHNAN	COHEN, DVIR	3,233,664
BRIDGE TO LIFE LTD.	3,233,704	CHARLES, STEVEN T.	COHEN, ELAD	3,233,716
BRIDGEBIO SERVICES, INC.	3,233,554	CHASE, ARNOLD	COMMISSARIAT A L'ENERGIE	
BRIDGEBIO SERVICES, INC.	3,233,555	CHECHILE, IGNACIO	ATOMIQUE ET AUX	
BRIDGESTONE AMERICAS		CHEN, CHI-JUNG	ENERGIES	
TIRE OPERATIONS, LLC	3,233,642	CHEN, HELIANG	ALTERNATIVES	3,233,783
BRISTOL-MYERS SQUIBB		CHEN, JIAWEN	COMMISSARIAT A L'ENERGIE	
COMPANY	3,233,554	CHEN, JUN	ATOMIQUE ET AUX	
BRODKIN, HEATHER	3,233,893	CHEN, LIANGYI	ENERGIES	
BROGAARD, KRISTIN	3,233,857	CHEN, PING	ALTERNATIVES	3,233,798
BROWN, DONAVAN	3,233,779	CHEN, ROBERT	COMMISSARIAT A L'ENERGIE	
BRUENING, HAUKE	3,233,754	CHEN, SHUHUI	ATOMIQUE ET AUX	
BUBENIK, MONICA	3,233,636	CHEN, WEI	ENERGIES	
BUCKLEY, MICHAEL	3,233,711	CHEN, XIAOBO	ALTERNATIVES	3,233,850
BUDIN, JOEL	3,233,479	CHEN, XIMOU	COMPACT MEDICAL	
BURN, JOHN	3,233,741	CHEN, YING	SOLUTIONS LLC	3,233,561
BUSEKRUS, DOUG	3,233,842	CHEN, YONGKAI	COMPAGNIE GENERALE DES	
BUTLER, JEFFREY	3,233,827	CHEN, ZEHAO	ETABLISSEMENTS	
BWXT MEDICAL LTD.	3,233,550	CHEN, ZEHAO	MICHELIN	3,233,473
BYD COMPANY LIMITED	3,233,544	CHEN, ZHEN	COMPAGNIE GENERALE DES	
BYERS, ANTHONY	3,233,926	CHENG, GANG	ETABLISSEMENTS	
CAFARELLI, TIZIANA	3,233,893	CHI, HO-JUNE	MICHELIN	3,233,478
CAI, NA	3,233,663	CHIA TAI TIANQING	COMPAGNIE GENERALE DES	
CAI, NA	3,233,707	PHARMACEUTICAL	ETABLISSEMENTS	
CAI, XIAOCHUAN	3,233,836	GROUP CO., LTD.	MICHELIN	3,233,677
CALYSTA, INC.	3,233,940	CHIANG, HAO	CONRADO, ROBERT JOHN	3,233,702
CAMLIBEL, MUZAFFER	3,217,105	CHINA PETROLEUM &	CONSTANTZ, BRENT R.	3,233,495
CANCER RESEARCH		CHEMICAL	CONSTANTZ, BRENT R.	3,233,611
TECHNOLOGY LIMITED	3,233,741	CORPORATION	CONTEMPORARY AMPEREX	
CAO, LUXIANG	3,233,744	CHING, CHEUCK HIN	TECHNOLOGY CO.,	
CAR BENCH S.P.A.	3,233,617	CHO, BYUNGSUNG	LIMITED	3,233,869
CARAWAY THERAPEUTICS,		CHO, BYUNGSUNG	CONVENT, LIONEL	3,233,513
INC.	3,233,509	CHO, BYUNGSUNG	CONVERSE, PERRY D.	3,233,593
CARBONCOMPETENCE		CHO, BYUNGSUNG	COOMBES, JOSS ANTON	3,233,702
GMBH	3,233,608	CHO, BYUNGSUNG	COOPER, DANIEL JOHN	3,233,849
CARDINAL, CHRISTOPHER J.-		CHO, SANGEUN	COOPER, SCOTT	3,233,808
P.	3,233,950	CHOI, HYUN-HO	COOPERATIE KONINKLIJKE	
CARNIOL, NATACHA	3,233,478	CHRISTENSEN, JAMES GAIL	COSUN U.A.	3,233,483
CARRIE, MAXIME	3,233,528	CHRISTENSEN, JAMES GAIL	COSTELLA, STEPHEN	3,233,823
CASTILLO, DORIANNE A.	3,233,811	CHRISTENSEN, JAMES GAIL	COTRELL, PHILLIP LORAIN	3,233,671
CASTILLO, JOSE GARAY	3,233,808	CHRISTENSEN, JAMES GAIL	COTTON, AARON	3,233,708
CATERPILLAR INC.	3,233,591	CHUA, MARDONN CARL		
CATERPILLAR INC.	3,233,593	CHUBUKOV, BORIS A.		



## Index des demandes PCT entrant en phase nationale

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGN. OF SOC. ACT (ACT XXI OF 1860)	3,233,848	DI IORIO, STEPHANE	3,233,798	EPISURF IP-MANAGEMENT AB	3,233,739
CRITICAL CARE DX LTD.	3,233,487	DIAMIDEX	3,233,932	EPISURF IP-MANAGEMENT AB	3,233,740
CROWLEY, JOHN	3,233,543	DIETRICH, EVELYNE	3,233,636	EQUIFAX INC.	3,233,931
CRUCIANI, PAUL	3,233,738	DIMITROVA, MARIANA N.	3,233,918	EQUIFAX INC.	3,233,934
CTK RESEARCH AND DEVELOPMENT CANADA LTD.	3,233,840	DING, LINA	3,233,554	ERB, TOBIAS	3,233,529
CURRERI, ALEXANDER M.	3,233,824	DING, MURAN	3,233,721	ERICKSON, SIGNE	3,233,538
CYALUME TECHNOLOGIES, INC.	3,233,734	DINIZ DE CARVALHO, DANIEL	3,233,809	ESPOSITO, GENNARO	3,233,725
CYTOMX THERAPEUTICS, INC.	3,233,663	DIPIETRO, DEAN	3,233,607	ESSITY HYGIENE AND HEALTH AKTIEBOLAG	3,233,761
CYTOMX THERAPEUTICS, INC.	3,233,707	DIXON, JOSHUA M.	3,233,626	ESSITY HYGIENE AND HEALTH AKTIEBOLAG	3,233,780
DAEWOONG PHARMACEUTICAL CO., LTD.	3,233,606	DOMANI, GUENTER	3,233,821	ESSITY HYGIENE AND HEALTH AKTIEBOLAG	3,233,826
DAIMLER TRUCK AG	3,233,796	DONGJIN SEMICHEM CO., LTD.	3,233,569	ETERNIVAX BIOMEDICAL, INC	3,233,697
DALE, SUZANNA	3,233,889	DONNER, TOBIAS	3,233,672	ETHERIDGE, JOE	3,233,620
DALVADI, ROMIL HITENBHAI	3,233,489	DOTAN, NESLY	3,233,716	ETTAYEBI, ILIAS	3,233,809
DAMBKOWSKI, CARL	3,233,554	DOULAMI, CHRISTIANA	3,233,732	ETZ, OLIVER	3,233,955
DAMBKOWSKI, CARL	3,233,555	DOUXMATOK LTD.	3,233,710	EUROKERA S.N.C	3,233,491
DAMES, ENOCH	3,233,950	DOW GLOBAL TECHNOLOGIES LLC	3,233,789	EVAPCO, INC.	3,233,552
DANIEL, DYLAN L.	3,233,663	DOW GLOBAL TECHNOLOGIES LLC	3,233,793	FAIRWEATHER, THOMAS DAVID	3,233,705
DANIEL, DYLAN L.	3,233,707	DU PREEZ, WARREN	3,233,931	FALK, TOMMY	3,233,947
DANIELS, DAVID ARTHUR	3,233,684	DUCROS, FREDERIC	3,233,783	FANG, LI	3,233,744
DANNENBERG, CHRISTINA FRIEDERIKE	3,233,775	DUCROS, FREDERIC	3,233,850	FANG, YICHEN	3,233,852
DANYANG HUICHUANG MEDICAL EQUIPMENT CO., LTD.	3,233,764	DUDOIT, LAURENT	3,233,530	FATTAL, MORAN	3,233,709
DASAPPA, SHRUTHI	3,233,950	DUFFY, IAN R.	3,233,733	FATTAL, MORAN	3,233,710
DAUM, FREDERICK E.	3,233,666	DUFFY, IAN R.	3,233,748	FAUGERAS, VINCENT	3,233,627
DAVIDSON, MATTHEW	3,233,526	DUKAN, SAM	3,233,932	FENG, DEVIN	3,233,854
DAVIDSON, PHILIP	3,233,926	DULAT, HOLGER	3,233,696	FEOLA, ROLAND	3,233,955
DAVIS, LUKE	3,233,685	DUMONT, AUDREY	3,233,932	FERRAND, THOMAS	3,233,473
DE ALMEIDA, ANDRE	3,233,860	DUPRET, LAETITIA	3,233,513	FERRAND, THOMAS	3,233,677
DE BORTOLI, MARC	3,233,750	DURAND, NICOLAS	3,233,713	FITSKIN INC.	3,233,525
DE BRUIJN, WERNER	3,233,947	DURR, JOSSELYN HAAS	3,233,651	FLAGLE, JACOB	3,233,561
DE CLERCQ, SANDER	3,233,513	DURUGAPPA, BASAVARAJA	3,233,848	FLODSTROM, KATARINA	3,233,739
DE JUAN, EUGENE	3,233,538	EASTMAN CHEMICAL COMPANY	3,233,844	FLOWER, TODD	3,233,533
DEAR, DAVID	3,233,827	EASTMAN CHEMICAL COMPANY	3,233,852	FLUIT, STEVEN	3,233,643
DEBETENCOURT, SAM	3,233,513	EASYDAY HEALTH PRODUCTS INC.	3,233,559	FOLGER, MANFRED	3,233,766
DEBX MEDICAL HOLDING B.V.	3,233,920	EATON INTELLIGENT POWER LIMITED	3,233,646	FORREST, BRUCE D.	3,233,863
DELACROIX, SEBASTIEN	3,233,651	EBRAHIMI, HAMID	3,233,844	FORS, JONAS	3,233,787
DELAYE, LOIC	3,233,491	ECOLE NORMALE SUPERIEURE	3,233,627	FORSELL, PETER	3,233,737
DELVECCHIO, DANIEL E.	3,233,847	EDMONDS, JOSEPH	3,233,568	FORWARD ENTERTAINMENT & TECHNOLOGY, LLC	3,233,770
DEMARAIS, JAKE	3,233,823	EDSON, MICHAEL	3,233,923	FOWLER, GREGORY D.	3,233,624
DEMOPULOS, GREGORY A.	3,233,732	EGAMI, KIICHI	3,233,924	FRANCO, JORGE	3,233,705
DEN BOER, NOLAN	3,233,643	EICKHOFF, JONATHAN	3,233,637	FRARACCIO, SERENA	3,233,868
DEPLACE, AYMERIC	3,233,769	ELBAUM, HECTOR	3,233,720	FREEPORT MINERALS CORPORATION	3,233,773
DESTAILLATS, FREDERIC	3,233,943	ELICIT PLANT	3,233,786	FREIJE, JANJAAP	3,233,485
DFX: SOUND VISION	3,233,725	ELSWORTH, CLIVE THOMAS	3,233,532	FRICK, CHRISTOPHER D.	3,233,793
DHAMNE, SAMEER	3,233,700	ELVES, PHILIP MICHAEL	3,233,889	FU, TIMOTHY	3,233,607
DHILOON, SANTOKH	3,233,804	EMERGING FUELS TECHNOLOGY, INC.	3,233,693	FUENTEVILLA DIAZ, GREGORIO	3,233,504
DHOKE, CHAITANYA	3,233,689	ENCINO ENVIRONMENTAL SERVICES, LLC	3,233,620	FUKUDA, MASAKAZU	3,233,924
DI CARLO, DANIEL	3,233,957	ENGEL, TOBIAS	3,233,837	FULTZ, KIMBERLY	3,233,755
		ENNOVI INDUSTRIES, INC.	3,233,777	FUSION PHARMACEUTICALS INC.	3,233,733
		ENWAVE CORPORATION	3,233,948	FUSION PHARMACEUTICALS INC.	3,233,748
		EOSENSE INC.	3,233,520	FYE, STEPHEN C.	3,233,708
		EPIROC ROCK DRILLS AKTIEBOLAG	3,233,906	GABELLE, JEAN-CHRISTOPHE	3,233,528
				GABIG, DANIEL ALBERT	3,233,564

## Index of PCT Applications Entering the National Phase

GAL, MAAYAN	3,233,716	GUELTEKIN, FURKAN	3,233,821	HILTI	
GALIBOURG, ISABELLE	3,233,738	GUENTHART, BRANDON A.	3,233,497	AKTIENGESELLSCHAFT	3,233,821
GALLANT, MICHEL	3,233,636	GUISOT, NICOLAS E.S.	3,233,572	HIRAYAMA, KAZUNORI	3,233,924
GALLON, RICHARD	3,233,741	GUO, BO	3,233,934	HOANG, HARLEN	3,233,600
GAO, ALLAN HAIMING	3,233,702	GUO, SHUWEI	3,233,540	HOERMANN, ALEXANDER	3,233,950
GARCIA CANSECO, ERIK	3,233,646	GUO, ZHIHENG	3,233,763	HOFFMAN, KARL K.	3,233,723
GARCIA, ALEJANDRO	3,233,646	GUPTA, ARVIND	3,233,840	HOFMANN, NILS	3,233,766
GARDEZI, SYED ALI	3,233,701	GUTHLEIN, JAMES	3,233,847	HOGANAS AB (PUBL)	3,233,875
GARNER, GREGORY MACK	3,233,670	GUZIK, THOMAS	3,233,810	HOJJATIE, MICHAEL	3,233,705
GARNER, WILL	3,233,728	HA, SONGYI	3,233,606	HOLLISTER INCORPORATED	3,233,778
GASTEIGER, HUBERT	3,233,515	HABERMANN, JUDITH	3,233,754	HONG, FENG	3,233,744
GATTEN, BENJAMIN M.	3,233,542	HACSI, JAMES SCOTT	3,233,827	HONG, SEUNG GYUN	3,233,838
GE, CUILI	3,233,839	HADLEY, CATHRINE LUND	3,233,615	HOROS, RASTISLAV	3,233,519
GE, WEIZHI	3,233,865	HAGHAYEGH, FATEMEH	3,233,487	HOSHINO, YUTA	3,233,895
GEBREHIWOT, EPHREM		HAJJAMI, NARGISSE EL	3,233,651	HOU, LIJUAN	3,233,744
LEMLEM	3,233,773	HALLER, CORINNE	3,233,943	HOWE, THOMAS HARRY	3,233,573
GEIGER, DAVID	3,233,659	HALLIN, JILL	3,233,566	HU, LI	3,233,735
GELO, JOSEPH	3,233,734	HALLIN, JILL	3,233,567	HU, XINDE	3,233,534
GEN-PROBE INCORPORATED	3,226,812	HALLIN, JILL	3,233,570	HUANG, BOWEN	3,233,931
GENMAB A/S	3,233,512	HALLIN, JILL	3,233,571	HUANG, CHANGDE	3,233,744
GEOGHEGAN, EILEEN	3,233,537	HAMILTON, JENNIFER	3,233,552	HUANG, FUDE	3,233,744
GEREDEL, GOKHAN	3,217,105	HAN, DAENAM	3,233,717	HUANG, ZHENGLI	3,233,648
GERMAIN, NICOLAS	3,233,795	HAN, DAENAM	3,233,727	HUAWEI TECHNOLOGIES	
GESSLER, TOBIAS	3,233,521	HAN, DAENAM	3,233,859	CO., LTD.	3,233,516
GETAC CORPORATION	3,233,810	HAN, JUNGHO	3,233,726	HUAWEI TECHNOLOGIES	
GHANDEHARI, HAMIDREZA		HAN, JUNGHO	3,233,856	CO., LTD.	3,233,648
S.	3,233,691	HAN, ZHEN	3,233,540	HUAWEI TECHNOLOGIES	
GIEL-MOLONEY, MARYANN	3,233,926	HANNA, LUKE E.	3,233,625	CO., LTD.	3,233,649
GILBERT, PHILIPPE-		HANSELMANN, ROGER	3,233,731	HUAWEI TECHNOLOGIES	
ALEXANDRE	3,233,926	HARBURG-FREUDENBERGER		CO., LTD.	3,233,735
GILLANDERS, ROSS N	3,233,800	MASCHINENBAU GMBH	3,233,535	HUAWEI TECHNOLOGIES	
GINES, JEREMY	3,233,501	HARBURG-FREUDENBERGER		CO., LTD.	3,233,763
GIRARD, ROBERT KENNETH	3,233,616	MASCHINENBAU GMBH	3,233,963	HUAWEI TECHNOLOGIES	
GIVER, LORRAINE JOAN	3,233,940	HART, THOMAS	3,233,867	CO., LTD.	3,233,839
GLACKIN, JAMES ME	3,233,800	HARTL, DANIEL	3,233,806	HUBBACH, JEFF	3,233,841
GLENN, DAVID J.	3,233,550	HARTMANN, LOUIS	3,233,515	HUBBARD, SAWYER A.	3,233,745
GLOSE, MORGAN	3,233,701	HAUSMANN, MICHAEL		HUBER, GEORGE	3,233,547
GODSIL, AMANDA	3,233,808	KARLHEINZ	3,233,775	HUBER, JOCHEN	3,233,831
GOGEL, PATRICK	3,233,766	HAVUNEN, RIIKKA	3,233,797	HUGHES NETWORK	
GOLDBERG, STEVEN D.	3,233,622	HAYDALE GRAPHENE		SYSTEMS, LLC	3,233,711
GOLDBERG, STEVEN D.	3,233,625	INDUSTRIES PLC	3,233,573	HUGHES, ROBIN	3,233,551
GOLDMAN, STEVEN A.	3,233,935	HE, WENQIANG	3,233,697	HUH, EUGENE	3,233,563
GOLDS, CALLUM	3,233,781	HE, XIAOYAN	3,233,697	HUMMINGBIRD	
GOMES-OSMAN, JOYCE	3,233,700	HEGURI, SHIN-ICHI	3,233,494	DIGANOSTICS GMBH	3,233,519
GOMPELS, URSULA	3,233,658	HEINONEN, TOMMI	3,233,665	HUNTER, GARY	3,233,550
GONZALES, ENRIQUE	3,233,808	HELLSEN, ANN-CATHRIN	3,233,875	HUTCHINSON, PETER	3,233,854
GORDON, DEANE	3,233,622	HEMMINKI, AKSELI	3,233,797	HUYNH, NGUYEN P.T.	3,233,935
GORDON, DEANE	3,233,625	HER MAJESTY THE QUEEN IN		HWANG, ON	3,233,606
GOSSE, COLLEEN M.	3,233,520	RIGHT OF CANADA AS		ICEYE OY	3,233,539
GOYAL, ARJUN K.	3,233,524	REPRESENTED BY THE		IFP ENERGIES NOUVELLES	3,233,528
GOYAL, SANKET	3,233,541	MINISTER OF NATURAL		IGAS ENERGY GMBH	3,233,829
GOYAL, SANKET	3,233,542	RESOURCES CANADA	3,233,551	IGAS ENERGY GMBH	3,233,832
GRAC, EDITH	3,233,932	HERRENKNECHT AG	3,233,774	IHI CORPORATION	3,233,638
GRAIL, INC.	3,233,805	HERRENKNECHT AG	3,233,837	IHNS, JURGEN	3,233,776
GRAZIOTTO, JOHN J.	3,233,509	HERTZ, THOMAS	3,233,787	ILTOO PHARMA	3,233,644
GREENZY	3,233,513	HERWIG, JEFFREY	3,233,552	IMPLANTICA PATENT LTD	3,233,737
GRIBBLE, KATHERINE DIANE	3,233,522	HEWITT, AARON JEROME	3,233,492	INCREDO LTD.	3,233,709
GRIMAUD, BERNARD	3,233,738	HICKEY, EUGENE R.	3,233,484	INCREDO LTD.	3,233,712
GRINSHTEIN, NATALIE	3,233,733	HICKLIN, DANIEL	3,233,893	INHERENT BIOSCIENCES,	
GRINSHTEIN, NATALIE	3,233,748	HIDISAN, IOANA MIHAELA	3,233,559	INC.	3,233,857
GROSSMAN, MARK	3,233,923	HIDROT, JEAN-DENIS	3,233,478	INNERWORLD, INC.	3,233,781
GRUBER, PETER	3,233,703	HIGA, MITSURU	3,233,746	INNOSPEC ACTIVE	
GRUENER, STEN	3,233,514	HILTI		CHEMICALS LLC	3,233,671
GU, JIBING	3,233,854	AKTIENGESELLSCHAFT	3,233,672		

## Index des demandes PCT entrant en phase nationale

INNOSPEC FUEL SPECIALTIES LLC	3,233,684	KARISHETTI, DEEPAK RAJASEKHAR	3,233,542	KOPONEN, JOONAS	3,233,817
INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE)	3,233,644	KASCHUTNIG, PAUL KASEVICH, RAYMOND STANLEY	3,233,651	KORBER TECHNOLOGIES GMBH	3,233,766
INTEGRATED NEUROLOGICS LLC	3,233,533	KASTL, JOHN	3,233,923	KOSMAC, KEVIN J.	3,233,642
INTERDIGITAL VC HOLDINGS, INC.	3,233,818	KATSURA, KENSHIRO	3,233,626	KOSSA, EDWARD	3,233,779
INTERIUS BIOTHERAPEUTICS, INC.	3,233,493	KATZ, BOB H.	3,233,638	KOTANIDES, HELEN	3,233,537
INTERNATIONAL N&H DENMARK APS	3,233,825	KE, JIANHUANG	3,233,945	KRAKEN TECHNOLOGIES LIMITED	3,233,527
IQBAL, MOHAMMED SHAMEER	3,233,804	KEAN, GREGORY GEORGE	3,233,869	KRAUS, MARINE	3,233,943
IRWIN, MATTHEW A.	3,233,642	KEENE, ANDREW	3,233,485	KREYSERN, JAN	3,233,766
ISHII, SHINYA	3,233,531	KEISER CORPORATION	3,233,854	KRIMER, ANTON	3,233,817
IYENGAR, RAJESH R.	3,233,509	KEISER, DENNIS L.	3,233,845	KT&G CORPORATION	3,226,422
JACKSON, MICHAEL STEWART	3,233,741	KENIS, KAAAT	3,233,845	KT&G CORPORATION	3,233,717
JACOB, LINDA ANNE	3,233,734	KERVICK, KRISTOPHER	3,233,513	KT&G CORPORATION	3,233,719
JAIN, DEEPAK	3,233,866	KESICKI, EDWARD A.	3,233,620	KT&G CORPORATION	3,233,722
JANNATI, ALI	3,233,700	KHADEMOSSEINI, ALIREZA	3,233,484	KT&G CORPORATION	3,233,724
JANSSSEN PHARMACEUTICA NV	3,233,622	KHALILI, JAHAN	3,233,784	KT&G CORPORATION	3,233,726
JANSSSEN PHARMACEUTICA NV	3,233,625	KHATIWADA, SUMAN KHETANI, SULTAN	3,233,721	KT&G CORPORATION	3,233,727
JARAMILLO, MARIA	3,233,733	KIKUCHI, SADATO	3,233,701	KT&G CORPORATION	3,233,856
JARAMILLO, MARIA	3,233,748	KIM, DONG SUNG	3,233,487	KT&G CORPORATION	3,233,858
JARVELA, JUSSI PETTERI	3,233,665	KIM, EUN-KYUNG	3,233,746	KT&G CORPORATION	3,233,859
JAVORKA, MARIAN	3,233,873	KIM, GWANYOUNG	3,226,422	KT&G CORPORATION	3,233,862
JEANMART, STEPHANE ANDRE MARIE	3,233,795	KIM, GYOUNGWON	3,233,505	KT&G CORPORATION	3,233,864
JEH, HOON SUNG	3,233,563	KIM, JAYOUNG	3,233,606	KUDLING, TATIANA	3,233,797
JENKS, JEREMY W J	3,233,564	KIM, JINHO	3,233,824	KUMAR, RAJIV	3,233,847
JENSEN, HENRIK MAX	3,233,825	KIM, KWANG-HYEOK	3,233,497	KVAM, MICHAEL ALAN	3,233,564
JEONG, CHEOLKYUN	3,233,662	KIM, KYUNG-WOO	3,233,871	KVAMSDAL, HANNE	3,233,689
JIANG, FEI	3,233,673	KIM, MINKYU	3,233,814	KWON, YOUNG BUM	3,226,422
JIAO, CHANGPING	3,233,744	KIM, SEUNG-JOON	3,233,719	KYRATSOS, CHRISTOS	3,233,698
JIKUMARU, TAKEHIRO	3,233,638	KIM, SEUNGDOO	3,233,814	KYUSHU UNIVERSITY, NATIONAL UNIVERSITY CORPORATION	3,233,746
JO, MIN-KI	3,233,816	KIM, TAE YOUNG	3,233,569	LAGOTTE, SAMUEL	3,233,530
JOHNSON, PHILIP R.	3,233,493	KIM, TAEHUN	3,233,838	LAHAV, NAAMA	3,233,709
JONES, CLIFFORD D.	3,233,572	KIM, TAEHUN	3,233,726	LAHAV, NAAMA	3,233,710
JONES, ELLIOT OWEN	3,233,573	KIM, TAEHUN	3,233,856	LAM, WAI KEI	3,233,805
JONES, LAWRENCE R.	3,233,704	KIM, YONG HWAN	3,233,858	LAMANDE, SHIREEN	3,233,545
JONSSON, CHRISTIAN	3,233,875	KIMURA, NAOKI	3,226,422	LANDIS+GYR INNOVATIONS, INC.	3,233,842
JORE, JAMES DOUGLAS	3,233,564	KINGSTON, CHARLES WILLIAM FREDERICK	3,233,531	LANE, CAMERON THOMAS	3,233,591
JORE, MATTHEW BERNARD	3,233,564	KINTER, SAUL	3,233,889	LANE, DANIEL	3,233,561
JULIANO, ANDREW	3,233,725	KINZE MANUFACTURING, INC.	3,233,770	LANGE, KEVIN	3,233,536
JULIN, JOHAN	3,233,739	KIRKLAND, JUSTIN	3,233,518	LANGTON, JOHN	3,233,700
JULIN, JOHAN	3,233,740	KLAASSEN-HESHOF, DIANA	3,233,930	LANZATECH, INC.	3,233,702
JUNG, FRANCK	3,233,911	KLATZMANN, DAVID	3,233,483	LAPUYADE, NICOLE G.	3,233,707
JUNG, HYUNGJIN	3,233,726	KLEANTHOS, HAROLD	3,233,644	LARSEN, ROBERT C. JR.	3,233,723
JUNG, HYUNGJIN	3,233,856	KLEINE WACHTER, MICHAEL	3,233,926	LAUGEL, BRUNO	3,233,771
JURE-KUNKEL, MARIAN	3,233,512	KNAPP, FLORIAN	3,233,766	LAURILA, PEKKA	3,233,539
JUSTUS-LIEBIG-UNIVERSITAT GIESSEN	3,233,521	KNAPP, FLORIAN	3,233,546	LAYEVSKY, DMITRY	3,233,854
KAHRAMAN, MUSTAFA	3,233,519	KNIGHTS, BRADEN	3,233,548	LAYNE, JAMES L.	3,233,708
KALLEBERG, KARL TRYGVE	3,233,615	KNOS, ANNA	3,233,948	LE SCOLAN, ERWAN	3,233,663
KAMIKAWA, TAKAYUKI	3,233,531	KNOS, ANNA	3,233,761	LE SCOLAN, ERWAN	3,233,707
KANG, JIANHUI	3,233,846	KNOS, ANNA	3,233,780	LEE, CLAUDIA	3,233,847
KARDIO DIAGNOSTIX INC.	3,233,804	KOCH, JOACHIM	3,233,826	LEE, HEEWON	3,233,606
		KODAMA, TATSUSHI	3,233,696	LEE, JAEMIN	3,233,859
		KOHL, NANCY	3,233,531	LEE, JAEMIN	3,233,864
		KOHL, NANCY	3,233,554	LEE, JONGSUB	3,233,717
		KOMANDURI, VARADA RAJAN	3,233,555	LEE, JONGSUB	3,233,719
		KOMATSU LTD.	3,233,711	LEE, JONGSUB	3,233,722
		KONGSHAUG, RUNE	3,233,895	LEE, JONGSUB	3,233,724
		KONISHI, MASAYOSHI	3,233,752	LEE, JONGSUB	3,233,727
		KOOIMA AG, INC.	3,233,746	LEE, JOOCHEOL	3,233,569
			3,233,643	LEE, KANG-YO	3,233,505
				LEE, MYUNG AN	3,233,647

## Index of PCT Applications Entering the National Phase

LEE, MYUNG-AN	3,233,788	LIU, TUANFANG	3,233,872	MCGARRY, AMY	3,233,523
LEE, SEOYEO	3,233,606	LIU, WEIDONG	3,233,540	MCGRATH, ELIZABETH	3,233,921
LEE, THOMAS WAI-HO	3,233,509	LIU, YU	3,233,554	MCGRATH, MICHAEL S.	3,233,863
LEE, WEN -SHENG	3,233,793	LIUKKONEN, OLLI	3,233,817	MECANIZACION INDUSTRIAL	
LEIS, MATHEW	3,233,950	LO, YUK-MING DENNIS	3,233,805	ASTILLERO, S.A.	3,233,504
LENG, LUHAO	3,233,557	LOADHOG LIMITED	3,233,685	MEDINBIO	3,233,938
LENNARTZ, MICHAEL	3,233,515	LODHI, MUHAMMAD ASAD	3,233,818	MEDIVENA SP. Z O.O.	3,233,888
LENNON, JASON ALLEN	3,233,684	LOGRHYTHM, INC.	3,233,841	MEDUNA, STEVEN P.	3,233,625
LENOVO (SINGAPORE) PTE. LTD	3,233,498	LOHMANN, JEROME	3,233,767	MEGGITT (SENSOREX)	3,233,772
LENTZ, KARL-HEINZ	3,233,829	LOHMEIJER, BASTIAAN	3,233,791	MEINKE, KARSTEN	3,233,766
LENTZ, KARL-HEINZ	3,233,832	LOO YAU, HELEN	3,233,809	MEKONNEN, TIZAZU H.	3,233,840
LENZ, DANIELLE R.	3,233,522	LOSKOT, STEVEN A.	3,233,622	MELANDER, EVA MARIA	
LEONG, KAM W.	3,233,706	LOSKOT, STEVEN A.	3,233,625	CARLSEN	3,233,771
LES LABORATOIRES SERVIER	3,233,771	LOU, JUN	3,233,486	MELISSA & DOUG, LLC	3,233,827
LEVERING, VRAD	3,233,538	LOVSHALL-JENSEN, ASK EMIL	3,233,849	MELLERT, MARTIN	3,233,831
LEVINSON, YARON	3,233,664	LU, JINLIAN	3,233,744	MELZER, MAX	3,233,680
LEWANDOSKI, MICHAEL	3,233,861	LU, SHAOZHONG	3,233,763	MERCK PATENT GMBH	3,233,651
LEWIS, JOHN DAVID	3,233,729	LU, XIAOQIN	3,233,486	MERRELL, JONATHAN	3,233,561
LG ENERGY SOLUTION, LTD.	3,233,647	LU, YING	3,233,697	MERSEN FRANCE AMIENS SAS	3,233,843
LG ENERGY SOLUTION, LTD.	3,233,788	LU, ZHENGZHOU	3,233,854	MERSEN OSTERREICH	
LG ENERGY SOLUTION, LTD.	3,233,814	LUCAS, JONATHAN	3,233,861	HITTISAU GES.M.B.H.	3,233,843
LG ENERGY SOLUTION, LTD.	3,233,816	LUCAS, JOSEPH S.	3,233,506	MERTE, KENNETH E.	3,233,704
LG ENERGY SOLUTION, LTD.	3,233,838	LUCKMANN, JENS	3,233,796	MESA, SEBASTIAN	3,233,811
LI, HAORYU	3,233,549	LUDWIG, DALE L.	3,233,537	METACEN THERAPEUTICS CO., LTD	3,233,563
LI, HE	3,233,735	LUKA, EMI	3,233,551	METCALF, JULIE	3,233,733
LI, I-CHEN	3,233,715	LUM, ROBERT	3,233,526	METCALF, JULIE	3,233,748
LI, JUNPING	3,233,854	LUMBROSO, ALEXANDRE FRANCO JEAN CAMILLE	3,233,795	METCALFE, NICK	3,233,492
LI, MENG	3,233,839	LUO, RONGHUA	3,233,697	MEYER, ADAM	3,233,823
LI, SHAOLONG	3,233,865	LUO, YUNFU	3,233,865	MEYER, MATTHEW	3,233,554
LI, TUOQI	3,233,600	MA, LIPING	3,233,744	MEYERS, BROOKE	3,233,554
LI, XIAOHONG	3,233,760	MADISON, BLAIR B.	3,233,506	MEYERS, BROOKE	3,233,555
LI, XIAOLONG	3,233,846	MAGNA INTERNATIONAL INC.	3,233,499	MICRONOMA, INC.	3,233,868
LI, YAO	3,233,869	MAK, NGA SZE AMANDA	3,233,721	MILANO, FIONA	3,233,513
LI, YI	3,233,499	MALAQUIN, LINDA	3,233,750	MILLER, DAVID KYLE	3,233,770
LI, YONGCUI	3,233,516	MALM, PATRIK	3,233,906	MILLER, RYAN	3,233,857
LI, YONGCUI	3,233,648	MANFREDI, LORENZO		MIR, SEYED MOHAMMAD	3,233,497
LI, YONGCUI	3,233,649	FEDERICO MICHAEL	3,233,617	MIRATI THERAPEUTICS, INC.	3,233,566
LI, YONGGANG	3,233,854	MANHAS, KARAN	3,233,604	MIRATI THERAPEUTICS, INC.	3,233,567
LI, ZHEN	3,233,755	MANN KEVEHAZI, LAURA	3,233,576	MIRATI THERAPEUTICS, INC.	3,233,570
LIAN, JUNLAN	3,233,544	MANN, JEFFREY A.	3,233,637	MIRATI THERAPEUTICS, INC.	3,233,571
LIM, CHANHYUK	3,233,569	MARCIL, ANNE	3,233,733	MIRUM PHARMACEUTICALS, INC.	3,233,728
LIM, CHEOL-HEE	3,233,505	MARCIL, ANNE	3,233,748	MITRAGOTRI, SAMIR	3,233,824
LIM, HUN IL	3,226,422	MARIANI, JOHN	3,233,935	MOCHIRIAN, PHILIPPE	3,233,636
LIM, JAE-WON	3,233,816	MARKI, IWAN	3,233,713	MODRZEWSKI, RAFAL	3,233,539
LIM, JUSTIN	3,233,554	MAROH, BORIS	3,233,955	MOINDRAULT, DENIS	3,233,911
LIM, JUSTIN	3,233,555	MARTIN-FILIPPI, MARGAUX	3,233,556	MOKARAMIAN, AMIR	3,233,873
LIMBACH, KIRK W.	3,233,785	MARTINEZ VELERIO, ELIAS	3,233,646	MOLEDA, JAROSLAW	3,233,888
LIMBACH, KIRK W.	3,233,789	MASHINCHIAN, OMID	3,233,943	MOLIN, AYMERIC	3,233,786
LIMBACH, KIRK W.	3,233,792	MATHIEU, BRUNO	3,233,911	MOLLER-TANK, SVEN	3,233,698
LIMBACH, KIRK W.	3,233,793	MATHIS, MICHAEL	3,233,624	MOMENTIS SURGICAL LTD.	3,233,664
LIMBACH, KIRK W.	3,233,794	MATSUGI, TAKUMI	3,233,494	MONDI AG	3,233,680
LIMBACH, KIRK W.	3,233,799	MATSUOKA, ITSUMI	3,233,494	MONOLITH MATERIALS, INC.	3,233,950
LIMBACH, KIRK W.	3,233,801	MATZILEVICH, DAVID	3,233,533	MONTANA TECHNOLOGIES LLC	3,233,564
LIMBACH, KIRK W.	3,233,803	MAX-PLANCK- GESELLSCHAFT ZUR		MONZA, EMANUELE	3,233,769
LIN, HONGYE	3,233,544	FORDERUNG DER		MOOG INC.	3,233,659
LINDSAY, CHRISTOPHER IAN	3,233,941	WISSENSCHAFTEN E.V.	3,233,529	MORADI ASHOUR, CHAMRAN	3,233,947
LINUS HEALTH, INC.	3,233,700	MCCARVER, STEFAN	3,233,625	MORELAND, MICHAEL	3,233,492
LIU, BINGCAN	3,233,636	MCCARVER, STEFAN J.	3,233,622	MORENO, MARIA	3,233,733
LIU, LEI	3,233,854	MCCOMAS, CASEY CAMERON	3,233,509	MORENO, MARIA	3,233,748
LIU, LI	3,233,486				
LIU, PO-CHANG	3,233,592				
LIU, PO-CHANG	3,233,594				

## Index des demandes PCT entrant en phase nationale

MORGAN STANLEY SERVICES GROUP INC.	3,233,568	NIRSCHL, CHRISTOPHER	3,233,893	PARK, SANGKYU	3,233,727
MOROVIC, WESLEY WILLIAM	3,233,825	NOETIC TECHNOLOGIES INC.	3,233,560	PARK, SANGKYU	3,233,859
MORRIS, ERIC LEON	3,233,870	NOLTE, STEVE	3,233,518	PARKER, JENNIFER	3,233,693
MORRIS, ERICK	3,233,554	NOVELTY NOBILITY INC.	3,233,871	PASCUAL-LEONE, ALVARO	3,233,700
MORRIS, JAMES ALAN	3,233,889	NUIONIC TECHNOLOGIES (CANADA) INC.	3,233,602	PATCHING, GREGORY	3,233,496
MORRIS, MICHAEL CHARLES	3,233,492	NUO-BETA PHARMACEUTICAL TECHNOLOGY (SHANGHAI) CO., LTD.	3,233,744	PATEL, ATIN	3,233,823
MOSHER, DONNA MAE	3,233,524	NURMBERGER, KRISTINA	3,233,512	PATTERSON, ELAINE	3,233,825
MOUGIN, JULIE	3,233,798	O'NEILL, JOHN D.	3,233,497	PEKING UNIVERSITY	3,233,549
MOUTIS, PANAYIOTIS	3,233,527	O'SHEA, IAN	3,233,543	PELLET, STEPHANIE	3,233,750
MSD INTERNATIONAL BUSINESS GMBH	3,233,512	OAKLEY, JONATHAN	3,233,568	PELUSO, RICHARD W.	3,233,493
MUIK, ALEXANDER	3,233,512	OCANA FERNANDEZ, ALBERTO	3,233,771	PENCHEVA, NORA	3,233,512
MULLER, ALEXANDRE	3,233,932	ODYSSEY HEALTH, INC.	3,233,861	PENG, FEI	3,233,760
MULLER-OHL, FELIX JOHANNES GERHARD	3,233,485	OELSNER, STEPHEN M.	3,233,550	PERISSE, JULIE	3,233,860
MUMMERT, ELIZA	3,233,552	OESTE, FRANZ DIETRICH	3,233,532	PERRYMAN, ALEXANDER	3,233,636
MUNTZ, HARLAN R.	3,233,691	OH, MYUNG SOOK	3,233,563	PERSSON, ANDERS	3,233,906
MURDOCH CHILDREN'S RESEARCH INSTITUTE	3,233,545	OHANYERENWA, CHIEDO	3,233,770	PETERS, KEVIN	3,233,945
MURPHY, ANDREW J.	3,233,698	OISIN BIOTECHNOLOGIES, INC.	3,233,729	PETRA PHARMA CORPORATION	3,233,484
MURPHY, NANCY ALICE	3,233,691	OIZUMI, RISA	3,233,746	PHAN, VU	3,233,777
MYERS, GILLIAN	3,233,597	OKHRIMENKO, SERGEI	3,233,802	PICAUD, THIERRY	3,233,938
NA, MIN SOO	3,233,855	OLDENGARM, SANDER HILBERT	3,233,485	PICHLER, JERIME JOSEF	3,233,916
NACHSHONY, GAL	3,233,664	OLSON, ANDREW	3,233,857	PIERRAT, MARIE-JEANNE	3,233,771
NAIK, ARMAGHAN	3,233,926	OLSON, PETER	3,233,566	PINEZICH, MEGHAN	3,233,497
NAIO-TECHNOLOGIES	3,233,911	OLSON, PETER	3,233,567	PLITEK, L.L.C.	3,233,723
NAISH, ADAM	3,233,499	OLSON, PETER	3,233,570	POLICKE, TIMOTHY A.	3,233,550
NAKAHARA, DAISUKE	3,233,642	OLSON, PETER	3,233,571	POSEIDA THERAPEUTICS, INC.	3,233,506
NAKAMURA, SHOGO	3,233,746	OMEROS CORPORATION	3,233,732	POST, GRANT	3,233,643
NANCY-PORTEBOIS, VANESSA	3,233,771	OTHMAN, JEFFERY	3,233,593	POTSCHER, JULIAN	3,233,546
NANGIA, VIJAY	3,233,498	OURA HEALTH OY	3,233,665	POTSCHER, JULIAN	3,233,548
NAPIER-RODEN, CHRISTYNE	3,233,912	OUWEHAND, ARTHUR	3,233,825	POULIOT, MARTIN	3,233,795
NATHMANN, MICHAEL	3,233,843	OWENS-BROCKWAY GLASS CONTAINER INC.	3,233,808	POWER, MARTIN	3,233,543
NATIONAL RESEARCH COUNCIL OF CANADA	3,233,733	OXEFIT, INC.	3,233,501	PPC BROADBAND, INC.	3,233,867
NATIONAL RESEARCH COUNCIL OF CANADA	3,233,748	PAHL, JENS	3,233,696	PPG INDUSTRIES OHIO, INC.	3,233,714
NATURAL EYE CARE, INC.	3,233,923	PAIDHUNGAT, MADAN M.	3,233,663	PRAS, MAXIME	3,233,473
NAVE, BARBARA	3,233,529	PAIDHUNGAT, MADAN M.	3,233,707	PRAS, MAXIME	3,233,677
NAVIRE PHARMA, INC.	3,233,554	PALMQVIST, LISA	3,233,761	PRC-DESOTO INTERNATIONAL, INC.	3,233,870
NAVIRE PHARMA, INC.	3,233,555	PALMQVIST, LISA	3,233,780	PRESIDENT AND FELLOWS OF HARVARD COLLEGE	3,233,824
NEOVOLT OY	3,233,817	PALMQVIST, LISA	3,233,826	PRICE, LEAH	3,233,863
NETTERVILLE, TANNER	3,233,781	PALUMBO, AARON W.	3,233,782	PRISM NEURO PTY LTD	3,233,921
NEUHAUS, PETER	3,233,501	PAN, QI	3,233,648	PRODUKTIF NORWAY AS	3,233,752
NEUMANN, JANIS FREDERICK	3,233,615	PANG, JIAHAO	3,233,818	PROJINI AGCHEM LTD	3,233,716
NEUVIVO, INC.	3,233,863	PANG, WEI	3,233,697	PUGACHEV, KONSTANTIN	3,233,926
NEVINS, SCOTT	3,233,552	PANIGADA, DAVIDE	3,233,769	QI, GUOZHEN	3,233,760
NEW CLOUD DYNAMICS PTY LTD	3,233,720	PANUGANTI, SREE DIVYA	3,226,812	QIN, MINGLIANG	3,233,854
NEW-TEC INTEGRATION (XIAMEN) CO., LTD.	3,233,557	PARAGON PET PRODUCTS EUROPE B.V.	3,233,485	QUINT, BERTUS JOZEF	3,233,920
NEWSOUTH INNOVATIONS PTY LIMITED	3,233,706	PARIS SCIENCES ET LETTRES	3,233,627	QUIXABEIRA, DAFNE	3,233,797
NEXT LEVEL HEALTH SCIENCES INC.	3,233,645	PARK, JUEON	3,233,719	RACINE, REGENT	3,233,559
NG, ELIZABETH	3,233,545	PARK, JUEON	3,233,726	RAI STRATEGIC HOLDINGS, INC.	3,233,745
NG, ROBERT	3,233,522	PARK, JUEON	3,233,856	RAJAKUMAR, TIMOTHY	3,233,519
NI, HUI	3,233,516	PARK, MIN GYU	3,233,640	RAMANAND, PRAKASH VALENTINO	3,233,489
NI, HUI	3,233,649	PARK, MINHYUNG	3,233,606	RASHIDI, BEHZAD	3,233,483
NICKERSON, NICHOLAS R.	3,233,520	PARK, MYOUNG GYU	3,233,563	RASIN, ALEXANDER	3,233,507
NINI, DIEGO	3,233,503	PARK, SANG GYU	3,233,871	RATTNER, SERGIO	3,233,525
		PARK, SANGKYU	3,233,717	RAYTHEON COMPANY	3,233,666
		PARK, SANGKYU	3,233,722	REALTIMEID AS	3,233,815
		PARK, SANGKYU	3,233,724	REDMAN, JOSHUA	3,233,854
				REDX PHARMA PLC	3,233,572
				REESE, SVEN	3,233,718

## Index of PCT Applications Entering the National Phase

REFLEX INSTRUMENTS ASIA PACIFIC PTY LTD	3,233,873	SANCHEZ-RIVERA, KEVIN	3,233,547	SHIREMAN, BROCK T.	3,233,622
REGENERON PHARMACEUTICALS, INC.	3,233,543	SANDERS, WILLIAM DUANE	3,233,773	SHIREMAN, BROCK T.	3,233,625
REGENERON PHARMACEUTICALS, INC.	3,233,698	SANDNES, JAN IVAR	3,233,815	SHIRK, TYLER	3,233,779
REGO, GEORGE	3,233,492	SANDOVAL, ERIKA	3,233,948	SHORT, JASON M.	3,233,745
REILLY, JAMES BARRY	3,233,873	SANDOVAL, SCOT PHILIP	3,233,773	SHOUJI, HIROFUMI	3,233,494
REPAIRE THERAPEUTICS INC.	3,233,636	SANEGENE BIO USA INC.	3,233,836	SIEGLER, JANA-JULIA	3,233,696
REY, GAETAN	3,233,750	SANJO, SHOTA	3,233,494	SILK WAY SERVICES INC.	3,233,616
RHORER, TIMOTHY B.	3,233,622	SANOFI	3,233,738	SILVIOLI, LUCA	3,233,849
RICE, BEN KEITH SR.	3,229,027	SANOFI	3,233,769	SIMILA, HEIDI	3,233,665
RICE, BENJAMIN KEITH JR.	3,229,027	SANOFI PASTEUR INC.	3,233,926	SIMULCONSULT, INC.	3,233,508
RICE, JANISE L.	3,229,027	SANTIBANEZ-KOREF, FRANCISCO MAURO	3,233,741	SINGH-TAYLOR, AKANKSHA	3,233,868
RIES, JUSTIN BAKER	3,233,556	SANTINHO, ALEXANDRE	3,233,627	SINKEVICIUS, KERSTIN	3,233,554
RIHA-MILOSKOVSKA, ELENA	3,233,483	SCHICK, MICHAEL BERNHARD	3,233,767	SINKEVICIUS, KERSTIN	3,233,555
RISK, DAVID A.	3,233,520	SCHLUMBERGER CANADA LIMITED	3,233,662	SINTEF TTO AS	3,233,689
RISKEDAL, ESPEN	3,233,615	SCHMIDT, DARBY R.	3,233,509	SIRCOULOMB, PASCAL	3,233,750
RIVIERA, JENINE	3,233,723	SCHMIDT, NANCY	3,233,645	SKARMAN, BJORN	3,233,875
ROBATJAZI, HOSSEIN	3,233,701	SCHNEIDER, JACOB	3,233,495	SLACK, MAURICE WILLIAM	3,233,560
ROBINSON, NOAH	3,233,781	SCHNEIDER, JACOB	3,233,611	SMITH, LINDSAY LORETTA	3,233,657
ROGERS, GARETH	3,233,523	SCHNEIDER, MARTIN	3,233,796	SOCIETE DES PRODUITS NESTLE S.A.	3,233,775
ROHM AND HAAS COMPANY	3,233,785	SCHNEIDER, MARTIN	3,233,796	SOCIETE DES PRODUITS NESTLE S.A.	3,233,943
ROHM AND HAAS COMPANY	3,233,789	SCHNEPP, BRUCE C.	3,233,493	SOMAPPA, SASIDHAR BALAPPA	3,233,848
ROHM AND HAAS COMPANY	3,233,792	SCHOLZ, MATTHEW REIN	3,233,729	SONG, KRISTEN G.	3,233,622
ROHM AND HAAS COMPANY	3,233,793	SCHOW, STEVEN R.	3,233,526	SORAAS, ARNE	3,233,615
ROHM AND HAAS COMPANY	3,233,794	SCHREIFELS, MARY JO	3,233,945	SORBONNE UNIVERSITE	3,233,627
ROHM AND HAAS COMPANY	3,233,799	SCHWAEBLE, HANS- WILHELM	3,233,732	SORBONNE UNIVERSITE	3,233,644
ROHM AND HAAS COMPANY	3,233,801	SCOPE, NICHOLAS CRAIG	3,233,507	SOW, BOUBACAR	3,233,636
ROHM AND HAAS COMPANY	3,233,803	SCOTT, ADAM	3,233,561	SPAN TECH LLC	3,233,708
ROHM AND HAAS COMPANY	3,233,803	SCOTT, JENNYE	3,233,637	SPIRAL THERAPEUTICS INC.	3,233,538
ROHM AND HAAS COMPANY	3,233,803	SCOTT, MARK	3,233,645	SPRINGER MASCHINENFABRIK GMBH	3,233,546
ROHM AND HAAS COMPANY	3,233,803	SCOTT, SEAN	3,233,841	SPRINGER MASCHINENFABRIK GMBH	3,233,548
ROK, INC.	3,233,670	SEABORG APS	3,233,849	SQUANDA, NICHOLAS	3,233,782
ROLPH, TIMOTHY P.	3,233,918	SEBELA VLC LIMITED	3,233,945	SRIDHAR, SARANYA	3,233,926
RON, ADAM	3,233,664	SEEGER, WERNER	3,233,521	STARR, SUSAN	3,233,536
RONAN, ALAN	3,233,543	SEGAL, MICHAEL M.	3,233,508	STEC, MICHAEL	3,233,698
ROSCHMANN, KONRAD	3,233,791	SEGAL, MICHAEL M.	3,233,508	STEFU, CRISTIAN	3,233,559
ROSS, THORSTEN	3,233,696	SEGUINEAU, CEDRIC	3,233,911	STEINKRAUS, BRUNO	3,233,519
ROZEK, ANNETT	3,233,604	SEIDEL-DUGAN, CYNTHIA	3,233,893	STEINMETZ, ANKE	3,233,769
RUIZ, HECTOR	3,233,564	SELF, KYLE	3,233,495	STEINMULLER, DETLEF	3,233,608
RUNNING TIDE TECHNOLOGIES, INC.	3,233,556	SELF, KYLE	3,233,611	STEINMULLER, MAXIMILIAN	3,233,608
RUSSELL, RONNIE M.	3,233,493	SEME, CHARLENE	3,233,491	STEINMULLER-NETHL, DORIS	3,233,608
RYAN, TIMOTHY C.	3,233,595	SENGUPTA, SRIKUMAR	3,233,730	STERN, DAVID	3,233,670
RYD, LEIF	3,233,739	SETH, SANDESH	3,233,537	STICE, JAMES	3,233,554
RYD, LEIF	3,233,740	SEVERAC, GAETAN	3,233,911	STICE, JAMES	3,233,555
RYO, SAMUEL	3,233,657	SEYEDI, MAHLA	3,233,849	STOICA, RAZVAN-ANDREI	3,233,498
RYU, DUK HYUN	3,233,647	SHAH, SHREYA	3,233,701	STOWELL, KELLY M.	3,233,861
RYU, DUK-HYUN	3,233,788	SHANGHAI GENEMAGIC BIOSCIENCES CO., LTD.	3,233,534	STROELIN, MARC	3,233,796
RYU, HANSEUL	3,233,859	SHANGHAI RESEARCH INSTITUTE OF PETROCHEMICAL TECHNOLOGY, SINOPEC	3,233,760	STUDER, SEAN	3,233,755
SAAD, DANIEL ASSAD	3,233,657	SHARKNINJA OPERATING LLC	3,233,854	STUNTNER, BENJAMIN	3,233,806
SABIN, LEAH	3,233,698	SHAW INDUSTRIES GROUP, INC.	3,233,624	SU, JINLIN	3,233,534
SAFRAN ELECTRONICS & DEFENSE	3,233,479	SHAW, ALAN	3,233,940	SUBRAMANIAN, AZHAGU	3,233,499
SAHIN, UGUR	3,233,512	SHEIKHI, AMIR	3,233,784	SULEA, TRAIAN	3,233,733
SAIKI, JULIE	3,233,526	SHEN, FAN	3,233,697	SULEA, TRAIAN	3,233,748
SALAHANDISH, RAZIEH	3,233,487	SHEN, YUELIN	3,233,662	SULLIVAN, MICHAEL	3,233,847
SALMERON-GARCIA, JOSE ANDRES	3,233,893	SHERRY, R. MITCHELL	3,233,600	SUMITOMO METAL MINING CO., LTD.	3,233,494
SALPUKAS, MICHAEL R.	3,233,666	SHIN, EUN-GYU	3,233,814		
SAMAI, POULAMI	3,233,698	SHIRAZI, LEILA	3,233,562		
SAMUEL, IFOR DAVID WILLIAM	3,233,800				
SANATI-NEZHAD, AMIR	3,233,487				

## Index des demandes PCT entrant en phase nationale

SUMITOMO OSAKA CEMENT CO., LTD.	3,233,746	THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK	3,233,706	VALMONT INDUSTRIES, INC.	3,233,626
SUN, NANCY	3,233,607			VAN DE WAERDT, NICHOLAS	3,233,643
SUN, PEIHUA	3,233,673			VAN DEN BOGAARD, PATRICK	3,233,713
SUN, YOUYOU	3,233,486	THERMO SCIENTIFIC		VAN FLEET, ERIC	3,233,604
SUN, YUE	3,233,763	PORTABLE ANALYTICAL INSTRUMENTS INC.	3,233,835	VAN GELDER, ALDO	3,233,499
SUN, YUTING	3,233,554	THIAM, ABDOU RACHID	3,233,627	VAN VEENHUYZEN, DAVID	3,233,554
SUN, YUTING	3,233,555	THOMPSON, ANDREW	3,233,556	VAN VEENHUYZEN, DAVID	3,233,555
SUNDARAM, SRIVIDHYA	3,233,529	THOMPSON, TIMOTHY J.	3,233,492	VAN-LEHN, REID	3,233,547
SURPRENANT, SIMON	3,233,636	THOMSON, JAMES	3,233,730	VANDERBILT UNIVERSITY	3,233,497
SUSSMAN, VICTOR J.	3,233,793	TIAN, DONG	3,233,818	VANDERBILT UNIVERSITY	3,233,781
SWILER, DAN	3,233,808	TIKKANEN, PAULI ENSIO	3,233,665	VANDEVENNE, BRECHT	3,233,513
SWISS.318 SAGL	3,233,833	TILT BIOTHERAPEUTICS OY	3,233,797	VANLANDINGHAM, JACOB	3,233,861
SYMONDS, ROBERT	3,233,551	TINECO INTELLIGENT TECHNOLOGY CO., LTD.	3,233,540	VARELA RODRIGUEZ, ANA	3,233,572
SYNGENTA CROP PROTECTION AG	3,233,795	TOBYNE, SEAN	3,233,700	VARMA BHUPATIRAJU, RAMA VENKATA SURYA KUMAR	3,233,542
SYNGENTA CROP PROTECTION AG	3,233,889	TOKAREV, DENIS	3,233,616	VAZQUEZ, THOMAS	3,233,644
SYNGENTA CROP PROTECTION AG	3,233,941	TOMIC-SKRIBIC, SLADJANA	3,233,651	VEGA GRIESHABER KG.	3,233,831
SYRJALA, JUHA-PEKKA	3,233,665	TOTALENERGIES ONETECH	3,233,820	VEGA-SOTO, GIANNA CHRISTINE	3,233,492
SYSTIMMUNE, INC.	3,233,721	TRACHTENBERG, ALEXANDER	3,233,709	VEILLARD, DAMIEN	3,233,772
SYZGY PLASMONICS INC.	3,233,701	TRACHTENBERG, ALEXANDER	3,233,710	VELLY, HELENE	3,233,528
SZABO, DAVE	3,233,536	TRACK MACHINES CONNECTED		VENABLE, JENNIFER D.	3,233,625
SZYCHOWSKI, JANEK	3,233,636	GESELLSCHAFT M.B.H.	3,233,806	VENTURA, FRANCOIS	3,233,713
TAKENOUCI, HIROSHI	3,233,494	TRANQUILLA, JAMES M.	3,233,602	VERHOEVE, DUSTIN	3,233,670
TALLMAN, STANBERG LEE	3,233,773	TRUDELL MEDICAL INTERNATIONAL	3,233,823	VESSELINOV, VELIZAR	3,233,662
TAN, QUEENA	3,233,854	TRUSTEES OF THE STEVENS INSTITUTE OF TECHNOLOGY	3,233,497	VIG, PAMELA	3,233,728
TANIGUCHI, IKUO	3,233,746	TSIVION, DAVID	3,233,709	VILIMAS, JUSTINAS	3,233,525
TANIS, VIRGINIA M.	3,233,622	TSIVION, DAVID	3,233,710	VILLETTE, SOLANGE	3,233,786
TARDY, JEAN	3,233,530	TSIVION, DAVID	3,233,712	VIROTHERA LTD	3,233,658
TAYLOR, PHILIP	3,233,941	TURNBULL, GRAHAM	3,233,800	VITALE, ANDREW J.	3,233,593
TECHNISCHE UNIVERSITAT MUNCHEN	3,233,957	TURNBULL, WILLIAM LESLIE	3,233,733	VITOP MOULDING S.R.L.	3,233,503
TEDGUI, ALAIN	3,233,644	TURNBULL, WILLIAM LESLIE	3,233,748	VIVA STAR BIOSCIENCES (SUZHOU) CO., LTD.	3,233,673
TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)	3,233,947	TWYMAN-SAINT VICTOR, CHRISTINA	3,233,554	VOLTZER, MORITZ	3,233,535
TENAUD, PHILIPPE	3,233,750	TYAB, ARON	3,233,773	VOLTZER, MORITZ	3,233,963
TERRAMERA, INC.	3,233,604	UFFMANN, HANS-PETER	3,233,774	VRDOLJAK, OGNJEN	3,233,854
TESSENDERLO GROUP NV	3,233,705	UHLENBROCK, FRANZISKA KATHARINA	3,233,771	VREEKER, ROB	3,233,483
TESSMANN, ALEXANDER	3,233,754	ULRICH, NICOLAS	3,233,672	VUNJAK-NOVAKOVIC, GORDANA	3,233,497
THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY	3,233,497	UNITED STATES PIPE AND FOUNDRY COMPANY, LLC	3,233,565	WADE, ANNA	3,233,554
THE CHINESE UNIVERSITY OF HONG KONG	3,233,805	UNIVERSITE PARIS CITE	3,233,627	WADE, ANNA	3,233,555
THE GILLETTE COMPANY LLC	3,233,754	UNIVERSITY COURT OF THE UNIVERSITY OF ST ANDREWS	3,233,800	WAGNER, MARCUS	3,233,766
THE PENN STATE RESEARCH FOUNDATION	3,233,784	UNIVERSITY HEALTH NETWORK	3,233,809	WAGNER, OLIVER	3,233,791
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	3,233,784	UNIVERSITY OF ROCHESTER	3,233,935	WALKER, JUSTIN	3,233,789
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	3,233,863	UNIVERSITY OF UTAH RESEARCH FOUNDATION	3,233,691	WALKER, TED	3,233,547
THE SAINSBURY LABORATORY	3,233,676	UPNANO GMBH	3,233,703	WALLACE, ELI	3,233,554
THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK	3,233,497	VALDES, ALEXANDER E.	3,233,622	WALLACE, ELI	3,233,555
		VALDES, ALEXANDER E.	3,233,625	WALLACE, TAD	3,233,536
		VALLIUS, TERO JUHANI	3,233,665	WANDRO, STEPHEN	3,233,868
		VALMIKI, PRAVEEN KUMAR	3,233,848	WANG, CHAODONG	3,233,486
				WANG, DAIFA	3,233,764
				WANG, HONGTAO	3,233,760
				WANG, QUANJIANG	3,233,846
				WANG, TAO	3,233,854
				WANG, WEIMIN	3,233,836
				WANG, WEIMIN	3,233,836
				WANG, WENAN	3,233,744
				WANG, YISONG	3,233,540
				WARREN, WILLIAM	3,233,926
				WATERMAN, JARED B.	3,233,637
				WATKIN, SAMUEL VAUGHAN	3,233,889
				WATT, KEVIN	3,233,691
				WATTS, KENNETH J	3,233,565

## Index of PCT Applications Entering the National Phase

WEI, JIALIANG	3,233,544	YANG, HWICHAN	3,233,569
WEINKAUF, DAVID	3,233,645	YANG, JIANGUO	3,233,846
WELLER, BERNHARD	3,233,831	YAO, MING	3,233,854
WENSRIICH, DOUGLAS BRENT	3,233,600	YART, LUCILE	3,233,943
WEREWOLF THERAPEUTICS, INC.	3,233,893	YATHAVAN, BHUVANESH KUMAR	3,233,691
WEST PHARMACEUTICAL SERVICES, INC.	3,233,847	YELLEPEDDI, VENKATA K	3,233,691
WESTER, HANS-JURGEN	3,233,957	YG-1 CO., LTD.	3,233,608
WESTERHOFF, DAVID	3,233,670	YONNET, JEAN-PAUL	3,233,750
WHITNEY, CHRISTOPHER TRAVIS	3,233,541	YOUN, SEUNGBIN	3,233,606
WHP WORKFLOW SOLUTIONS, INC.	3,233,810	YOUNG, MICHAEL D.	3,233,834
WIGGINS, BRYAN BLAKE	3,233,550	YOUNG, WARREN	3,233,499
WILLIAMS, DENNY	3,233,518	YU, GUOTAI	3,233,676
WILLNER, RALF	3,233,672	YU, YINGWEI	3,233,662
WINES, JAMES P.	3,233,778	YU, ZHINAN	3,233,760
WINSTON, WILLIAM	3,233,893	YUAN, LI-PIN	3,233,592
WINTER, MICHAEL B.	3,233,663	YUAN, LI-PIN	3,233,594
WINTER, MICHAEL B.	3,233,707	YUHAN CORPORATION	3,233,505
WINTERS, DAVID JAMES	3,233,612	ZAABOUT, ABDELGHAFOR	3,233,689
WISCONSIN ALUMNI RESEARCH FOUNDATION	3,233,547	ZELDER, OSKAR	3,233,529
WISCONSIN ALUMNI RESEARCH FOUNDATION	3,233,730	ZELDOVICH, KONSTANTIN	3,233,926
WITT, TIMO BENJAMIN	3,233,767	ZHANG, GUOLI	3,233,865
WONG, KENNETH	3,233,707	ZHANG, GUOPENG	3,233,948
WOO, JAE-YOUNG	3,233,788	ZHANG, HAO	3,233,744
WOOD, LAUREN	3,233,554	ZHANG, HONGJIAN	3,233,673
WOOD, LAUREN	3,233,555	ZHANG, JIANGANG	3,233,744
WOODS, CRAIG R.	3,233,622	ZHANG, JILONG	3,233,846
WRIGHT, DAVID W.	3,233,704	ZHANG, LIQIAN	3,233,486
WRIGHT, JONATHAN	3,233,496	ZHANG, WANQIANG	3,233,648
WU, CHUNHAO	3,233,540	ZHANG, XI	3,233,665
WU, CUNLE	3,233,733	ZHANG, YIHAN	3,233,486
WU, CUNLE	3,233,748	ZHANG, YONG	3,233,721
WU, DONGPEI	3,233,625	ZHANG, ZHENGXIN	3,233,662
WU, JINGKANG	3,233,486	ZHAO, WEI	3,233,714
WU, RONG	3,233,735	ZHAO, WEISONG	3,233,549
WU, YINGHUI	3,233,600	ZHENG, LINAN	3,233,744
WUHAN CREATERNA SCIENCE AND TECHNOLOGY CO.,LTD.	3,233,486	ZHENG, YIJUN	3,233,760
WULFF, BRANDE BRUCE HERTEL	3,233,676	ZHENG, YONGTANG	3,233,697
X4 PHARMACEUTICALS, INC.	3,233,731	ZHONG, YILING	3,233,706
XIA, PENG	3,233,540	ZHOU, CHENGJUN	3,233,846
XIANG, QING	3,233,595	ZHOU, CHUNFENG	3,233,540
XIAO, SA	3,233,721	ZHOU, FENG	3,233,486
XIE, WEIBO	3,233,846	ZHOU, HAIBO	3,233,534
XIE, YUYU	3,233,744	ZHOU, PANZHENG	3,233,547
XU, KAI	3,233,854	ZHOU, YE	3,233,875
XUE, XIAOHUA	3,233,622	ZHOU, ZHIQING (JOEL)	3,233,755
XUE, XIAOHUA	3,233,625	ZHU, HAI	3,233,721
YABUKI, MUNEHISA	3,233,732	ZHU, JEANNE	3,233,820
YAMADA, TATSURO	3,233,638	ZHU, RUI	3,233,755
YAMAGUCHI UNIVERSITY	3,233,746	ZHU, YI	3,233,721
YAMAGUCHI, KOJI	3,233,638	ZHUO, SHI	3,233,721
YAN, YU	3,233,595	ZIMENO, INC. DBA MONARCH TRACTOR	3,233,541
YANG, FAN	3,233,486	ZIMENO, INC. DBA MONARCH TRACTOR	3,233,542
		ZIMMER, JOHANNES	3,233,775
		ZITTING, LORIN K.	3,233,851
		ZOU, HUI	3,233,854
		ZUR LINDE, LUTZ	3,233,837



# Index of Canadian Divisional and Previously Unavailable Applications Open to Public Inspection

## Index des demandes canadiennes apparentées par division et demandes mises à la disponibilité du public non disponibles auparavant

AGT FOOD AND INGREDIENTS INC.	3,233,463	INOVIO PHARMACEUTICALS, INC.	3,233,605	SUN, XINBO	3,233,656
ALNYLAM PHARMACEUTICALS, INC.	3,233,743	ISOLYNX, LLC	3,233,903	THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA	3,233,605
ASML NETHERLANDS B.V.	3,233,586	JADHAV, VASANT	3,233,743	TIPTON, CHRISTOPHER ALLEN	3,233,699
ATS CORPORATION	3,233,599	JANSSEN, PAUL	3,233,586	TIX, JOSEPH E.	3,233,462
AVALLE, PAOLO	3,233,437	JOHANNESSON, MARK	3,233,599	TODD, DAVID	3,233,749
BARTSCH, ERIC	3,233,463	JOHNSTON, SIMON	3,233,656	TULBEK, MEHMET	3,233,463
BOSAK, JACK A.	3,233,462	KAMALI, MOHAMMAD REZA	3,233,586	UEDA, YASUFUMI	3,233,584
BRODERICK, KATE	3,233,605	KAROL, DANIEL SCOTT	3,233,699	VAN DER ZANDE, WILLEM JOAN	3,233,586
BROUNS, DERK SERVATIUS GERTRUDA	3,233,586	KAWASE, TAKUO	3,233,584	VAN ZWOL, PIETER-JAN	3,233,586
BROWN LLC	3,233,654	KNUDSON, LES	3,233,463	VELGERSDYK, JEFFREY N.	3,233,462
BROWN LLC	3,233,655	KOBAYASHI, SHOHEI	3,233,584	VICTAULIC COMPANY	3,233,830
BROWN LLC	3,233,660	KRZYSTANEK, KATARZYNA	3,232,630	VITALE, DAVIDE	3,233,463
BROWN, STEFFEN	3,233,654	KUBRICHT, DAVID	3,233,749	VLES, DAVID FERDINAND	3,233,586
BROWN, STEFFEN	3,233,655	KUEHNER, RYAN D.	3,233,830	VOORTHUIJZEN, WILLEM- PIETER	3,233,586
BROWN, STEFFEN	3,233,660	KUMAR, SATHISH	3,232,630	WANG, YI-LAN	3,233,345
CAO, ZHENG BING	3,233,656	LAMBERTO, DAVID J.	3,233,437	WEBSTER, JEFFREY J.	3,233,830
CASE WESTERN RESERVE UNIVERSITY	3,233,345	LANG, BRADLEY T.	3,233,345	WEINBERGER, MARK T.	3,233,462
CHEATHAM, RICHARD	3,233,749	LARPENT, PATRICK	3,233,437	WEINER, DAVID B.	3,233,605
CHUGAI SEIYAKU KABUSHIKI KAISHA	3,233,584	LAWMAN, CHAD	3,233,749	WEISSENBERGER, MARKUS	3,232,131
CHUN, VICTOR L.	3,233,654	LIU, GARY	3,232,630	WERTHENSTEIN BIOPHARMA GMBH	3,233,437
CHUN, VICTOR L.	3,233,655	LIU, YAOQUAN	3,232,630	WHITEOAK, JACOB R.	3,233,462
CHUN, VICTOR L.	3,233,660	MAIER, MARTIN	3,233,743	WILLIAMS, JEFFREY F.	3,233,656
CODAN, LORENZO	3,233,437	MANOHARAN, MUTHIAH	3,233,743	WISE, MEGAN	3,233,605
CREGG, JARED M.	3,233,345	MARUNICH, JACOB M.	3,233,830	YAN, JIAN	3,233,605
CROSETTO, JOHN J.	3,233,749	MERCK SHARP & DOHME LLC	3,233,437	YANAGITA, SATOKO	3,233,584
DAMKIAER, SOREN	3,232,630	MILSTEIN, STUART	3,233,743	YOUSSEF, EMHEMME	3,232,131
DEANGELIS, DOUGLAS J.	3,233,903	MORIKAWA, DAVID TARO	3,233,599		
DEKA PRODUCTS LIMITED PARTNERSHIP	3,233,699	MURALI, MUTHUSWAMY	3,232,630		
DISSING A/S	3,233,828	PANCHAPAGESA	3,232,630		
DISSING, CLAUS HORNSTRUP	3,233,828	MUTHUMANI, KARUPPIAH	3,233,605		
EICHBAUER, PHILIP	3,233,654	NEUHAUS, JEFFREY S.	3,233,437		
EICHBAUER, PHILIP	3,233,655	NOLAN, TYLER	3,233,749		
EICHBAUER, PHILIP	3,233,660	NORRIS, MATTHEW ALLEN	3,233,699		
EVANSEN, EDWARD G.	3,233,903	PAGELS, MARKUS	3,232,131		
EVOLVA SA	3,232,630	PELLIN, CHRISTOPHER J.	3,233,462		
FARKAS, ALEXANDER T.	3,233,903	PETER, MARIA	3,233,586		
FISCHER, JOHN	3,233,749	POLLACK, JEFFREY	3,233,749		
FUKUNAGA, MASAHIRO	3,233,584	RAJEEV, KALLANTHOTTATHIL G.	3,233,743		
GAUDREAU, JOSEPH M.	3,233,903	RASMUSSEN, NINA NICOLINE	3,232,630		
GRACO MINNESOTA INC.	3,233,462	REILLY, GERARD M.	3,233,903		
GREY, ADAM M.	3,233,830	RHODES, BRIAN D.	3,233,903		
HALLIBURTON ENERGY SERVICES, INC.	3,233,749	ROSS, DANIEL P.	3,233,462		
HANSEN, IVER KLAVS RIISHEDE	3,232,630	SANTOS, TYLER CHRISTOPHER	3,233,699		
HANSEN, JORGEN	3,232,630	SCHOELL, JOCHEN	3,233,437		
HINKLE, GREGORY	3,233,743	SEMMLER, ANGELIKA	3,232,630		
HOUGHTON-LARSEN, JENS	3,232,630	SEPP-LORENZINO, LAURA	3,233,743		
		SIGEL, KIRK M.	3,233,903		
		SILVER, JERRY	3,233,345		
		SIXRING INC.	3,232,131		
		STEWART, SAMUEL R.	3,233,462		
		SULJEVIC, ADNAN	3,233,699		