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| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371                        |  | Attorney Docket No.   |  |  |  |
|---|--|---|--|--|--|
|   |  | U.S. Application No. (if known, see 37 CFR 1.5)   |  |  |  |
| International Application No.   | International Filing Date  | Priority Date Claimed   |  |  |  |
| Title of Invention  |  |   |  |  |  |
| First Named Inventor  |  |   |  |  |  |
| Applicant herewith submits to the United S  | tates Designated/Elected Office (DO/EO/US  | ) the following items and other information.  |  |  |  |
| 35 U.S.C. 371(f) will not be effective in   |  | 1(f)). NOTE: The express request under c)(1), (2), and (4) for payment of the basic national , and the oath or declaration of the inventor(s) |  |  |  |
|   | n (35 U.S.C. 371(c)(2)) is attached hereto (not rnational Bureau or was filed in the United Stat |   |  |  |  |
| 3. An English language translation of the   | e International Application (35 U.S.C. 371(c)(2  | ))  |  |  |  |
| a. is attached hereto.  |  |   |  |  |  |
| b. has been previously submitted u  | , , , ,  |   |  |  |  |
| 4. An oath or declaration of the inventor   | (s) (35 U.S.C. 371(c)(4))  |   |  |  |  |
| a. is attached.   | "  |   |  |  |  |
|   | ational phase under PCT Rule 4.17(iv).   |   |  |  |  |
| Items 5 to 8 below concern amendments m   | ade in the international phase.  |   |  |  |  |
| PCT Article 19 and 34 amendments  | T Article 10 are attached (not required if comm  | unicated by the International Pureau / 25 LLS C   |  |  |  |
| 5. Amendments to the claims under PCT Article 19 are attached (not required if communicated by the International Bureau) (35 U.S.C. 371(c)(3)). |  |   |  |  |  |
| 6. English translation of the PCT Article   | 19 amendment is attached (35 U.S.C. 371(c)(  | 3)).  |  |  |  |
| 7. English translation of annexes (Article attached (35 U.S.C. 371(c)(5)).  | e 19 and/or 34 amendments only) of the Intern  | ational Preliminary Examination Report is   |  |  |  |
| Cancellation of amendments made in the inter  | national phase   |   |  |  |  |
| 8a. Do not enter the amendment made in  | the international phase under PCT Article 19.  |   |  |  |  |
| 8b. Do not enter the amendment made in  | the international phase under PCT Article 34.  |   |  |  |  |
| NOTE: A proper amendment made in English instruction from applicant not to enter the ame  |  | S. national phase application absent a clear  |  |  |  |
| The following items 9 to 17 concern a docu  | ment(s) or information included.   |   |  |  |  |
| 9. An Information Disclosure Statement  | under 37 CFR 1.97 and 1.98.  |   |  |  |  |
| 10. A preliminary amendment.  |  |   |  |  |  |
| 11. An Application Data Sheet under 37 (  | CFR 1.76.  |   |  |  |  |
| 12. A substitute specification. NOTE: A s   | substitute specification cannot include claims.  | See 37 CFR 1.125(b).  |  |  |  |
| 13. A power of attorney and/or change of  | address letter.  |   |  |  |  |
| 14. A computer-readable form of the sequence  | uence listing in accordance with PCT Rule 13to   | er.3 and 37 CFR 1.821-1.825.  |  |  |  |
| 15. Assignment papers (cover sheet and  | document(s)). Name of Assignee:  |   |  |  |  |
| 16. 37 CFR 3.73(c) Statement (when the  | re is an Assignee).  |   |  |  |  |

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO-1390 (03-13)

Approved for use through 4/30/2013. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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| U.S. APPLN. N  | lo. (if known – see                   | 37 CFR 1.5)  | INTERNATIONAL  | APPLIC <i>I</i> | ATION No.      | ATTORNEY DOCKET No.    |    |  |
|--|---------------------------------------|--|----------------|-----------------|----------------|------------------------|----|--|
| 17. Other items or information:  |                                       |  |                |                 |                |                        |    |  |
| The following fees have been submitted.  |                                       |  |                |                 | CALCULATIONS   | PTO USE ONLY           |    |  |
| 18. Basic  | national fee (37                      | CFR 1.492(a))  |                |                 | \$280          | \$                     |    |  |
| 19. Examination fee (37 CFR 1.492(c))  If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)  |                                       |  |                |                 | \$             |                        |    |  |
| 20. Search fee (37 CFR 1.492(b))  If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)   |                                       |  |                |                 | \$             |                        |    |  |
|  |                                       |  | TOTA           | L OF 18         | , 19, and 20 = | \$                     |    |  |
| Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) in an electronic medium or computer program listing in an electronic medium) (37 CFR 1.492(j)).  Fee for each additional 50 sheets of paper or fraction thereof |                                       |  |                |                 |                |                        |    |  |
| Total Sheets   | Extra Sheets                          | Number of each addition 50 or fraction thereof (round <b>up</b> to a whole number) |                |                 |                |                        |    |  |
| - 100 =  | / 50 =                                |  | × \$400        |                 |                | \$                     |    |  |
| Surcharge of <b>\$140.00</b> for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).   |                                       |  |                |                 | \$             |                        |    |  |
| CLAIMS   | CLAIMS NUMBER FILED NUMBER EXTRA RATE |  | RATE           |                 |                |                        |    |  |
| Total claim  | s                                     | - 20 =   |                | x \$80          |                | \$                     |    |  |
| Independent c  | ndependent claims - 3 = x \$420       |  | x <b>\$420</b> | \$              |                |                        |    |  |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$780  |                                       |  | \$             |                 |                |                        |    |  |
| Processing fee of \$140.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  |                                       |  | \$             |                 |                |                        |    |  |
| TOTAL OF ABOVE CALCULATIONS =  |                                       |  | \$             |                 |                |                        |    |  |
| Applicant asserts small entity status. See 37 CFR 1.27. Fees above are reduced by ½.   |                                       |  |                |                 |                |                        |    |  |
| Applicant certifies micro entity status. See 37 CFR 1.29. Fees above are reduced by %.  Applicant must attach form PTO/SB/15A or B or equivalent.  |                                       |  |                |                 |                |                        |    |  |
| TOTAL NATIONAL FEE =   |                                       |  | \$             |                 |                |                        |    |  |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property. +   |                                       |  | \$             |                 |                |                        |    |  |
| TOTAL FEES ENCLOSED =  |                                       |  | \$             |                 |                |                        |    |  |
|  |                                       |  |                |                 |                | Amount to be refunded: | \$ |  |
|  |                                       |  |                |                 |                | Amount to be charged:  | \$ |  |

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| b.   | lease charge my Deposit Account No  |          | in the amount of \$_        |                        |                | to cover the above fees. |  |  |
|  | The Director is hereby authorized to charge additional fees which may be required, or credit any overpayment, to Deposit Account No as follows:   |          |                             |                        |                |                          |  |  |
| i.   | any required fee.   |          |                             |                        |                |                          |  |  |
| ii.  | any required fee except for excess claims f required under 37 CFR 1.492(f).   | ees requ | ired under 37 CFR 1.492(d   | ) and (e) ar           | nd multiple de | ependent claim fee       |  |  |
| □ be   | Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. The PTO-2038 should only be mailed or faxed to the USPTO. However, when paying the basic national fee, the PTO-2038 may NOT be faxed to the USPTO. |          |                             |                        |                |                          |  |  |
| <b>ADVISORY:</b> If filing by EFS-Web, do <b>NOT</b> attach the PTO-2038 form as a PDF along with your EFS-Web submission. Please be advised that this is <b>not</b> recommended and by doing so your <b>credit card information may be displayed via PAIR</b> . To protect your information, it is recommended to pay fees online by using the electronic payment method. |   |          |                             |                        |                |                          |  |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.   |   |          |                             |                        |                |                          |  |  |
|  | under 37 CFR 1.55 or 1.78 for AIA (First Inv  |          | ,                           |                        |                |                          |  |  |
|  | This application (1) claims priority to or the benefit of an application filed before March 16, 2013, and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.   |          |                             |                        |                |                          |  |  |
| <b>NOTE:</b> A U.S. national stage application may not claim priority to the international application of which it is the national phase. The filing date of a U.S. national stage application is the international filing date. See 35 U.S.C. 363.  |   |          |                             |                        |                |                          |  |  |
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| Name<br>(Print/Type  | )   |          |                             | Registrat<br>(Attorney |                |                          |  |  |

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.