

PATENT ASSIGNMENT

Electronic Version v1.1
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| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | | | |
|---|---|---------------|---|---------------------|--------------------------|-------|-----------|----------------|---------------|--------------|-------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>PHILIP R. DORMITZER</td> <td>05/21/2012</td> </tr> </tbody> </table> | | Name | Execution Date | PHILIP R. DORMITZER | 05/21/2012 | | | | | | |
| Name | Execution Date | | | | | | | | | | |
| PHILIP R. DORMITZER | 05/21/2012 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>NOVARTIS VACCINES AND DIAGNOSTICS, INC.</td> </tr> <tr> <td>Street Address:</td> <td>350 MASSACHUSETTS AVENUE</td> </tr> <tr> <td>City:</td> <td>CAMBRIDGE</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>02139</td> </tr> </table> | | Name: | NOVARTIS VACCINES AND DIAGNOSTICS, INC. | Street Address: | 350 MASSACHUSETTS AVENUE | City: | CAMBRIDGE | State/Country: | MASSACHUSETTS | Postal Code: | 02139 |
| Name: | NOVARTIS VACCINES AND DIAGNOSTICS, INC. | | | | | | | | | | |
| Street Address: | 350 MASSACHUSETTS AVENUE | | | | | | | | | | |
| City: | CAMBRIDGE | | | | | | | | | | |
| State/Country: | MASSACHUSETTS | | | | | | | | | | |
| Postal Code: | 02139 | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>PCT Number:</td> <td>US1222762</td> </tr> </tbody> </table> | | Property Type | Number | PCT Number: | US1222762 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| PCT Number: | US1222762 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
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| Correspondent Name: | Helen Lee | | | | | | | | | | |
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| ATTORNEY DOCKET NUMBER: | PAT054473-WO-PCT | | | | | | | | | | |
| NAME OF SUBMITTER: | Felicia Soria | | | | | | | | | | |
| <p>Total Attachments: 3 source=Signed-Asg-inventor-to-NVDInc-54473-WO-PCT#page1.tif source=Signed-Asg-inventor-to-NVDInc-54473-WO-PCT#page2.tif source=Signed-Asg-inventor-to-NVDInc-54473-WO-PCT#page3.tif</p> | | | | | | | | | | | |

CH \$40.00 US1222762

PATENT

RECORDATION FORM COVER SHEET
PATENTS ONLY

Atty Docket No.: PAT054473-WO-PCT

To the Director of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

PHILIP R. DORMITZER

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name:

Novartis Vaccines and Diagnostics, Inc.
350 Massachusetts Avenue
Cambridge, MA
02139

 Other

3. Nature of conveyance:

 Assignment Merger
 Security Agreement Change of Name
 Joint Research Agreement Other _____
 Government Interest Assignment
 Executive Order 9424, Confirmatory License

Execution Date(s): 05/21/2012

Additional name(s) & address(es) attached? Yes No

4. Application number(s) or patent number(s):
If this document is being filed together with a new application, the execution date of the application is: _____.

A. Patent Application No.(s)

PCT/US2012/022762

B. Patent No.(s)

Additional number(s) attached Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

NOVARTIS VACCINES AND DIAGNOSTICS, INC.
Corporate Intellectual Property – X 100B
P.O. Box 8097
Emeryville, CA 94662-8097

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41)..... \$40.00

Enclosed

Authorized to be charged to deposit account.

8. Deposit account number: 03-1664

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Helen Lee, Reg. No. 39,270

Name of Person Signing

Signature

28 May 2012

Date

Total number of pages including cover sheet, attachments, and document: 3

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I

Philip R. Dormitzer

do hereby sell, assign and transfer to **Novartis Vaccines and Diagnostics, Inc.**, a company organized under the laws of the State of Delaware, and having a place of business at 350 Massachusetts Avenue, Cambridge, MA 02139, USA, (hereinafter referred to as the "**ASSIGNEE**") and its successors, assigns and legal representatives, all our right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) entitled

RSV IMMUNIZATION REGIMEN

and filed in the United States Patent and Trademark Office on _____, 20__ and accorded Application Number _____* and/or filed in the RO/US on January 26, 2012 and accorded International Patent Application Number PCT/US2012/022762*, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the United States Patent and Trademark Office on January 26, 2011 and accorded Application Number 61/436,355, (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) in all countries and regions under the Paris Convention for the Protection of Industrial Property, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of **ASSIGNEE** or their designees or in my name, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said **ASSIGNEE** and their successors, assigns and legal representatives to the full ends of the terms for which said patents, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me if this sale, assignment and transfer had not been made.

*I hereby authorize **ASSIGNEE** and their representatives to insert in this Assignment the filing date(s) and Application Number(s) of said patent application(s) when notified thereof.

And I hereby covenant and agree that I will, at any time, (i) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates and applications within the scope of (8) and (9) in **ASSIGNEE** or their successors, assigns or legal representatives, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the

patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of **ASSIGNEE** or their successors, assigns or legal representatives.

This Assignment is effective as from the earliest priority date as stated above.

Executed this 21st day of May, 2012.

Philip R. Dormitzer

L.S.

Philip R. Dormitzer

ACKNOWLEDGEMENT

Commonwealth of Massachusetts)

) s.s.:

County of Middlesex)

On this 21 day of May, 2012, before me personally appeared Philip R. Dormitzer, to me known to be the person (or persons) described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

Christy Snyder

Signature of Notary Public

Print Name: CHRISTY SNYDER

My commission expires:

Nov 11, 2016

