

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ARAVIND CHAKRAPANI	09/17/2010
MANMOHAN SINGH	07/29/2010
DEREK O'HAGAN	07/29/2010
RECEIVING PARTY DATA	
Name:	NOVARTIS VACCINES AND DIAGNOSTICS, INC.
Street Address:	4560 Horton Street
Internal Address:	Intellectual Property M/S X-100B
City:	Emeryville
State/Country:	CALIFORNIA
Postal Code:	94608-2916
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	61048428
PCT Number:	US0941932
CORRESPONDENCE DATA	
Fax Number:	(510)655-3542
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	(510)923-2192
Email:	kara.shure@novartis.com
Correspondent Name:	Helen Lee
Address Line 1:	4560 Horton Street
Address Line 2:	Intellectual Property M/S X-100B
Address Line 4:	Emeryville, CALIFORNIA 94662-8097
ATTORNEY DOCKET NUMBER:	PAT052560
NAME OF SUBMITTER:	Kara Shure

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PATENT
REEL: 025052 FRAME: 0654

Total Attachments: 7

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RECORDATION FORM COVER SHEET
PATENTS ONLY

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

Atty Docket No.: PAT052560

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

1. Name of conveying party(ies):

ARAVIND CHAKRAPANI
MANMOHAN SINGH
DEREK O'HAGAN

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

Novartis Vaccines and Diagnostics, Inc.
4560 Horton Street
Emeryville, California
94608-2916

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

3. Nature of conveyance:

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

☐ Other

Execution Date(s): 09/17/2010, 07/29/2010, 07/29/2010

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)

US 61/048,428
filed April 28, 2008

PCT/US2009/041932
filed April 28, 2009

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 **2**

7. Total fee (37 CFR 3.41) \$80.00

☐ 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)

DO NOT USE THIS SPACE

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]
Signature

26 May 2010
Date

Total number of pages including cover sheet, attachments, and document: **7**

Documents to be recorded (including cover sheet) should be faxed to (571) 273-9140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1480, Alexandria, VA 22313-1480

ASSIGNMENT

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

(1) Aravind Chakrapani, (2) Manmohan Singh and (3) Derek O'Hagan

do hereby sell, assign and transfer to **Novartis Vaccines and Diagnostics, Inc.**, a company organized under the laws of the State of Delaware, 4560 Horton Street, Emeryville, CA 94608, USA, (hereinafter referred to as the "**ASSIGNEE**") and its successors, assigns and legal representatives, all of my right, title and interest for all countries of the world in and to (1) all of our inventions and discoveries described in the patent application(s) titled

NANOPARTICLES FOR USE IN PHARMACEUTICAL COMPOSITIONS

and filed in the United States Patent and Trademark Office on _____, 20____ and accorded Application Number _____* and/or filed in the RO/US on April 28, 2009 and accorded International Patent Application Number PCT/US2009/041932*, (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 April 28, 2008 and accorded Application Number 61/048,428 (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 our names, 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 us if this sale, assignment and transfer had not been made.

*We 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.

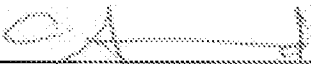
And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, 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

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applications within the scope of (8) or (9) and (ii) 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 17th day of SEPTEMBER, 2010.

 L.S.
Aravind Chakrapani

ACKNOWLEDGEMENT


WITNESS


WITNESS

Executed this _____ day of _____, 2010.

L.S.
Mannohan Singh

ACKNOWLEDGEMENT

WITNESS

WITNESS

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Executed this _____ day of _____, 2019.

Derek O'Hagan

L.S.

ACKNOWLEDGEMENT

WITNESS

WITNESS

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ASSIGNMENT

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applications within the scope of (B) or (S) 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 _____ day of _____, 2010.

Aravind Chakrapani

ACKNOWLEDGEMENT

WITNESS

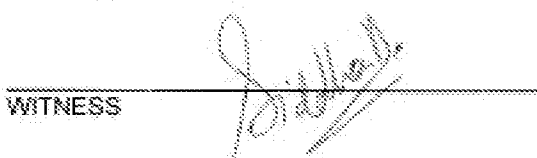
WITNESS

Executed this ^A29 day of July, 2010.


Manmohan Singh

ACKNOWLEDGEMENT


WITNESS


WITNESS

Executed this 29th day of July, 2010.

Derek O'Hagan L.S.
Derek O'Hagan

ACKNOWLEDGEMENT

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[Signature]
WITNESS

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