

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3143487

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the ASSIGNMENT SHOULD BE TO NOVARTIS VACCINES AND DIAGNOSTICS previously recorded on Reel 026910 Frame 0955. Assignor(s) hereby confirms the ASSIGNMENT.

## CONVEYING PARTY DATA

Name	Execution Date
MINA E AIKAWA	09/18/2006
PAYMAN AMIRI	09/18/2006
JEFFREY H DOVE	09/20/2006
BARRY HASKELL LEVINE	09/20/2006
CHRISTOPHER MCBRIDE	09/18/2006
TERESA E PICK	09/18/2006
DANIEL J POON	10/11/2006
SAVITHRI RAMURTHY	09/18/2006
PAUL A RENHOWE	09/18/2006
CYNTHIA SHAFER	09/18/2006
DARRIN STUART	09/18/2006
SHARADHA SUBRAMANIAN	09/18/2006

## RECEIVING PARTY DATA

<b>Name:</b>	NOVARTIS VACCINES AND DIAGNOSTICS, INC.
<b>Street Address:</b>	4560 HORTON STREET
<b>City:</b>	EMERYVILLE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94608-2916

## PROPERTY NUMBERS Total: 2

Property Type	Number
Patent Number:	7732465
Patent Number:	8592459

## CORRESPONDENCE DATA

Fax Number: (973)781-8064

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

Phone: 862-778-7831

Email: pip\_inbox.phchbs@novartis.com

Correspondent Name: GREGORD D. FERRARO

PATENT

**Address Line 1:** NOVARTIS PHARMACEUTICALS CORPORATION  
**Address Line 2:** ONE HEALTH PLAZA, BLDG 433  
**Address Line 4:** EAST HANOVER, NEW JERSEY 07936

**ATTORNEY DOCKET NUMBER:** PAT051669-US-DIV,CNT

**NAME OF SUBMITTER:** DENISE COOPER

**SIGNATURE:** /Denise Cooper/

**DATE SIGNED:** 12/11/2014

**Total Attachments: 9**

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 15, 2011

PTAS

GEORGE DOHMANN, NOVARTIS  
ONE HEALTH PLAZA  
BLDG. 101  
EAST HANOVER, NJ 07936

**501659043**

UNITED STATES PATENT AND TRADEMARK OFFICE  
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RECORDATION DATE: 09/15/2011

REEL/FRAME: 026910/0955  
NUMBER OF PAGES: 38

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS),

DOCKET NUMBER: PAT051669

ASSIGNOR:

AIKAWA, MINA E

DOC DATE: 02/25/2008

ASSIGNOR:

AMIRI, PAYMAN

DOC DATE: 02/25/2008

ASSIGNOR:

DOVE, JEFFREY H

DOC DATE: 02/25/2008

ASSIGNOR:

POON, DANIEL J

DOC DATE: 02/25/2008

ASSIGNOR:

RAMURTHY, SAVITHRI

DOC DATE: 03/03/2008

ASSIGNOR:

RENHWE, PAUL A

DOC DATE: 03/03/2008

ASSIGNOR:

SHAFFER, CYNTHIA

DOC DATE: 02/25/2008

ASSIGNOR:  
STUART, DARRIN DOC DATE: 02/25/2008

ASSIGNOR:  
SUBRAMANIAN, SHARADHA DOC DATE: 03/03/2008

ASSIGNOR:  
LEVINE, BARRY HASKELL DOC DATE: 02/04/2008

ASSIGNOR:  
MCBRIDE, CHRISTOPHER DOC DATE: 02/20/2008

ASSIGNOR:  
PICK, TERESA E DOC DATE: 03/21/2008

ASSIGNEE:  
NOVARTIS AG  
LICHTSTRASSE 35  
BASEL, SWITZERLAND 4056

APPLICATION NUMBER: 11513959 FILING DATE: 08/30/2006  
PATENT NUMBER: 7482367 ISSUE DATE: 01/27/2009  
TITLE: SUBSTITUTED BENZIMIDAZOLES AND METHODS OF THEIR USE

APPLICATION NUMBER: 12315779 FILING DATE: 12/08/2008  
PATENT NUMBER: 7732465 ISSUE DATE: 06/08/2010  
TITLE: SUBSTITUTED BENZIMIDAZOLES AND METHODS OF THEIR USE

APPLICATION NUMBER: 12759578 FILING DATE: 04/13/2010  
PATENT NUMBER: ISSUE DATE:  
TITLE: SUBSTITUTED BENZIMIDAZOLES AND METHODS OF THEIR USE

ASSIGNMENT RECORDATION BRANCH  
PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT																										
NATURE OF CONVEYANCE:	CHANGE OF NAME																										
CONVEYING PARTY DATA																											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Mina E Aikawa</td> <td>02/25/2008</td> </tr> <tr> <td>Payman Amiri</td> <td>02/25/2008</td> </tr> <tr> <td>Jeffrey H Dove</td> <td>02/25/2008</td> </tr> <tr> <td>Daniel J Poon</td> <td>02/25/2008</td> </tr> <tr> <td>Savithri Ramurthy</td> <td>03/03/2008</td> </tr> <tr> <td>Paul A Renhowe</td> <td>03/03/2008</td> </tr> <tr> <td>Cynthia Shafer</td> <td>02/25/2008</td> </tr> <tr> <td>Darrin Stuart</td> <td>02/25/2008</td> </tr> <tr> <td>Sharadha Subramanian</td> <td>03/03/2008</td> </tr> <tr> <td>Barry Haskell Levine</td> <td>02/04/2008</td> </tr> <tr> <td>Christopher McBride</td> <td>02/20/2008</td> </tr> <tr> <td>Teresa E Pick</td> <td>03/21/2008</td> </tr> </tbody> </table>		Name	Execution Date	Mina E Aikawa	02/25/2008	Payman Amiri	02/25/2008	Jeffrey H Dove	02/25/2008	Daniel J Poon	02/25/2008	Savithri Ramurthy	03/03/2008	Paul A Renhowe	03/03/2008	Cynthia Shafer	02/25/2008	Darrin Stuart	02/25/2008	Sharadha Subramanian	03/03/2008	Barry Haskell Levine	02/04/2008	Christopher McBride	02/20/2008	Teresa E Pick	03/21/2008
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<table border="1"> <tr> <td>Name:</td> <td>Novartis AG</td> </tr> <tr> <td>Street Address:</td> <td>Lichtstrasse 35</td> </tr> <tr> <td>City:</td> <td>Basel</td> </tr> <tr> <td>State/Country:</td> <td>SWITZERLAND</td> </tr> <tr> <td>Postal Code:</td> <td>4056</td> </tr> </table>		Name:	Novartis AG	Street Address:	Lichtstrasse 35	City:	Basel	State/Country:	SWITZERLAND	Postal Code:	4056																
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CORRESPONDENCE DATA																											
Fax Number:	(973)781-8064																										

CH 5120.00 7482367

**ASSIGNMENT**

*WHEREAS*, We, Mina E. Aikawa, Payman Amiri, Jeffrey H. Dove, Barry Haskell Levine, Christopher McBride, Teresa E. Pick, Daniel J. Poon, Savithri Ramurthy, Paul A. Renhowe, Cynthia Shafer, Darrin Stuart, and Sharadha Subramanian hereinafter referred to as *ASSIGNORS*, have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:     SUBSTITUTED BENZIMIDAZOLES AND METHODS OF THEIR USE

Date(s) of Execution: September 18, 2006, September 20, 2006,     Filing Date: August 30, 2006  
and October 11, 2006

Serial No:             11/513,959

*WHEREAS*, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as *ASSIGNEE*, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

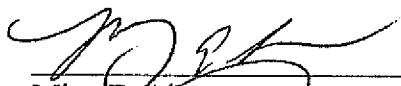
*NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN*: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to *ASSIGNORS* by *ASSIGNEE*, receipt of which is hereby acknowledged, *ASSIGNORS* have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said *ASSIGNEE*, and *ASSIGNEE'S* successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said *ASSIGNEE* as fully and exclusively as it would have been held and enjoyed by said *ASSIGNORS* had this assignment and transfer not been made, to the full end and term of any Letters Patent.

*ASSIGNORS* also agree that the U.S. application number may be entered above by *ASSIGNEE* or its agents upon designation of the application number by the U.S. Patent and Trademark Office.

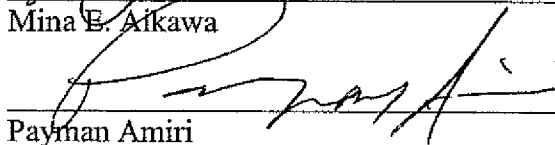
*ASSIGNORS* further agree that they will, without charge to said *ASSIGNEE*, but at *ASSIGNEE'S* expense, cooperate with *ASSIGNEE* in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as *ASSIGNEE* lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said *ASSIGNEE*, or *ASSIGNEE'S* successors and assigns.

*IN TESTIMONY WHEREOF*, *ASSIGNORS* have hereunto signed their names to this assignment on the dates indicated below.

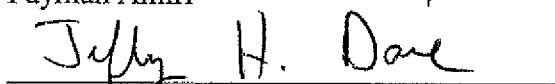
DATE 9/18/06

  
Mina B. Aikawa

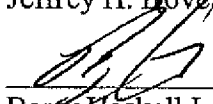
DATE 9/18/06

  
Payman Amiri

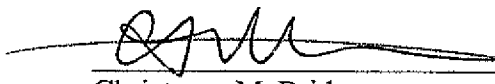
DATE 9/20/06

  
Jeffrey H. Dove

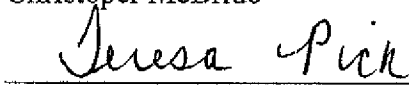
DATE 9/20/06

  
Barry Haskell Levine


DATE 9-18-06

  
Christopher McBride

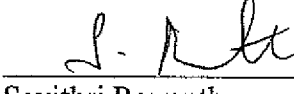
DATE 9-18-06

  
Teresa E. Pick

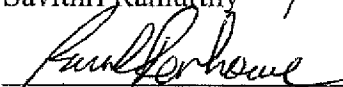
DATE 10/11/2006

  
Daniel J. Poon

DATE 9/18/06

  
Savithri Ramurthy

DATE 9/18/06

  
Paul A. Renhowe

DATE 9-18-06

Cynthia Shafer  
Cynthia Shafer

DATE 9/18/06

Darrin Stuart  
Darrin Stuart

DATE 9/18/06

Sharadha Subramanian  
Sharadha Subramanian



**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Alameda

} ss.

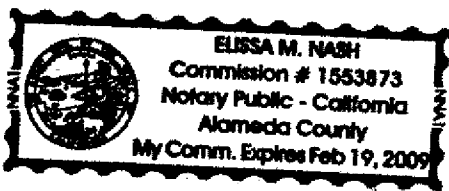
On September 18, 2006, before me, Elissa M. Nash,  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Mina E. Aikawa, Payman Amiri, Christopher McBride, Teresa Pick,  
Name(s) of Signer(s)

Savithri Ramurthy, Paul A. Renhowe, Cynthia Shafer, Darrin Stuart, and  
Sharadha Subramanian

personally known to me

proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Elissa M. Nash  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

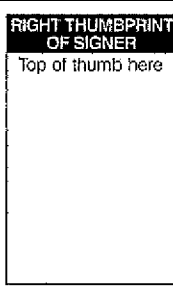
Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

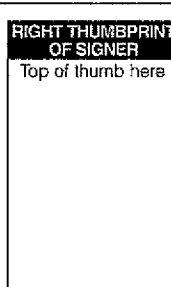
- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
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- Guardian or Conservator
- Other: \_\_\_\_\_



Signer Is Representing: \_\_\_\_\_

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Alameda

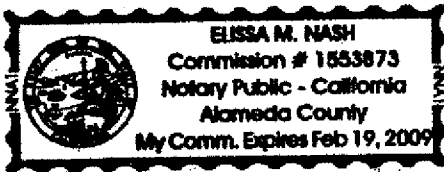
} ss.

On September 20, 2006, before me, Elissa M. Nash  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Jeffrey H. Dove and Barry Levine  
Name(s) of Signer(s)

personally known to me

proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Place Notary Seal Above

Elissa M. Nash  
Signature of Notary Public

**OPTIONAL**

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Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

RIGHT THUMBPRINT OF SIGNER  
Top of thumb here

Signer Is Representing: \_\_\_\_\_

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- Individual
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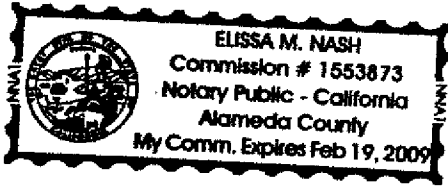
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On October 11, 2006, before me, Elissa M. Nash  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Daniel Poon  
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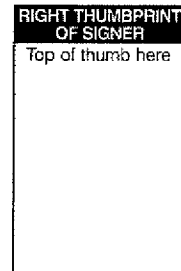
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Signer Is Representing: \_\_\_\_\_