

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DEREK O'HAGAN	12/15/2010
MANMOHAN SINGH	12/15/2010
SIDDHARTHA JAIN	12/15/2010
PADMA MALYALA	01/11/2011
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<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15981104
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<b>ATTORNEY DOCKET NUMBER:</b>	VN53437C1
<b>NAME OF SUBMITTER:</b>	JOSEPH SCHULLER
<b>SIGNATURE:</b>	/Joseph Schuller/
<b>DATE SIGNED:</b>	10/24/2018
<b>Total Attachments: 6</b>	
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**ASSIGNMENT**

**WHEREAS, WE, Derek O'HAGAN, Manmohan SINGH, Siddhartha JAIN and Padma MALYALA** 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: **IRRADIATED BIODEGRADABLE POLYMER MICROPARTICLES**

Date(s) of Execution: 12/15/2010, 12/15/2010, 12/15/2010

U.S. Provisional Application. No.: 61/297,809

Filing Date: January 24, 2010


**WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS INC.,** 4560 Horton Street, Emeryville, California 94608, USA, 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 good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, **ASSIGNORS** have sold, assigned, transferred and conveyed, and by these presents do sell, assign, transfer and convey 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. This Assignment is effective as from the earliest priority date as stated above.


**ASSIGNORS** also agree that the U.S. serial number may be entered above by **ASSIGNEE** or its agents upon designation of the serial 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 12/15/10 SIGNED   
Derek O'Hagan

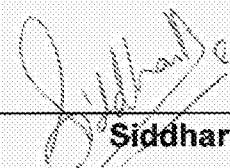
  
Witnessed by

  
Witnessed by

DATE 12/15/10 SIGNED   
Manmohan Singh

  
Witnessed by

  
Witnessed by

DATE DEC 15, 2010 SIGNED   
Siddhartha Jain

  
Witnessed by

  
Witnessed by

DATE \_\_\_\_\_ SIGNED \_\_\_\_\_  
Padma Malyala

\_\_\_\_\_  
Witnessed by

\_\_\_\_\_  
Witnessed by

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DATE \_\_\_\_\_ SIGNED \_\_\_\_\_  
Manmohan Singh

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Witnessed by

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Witnessed by

DATE \_\_\_\_\_ SIGNED \_\_\_\_\_  
Siddhartha Jain

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Witnessed by

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Witnessed by

DATE 11/11/11 SIGNED \_\_\_\_\_  
Padma Malyala

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Witnessed by

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Witnessed by