503902103 07/06/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3948754

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LUIS BRITO	02/27/2012
MICHELLE CHAN	02/27/2012
ANDREW GEALL	02/27/2012
DEREK O'HAGAN	03/15/2012
MANMOHAN SINGH	02/27/2012

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14130880

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	VN54719
NAME OF SUBMITTER:	CARLY MORROW
SIGNATURE:	/Carly Morrow/
DATE SIGNED:	07/06/2016

Total Attachments: 8

PATENT REEL: 039080 FRAME: 0106

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PATENT REEL: 039080 FRAME: 0107

Form PTO-1595	RECORDATION FORM		U.S. DEPARTMENT OF COMMERCE
(Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)	PATENTS ONLY		U.S. Patent and Trademark Office
		Ati	ty Docket No.: PAT054719
	s and Trademarks: Please re	ecord the attached original do	ocuments or copy thereof.
Name of conveying party(ies):		Name and address of re Name:	eceiving party(ies)
LUIS BRITO MICHELLE CHAN ANDREW GEALL DEREK O'HAGAN MANMOHAN SINGH		Novartis Vaccines ar 4560 Horton Street Emeryville, California 94608-2916	
Additional name(s) of conveying party(ie	s) attached? 🗌 Yes 🗵 No		
☐ Security Agreement ☐ Joint Research Agreement	☐ Merger ☐ Change of Name ☐ Other	☐ Other	
Government Interest Assignment		Additional name(s) & a	ddress(es) attached? ☐ Yes ☒ No
Executive Order 9424, Confirmatory	License		
Execution Date(s): 02/27/2012, 02/2 03/15/2012, 02/27/2012		***************************************	
Application number(s) or patent number of this document is being filed together. A. Patent Application No.(s)		execution date of the applica B. Patent No.(s)	tion is:
61/505,091			
61/585,639	;		
, .	Additional number(s) a	ttached T Ves M No	
Name and address of party to whom concerning document should be mail	correspondence	6. Total number of applications	s and patents involved Z
NOVARTIS VACCINES AND I		7. Total fee (37 CFR 3.41)	\$80.00
Corporate Intellectual Property P.O. Box 8097 Emeryville, CA 94662-8097	-X 100B	Authorized to be ch	arged to deposit account,
Emblyville, or t 5-1002-555		8. Deposit account numbe	
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Helen Lee, Reg. No. 39,270	147		<u> </u>
Name of Person Signing	Signature	3.	Date
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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

WHEREAS, WE, Luis Brito, Michelle Chan, Andrew Geall, Derek O'Hagan and Manmohan Singh 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: OIL-IN-WATER EMULSIONS THAT CONTAIN NUCLEIC ACIDS

U.S. Provisional Application, No.: 61/505,091 Filing

Filing Date: July 6, 2011

61/585.639

Filing Date: January 11, 2012

WHEREAS, Novartis Vaccines and Diagnostics, Inc., a corporation organized under the laws of the state of Delaware and having a place of business at 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 ASSIGNOEE 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.

Page 1 of 7

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.

Page 2 of 7

)

Executed this <u>27</u> day of <u>February</u> , 20 <u>/2</u> .	
Luis Britto	
ACKNOWLEDGEMENT	
Commonwealth of Massachusetts	
County of Middlesex)	
On this 27 day of 202 202 before me personally appear known to be the person (or persons) described in and who executed instrument, and acknowledged that he executed the same as his free	d the foregoing
Signature of Notary Public	
Print Name: CHUSTY SAYOGA	Masty Sall
My commission expires:	
Nor 11 soir	

Executed this 27th day of February, 2012.	
L.S. Michelle Chan	
ACKNOWLEDGEMENT	
Commonwealth of Massachusetts	,
) s.s.: County of Middlesex)	
On this day of following, 20 la, before me personally appear me known to be the person (or persons) described in and who executed the same as her following the same as her fo	cuted the foregoing
Signature of Notary Public	
Print Name: CHAISTY SAVDEA	A STANDARD OF THE STANDARD OF
My commission expires:	
No. 1 . 2016	

Executed this 27 day of 50	, 20 <u>12</u> ,
Andrew Geall	L.S.
ACKNOWLEDGEMENT	
Commonwealth of Massachusetts) s.s.:)
County of Middlesex)	
me known to be the person (or persons)	before me personally appeared <u>Andrew Geall</u> , to) described in and who executed the foregoing executed the same as his free act and deed.
Signature of Notary Public	
	WALLES TA SWILLING
Print Name: CHAKY SAYOEA	
My commission expires:	
Nov 11. 2012	

Executed this 15 day of MACH, 2017.	
L.s. Derek O'Hagan	
ACKNOWLEDGEMENT	
Commonwealth of Massachusetts)
) s.s.: County of Middlesex)	
On this 5 day of 12 , 20 12 , before me personally appeared D me known to be the person (or persons) described in and who executed instrument, and acknowledged that he executed the same as his free act	the foregoing
Signature of Notary Public	MANAGE SALES
Print Name: <u>Organy savvose</u> My commission expires:	
Alast 11 Dass.	- 6888-4834-420

Executed this 27 day of Fb , $20/2$
Manmohan Singh L.S.
ACKNOWLEDGEMENT
Commonwealth of Massachusetts)
) s.s.: County of Middlesex)
On this 1 day of 12, before me personally appeared Manmohan Singh, 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.
Signature of Notary Public
Print Name:CNUSTY_SNVDEAC
My commission expires:

Page 7 of 7