

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Michael BROEKER	05/09/2011
RECEIVING PARTY DATA	
Name:	Novartis Vaccines and Diagnostics GmbH
Street Address:	Emil-von-Behring Strasse 76
City:	Marburg
State/Country:	GERMANY
Postal Code:	35041
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13061505
CORRESPONDENCE DATA	
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<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Email:	diana-1.castillo@novartis.com
Correspondent Name:	Novartis Vaccines and Diagnostics, Inc.
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ATTORNEY DOCKET NUMBER:	PAT052755-US-PCT
NAME OF SUBMITTER:	Helen Lee
Total Attachments: 2 source=52755-US-PCT Assign Inv GmbH#page1.tif source=52755-US-PCT Assign Inv GmbH#page2.tif	

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REEL: 026312 FRAME: 0547

ASSIGNMENT

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

Michael BROECKER

do hereby sell, assign and transfer to **Novartis Vaccines and Diagnostics GmbH, Emil-von-Behring, Strasse 76, 35041 Marburg, Germany**, (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 the inventions and discoveries described in the patent application(s) entitled

PRODUCTION OF SQUALENE FROM HYPER-PRODUCING YEASTS

and filed in the United States of Patent and Trademark Office on February 28, 2011 and accorded Application Number 13/061,505 filed* in the RO/IB on August 28, 2009, and accorded International Patent Application Number PCT/IB2009/006825, and United States Of America and accorded Application Number 61/190,486, patent application filed on August 28, 2008 (2) said patent application(s), (3) all national stages of said international patent application, (4) all other patent applications in all countries and regions claiming the priority of the _____, patent application filed on _____ and accorded Application Number _____, and, (5) all continuations and divisions of all of said patent applications (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(5) hereinafter referred to collectively as "patent applications"), (6) all patents that are granted on any of said patent applications, (7) all registrations and confirmations of, and importation certificates based on, one or more of said patents and (8) all reissues, renewals and extensions of said patents, reexamination certificates issued for said patents and supplementary protection certificates based on said patents (including the right to file patent applications on said inventions and discoveries in the names of **ASSIGNEE**, their designees or in any or all of our names, at their election and in accordance with applicable law in all countries and regions and all rights of priority in all countries and regions for all of said patent applications under the International Convention for the Protection of Industrial Property, and all other applicable similar international agreements), the same to be held and enjoyed by said **ASSIGNEE**, their successors, assigns and legal representatives, to the full ends of the terms for which all patents therefor 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 instrument the Application Number and the filing date of said patent application when notified thereof.

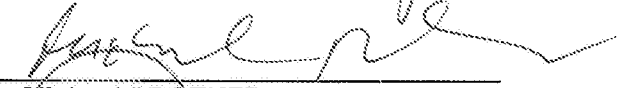
And we hereby covenant and agree that we will, at any time, upon the request and at the expense of **ASSIGNEE**, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates and supplementary protection certificates in **ASSIGNEE**, their successors, assigns or other 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, that we will, at any time, upon the request and at the expense of **ASSIGNEE**, execute all additional patent applications, applications for registration and/or confirmation of one or more of said patents, applications for certificates of importation based on one or more of said patents, applications for reissues, renewals and extensions of one or more of said patents and supplemental protection certificates based upon one or more of said patents, and that we will 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**, the successors, assigns or other legal representatives.

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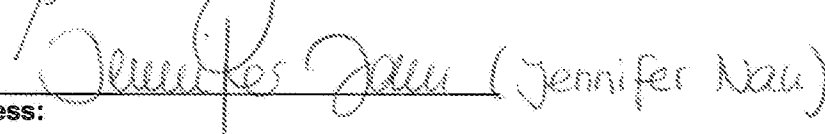
REEL: 026312 FRAME: 0548

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

Executed this 9 day of May, 2011.


Name: Michael BROEKER

 (NICOLE PRINZ)
Witness:

 (Jennifer Nau)
Witness: