

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
NOVARTIS PHARMA AG	05/13/2001
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	NOVARTIS AG
<b>Street Address:</b>	Lichtstrasse 35
<b>City:</b>	Basel
<b>State/Country:</b>	SWITZERLAND
<b>PROPERTY NUMBERS Total: 8</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	10481457
Application Number:	12351281
Application Number:	12353409
Application Number:	12321420
Application Number:	12321434
Application Number:	12321418
Application Number:	12321417
Application Number:	12321464
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(510)655-3542
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	5109232192
<b>Email:</b>	helen.lee@novartis.com
<b>Correspondent Name:</b>	NOVARTIS VACCINES AND DIAGNOSTICS, INC.
<b>Address Line 1:</b>	INTELLECTUAL PROPERTY X-100B
<b>Address Line 2:</b>	P.O. BOX 8097
<b>Address Line 4:</b>	EMERYVILLE, CALIFORNIA 94662-8097

CH \$320.00 10481457

501531276

**PATENT**  
**REEL: 026279 FRAME: 0564**

ATTORNEY DOCKET NUMBER:	PAT051608-US-XXX
NAME OF SUBMITTER:	Helen Lee
<b>Total Attachments: 3</b> source=51608_Assignment_NPh_to_NAG#page1.tif source=51608_Assignment_NPh_to_NAG#page2.tif source=51608_Assignment_NPh_to_NAG#page3.tif	



## PATENT ASSIGNMENT

### PARTIES:

- (1) **NOVARTIS PHARMA AG** (incorporated in Switzerland)  
of Lichtstrasse 65, Basel, Switzerland  
("ASSIGNOR")
- (2) **NOVARTIS AG** (incorporated in Switzerland)  
of Lichtstrasse 35, Basel, Switzerland  
("ASSIGNEE")

### RECITALS:

- A. The ASSIGNOR is the applicant in respect of the United States patent applications particularised in the Schedule (the "PATENT APPLICATIONS").
- B. The ASSIGNOR has agreed to assign to the ASSIGNEE and the ASSIGNEE has agreed to accept such assignment from the ASSIGNOR all the ASSIGNOR's right, title and interest in and to the PATENT APPLICATIONS and the parties have agreed to execute this document for the purpose of perfecting and registering the assignment of the PATENT APPLICATIONS in all relevant intellectual property offices.

### OPERATIVE TERMS:

In consideration of good and valuable consideration paid by the ASSIGNEE to the ASSIGNOR (the receipt and sufficiency of which are hereby acknowledged) IT IS AGREED as follows:

#### 1. Assignment

The ASSIGNOR hereby assigns to the ASSIGNEE and the ASSIGNEE hereby accepts all the ASSIGNOR's property right title and interest in and to the PATENT APPLICATIONS including without limitation:

- (a) the PATENT APPLICATIONS and all patent applications and patents which may derive or result from any of the same, including any divisionals, continuations, re-examinations and reissues in relation to any thereof and all and any other rights in the inventions comprised in the above (together referred to as the "PATENT RIGHTS");
- (b) the benefit of all priority rights;
- (c) the right to defend all re-examination proceedings in relation to any of the PATENT RIGHTS;
- (d) the right to sue for and obtain injunctive relief, damages and all other relief in respect of any infringement or misuse (whether past present or future) of any of the PATENT RIGHTS or of the rights conferred by publication of any of the same.

#### 2. Further Assurance

The ASSIGNOR agrees to execute any further documents and do all things which the ASSIGNEE may reasonably require in order to vest or confirm the vesting in the ASSIGNEE (or the ASSIGNEE's successors in title or nominees as the case may be) of the PATENT APPLICATIONS and all other PATENT RIGHTS in all relevant jurisdictions and all other property rights title and interests intended to be assigned transferred or granted to the ASSIGNEE hereunder and to give the ASSIGNEE the full benefit of this Assignment including doing all acts which may be necessary or desirable to record the PATENT APPLICATIONS in the name of the ASSIGNEE in all relevant jurisdictions. The ASSIGNOR hereby authorises the ASSIGNEE and the ASSIGNEE's agents to sign all such forms on behalf of the ASSIGNOR as the ASSIGNEE considers appropriate in order to record the PATENT APPLICATIONS and any other PATENT RIGHTS in the name of the ASSIGNEE.


IN WITNESS of which the parties have executed this Assignment in accordance with their statutes by duly authorised officers as of the date of the later of the parties' signatures.

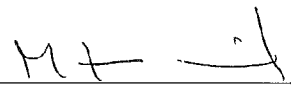
## SCHEDULE

## THE PATENT APPLICATIONS

<u>Application No.</u>	<u>Application Date</u>	<u>Reference</u>
PCT/IB2002/003191	June 20, 2002	PAT051608-WO-PCT
10/481,457	June 20, 2002	PAT051608-US-PCT
12/351,281	January 9, 2009	PAT051608-US-PCTD
12/353,409	January 14, 2009	PAT051608-US-PCTD02
12/321,420	January 20, 2009	PAT051608-US-PCTD03
12/321,434	January 20, 2009	PAT051608-US-PCTD04
12/321,418	January 20, 2009	PAT051608-US-PCTD05
12/321,417	January 20, 2009	PAT051608-US-PCTD06
12/321,464	January 20, 2009	PAT051608-US-PCTD07


EXECUTED by the ASSIGNOR  
NOVARTIS PHARMA AG

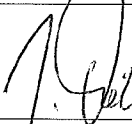
Signature:   
Name: Alisa A. Herbin  
Title: Head, Corp IP  
Date: 13 May 2011

Signature:   
Name: Dr. Martin Henrich  
Title: Authorized Signatory  
Date: 13.5.2011

In the presence of a Notary Public:

EXECUTED by the ASSIGNEE  
NOVARTIS AG

Signature:   
Name: I. HISCOCK  
Title: AUTHORISED SIGNATORY  
Date: 13 MAY 2011

Signature:   
Name: Dr. Jörg Dietz  
Title: Authorised Signatory  
Date: 13.5.2011

In the presence of a Notary Public:

## ATTESTATION

I, the undersigned Civil Law Notary in Basel, Switzerland, Dr. Roland M. Müller, certify herewith that the signatures attached heretofore are the genuine signatures of **Ms. Alisa Harbin**, citizen of the United States of America, Switzerland, residing in Reinach/BL, Switzerland, and of **Dr. Martin Henrich**, citizen of Basel, Switzerland, residing in Basel, Switzerland, both acting for **Novartis Pharma AG**, in Basel, Switzerland, both as authorized signatories, both with joint signature.

I further certify herewith that the signatures attached heretofore are the genuine signatures of **Mr. Ian Hiscock**, British citizen, residing in Gempen, Switzerland, and of **Dr. Jörg Dietz**, German citizen, residing in Allschwil, Switzerland, both acting for **Novartis AG**, in Basel, Switzerland, both as authorized signatories, both with joint signature.

The authenticity of the signatures was established by means of comparison.

BASEL, Switzerland, this 13<sup>th</sup> (thirteenth) day of May 2011 (two thousand and eleven)



*R.M. Müller*  
*Notar*

Dr. R.M. Müller  
Notar

Leg.Prot. 443 /2011