PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2927800

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YONG-IN KIM	02/26/2013

RECEIVING PARTY DATA

Name:	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.
Street Address:	250 MASSACHUSETTS AVENUE
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	14309330
Application Number:	13716526

CORRESPONDENCE DATA

Fax Number:

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.

Email: robert.sweeney@novartis.com

Correspondent Name: ROBERT SWEENEY

Address Line 1: 220 MASSACHUSETTS AVENUE

Address Line 4: CAMBRIDGE, MASSACHUSETTS 02139

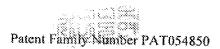
ATTORNEY DOCKET NUMBER:	PAT054850-US-NP/PCT
NAME OF SUBMITTER:	ROBERT SWEENEY
SIGNATURE:	/Robert Sweeney/
DATE SIGNED:	07/07/2014

Total Attachments: 7

source=PAT054850-US-NP_Inventors_to_NIBR_Two#page1.tif
source=PAT054850-US-NP_Inventors_to_NIBR_Two#page2.tif
source=PAT054850-US-NP_Inventors_to_NIBR_Two#page3.tif
source=PAT054850-US-NP_Inventors_to_NIBR_Two#page4.tif
source=PAT054850-US-NP_Inventors_to_NIBR_Two#page5.tif
source=PAT054850-US-NP_Inventors_to_NIBR_Two#page6.tif
source=PAT054850-US-NP Inventors to NIBR Two#page7.tif

REEL: 033252 FRAME: 0867

PATENT -



ASSIGNMENT

This Assignment Agreement is entered into by and between

Leslie JOHNSON	citizen of United States of America	Novartis Institutes for BioMedical Research, Inc. 500 Technology Square Cambridge, MA 02139 USA
Yong-In KIM	citizen of South Korea / Republic of Korea	Novartis Institutes for BioMedical Research, Inc. 500 Technology Square Cambridge, MA 02139 USA
Igor SPLAWSKI	citizen of Poland	Novartis Institutes for BioMedical Research, Inc. 100 Technology Square Cambridge, MA 02139 USA
Michael ROGUSKA	citizen of United States of America	Novartis Institutes for BioMedical Research, Inc. 500 Technology Square Cambridge, MA 02139 USA
Joy GHOSH	citizen of India	Novartis Institutes for BioMedical Research, Inc. 500 Technology Square Cambridge, MA 02139 USA

c/o Novartis Institutes for Biomedical Research Inc., 250 Massachusetts Ave, Cambridge, MA 02139, USA, (hereinafter "Inventor(s)"), and Novartis Institutes for Biomedical Research Inc., 250 Massachusetts Ave, Cambridge, MA 02139, USA, a company organized under the laws of Delaware.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, Novartis Institutes for Biomedical Research Inc.is the true and lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Institutes for Biomedical Research Inc. and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

Compositions and Methods for Antibodies Targeting Factor P
[Patent Case PAT054850]

and filed in the United States Patent Office on December 17, 2012 and accorded Application Number 13/716,526 and/or filed as a PCT International Application on December 17, 2012 and accorded International Patent Application Number PCT/IB2012/057394; and/or filed in the United States Patent and Trademark Office on December 21, 2011 and accorded Application Number 61/578,458.

- (2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);
- (3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);
- (4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);
- (5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;
- (6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;
- (7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;
- (8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the

same to be held and enjoyed by said ASSIGNEE to the full ends of the learns in which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but 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, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, 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, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) 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.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of the state of Delaware.

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

Executed this	day of	, 20	_	
BY Leslie Johnson	***************************************	L.	S.	
On this day of personally appeared identification, which preceding or attached its stated purpose.	vas his or her l	license to be th	e person whose nan	ne is signed on the
	****	, Notary Public		
My commission expire	S:			
Executed this 26th d	ay of Februs	2013	•	
BY Yong-In Kim	<u> </u>	L.s	,	
On this 26 ⁺¹ day of personally appeared Vo	Tebhory	20 <u>13</u> , befo	ore me, the undersig	med notary public,
personally appeared Yo which was his or her lie document and acknowle	ense to be the pe	rson whose nam	e is signed on the pri	ce of identification, eceding or attached
De Ye	on Ha.	Notary Public		
My commission expires				

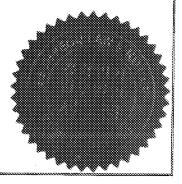
MANAGES HASTILLIES FOR BION	EDICAL RESEARCH INC.
Executed this 3rd day of July	, 20 <u>1</u> 4ે.
BY JUIL CLOUL. Name: JII R. Clarke Title: Authorized Signatory	L.S.
Witnessed by:	
Name: Address: 220 Massachusetts Avenue Cambridge, MA 02139	Name: (1416) Kim Address: 220 Massachusetts Avenue Cambridge, MA 02139

[제 41호 여석] SEOHYEON LAW & NOTARY PUBLIC OFFICE

Registered No. 2013 - 762

NOTARIAL CERTIFICATE

SEOHYEON LAW & NOTARY PUBLIC OFFICE #608 BORAMCORE BUILDING 245-2 SEOHYEON-DONG BUNDANG-GU SEONGNAM-SI GYEONGGI-DO KOREA



23230~05311 일 90. 11. 26 중인 전 화 : 031-781-3848 팩 스 : 031-701-3858

PATENT REEL: 033252 FRAME: 0873

[제 42호 서식] SEOHYEON LAW & NOTARY PUBLIC OFFICE

등부 2013년 제 762 호

Registered No. 2013 - 762

인 중

Notarial Certificate

위 임명장

에 기재된

Yong-In Kim

personally appeared before

me and admitted his(her)

김 용 인 은

본직의 면전에서 위 사서중서에 자기가 서명 날인을 자인하였다

subscription to the

attached

ASSIGNMENT

2013년 2월 26일 이 사무소에서

위 인증한다.

This is hereby attested on

this 26th day of FEB. 2013

at this office.

공증인가 법무법인 서현 소속 수원지방검찰청

경기 성남시 분당구 서현동 245의 2 보람코아 빌딩 608호 SPOHYEON LAW & NOTARY PUBLIC OFFICE

Department Sowon District Prosecutors' office

#608 Boramcore Building 245-2

Seohyeon-dong Bundang-gu Seongnam-si

Gyeonggi-do Korea.

Attorney-at-Law DØ YBON NA

This office has been authorized by the Minister of Justice, the Republic

of Korea, to act as Notary Public since May.15. 2003 under Law No.275

23230-05511 및 90, 11, 26 숙연 진 화 : 031-781-3848 팩 스 : 031-701-3858

> PATENT REEL: 033252 FRAME: 0874

RECORDED: 07/07/2014