503581020 11/23/2015

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KONSTANZE HURTH	09/13/2012
SEBASTIEN JACQUIER	09/18/2012
RAINER MACHAUER	09/19/2012
HEINRICH RUEEGER	09/19/2012
MARINA TINTELNOT-BLOMLEY	09/19/2012
SIEM JACOB VEENSTRA	09/19/2012
MARKUS VOEGTLE	09/19/2012

RECEIVING PARTY DATA

Name:	NOVARTIS PHARMA AG
Street Address:	LICHTSTRASSE 35
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State/Country:	SWITZERLAND
Postal Code:	4056

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14350938

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	PAT054834-US-PCT
NAME OF SUBMITTER:	BETH O'BRIEN
SIGNATURE:	/Beth O'Brien/
DATE SIGNED:	11/23/2015

PATENT 503581020 REEL: 037116 FRAME: 0093

Total Attachments: 6

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PATENT REEL: 037116 FRAME: 0094



Patent Family Number PAT054834

ASSIGNMENT

This Assignment Agreement is entered into by and between

Konstanze HURTH	citizen of Germany	Novartis Pharma AG
		Werk Klybeck
		Postfach
		4002 Basel
***		CH
Sébastien JACQUIER	citizen of France	Novartis Pharma AG
		Werk Klybeck
		Postfach
		4002 Basel
		CH
Rainer MACHAUER	citizen of Germany	Novartis Pharma AG
		Werk Klybeck
		Postfach
		4002 Basel
		CH
Heinrich RUEEGER	citizen of Switzerland	Novartis Pharma AG
		Werk Klybeck
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		4002 Basel
T. C. THE IMANE	·	CH
Marina TINTELNOT-BLOMLEY	citizen of Germany	Novartis Pharma AG
		Werk Klybeck
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		4002 Basel
A		CH
Siem Jacob VEENSTRA	citizen of Netherlands	Novartis Pharma AG
		Werk Klybeck
		Postfach
		4002 Basel
		CH
Markus VOEGTLE	citizen of Germany	Novartis Pharma AG
		Werk Klybeck
		Postfach
		4002 Basel
		CH

(hereinafter "Inventor(s)"), and NOVARTIS PHARMA AG, Lichtstrasse 35,4056 Basel, Switzerland, a company organized under the laws of Switzerland.

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 PHARMA AG 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 PHARMA AG 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

NOVEL OXAZINE DERIVATIVES AND THEIR USE IN THE TREATMENT OF DISEASE [Patent Application PAT054834]

and filed in the	Office on	, 20 and accorded
Application Number		CT International Application
	20 and accorded International	
PCT/	; and/or filed in the United States	
on October 13, 2011 and	August 31, 2012 and accorded Applicat	ion Numbers 61/546,836 and
61/695.329;	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

- (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 terms for 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 is effective as from the earliest priority date as stated above.

Executed this /3 day of Spleader, 20/2.

BY Williams Hurth L.S.

Executed this 18 day of Scolember, 2012.

BY L.S. Sébastien ACOUIER

Executed this /3 day of $\sqrt{2}$, $\sqrt{2}$, $\sqrt{2}$.

BY Rainer MACHAUER L.S.

BY Heinrich RUBEGER L.S.

Executed this Ag day of September, 20/2

Executed this day of
BY Siem Jacob VEENSTRA
Executed this day of
BYL.S.
Warkus VOEGTEE
Executed this <u>20</u> day of <u>\$\langle 12\langle 2\langle 12\langle 20\langle 12\langle 1</u>
NOVARTIS PHARMA AG
by <u>E Rubchi</u> ls.
Ella Rutschmann Authorized signatory
NOYARTIS MHARMÄ AG BY L.S.
Reto Halbeisen Authorized signatory

ATTESTATION

I, the undersigned Civil Law Notary in Basel, Switzerland, Marius Meier, certify herewith that the signatures attached heretofore are the genuine signatures of Ms. Konstanze Hurth, German citizen, residing in Lörrach, Germany; of Mr. Sébastien Jacquier, French citizen, residing in Hegenheim, France; of Mr. Rainer Machauer, German citizen, residing in Freiburg, Germany; of Mr. Heinrich Rüeger, citizen of Elsau, Switzerland, residing in Flüh/SO, Switzerland; of Ms. Marina Tintelnot-Biomley, German citizen, residing in Maulburg, Germany; of Mr. Siem Jacob Veenstra, Dutch citizen, residing in Lörrach, Germany; and of Mr. Markus Vögtle, German citizen, residing in Lörrach, Germany.

Further I certify herewith that the signatures attached heretofore are the genuine signatures of Ms. Ella Rutschmann, citizen of Lotzwil, Switzerland, residing in Basel, Switzerland; and of Mr. Reto Halbeisen, citizen of Wahlen/BL, Switzerland, residing in Laufen, Switzerland; both acting for Novartis Pharma AG, in Basel, Switzerland, both as proxy holders, both with joint signature.

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

BASEL, Switzerland, this 25^{th} (twenty-fifth) day of September 2012 (two thousand and twelve)

M. Meler Notar

> PATENT REEL: 037116 FRAME: 0100

RECORDED: 11/23/2015