505553429 07/01/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRIAN W. METCALF	10/12/2015
ZHE LI	11/09/2015
QING XU	11/10/2015
STEPHEN L. GWALTNEY II	11/16/2015
JASON R. HARRIS	11/10/2015
CALVIN W. YEE	11/11/2015

RECEIVING PARTY DATA

Name:	GLOBAL BLOOD THERAPEUTICS, INC.	
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Internal Address:	SUITE 300	
City:	SOUTH SAN FRANCISCO	
State/Country:	CALIFORNIA	
Postal Code:	94080	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15941433

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ATTORNEY DOCKET NUMBER:	57LZ-259167-US4
NAME OF SUBMITTER:	LORNA L. TANNER
SIGNATURE:	/Lorna L. Tanner/
DATE SIGNED:	07/01/2019

505553429 PATENT REEL: 049646 FRAME: 0864

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PATENT REEL: 049646 FRAME: 0865

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

GLOBAL BLOOD THERAPEUTICS, INC. 400 EAST JAMIE COURT, SUITE 101 SOUTH SAN FRANCISCO, CALIFORNIA 94080

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

COMPOUNDS AND USES THEREOF FOR THE MODULATION OF HEMOGLOBIN

check one	[] executed concurrently herewith,
	[] executed on
	[X] Serial No. 14/776,603 filed September 14, 2015

as set forth in this United States Patent Application

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

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ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of Foley & Lardner LLP the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of Foley & Lardner LLP do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

Executed this day of \(\frac{1}{10000000000000000000000000000000000	* .
	7Ina W. Metcalf BRIAN W. METCALF
Executed this 9th day of November, 2015.	ZHE LI
Executed this fothday of November 2015.	QING XU
Executed this day of 20	STEPHEN L. GWALTNEY, II

Executed this	day of	20	
		<u> </u>	BRIAN W. METCALF
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			STEPHEN L. GWALTNEY, II

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	Atty. Dkt. No. 104592-0202
Executed this 10 day of POSEMBER, 2015.	JASON R. HARRIS
Contraction of the second	
Executed this day of, 20	
	CALVIN W. YEE

Executed this day of 20	<u></u> '
<u>-</u>	JASON R. HARRIS
Executed this <u>II</u> day of <u>November 2011</u>	<u>\$</u>
_	any
	CALVIN W. YEE