503946453 08/04/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3993109

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANTHOSH F. NEELAMKAVIL	02/04/2015
SCOTT D. EDMONDSON	02/04/2015
ZHUYAN GUO	02/04/2015
ALAN W. HRUZA	02/04/2015
ZAHID HUSSAIN	02/04/2015
CHARLES A. LESBURG	02/06/2015
REMOND MONINGKA	02/04/2015
ANTHONY K. OGAWA	02/04/2015
RUDRAJIT MAL	02/04/2015

RECEIVING PARTY DATA

Name:	MERCK SHARP & DOHME CORP.
Street Address:	126 EAST LINCOLN AVE
City:	RAHWAY
State/Country:	NEW JERSEY
Postal Code:	07065

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15116659

CORRESPONDENCE DATA

Fax Number: (732)594-4720

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.

Phone: 732-594-4488
Email: us_efs@merck.com

Correspondent Name: MERCK

Address Line 1: P O BOX 2000

Address Line 4: RAHWAY, NEW JERSEY 07065-0907

NAME OF SUBMITTER:TANYA L. TORRESSIGNATURE:/Tanya L. Torres/

PATENT 503946453 REEL: 039344 FRAME: 0694

DATE SIGNED:	08/04/2016		
Total Attachments: 12	Total Attachments: 12		
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PATENT REEL: 039344 FRAME: 0695

WORLDWIDE ASSIGNMENT

WHEREAS, IWE,

(1) Santhosh F. Neelamkavil, located at Edison, New Jersey, 08820, located at Clark, New Jersey, 07066, (2) Scott D. Edmondson, (3) Zhuyan Guo, located at Scotch Plains, New Jersey, 07076, (4) Alan W. Hruza, located at Hackettstown, New Jersey, 07840, (5) Zahid Hussain, located at Dayton, New Jersey, 08810, (6) Charles A. Lesburg, located at Newton, Massachusetts, 02468, (7) Remond Moningka, located at Jersey City, New Jersey, 07307, (8) Anthony K. Ogawa, located at New Providence, New Jersey, 07974, (9) Rudrajit Mal, located at Piscataway, New Jersey, 08854,

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

FACTOR XIa INHIBITORS

and/or in the following application(s):

U.S. Provisional Application No. 61/93	8,230 filed on 02-11-2014;	
U.S. Application No.	having a filing date of	; and
PCT International Application No.	having a filing d	ate of

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter **ASSIGNEE**), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize **ASSIGNEE** to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Computer Generated Template "Assignment-Merck Sharp & Dohme, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp., 11/04/2010

Executed this, day of, 2015.
Santhošh F. Neelamkavil
ACKNOWLEDGEMENT
State of New Jersey) s.s.: County of Union On this day of, 2015, personally appeared before me Santhosh F. Neelamkavil to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.
(Seal) Notary Public
MICHELLE ANN SISKO Notary Public of New Jersey My Commission Expires on October 24, 2017
cott D. Edmondson
CKNOWLEDGEMENT
tate of New Jersey) s.s.:
On this day of, 2015, personally appeared before me Scott D. Edmondson to me nown, and known by me to be the same/person described in and who executed the foregoing instrument, and cknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.
(Seal) Notary Public
9. 47 4794 4 9009 4 500 0 4 4 5 4 5 6 90 4 5 4 5 5

MICHELLE ANN SISKO Notary Public of New Jersey My Commission Expires on October 24, 2017

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Executed this day of	<u>~~~~</u> , 2015.
Zhuyan Guo	
ACKNOWLEDGEMENT	
State of New Jersey)) s.s.:	
County of Union)	
known by me to be the same person d	, 2015, personally appeared before me Zhuyan Guo to me known, and lescribed in and who executed the foregoing instrument, and acknowledged that er) own free will for the purpose set forth.
(Seal)	- San San San San Barbaran San B
	Notary Public
	MICHELLE ANN SISKO
	Notary Public of New Jersey My Commission Expires on October 24, 2017
Executed this day of Ahan W. Hruza	2015.
ACKNOWLEDGEMENT	
State of New Jersey) s.s.:	
and known by me to be the same person	<u>36.688.66.2015</u> , personally appeared before me Alan W. Hruza to me known, on described in and who executed the foregoing instrument, and acknowledged s (her) own free will for the purpose set forth.
(Seal)	Notary Public
	MICHELLE ANN SISKO Notery Public of New Jersey My Commission Expires on October 24, 2017

Executed this day of	2015.
Zahid Hussain	
ACKNOWLEDGEMENT	
State of New Jersey)	
County of Union) s.s.;	
On this day of and known by me to be the same person describ that he (she) executed the same, of his (her) own	, 2015, personally appeared before me Zahid Hussain to me known, ed in and who executed the foregoing instrument, and acknowledged a free will for the purpose set forth.
(Seal)	Michael Ghilo
	Notary Public
	MICHELLE ANN SISKO Notary Public of New Jersey My Commission Expires on October 24, 2017
Executed this day of,	2015.
Charles A. Lesburg	_
ACKNOWLEDGEMENT	
Commonwealth of Massachusetts)	
County of) s.s.:	
On this day of known, and known by me to be the same person acknowledged that he (she) executed the same, or	2015, personally appeared before me Charles A. Lesburg to me described in and who executed the foregoing instrument, and of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

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Executed this day	y στ <u>π. καν προσφ</u>	_, 2015.	
Remond Moningka	***************************************		
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ACKNOWLEDGEMEN	ıτ		
State of New Jersey)) s.s.:		
County of Union) 3.3		
known, and known by r	ne to be the same perso	_, 2015, personally appeared before m n described in and who executed the fo , of his (her) own free will for the purpo	oregoing instrument, and
(Seal)	1	-10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	À
		Notary Public	<u> </u>
		MICHELLE ANN SIS	KO
		Notary Public of New Commission Expires on Octob	persex er 24, 2017
Executed this day Anthony K. Ogawa	of FROWIG	_, 2015.	
ACKNOWLEDGEMEN	Ŧ		
		_, 2015, personally appeared before m n described in and who executed the fo , of his (her) own free will for the purpo	
(Seal)		Atopina (Lancs (L Notary Public	2010
((NEW) NOTARY	ANIE RAMOS RICARDO P PUBLIC OF NEW JERSEY S mission Expires 4/23/2018 S		

Page 5 of 6
Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

Executed this day	y of, 2015.
Mal	
Rudrajit Mal	
ACKNOWLEDGEMEN	TT
State of New Jersey)
County of Union On this) s.s.:) day of, 2015, personally appeared before me Rudrajit Mal to me known, and
known by me to be the he (she) executed the	same person described in and who executed the foregoing instrument, and acknowledged that same, of his (her) own free will for the purpose set forth.
(Seal)	<u> </u>
	Notary Public

MICHELLE ANN SISKO Notary Public of New Jersey My Commission Expires on October 24, 2017

WORLDWIDE ASSIGNMENT

WHEREAS, IWE,

(1) Santhosh F. Neelamkavil, located at Edison, New Jersey, 08820, (2) Scott D. Edmondson, located at Clark, New Jersey, 07066, (3) Zhuyan Guo, located at Scotch Plains, New Jersey, 07076, (4) Alan W. Hruza, located at Hackettstown, New Jersey, 07840, (5) Zahid Hussain, located at Dayton, New Jersey, 08810, (6) Charles A. Lesburg, located at Newton, Massachusetts, 02468, (7) Remond Moningka, located at Jersey City, New Jersey, 07307, (8) Anthony K. Ogawa, located at New Providence, New Jersey, 07974. (9) Rudrajit Mal, located at Piscataway, New Jersey, 08854,

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

FACTOR XIa INHIBITORS

and/or in the following application(s):

U.S. Provisional Application No. 61/938,23	30 filed on 02-11-2014;	
U.S. Application No.	having a filing date of	; and
PCT International Application No.	having a filing	date of

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter **ASSIGNEE**), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

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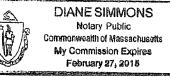
Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

Executed this day of	_, 2015.
Santhosh F. Neelamkavil	
ACKNOWLEDGEMENT	
State of New Jersey)) s.s.:	
County of Union)	
me known, and known by me to be the same pe	_, 2015, personally appeared before me Santhosh F. Neelamkavil to erson described in and who executed the foregoing instrument, and , of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	., 2015.
Scott D. Edmondson	
ACKNOWLEDGEMENT	
State of New Jersey)	
) s.s.: County of Union)	
known, and known by me to be the same persor	_, 2015, personally appeared before me Scott D. Edmondson to me a described in and who executed the foregoing instrument, and of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

Executed this day of	, 2015.
Zhuyan Guo	
ACKNOWLEDGEMENT	
State of New Jersey)) s.s.: County of Union)	
On this day of	, 2015, personally appeared before me Zhuyan Guo to me known, and ibed in and who executed the foregoing instrument, and acknowledged that wn free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	, 2015.
Alan W. Hruza	
ACKNOWLEDGEMENT	
State of New Jersey)) s.s.: County of Union)	
On this day of and known by me to be the same person d that he (she) executed the same, of his (he	, 2015, personally appeared before me Alan W. Hruza to me known, escribed in and who executed the foregoing instrument, and acknowledged r) own free will for the purpose set forth.
(Seal)	
	Notary Public

from a modernion,

Executed this day of	, 2015.
Zahid Hussain	
ACKNOWLEDGEMENT	
State of New Jersey) s.s.:	
County of Union)	
On this day of and known by me to be the same person desc that he (she) executed the same, of his (her) of	, 2015, personally appeared before me Zahid Hussain to me known, cribed in and who executed the foregoing instrument, and acknowledged own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this Gday of FEBRUYMY Charles A. Lesburg	, 2015.
ACKNOWLEDGEMENT	
Commonwealth of Massachusetts) s.e	
into this direction by the to be the same person	, 2015, personally appeared before me Charles A. Lesburg to me on described in and who executed the foregoing instrument, and e, of his (her) own free will for the purpose set forth.
(Seal)	Notary Public
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Executed this day	of	_, 2015.
Remond Moningka		
ACKNOWLEDGEMEN	т	
State of New Jersey County of Union)	
County of Union)	
On this on this on this on this on the sum of	day of ne to be the same perso	, 2015, personally appeared before me Remond Moningka to me on described in and who executed the foregoing instrument, and e, of his (her) own free will for the purpose set forth.
(Seal)		
		Notary Public
Executed this day	of	_, 2015.
Anthony K. Ogawa		
ACKNOWLEDGEMENT	-	
State of New Jersey)	
County of Union) s.s.:)	
known, and known by m	e to be the same perso	, 2015, personally appeared before me Anthony K. Ogawa to me on described in and who executed the foregoing instrument, and e, of his (her) own free will for the purpose set forth.
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		Notary Public

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Executed this da	y of	_, 2015.
Rudrajit Mal		
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ACKNOWLEDGEME	NT	
State of New Jersey)	
County of Union)	
known by me to be the	same person described	, 2015, personally appeared before me Rudrajit Mal to me known, and in and who executed the foregoing instrument, and acknowledged that ee will for the purpose set forth.
(Seal)		
		Notary Public

RECORDED: 08/04/2016