503457513 08/28/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3504138

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FRANK CHEN	03/25/2013
CARMELA MOLINARO	03/27/2013
PETER W. WUELFING	03/27/2013
NOBUYOSHI YASUDA	03/21/2013
JIANGUO YIN	04/04/2013
YONG-LI ZHONG	04/02/2013
JOSEPH LYNCH	04/01/2013
TERESA ANDREANI	03/22/2013

RECEIVING PARTY DATA

Name:	MERCK SHARP & DOHME CORP.
Street Address:	126 EAST LINCOLN AVENUE
Internal Address:	RY86-2011A
City:	RAHWAY
State/Country:	NEW JERSEY
Postal Code:	07065

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14399483

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: 732-594-3751 Email: us efs@merck.com

MERCK SHARP & DOHME CORP. Correspondent Name: Address Line 1: 126 EAST LINCOLN AVENUE

Address Line 2: RY86-2011A

Address Line 4: RAHWAY, NEW JERSEY 07065

ATTORNEY DOCKET NUMBER:	23236
NAME OF SUBMITTER:	CHRISTINE RAPACKI

PAIENI

SIGNATURE:	/Christine Rapacki/
DATE SIGNED:	08/28/2015
Total Attachments: 15	
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PATENT REEL: 036448 FRAME: 0040

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

- (1) Frank Chen, located at Plainsboro, New Jersey,
- (2) Carmela Molinaro, located at Lansdale, Pennsylvania,
- (3) Peter W. Wuelfing, located at Harleysville, Pennsylvania,
- (4) Nobuyoshi Yasuda, located at Mountainside, New Jersey,
- (5) Jianguo Yin, located at Plainsboro, New Jersey,
- (6) Yong-Li Zhong, located at Edison, New Jersey
- (7) Joseph Lynch, located at Plainfield, New Jersey
- (8) Teresa Andreani, located at Matawan, New Jersey

(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:

PROCESS FOR MAKING CGRP RECEPTOR ANTAGONISTS

and/or in the following application(s):

U.S. Provisional Application No. 61/64463	31 filed on 05/09/2012:		
U.S. Application No. <u>14/399,483</u>	having a filing date of		
PCT International Application No.		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 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 March	, 20 <u>13</u> .	
Frank Chen		
ACKNOWLEDGEMENT		
Companierally of Unstadiocally	}	
County of Viddesex) s.s.:)	
On this day of day of to me known, and known by me to be the same acknowledged that he (she) executed the same	, 20 13, personally appeared before me France person described in and who executed the form of his (her) own free will for the purpose set	oregoing instrument, and
(Seal)	Notary Public	
KATHLEEN A. CALLAN Notery Public Commonwealth of Massachusetts My Comm. Expires March 21, 2019	reviewy r duno	
Executed this day of	<u>,</u> , 20	
Carmela Molinaro		
ACKNOWLEDGEMENT		
of	_)	
County of) s.s.:)	
On this day of known, and known by me to be the same perso acknowledged that he (she) executed the same		ig instrument, and
(Seal)		
	Notary Public	

Executed this day of	, 20
Peter W. Wuelfing	
ACKNOWLEDGEMENT	
of)
of) s.s.: · · · · · · · · · · · · · · · · · · ·
On this day of known, and known by me to be the same per	, 20, personally appeared before me Peter W. Wuelfing to me son described in and who executed the foregoing instrument, and me, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
	*
Executed this day of	, 20
Nobuyoshi Yasuda	
ACKNOWLEDGEMENT	
of	\
of) s.s.:)
known, and known by me to be the same per	, 20, personally appeared before me Nobuyoshi Yasuda to me son described in and who executed the foregoing instrument, and ne, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

to me known, and known by me to be the same person described in and who executed the foregoing instrument, and

Notary Public

acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

On this ____ day of _

(Seal)

of	_)	
)	s.s.:
County of))

On this _____ day of _____, 20___, personally appeared before me Teresa Andreani 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

ACKNOWLEDGEMENT

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE.

- (1) Frank Chen, located at Plainsboro, New Jersey,
- (2) Carmela Molinaro, located at Lansdale, Pennsylvania,
- (3) Peter W. Wuelfing, located at Harleysville, Pennsylvania,
- (4) Nobuyoshi Yasuda, located at Mountainside, New Jersey,
- (5) Jianguo Yin, located at Plainsboro, New Jersey,
- (6) Yong-Li Zhong, located at Edison, New Jersey
- (7) Joseph Lynch, located at Plainfield, New Jersey
- (8) Teresa Andreani, located at Matawan, New Jersey

(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:

PROCESS FOR MAKING CGRP RECEPTOR ANTAGONISTS

and/or in the following application(s):

U.S. Provisional Application No. 6	1/644631 filed on 05/09/2012:
U.S. Application No 14/399,483	having a filing date of1/06/2014; 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 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.

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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,	20
Frank Chen	
ACKNOWLEDGEMENT	
of) County of)	s.s.:
On this day of , 2 to me known, and known by me to be the same p acknowledged that he (she) executed the same, o	0, personally appeared before me Frank Chen erson described in and who executed the foregoing instrument, and if his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this 27 day of March	20 <u>13</u> .
Executed this 27 day of March. Carmela Molinaro.	
Carmela Molinaro	
ACKNOWLEDGEMENT	
swalk observan	
County of language)	
On this A day of MACA known, and known by me to be the same person of acknowledged that he (she) executed the same, o	20/3 personally appeared before me Carmela Molinaro to me lescribed in and who executed the foregoing instrument, and f his (her) own free will for the purpose set forth.
(Seal)	Marian Serve
	Notary Public COMMONWEALTH OF PENNSYLVANIA
	Notarial Seal
	Marjone M. Bernett, Montgomery County Upper Gwynedd Twp., Montgomery County My Commission Expires Jan. 24, 2015 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTABLES

	Executed this 20 day of 1/2015	, 20 <u>13</u> .
	Peter W. Wuelfing	
	ACKNOWLEDGEMENT	
a Nu	LACOLUPO OKO OFOA ALLALOCIA	١٥`.
makeri R &	County of Man General) s.s.:)
	On this // day of // day/// known, and known by me to be the same person	, 20/3, personally appeared before me Peter W. Wuelfing to me described in and who executed the foregoing instrument, and of his (her) own free will for the purpose set forth.
	(Seal)	marjori n Benett
		Notary Public
		COMMONWEALTH OF PENNSYLVANIA Notarial Seal Marjorie M. Bennett, Notary Public
		Upper Gwynedd Twp., Montgomery County My Commission Expires Jan. 24, 2015 MEMBER, PERREVAYARIA ASSOCIATION OF NOTABLES
	Executed this day of	20
		,
	Nobuyoshi Yasuda	
	ACKNOWLEDGEMENT	
	of)
	County of) \$.\$.:)
	On this day of known, and known by me to be the same person acknowledged that he (she) executed the same,	, 20, personally appeared before me Nobuyoshi Yasuda 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
		ryotary r done

Executed this day of	, 20
Jianguo Yin	·
ACKNOWLEDGEMENT	
of)
of) s.s.:)
On this day of and known by me to be the same person descri that he (she) executed the same, of his (her) ow	_ , 20, personally appeared before me Jianguo Yin to me known, bed in and who executed the foregoing instrument, and acknowledged in free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	, 20
Yong-Li Zhong	
ACKNOWLEDGEMENT	
of)
County of) s.s.:)
On this day of , 20 to me known, and known by me to be the same acknowledged that he (she) executed the same,	, personally appeared before me Yong-Li Zhong person described in and who executed the foregoing instrument, and of his (her) own free will for the purpose set forth.
(Seal)	• •

Worldwide Assignment

Notary Public

Executed this day of	, 20
Joseph Lymph	
Joseph Lynch	
ACKNOWLEDGEMENT	
of	
of County of) s.s.:)
and known by me to be the same person	, 20, personally appeared before me Joseph Lynch to me known, described in and who executed the foregoing instrument, and acknowledged her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	, 20
Teresa Andreani	
ACKNOWLEDGEMENT	
)
of County of) s.s.:)
On this day of	, 20, personally appeared before me Teresa Andreani to me
known, and known by me to be the same	person described in and who executed the foregoing instrument, and a same, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

- (1) Frank Chen, located at Plainsboro, New Jersey.
- (2) Carmela Molinaro, located at Lansdale, Pennsylvania,
- (3) Peter W. Wuelfing, located at Harleysville, Pennsylvania,
- (4) Nobuyoshi Yasuda, located at Mountainside, New Jersey,
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and/or in the following application(s):

U.S. Provisional Application No. 61/64463	1 filed on 05/09/2012:	
	having a filing date of	
PCT International Application No.		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.

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

Executed this day of	, 20
Frank Chen	
ACKNOWLEDGEMENT	
of)
of County of) s.s.:)
On this day of to me known, and known by me to be th acknowledged that he (she) executed the	, 20, personally appeared before me Frank Chen ne same person described in and who executed the foregoing instrument, and e same, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	, 20
Carmela Molinaro	
ACKNOWLEDGEMENT	
	,
of) s.s.:
County of)
known, and known by me to be the same	, 20, personally appeared before me Carmela Molinaro to me person described in and who executed the foregoing instrument, and e same, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

Executed this day of	. , 20
Peter W. Wuelfing	
ACKNOWLEDGEMENT	
of	<u>)</u>
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	, 20, personally appeared before me Peter W. Wuelfing to mendescribed in and who executed the foregoing instrument, and , of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this <u>2/</u> day of <u>Max 4</u>	, 20 <u>/</u> }
Nobulyoshi Yasuda	
ACKNOWLEDGEMENT / ,	
Kahuay or New Jerry	Ó
County of Ald All Co) s.s.:)
On this 2/ 2 day of 1/ 2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/	, 20 //, personally appeared before me Nobuyoshi Yasuda to me n described in and who executed the foregoing instrument, and of his (her);own free will for the purpose set forth.
(Seal)	Tin foul A. Jame Sonjey
	/ Notáry Publić / (/

PAROCELS, PARAS-SANJURIO NOTARY PUBLIC OF NEW JERSEY NOTARIY PUBLIC SEPTEMBER 14, 2017

Executed this $\frac{\mathcal{G}^{\mathscr{C}}}{\mathcal{G}}$ day of $\frac{\mathcal{G}^{\mathscr{C}}}{\mathcal{G}}$,	20 <u>13</u>
Jianguo Yin	····
On this 4 day of Alver	s.s.: , 20 / 3, personally appeared before me Jianguo Yin to me known, ed in and who executed the foregoing instrument, and acknowledged free will for the purpose set forth. Notary Public
	PIA ROCEL S. FARAS-SANJURJO NOTARY PUBLIC OF NEW JERSEY My Comunission Equinos September 14, 2017
Executed this 2 rd day of AVVI ,	20 <u> }</u> .
ACKNOWLEDGEMENT Advant of County of On this Aday of One known, and known by me to be the same to acknowledged that he (she) executed the same, of (Seal)	personally appeared before me Yong-Li Zhong person described in and who executed the foregoing instrument, and of his (her) own free will for the purpose set forth. Notary Public

PARCCELS, PARAS-SANJURIO NOTARY PUBLIC OF NEW JERSEY W Commission Explosis September 14, 2017

Executed this	20 <u>13</u>
On this / g day of Grad	s.s.: , 20 3, personally appeared before me Joseph Lynch to me known, and in and who executed the foregoing instrument, and acknowledged free will for the purpose set forth. Notary Public
Executed this <u>ZZ</u> day of <u>MARCH</u> , January Teresa Andreani	PAROCE S. PRASSANULO NOTARY PUBLIC OF NEW JERSEY S. Commission Equino Service 14, 2017
On this 22 day of March	s.s.: , 20/3, personally appeared before me Teresa Andreani to me described in and who executed the foregoing instrument, and of his (her) own free will for the purpose set forth. Notary Public

PIA ROCEL S. PARAS-SANJURJO NOTARY PUBLIC OF NEW JERSEY Ny Commission Esphan Saptambar 14, 2017

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

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