# 504913303 05/14/2018

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4960047

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
THOMAS H. GRAHAM	10/07/2016
TAO YU	10/07/2016
ANDREW STAMFORD	10/13/2016
WENSHENG LIU	10/13/2016
LIBO XU	10/18/2016
SHERMAN T. WADDELL	10/17/2016
JOHN A. MCCAULEY	10/10/2016
JAY A. GROBLER	10/10/2016

## **RECEIVING PARTY DATA**

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

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15775966

#### **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

ATTORNEY DOCKET NUMBER:	24174-US-PCT
NAME OF SUBMITTER:	MICHELLE A. SISKO
SIGNATURE:	/Michelle A. Sisko/

PATENT 504913303 REEL: 045796 FRAME: 0661

DATE SIGNED:	05/14/2018
Total Attachments: 9	
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PATENT REEL: 045796 FRAME: 0662

#### **WORLDWIDE ASSIGNMENT**

WHEREAS, INVE,

(1) Thomas H. Graham,
(2) Tao Yu,
(3) Sherman T. Waddell,
(4) John A. McCauley,
(5) Andrew Stamford,
Iocated at Scotch Plains, New Jersey 07076, USA,
Iocated at Edison, New Jersey 08820, USA,
Iocated at Westfield, New Jersey 07090, USA,
Iocated at Maple Glen, Pennsylvania 19002, USA,
Iocated at Chatham Township, New Jersey, 07928 USA,

(6) Wensheng Liu, located at Edison, New Jersey 08820, USA,

(7) Jay A. Grobler, located at Gwynedd, Pennsylvania 19436, USA and (8) Libo Xu, located at Bridgewater, New Jersey 08807, USA

(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:

AMIDO-SUBSTITUTED PYRIDOTRIAZINE DERIVATIVES USEFUL AS HIV INTEGRASE INHIBITORS

and/or in the following application(s):

U.S. Provisional Application No. 62	/256,403 filed on November 17, 2015	· •
U.S. Application No.	having a filing date of	; and
PCT International Application No	having a filing da	ite 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 <u>07</u> day of <u>ctober</u>	, 20 <u>6</u> .	
Thom M Shaha		
Thomas H. Graham	<del></del>	
ACKNOWLEDGEMENT		
STATE of NEW JERSEY  County of Union	) ) s.s.: )	
On this day of CHOW known, and known by me to be the same persacknowledged that he (she) executed the same		egoing instrument, and
(Seal)	Chuduro M.  Notary Public	Kanellidi
		CHRISTINE M. KANELLIDIS Notary Public of New Jersey
Executed this May of October	, 2016.	L.D. # 2442057 Commission Expires January 9, 2019
Tao Yu	<del></del>	
ACKNOWLEDGEMENT		
STATE of NEW JERSEY	1	
County of Union	) s.s.: )	
On this Oday of Odoble known by me to be the same person(s) describe (she) executed the same, of his (her) own the same of	, 20∬o, personally appeared before me bed in and who executed the foregoing instru free will for the purpose set forth.	
(Seal)	Notary Public	Kanellidi
		CHRISTINE M. KANELLIDI
Executed this 13TH day of OCTOBER	, 20 <u>/6</u> .	Notary Public of New Jerse I.D. # 2442057 Commission Expires January 9, 20
Andrew Stamford	<del></del>	
ACKNOWLEDGEMENT		
STATE of NEW JERSEY	)	
County of Onion	) s.s.: )	
On this 3 day of 0/10/06 known, and known by me to be the same pers acknowledged that he (she) executed the same	, 20 <u>,</u> personally appeared before me on(s) described in and who executed the for ie, of his (her) own free will for the purpose s	egoing instrument, and
(Seal)	Moline M. / Notary Public	Karolledio
	notary rubits	

Page 2 of 4
Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11047010 LD. # 2442057

1.D. # 2442057

Notary Public of New Jersey I.D. # 2442057

**ACKNOWLEDGEMENT** 

Sherman P. Waddell

State of

County of

day of UC , 20 10, personally appeared before me Sherman T. Waddell 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)

CHRISTINE M. KANELLIDIS Notary Public of New Jersey I.D. # 2442057

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

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

Executed this day of	, 20
John A. McCauley	<del></del>
ACKNOWLEDGEMENT	
Commenwealth of PENNSYLVANIA	<b>)</b>
County of	) s.s.: )
known, and known by me to be the same per	, 20, personally appeared before me <b>John A. McCauley,</b> 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
Jay A. Grobler	
ACKNOWLEDGEMENT	
Commenwealth of PENNSYLVANIA	) s.s.:
County of	J.
On this day of and known by me to be the same person des that he (she) executed the same, of his (her)	, 20, personally appeared before me <b>Jay A. Grobler</b> to me known, cribed in and who executed the foregoing instrument, and acknowledged own free will for the purpose set forth.
(Seal)	
	Notary Public

#### WORLDWIDE ASSIGNMENT

	WHEREAS, IWE,	
(1)	Thomas H. Graham,	located at Scotch Plains, New Jersey 07076, USA,
(2)	Tao Yu,	located at Edison, New Jersey 08820, USA,
(3)	Sherman T. Waddell,	located at Westfield, New Jersey 07090, USA,
(4)	John A. McCauley,	located at Maple Glen, Pennsylvania 19002, USA,
(5)	Andrew Stamford,	located at Chatham Township, New Jersey, 07928 USA
(6)	Wensheng Liu,	located at Edison, New Jersey 08820, USA,
(7)	Jay A. Grobler,	located at Gwynedd, Pennsylvania 19436, USA and
(8)	Libo Xu,	located at Bridgewater, New Jersey 08807, USA

(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:

AMIDO-SUBSTITUTED PYRIDOTRIAZINE DERIVATIVES USEFUL AS HIV INTEGRASE INHIBITORS

and/or in the following application(s):

U.S. Provisional Application No. 62/256,	403 filed on November 17, 2015;	
U.S. Application No.	having a filing date of	; and
PCT International Application No.	having a filing dat	te 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 filling 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

PATENT

Executed this day of	, 20
Thomas H. Graham	
ACKNOWLEDGEMENT	
STATE of NEW JERSEY	)
STATE of NEW JERSEY  County of	)
On this day of known, and known by me to be the same pe	, 20, personally appeared before me <b>Thomas H. Graham</b> , to me erson(s) described in and who executed the foregoing instrument, and ame, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	_ , 20
Tao Yu	
ACKNOWLEDGEMENT	
STATE of NEW JERSEY  County of	) ) s.s.:
County of	
On this day of known by me to be the same person(s) desc (she) executed the same, of his (her) own fr	, 20, personally appeared before me <b>Tao Yu</b> , to me known, and cribed in and who executed the foregoing instrument, and acknowledged that ee will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	, 20
Andrew Stamford	
ACKNOWLEDGEMENT	
STATE of NEW JERSEY	
STATE of NEW JERSEY  County of  On this day of	) <b>s.s.</b> .
known, and known by me to be the same pe	, 20, personally appeared before me <b>Andrew Stamford</b> , to me erson(s) described in and who executed the foregoing instrument, and mane, of his (her) own free will for the purpose set forth.

Page 2 of 5
Computer Generated Template "Assignment-Merck Sharp & Dohme, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

**PATENT** 

he

(Seal)		
Executed this day of	Notary Public	
	, 20 Attorney Docket No.: <u>24174</u>	
Wensheng Liu		
ACKNOWLEDGEMENT		
STATE of NEW JERSEY  County of	) ) s.s.: )	
On this day of and known by me to be the same person(s) that he (she) executed the same, of his (her	, 20, personally appeared before me <b>Wensheng Liu</b> , to me lidescribed in and who executed the foregoing instrument, and acknow	known, rledged
(Seal)	Notary Public	
Executed this day of	, 20	
Libo Xu		
ACKNOWLEDGEMENT		
State of <u>NEW JERSEY</u> County of	) ) s.s.: )	
On this day of known by me to be the same person descrit (she) executed the same, of his (her) own fr	, 20, personally appeared before me <b>Libo Xu</b> , to me known ped in and who executed the foregoing instrument, and acknowledged ree will for the purpose set forth.	, and that he
(Seal)		
	Notary Public	
Executed this day of	9	pierangapian seranjan
Sherman T. Waddell	··	
ACKNOWLEDGEMENT		
State of <u>NEW JERSEY</u>	)	
County of	) s.s.:	

Worldwide Assignment

Page 3 of 5
Computer Generated Template "Assignment-Merck Sharp & Dohme. Single Assignee Worktwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010
PATENT

dwide Assignment
On this day of, 20, personally appeared before me <b>Sherman T. Waddell</b> to me m, and known by me to be the same person described in and who executed the foregoing instrument, and owledged that he (she) executed the same, of his (her) own free will for the purpose set forth.
(Seal)
Notary Public

Attorney Docket No.: 24174 Executed this 10 day of Ochber , 20/6 **ACKNOWLEDGEMENT** Commonwealth of PENNSYLVANIA ) s.s.: County of MONTGOW , 20[🗽, personally appeared before me John A. McCauley, to me On this O day of OCTOIOLD 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. COMMONWEALTH OF PENNSYLVANIA (Seal) Notarial Seal Dorothy M. Miller, Notary Public Upper Gwynedd Twp., Montgomery County N; Commission Expires May 14, 2017 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES Executed this 10 day of OcroBER **ACKNOWLEDGEMENT** Commonwealth of PENNSYLVANIA ) s.s.: County of MONTGOYLE , 20 16, personally appeared before me Jay A. Grobler to me known, and On this 10 day of OCTOOUS known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he

(Seal)

COMMONWEALTH OF PENNSYLVANIA Notarial Seal Dorothy M. Miller, Notary Public Upper Gwynedd Twp., Montgomery County My Commission Expires May 14, 2017

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

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

REEL: 045796 FRAME: 0671 **RECORDED: 05/14/2018**