# 502321114 04/23/2013

## PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
SOBHANA BABU BOGA	09/22/2011
JOSEPH M. KELLY	09/22/2011
HUGH Y. ZHU	09/22/2011
ABDUL-BASIT ALHASSAN	09/22/2011
XIN YAO	09/22/2011
XIAOLEI GAO	10/11/2011
JAMES J-S WANG	09/22/2011
JAGDISH A. DESAI	09/22/2011
SUBRAHMANYAM GUDIPATI	09/22/2011
SIE-MUN LO	09/23/2011
LIANG ZHU	09/20/2011
ALAN B. COOPER	09/22/2011
YONGQI DENG	09/20/2011
GERALD W. SHIPPS JR.	09/20/2011

## **RECEIVING PARTY DATA**

Name:	SCHERING CORPORATION
Street Address:	2000 GALLOPING HILL ROAD
City:	KENILWORTH
State/Country:	NEW JERSEY
Postal Code:	07033

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13881050

## **CORRESPONDENCE DATA**

7325944720 Fax Number:

**REEL: 030267 FRAME: 0502** 

**PATENT** 

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Email: US\_efs@merck.com

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

Address Line 4: RAHWAY, NEW HAMPSHIRE 07065-0900

ATTORNEY DOCKET NUMBER:	MRL-ONC-00053-US-PCT
NAME OF SUBMITTER:	HENRY C. JEANETTE
Signature:	/Henry C. Jeanette, Reg. #30,856/
Date:	04/23/2013

#### Total Attachments: 24

source=MRLONC00053USPCT-ASM-SP-23APR2013#page1.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page2.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page3.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page4.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page5.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page6.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page7.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page8.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page9.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page10.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page11.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page12.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page13.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page14.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page15.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page16.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page17.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page18.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page19.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page20.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page21.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page22.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page23.tif source=MRLONC00053USPCT-ASM-SP-23APR2013#page24.tif

> PATENT REEL: 030267 FRAME: 0503

Attorney Docket No.: MRL-ONC-00053

#### WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

(1)	SOBHANA BABU BOGA	located at SCOTCH PLAINS, NJ	07076 ,
(2)	JOSEPH M. KELLY	located at PARLIN, NJ	08859 ,
(3)	HUGH ZHU	located at WARREN, NJ	07059 ,
(4)	ABDUL-BASIT ALHASSAN	located at SCOTCH PLAINS, NJ	<u>07076</u> ,
(5)	XIN YAO	located at SCOTCH PLAINS, NJ	07076,
(6)	XIAOLEI GAO	located at BRIDGEWATER, NJ	<u>08807</u> ,
(7)	JAMES J-S WANG	located at WESTFIELD, NJ	<u>07090</u> ,
(8)	JAGDISH A. DESAI	located at MONROE TOWNSHIP, NJ	<u>08831</u> ,
(e)	SUBRAHMANYAM GUDIPATI,	located at EDISON, NJ	<u>08820</u> ,
(10)	SIE-MUN LO	located at SPRINGFIELD, VA	22150 ,
(11)	LIANG ZHU	located at WALTHAM, MA	<u>02453</u> ,
(12)	ALAN B. COOPER	located at WEST CALDWELL, NJ,	07006,
(13)	YONGQI DENG	located at <u>NEWTON, MA</u>	02459 ,
(14)	GERALD W. SHIPPS, JR.	located at STONEHAM, MA	02180,

(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:

### **NOVEL COMPOUNDS THAT ARE ERK INHIBITORS**

and in the following application(s):

U.S. Provisional Application No. 61	/408,092 filed on 10/29/2010;	
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. Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

Executed this 22 day of
SOBHANA BABU BOGA
ACKNOWLEDGEMENT
State of Nursey
j s.s.: County of <u>haraw</u> )
On this day of day of 2011, personally appeared before me SOBHANA BABU BOGA 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) Que a Scott
Notary Public  DAWN A. SCOTT
NOTARY PUBLIC OF NEW JERSEY Commission Expires March 5, 2013
Executed this 22 day of September, 2011.  Joseph M. Kelly
JOSEPH M. KELLY
ACKNOWLEDGEMENT
State of New Treesey ) s.s.:
County of
On this $\frac{2000}{1000}$ day of $\frac{1000}{1000}$ , $\frac{100}{1000}$ , personally appeared before me <b>JOSEPH M. KELLY.</b> 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) Dain godald
Notary Public

DAWN A. SCOTT NOTARY PUBLIC OF NEW JERSEY Commission Expires March 5, 2013

Executed this 22_day of <u>September</u> , 20 <u>11</u> .
e e e e e e e e e e e e e e e e e e e
HUGH Y. ZHU
ACKNOWLEDGEMENT
State of Wew yersey ) ) s.s.:
County of United ( ) s.s.:
On this <u>and</u> day of <u>State for</u> , 20 <u>II</u> , personally appeared before me <b>HUGH Y. ZHU</b> 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) Jan a Sol
Notary Public
DAWN A. SCOTT NOTARY PUBLIC OF NEW JERSEY Commission Expires March 5, 2013
Executed this <u>QQ</u> day of <u>SEPTEMBEL</u> , 20 <u>1/</u> .
MFAGE I
ABDUL-BASIT ALHASSAN
ACKNOWLEDGEMENT
State of Whytersay )
State of
On this day of Scottonber, 20 11, personally appeared before me ABDUL-BASIT ALHASSAN. 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) Down of Scott
Notary Public
DAMA & COTT

DAWN A. SCOTT NOTARY PUBLIC OF NEW JERSEY Commission Expires March 5, 2013

Executed this <u>22</u> day of <u>September</u> , 20 <u>70</u> .
XIN YAO
ACKNOWLEDGEMENT
State of Wew Jessey )
County of Usicin )
On this One 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) Warm Q Land
Notary Public
DAWN A. SCOTT  OTARY PUBLIC OF NEW JERSEY  Lummission Expires March 5, 2013
Executed this <u>//</u> day of <u>O&amp;c</u> , 20 <u>//</u> .
XIAOLEI GAO -773 DL -41 P 8-31-15 H 6 05087890 0 60752
ACKNOWLEDGEMENT
State of New Je sey
County of <u>CM. J.Lle Sex</u> ) s.s.:
On this 1/9 day of October, 20_/, personally appeared before me XIAOLEI GAO 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) A.J. Was de Notary Public Phyllis H. Warden
Notary Public Phyllis H. Warden Notary Public State of New Jersey County of Middlesex License No. 2205650 Commission Expires: 9/18/12

Page 4 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010
REEL: 030267 FRAME: 0507

Executed this 22 day of
JAMES J-S WANG
ACKNOWLEDGEMENT
State of <u>Num ( )</u> ) s.s.:
County of <u>Universe</u>
On this day of September, 2011, personally appeared before me JAMES J-S WANG 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) Dama Scort
Notary Public
DAWN A. SCOTT  NOTARY PUBLIC OF NEW JERSEY  Commission Expires March 5, 2013
Executed this 22 nd ay of September, 2011.
JAGDISH A. DESAI
ACKNOWLEDGEMENT
State of New Years ) ) s.s.:
County of Ullimo )
On this 2010 day of September, 2010, personally appeared before me JAGDISH A. DESAI 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) plan a Lost
Notary Public

DAWN A, SCOTT OTARY PUBLIC OF NEW IERSEY amission Expires March 5, 2013

Executed this <u>2.2.</u> day of <u>SEPH</u> , 20 <u>11</u> .
SUBRAHMANYAM GUDIPATI
ACKNOWLEDGEMENT
State of New FC/Sey ) s.s.: County of Un in )
County of the in )
On this 22 day of 5 chamber, 2011, personally appeared before me SUBRAHMANYAM GUDIPATI 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) Vlain a Last
Notary Public
DAWN A. SCOTT NOTARY PUBLIC OF NEW IERSEY Commission Expires March 5, 2013
Executed this day of, 20
SIE-MUN LO
ACKNOWLEDGEMENT
State of ) s.s.:
County of ) s.s
On this day of, 20, personally appeared before me SIE-MUN LO 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

Page 6 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2016
REEL: 030267 FRAME: 0509

Executed this day of	_ , 20
LIANG ZHU	
ACKNOWLEDGEMENT	
State of ) County of )	ii.
County of	
LIANG ZHU to me known, and known by me to	, 20, personally appeared before me be the same person described in and who executed the ne (she) executed the same, of his (her) own free will for
(Seal)	
Notary Public	
Executed this 2 2 day of	, 20 <u>_{</u> { <u>{</u> .
ALAN B. COOPER	
ACKNOWLEDGEMENT	
State of New/Tersey )	· •
County of (County of County of Count	
executed the foregoing instrument, and acknown free will for the purpose set forth.	, 20_1/, personally appeared before me in by me to be the same person described in and who owledged that he (she) executed the same, of his (her)
(Seal) Daw a Jeast	
Notary Public	

DAWN A. SCOTT NOTARY PUBLIC OF NEW JERSEY Commission Expires March 5, 2013

Executed this	day of			20				
YONGQI DENG								
ACKNOWLEDGEN	MENT							
State of			) ) s.s.:					
County of			)					
On this YONGQI DENG the foregoing inst for the purpose se	to me known, trument, and	and knowr	າ by me	to be the	same pe	erson descr	ibed in and	d before me I who executed rr) own free will
(Seal)								
	Notary Pu	blic						
Executed this	day of			, 20				
GERALD W. SI	HIPPS, JR.							
ACKNOWLEDGE	MENT							
State of			) ) s.s.:					
County of			) 5.5					
On this <b>GERALD W. SH</b> who executed th (her) own free wi	e foregoing i	me knowr nstrument,	n, and k and ac	nown by	me to be	e the same	person de	ed before me escribed in and e same, of his
(Seal)								
	Notary Pu	blic						

Attorney Docket No.: MRL-ONC-00053

#### WORLDWIDE ASSIGNMENT

WHEREAS, I/WE.

(1)	SOBHANA BABU BOGA	located at SCOTCH PLAINS, NJ	07076 .
(2)	JOSEPH M. KELLY	located at PARLIN, NJ	08859
(3)	HUGH ZHU	located at WARREN, NJ	07059
(4)	ABDUL-BASIT ALHASSAN ,	located at SCOTCH PLAINS, NJ	<u>07076</u> ,
(5)	XIN YAO	located at SCOTCH PLAINS, NJ	<u>07076</u> ,
(6)	XIAOLEI GAO	located at BRIDGEWATER, NJ	<u>08807</u> ,
(7)	JAMES J-S WANG	located at WESTFIELD, NJ	<u>07090</u> ,
(8)	JAGDISH A. DESAI ,	located at MONROE TOWNSHIP, NJ	<u>08831</u> ,
(9)	SUBRAHMANYAM GUDIPATI,	located at <u>EDISON, NJ</u>	<u>08820</u> ,
(10)	SIE-MUN LO	located at SPRINGFIELD, VA	<b>22150</b> ,
(11)	LIANG ZHU ,	located at WALTHAM, MA	<u>02453</u> ,
(12)	ALAN B. COOPER	located at WEST CALDWELL, NJ,	<u>07006</u> ,
(13)	YONGQI DENG	located at NEWTON, MA	<b>02459</b> ,
(14)	GERALD W. SHIPPS, JR.	located at STONEHAM, MA	<b>02180</b> ,

(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:

#### **NOVEL COMPOUNDS THAT ARE ERK INHIBITORS**

and in the following application(s):

U.S. Provisional Application No. 61	/408,092 filed on 10/29/2010;	
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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

Executed this	_ day of		, 20				
SOBHANA BABU	JBOGA						
ACKNOWLEDGEM	IENT						
State of		) ) s.s.:					
County of		)					
On this <b>SOBHANA BABL</b> executed the fore own free will for the	going instrumen	nown, and kno t, and acknow	wn by me	e to be th	e same pers	on describe	d in and who
(Seal)							
	Notary Public						
Executed this	_ day of		, 20				
	· · · · · · · · · · · · · · · · · · ·						
JOSEPH M. KEL	LY						
ACKNOWLEDGEN	IENT						
State of		)					
County of		) s.s.: )					
On this <b>JOSEPH M. KEL</b> executed the fore own free will for the	egoing instrumen	n, and known t, and acknow	by me t	o be the	same perso	n described	l in and who
(Seal)							
	Notary Public						

Page 2 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

REEL: 030267 FRAME: 0513

Executed this	day of	, 20	<i>:</i>	
			_	
HUGH Y. ZHU				
ACKNOWLEDGE	MENT			
State of		) ) s.s.:		
County of		) 3.3		
On this _ HUGH Y. ZHU to the foregoing ins for the purpose s	trument, and ackno	, 20 nown by me to be the owledged that he (sh	, personally appeared before me e same person described in and e) executed the same, of his (he	who executed r) own free will
(Seal)			*	
	Notary Public		_	
Executed this	day of	, 20	u.	
ABDUL-BASIT	ALHASSAN			
ACKNOWLEDGE	MENT			
State of	<u></u>	) ) s.s.:		
County of	<u>-</u>	) s.s.: )		
who executed the	day of ALHASSAN. to ments of the foregoing instruction ill for the purpose s	ment, and acknowle	, 20, personally appear by me to be the same person cedged that he (she) executed the	ed before me described in and he same, of his
(Seal)				
	Notary Public			

Executed this	day of	, 20	•			
XIN YAO						
ACKNOWLEDGE	MENT					
State of		) ) s.s.:				
County of		) 5.5				
XIN YAO to me	day of known, and known nent, and acknowle orth.	i by me to be the	same perso	n described i	n and wno exe	ecutea tne
(Seal)						
	Notary Public		<del></del>		,	
Executed this	day of	, 20_	·			
XIAOLEI GAO						
ACKNOWLEDGE	MENT					
State of		)				
County of		) s.s.: )				
XIAOLEI GAO to	day of one known, and ketrument, and acknown to the forth.	nown by me to be owledged that he	e the same p	erson describ	oed in and who	executed
(Seal)						
	Notary Public					

Page 4 of 8 Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2016 TEAME: 0515

Executed this day of	, 20_	•			
JAMES J-S WANG					
ACKNOWLEDGEMENT					
State of	)				
County of	) s.s.: )				
On this day of JAMES J-S WANG to me known executed the foregoing instrument own free will for the purpose set for	, and known by r t, and acknowledg	ne to be the	same person	described	in and who
(Seal)					
Notary Public					
Executed this day of	, 20_	·•			
JAGDISH A. DESAI					
ACKNOWLEDGEMENT					
State of	) ) s.s.:				
County of	) S.S.: )				
On this day of JAGDISH A. DESAI to me know executed the foregoing instrumen own free will for the purpose set for	t, and acknowledg	me to be the	same person	described	∣in and who
(Seal)					
Notary Public					

Page 5 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

REEL: 030267 FRAME: 0516

Executed this	day of		20			
SUBRAHMANY	AM GUDIPATI					
ACKNOWLEDGEN	IENT					
State of		) ) s.s.:				
County of		)				
On this SUBRAHMANYA and who executed (her) own free will	d the foregoing in	nstrument, and a	d known cknowled	20, perso by me to be dged that he (s	onally appe the same pe she) execute	ared before me erson described in d the same, of his
(Seal)						
	Notary Public	waa				
Executed this 🕰	3 day of <u>Se⊘i</u>	embec,	20 <u>//</u> .			
SIE-MUN LO	45 John					
ACKNOWLEDGEN	MENT					
State of May	Jand Janesk	) ) s.s.: )				
	me known, and l rument, and ack	nowledged that এ১০০ব	be the s	ame person dexecuted the s	lescribed in a same, of his	ared before me and who executed (her) own free will
			My Com	Notary Public Frederick County Maryland Imission Expires Fe		

Page 6 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worktwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2016
REEL: 030267 FRAME: 0517

Executed this	_ day of		, 20				
LIANG ZHU							
ACKNOWLEDGEM	ENT						
State of		) ) s.s.:					
County of		) s.s.: )					
On this LIANG ZHU to me foregoing instrume the purpose set for	e known, and k ent, and acknow	of nown by me to wledged that he	be the sar	ne perso	n described i	n and who	executed the
(Seal)							
	Notary Public	0					
Executed this	_ day of		, 20				
ALAN B. COOP	ER						
ACKNOWLEDGEM	ENT						
State of		\					
County of		) s.s.: )					
	day of the day of	vn, and known ent, and acknow	by me to	be the	same persor	n described	
(Seal)							
	Notary Publi	C					

Executed this	_ day of	, , 2	.0		
YONGQI DENG			<del></del>		
ACKNOWLEDGEN	IENT				
State of		) ) s.s.:			
County of		) \$.\$			
On this YONGQI DENG to the foregoing inst for the purpose se	rument, and a	of and known by me to cknowledged that h	, 20 b be the same ne (she) execu	_, personally person describ ted the same, o	appeared before me ed in and who executed of his (her) own free wil
(Seal)					
	Notary Pub	lic			
Executed this	day of	, , 2	20		
GERALD W. SH	IIPPS, JR.				
ACKNOWLEDGEN	MENT				
State of		)			
County of	• • • • • • • • • • • • • • • • • • • •	) s.s.: )			
GERALD W. SH	e foregoing in	me known, and kno strument, and ack	own by me to	be the same p	appeared before me person described in and ecuted the same, of his
(Seal)					
	Notary Pub	dic			

Attorney Docket No.: MRL-ONC-00053

#### WORLDWIDE ASSIGNMENT

WHEREAS, I/WE.

(1)	SOBHANA BABU BOGA .	located at SCOTCH PLAINS, NJ	07076 .
(2)	JOSEPH M. KELLY	located at PARLIN, NJ	08859
(3)	HUGH ZHU ,	located at WARREN, NJ	07059
(4)	ABDUL-BASIT ALHASSAN,	located at SCOTCH PLAINS, NJ	07076 ,
(5)	XIN YAO,	located at SCOTCH PLAINS, NJ	07076 ,
(6)	XIAOLEI GAO	located at <u>BRIDGEWATER, NJ</u>	08807
(7)	JAMES J-S WANG,	located at WESTFIELD, NJ	07090 ,
(8)	JAGDISH A. DESAI ,	located at MONROE TOWNSHIP, NJ	08831 ,
(9)	SUBRAHMANYAM GUDIPATI,	located at <u>EDISON, NJ</u>	08820,
(10)	SIE-MUN LO ,	located at SPRINGFIELD, VA	22150
(11)	LIANG ZHU ,	located at WALTHAM, MA	02453
(12)	ALAN B. COOPER ,	located at WEST CALDWELL, NJ,	07006
(13)	YONGQI DENG	located at NEWTON, MA	02459
(14)	GERALD W. SHIPPS, JR.	located at STONEHAM, MA	02180 ,

(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:

### **NOVEL COMPOUNDS THAT ARE ERK INHIBITORS**

and in the following application(s):

U.S. Provisional Application No. 61/	/408,092 filed on 10/29/2010;	
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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

Executed this	day of	, 20			
SOBHANA BABI	U BOGA		_		
ACKNOWLEDGE	<b>MENT</b>				
State of	·	) ) s.s.:			
County of		) S.S )			
executed the fore	day of _ U BOGA to me know egoing instrument, a he purpose set forth	wn, and known by r and acknowledged	ne to be the san	ne person describ	ed in and who
(Seal)					
	Notary Public		_		
Executed this	day of	, 20			
JOSEPH M. KEL	LY				
ACKNOWLEDGE	MENT				
State of		) ) s.s.:			
County of		) \$.\$			
JOSEPH M. KEI executed the for	day of _ LLY. to me known, egoing instrument, he purpose set forth	and acknowledged	to be the same	e person describe	ed in and who
(Seal)					
	Notary Public		_		

Page 2 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2010

REEL: 030267 FRAME: 0521

Executed this day of	, , 2	20		
HUGH Y. ZHU	and the second s			
ACKNOWLEDGEMENT				
State of	) ) s.s.:			
County of	) s.s.: )			
On this day of HUGH Y. ZHU to me known, and the foregoing instrument, and ac for the purpose set forth.	, 2 I known by me to knowledged that h	20, personal be the same pe ne (she) execute	ly appeared befor rson described in ed the same, of hi	re me and who executed s (her) own free will
(Seal)				
Notary Publi	С			
Executed this day of	, ,	20		
ABDUL-BASIT ALHASSAN				
ACKNOWLEDGEMENT				
State of	)			
County of	) s.s.: )			
On this day of ABDUL-BASIT ALHASSAN. to who executed the foregoing ins (her) own free will for the purpos	me known, and k strument, and ack	nown by me to	be the same pers	
(Seal)				
Notary Publi	ic	<del></del>		

Page 3 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2610 ATENT **REEL: 030267 FRAME: 0522** 

Executed this da	ay of	, 20	_·		
VINIVAO					
XIN YAO					
ACKNOWLEDGEMEN	r				
State of		) ) s.s.:			
County of		) 5.5			
On this XIN YAO to me know foregoing instrument, the purpose set forth.	and acknowledge	me to be the sed that he (she)	, 20, same person executed the	personally app described in an e same, of his (h	peared before me d who executed the ner) own free will for
(Seal)					
	lotary Public		_		
Executed this d	ay of	, 20	·		
XIAOLEI GAO			<u> </u>		
ACKNOWLEDGEMEN	г				
State of		) ) s.s.:			
County of		) 5.5			
On this XIAOLEI GAO to me the foregoing instrum for the purpose set for	known, and know ent, and acknowle	n by me to be	the same pe	rson described i	
(Seal)					
, <u> </u>	lotary Public				

Executed this	_ day of			, 20					
JAMES J-S WA	NG			· ·	<del>-</del>				
ACKNOWLEDGEM	ENT								
State of			) ) s.s.:						
County of			) 5.5						
On this JAMES J-S WAN executed the fore own free will for the	going instrum	wn, and ent, and	known	by me	to be the	same perso	n described	in and	who
(Seal)									
	Notary Publ	ic			_				
Executed this	_ day of			, 20					
					*****				
JAGDISH A. DE	SAI								
ACKNOWLEDGEN	IENT								
State of			) ) s.s.:						
County of			) 8.8						
On this JAGDISH A. DES executed the fore own free will for the	going instrum	own, and ent, and	known	by me	to be the		n described	in and	who
(Seal)									
	Notary Pub	lic							

Executed this	day of	, 20	_··		
SUBRAHMANY	'AM GUDIPAT	l			
ACKNOWLEDGE	MENT				
State of		) ) s.s.:			
County of	·····	) s.s.: )			
SUBRAHMANYA	<b>AM GUDIPATI</b> to d the foregoing i	o me known, and kn instrument, and ackno	own by me to be	onally appeared before the same person descril she) executed the same,	bed in
(Seal)					
	Notary Public	}			
Executed this	day of	, 20			
	•				
SIE-MUN LO					
ACKNOWLEDGE	MENT				
State of		)			
County of		) s.s.: )			
SIE-MUN LO to	trument, and acl	known by me to be t	the same person o	onally appeared before described in and who exe same, of his (her) own fr	ecuted
(Seal)					
	Notary Public	>	<del></del>		

Executed this 20 day of Sept., 2011.
(and
LIANG ZHU
ACKNOWLEDGEMENT
State of MASSITUSET'S
State of _MASSIBLEUSETTS ) County of _SUFFOLK ) s.s.:
On this 254 day of September, 2011, personally appeared before me LIANG ZHU 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) VICTORIA TAYLOR Notary Public Communication of Massachusedtes My Communication Engineer
Notary Public My Commission Express February 21, 2014
have diversify the contraction of the contraction o
Executed this day of , 20
ALAN B. COOPER
ACKNOWLEDGEMENT
State of ) s.s.:
County of)
On this day of, 20, personally appeared before me ALAN B. COOPER 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

Page 7 of 8
Computer Generated Template "Assignment-Schering Corporation. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 07/09/2016 REEL: 030267 FRAME: 0526

Executed this 20 day of Son fember, 20//.  YONGQI DENG  ACKNOWLEDGEMENT	
State of MASARCHUSETTS ) s.s.:  County of SUFFOLK ) s.s.:  On this Add day of SEFEMBLE ,  YONGQI DENG to me known, and known by me to be the the foregoing instrument, and acknowledged that he (she) for the purpose set forth.  (Seal) What Add Sefemble (Seal) Notary Public	same person described in and who executed executed the same, of his (her) own free will  VICTORIA TAYLOR  Notary Public  Communication of Massachusetts  My Construction Expires
Executed this $20^{12}$ day of $5eptember$ , $2011$ .	February 21, 2014
GERALD W. SHIPPS, JR.  ACKNOWLEDGEMENT  State of MASSITCHUSETTS )	
On this 20th day of Screenberk,  GERALD W. SHIPPS, JR. to me known, and known by who executed the foregoing instrument, and acknowledg (her) own free will for the purpose set forth.  (Seal)  Notary Public	me to be the same person described in and