PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2614432

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHN BRUCE PATTERSON	09/11/2008
DAVID G. LONERGAN	09/22/2008
GARY A. FLYNN	09/12/2008
QINGPING ZENG	09/11/2008
PETER V. PALLAI	09/15/2008

RECEIVING PARTY DATA

Name:	MANNKIND CORPORATION	
Street Address:	28903 NORTH AVENUE PAINE	
City:	VALENCIA	
State/Country:	CALIFORNIA	
Postal Code:	91355	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14078792	

CORRESPONDENCE DATA

Fax Number: (202)824-3001 2028243291 Phone:

Ihemmendinger@bannerwitcoff.com, bharrison@bannerwitcoff.com, BWPTOPAT@bannerwitcoff.comEmail:

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

Correspondent LISA M. HEMMENDINGER Name:

Address Line

1100 13TH STREET, NW

Address Line

SUITE 1200

Address Line

WASHINGTON, DISTRICT OF COLUMBIA 20005-4051

PATENT

REEL: 031598 FRAME: 0478

005184.00074
LISA M. HEMMENDINGER
/Lisa M. Hemmendinger/
11/14/2013

Total Attachments: 11

source=Assignment for 005184.00074 (from parent 005184.00058)#page1.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page2.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page3.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page4.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page5.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page6.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page7.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page8.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page9.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page10.tif source=Assignment for 005184.00074 (from parent 005184.00058)#page11.tif

We, John Bruce PATTERSON, David Gregory LONERGAN, Gary A. FLYNN, Qingping ZENG, and Peter V. PALLAI ("ASSIGNORS"), have invented subject matter ("INVENTION") disclosed in a patent application entitled "IRE-1α Inhibitors" ("APPLICATION"), which was filed on June 9, 2008 and was given U.S. Serial No. 12/135,571; and

MannKind Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and wants to own the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and all other applications and patents derived therefrom in the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign, and transfer to the ASSIGNEE the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and APPLICATION DERIVATIVES;

ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION and APPLICATION DERIVATIVES.

9-11-08	_ lh H
DATE	John Bruce PATTERSON
DATE	David Gregory LONERGAN
DATE	Gary A. FLYNN

B&W 005184.00042

8/11/08	De la companya della
DATE	Qingping ZENG
DATE	Peter V. PALLAI

State of California

County of Los Angeles

On _	911	1/2008	before me, _	Nico	le Spa	nks		_, personally
арре	\ eared_	John	Patters	son	and	Ringpi	ng Z	eng_

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Sull (Seal

NICOLE SPARKS
Commission # 1791320
Notary Public - California
Los Angeles County
My Comm. Biples Mar 14, 2012

We, John Bruce PATTERSON, David Gregory LONERGAN, Gary A. FLYNN, Qingping ZENG, and Peter V. PALLAI ("ASSIGNORS"), have invented subject matter ("INVENTION") disclosed in a patent application entitled "IRE-1α Inhibitors" ("APPLICATION"), which was filed on June 9, 2008 and was given U.S. Serial No. 12/135,571; and

MannKind Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and wants to own the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and all other applications and patents derived therefrom in the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign, and transfer to the ASSIGNEE the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and APPLICATION DERIVATIVES;

ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION and APPLICATION DERIVATIVES.

DATE	John Bruce PATTERSON	OFFICIAL SEAL MARY JO RUBASCH
09-22- 08	David havergen	Notary Public-Arizona PIMA COUNTY My Commission Expires
DATE	David Gregory LONERGAN	Mary go Bubasel Sept 22, 2008
DATE	Gary A. FLYNN	

DATE	Qingping ZENG
DATE	Peter V. PALLAI

2

We, John Bruce PATTERSON, David Gregory LONERGAN, Gary A. FLYNN, Qingping ZENG, and Peter V. PALLAI ("ASSIGNORS"), have invented subject matter ("INVENTION") disclosed in a patent application entitled "IRE-1α Inhibitors" ("APPLICATION"), which was filed on June 9, 2008 and was given U.S. Serial No. 12/135,571; and

MannKind Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and wants to own the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and all other applications and patents derived therefrom in the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign, and transfer to the ASSIGNEE the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and APPLICATION DERIVATIVES;

ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION and APPLICATION DERIVATIVES.

DATE	John Bruce PATTERSON
DATE	David Gregory LONERGAN
9-12-2008	Harry A Fley
DATE	Gary A. FLYNN

DATE	Qingping ZENG
DATE	Peter V. PALLAI

2



Acknowledgment by Individual

State of	County of		
ARIZONA	IPIMA		
On this 12 day of 50	EPTEMBER	, 20 <u>0 8</u> before me,	JEREMY BETTS Name of Notary Public
the undersigned Notary Publi	c, personally appeared		Name of Notary Fabric
GARY A FLY.	N		
Name of Signer(s)			
\bigcirc Proved to me on the oa	th of		
O Personally known to me			/ /
Proved to me on the ba	sis of satisfactory evidence	DZ DL D01248769	9 Ex 11/07/2015 (Description of ID)
to be the person(s) whose nar	ne(s) is/are subscribed to th	ne within instrument, and ac	knowledged that he/she/they executed it.
WITNESS my hand and official	seal.		
NOTARY P PIN My Con	emy Betts UBLIC ARIZONA IA CCUNTY Inission Expires Inber 11, 2010	My commissi	(Signature of Notary Public) on expires <u>SEPT.11</u> , 2010
Optional			
Though the information in this another document and could p	section is not required by law rove valuable to persons rely	ı, it may prevent fraudulent re ing on the document.	moval and reattachment of this form to
Description of Attached	Document		Right Thumbprint of Signer
Type or Title of Document			Top of thumb here
LASSIGNMENT			
Document Date		Number of Pages	
9/12/2008			
Signer(s) Other Than Named A	bove		

Scanner Enabled Stores should scan this form Manual Submission Route to Deposit Operation

DSGS350 (9-07 111677)



FO01-00000DSG5350.01

We, John Bruce PATTERSON, David Gregory LONERGAN, Gary A. FLYNN, Qingping ZENG, and Peter V. PALLAI ("ASSIGNORS"), have invented subject matter ("INVENTION") disclosed in a patent application entitled "IRE-1α Inhibitors" ("APPLICATION"), which was filed on June 9, 2008 and was given U.S. Serial No. 12/135,571; and

MannKind Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and wants to own the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and all other applications and patents derived therefrom in the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign, and transfer to the ASSIGNEE the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION and APPLICATION DERIVATIVES;

ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION and APPLICATION DERIVATIVES.

• • • • • • • • • • • • • • • • • • • •	warran and a second a second and a second an
DATE	John Bruce PATTERSON
DATE	David Gregory LONERGAN
DATE	Gary A. FLYNN

1

DATE

Qingping ZENG

09-15-08

DATE

Peter V. PALLAI

	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
State of California				
County of San Dieso				
County of				
On September 15, 2008 before me, Jo	amer M. Ellis Notan Rblir.			
On September 15, 2008 before me, James M. Ellis Notes Rblir personally appeared Peter V Palla Sinney(s)				
personally appeared				
	☐ personally known to me			
6.16.	$\ensuremath{\ensuremath{\mbox{\ensuremath{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath}\ensuremath{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath}\ensuremat$			
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.	to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies); and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of			
OFFICIAL SEAL JAMES M. ELLIS	which the person(s) acted, executed the instrument.			
TINOTARY PUBLIC CALIFORNIAS	WITNESS my hand and official seal.			
COMM. NO. 1599988 SAN DIEGO COUNTY	\wedge			
Place Nolary Seal Above	() " m =			
Place Notary Seal Above	Signature of Notary Public			
OP7	TIONAL /			
	it may prove valuable to persons relying on the document realtachment of this form to another document.			
Description of Attached Document Title or Type of Document:	in Menet			
	Number of Pages:			
Signer(s) Other Than Named Above: 4 Pear	ale to sisu luter			
Capacity(ies) Claimed by Signer(s) Signer's Name: Individual Corporate Officer — Title(s): Partner — Limited General Attorney in Fact Trustee Guardian or Conservator Other: Signer Is Representing:	Signer's Name: Individual Corporate Officer — Title(s): Partner — Limited General Attorney in Fact			
© 2006 National Notary Association • 9350 De Soto Ave., P.O. Box 2402 • Cha	alsworth, CA 91313-2402 Item No. 5907 Reorder: Call Toll-Free 1-800-876-6827			

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

PATENT REEL: 031598 FRAME: 0490

RECORDED: 11/14/2013