

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5376996

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHAD C. SMUTNEY	03/25/2009
P. SPENCER KINSEY	03/25/2009
CARL R. SAHI	03/25/2009
BENOIT ADAMO	03/30/2009
JOHN M. POLIDORO	03/25/2009
ANTHONY J. BRYANT	03/25/2009
DENNIS OVERFIELD	03/25/2009
SCOTT MCLEAN	06/04/2009
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MANKIND CORPORATION
<b>Street Address:</b>	30930 RUSSELL RANCH ROAD, SUITE 301
<b>City:</b>	WESTLAKE VILLAGE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	91362
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16271585
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(949)253-0902
<i>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.</i>	
<b>Phone:</b>	9492530900
<b>Email:</b>	stephanie.new@klgates.com
<b>Correspondent Name:</b>	K&L GATES LLP
<b>Address Line 1:</b>	1 PARK PLAZA, 12TH FLOOR
<b>Address Line 4:</b>	IRVINE, CALIFORNIA 92614
<b>ATTORNEY DOCKET NUMBER:</b>	1951300.00383
<b>NAME OF SUBMITTER:</b>	STEPHANIE NEW
<b>SIGNATURE:</b>	/Stephanie New/

<b>DATE SIGNED:</b>	02/14/2019
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**Total Attachments: 9**

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**ASSIGNMENT**

**WHEREAS**, We, Chad C. Smutney, residing at 1501 Bunker Hill Road, Watertown, CT 06795; P. Spencer Kinsey residing at 6 Quail Hollow Lane, Sandy Hook, CT 06482, Carl R. Sahi, residing at 389 High Street, Coventry, CT 06238; Benoit Adamo residing at 255 West Street, Apt. 2-G, Mount Kisco, NY 10549, John M. Polidoro, residing at 11 White Road in Tolland, CT; Scott McLean, residing at 42 Southridge Drive, Waterbury, CT; Dennis O. Overfield, residing at 103 Limmerick Road, Fairfield, CT 06824; Anthony J. Bryant, residing at 424 Patterson Avenue, Stratford Ct 06614; Tom He, residing at 5837 Indian Terrace Drive, Simi Valley, CA 93063; and Alfred Mann, residing at 2801 Coast Line Court, Las Vegas, NV 89117, the ASSIGNOR(S) herein, have invented certain new and useful inventions disclosed in **U.S. Provisional Application Serial No. 61/061,551 filed June 13, 2008 and U.S. Provisional Application Serial No. 61/157,506, filed March 4, 2009 entitled "A Dry Powder Inhaler and System for Drug Delivery";**

**WHEREAS**, MannKind Corporation a corporation organized and existing under the laws of the State of Delaware having a place of business at 28903 North Avenue Paine, Valencia, CA 91355 (hereinafter, together with any successors, legal representatives or assigns thereof, called ASSIGNEE), the ASSIGNEE herein, desires to acquire the entire right, title and interest in and to said inventions, applications and Letters Patent to be granted and issued thereon;

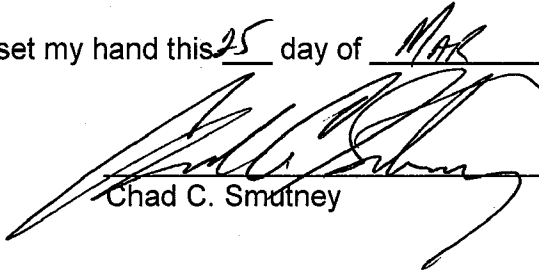
**NOW, THEREFORE**, in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ASSIGNEE the entire right, title and interest in and to said inventions, and said application and all non-provisional applications, divisions, continuations and continuations-in-part thereof, and all United States Letters Patents which may be granted thereon and all reissues, reexaminations and extensions thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, all national and regional applications deriving therefrom, and all subsequent patents and divisional patents, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, continuations-in-part, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said inventions in any foreign countries; and we hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEE in accordance with the terms of this Assignment;

**AND WE HEREBY** covenant that we have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

**AND WE HEREBY** further covenant and agree that we will communicate to ASSIGNEE any facts known to me respecting said inventions; and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, continuations-in-part, substitute and reissue applications, make all rightful oaths and generally do everything

possible to aid ASSIGNEE to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunder set my hand this 25 day of Mar, 2009

  
Chad C. Smutney

STATE OF Connecticut  
COUNTY OF Fairfield

} ss Danbury, CT

On 25 march 2009 before me, Pamela LeRose, Notary Public, personally appeared Chad C. Smutney, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.


WITNESS my hand and official seal

  
SIGNATURE OF NOTARY PUBLIC

**PAMELA LeROSE**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES MAY 31, 2009 *pal 25 MAR 09*

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IN TESTIMONY WHEREOF, I hereunder set my hand this 25<sup>th</sup> day of March, 2009

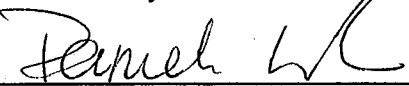
  
P. Spencer Kinsey

STATE OF Connecticut  
COUNTY OF Fairfield

} ss Danbury, CT

On 25 mar 09 before me, Pamela LeRose, Notary Public, personally appeared P. Spencer Kinsey, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

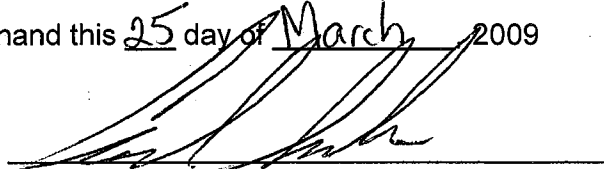
WITNESS my hand and official seal

  
SIGNATURE OF NOTARY PUBLIC

**PAMELA LeROSE**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES MAY 31, 2009 *pal 25 MAR 09*

SIGNATURE OF NOTARY PUBLIC

IN TESTIMONY WHEREOF, I hereunder set my hand this 25 day of March, 2009

  
Carl R. Sahi

STATE OF Connecticut

COUNTY OF Fairfield

} ss Danbury, CT

On 25 MAR 09 before me, Pamela LeRose, Notary Public, personally appeared Carl R. Sahi, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

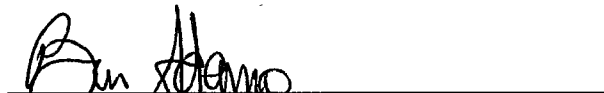
WITNESS my hand and official seal

  
SIGNATURE OF NOTARY PUBLIC

PAMELA LeROSE  
NOTARY PUBLIC  
MY COMMISSION EXPIRES MAY 31, 2009 *pal 25MAR09*

\*\*\*

IN TESTIMONY WHEREOF, I hereunder set my hand this 30 day of March, 2009

  
Benoit Adamo

STATE OF Connecticut

COUNTY OF Fairfield

} ss Danbury, CT

On 30 MAR 09 before me, Pamela LeRose, Notary Public, personally appeared Benoit Adamo, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

  
SIGNATURE OF NOTARY PUBLIC

PAMELA LeROSE  
NOTARY PUBLIC  
MY COMMISSION EXPIRES MAY 31, 2009 *pal 30MAR09*

\*\*\*

IN TESTIMONY WHEREOF, I hereunder set my hand this 25<sup>th</sup> day of March, 2009

*John M. Polidoro*  
John M. Polidoro

STATE OF Connecticut  
COUNTY OF Fairfield

} ss Danbury, CT

On 25 MAR 09 before me, Pamela LeRose, Notary Public, personally appeared John M. Polidoro, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

*Pamela LeRose*  
SIGNATURE OF NOTARY PUBLIC

**PAMELA LeROSE**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES MAY 31, 2009 *25 MAR 09 pal*

\*\*\*

IN TESTIMONY WHEREOF, I hereunder set my hand this 25<sup>th</sup> day of March, 2009

*Dennis O. Overfield*  
Dennis O. Overfield

STATE OF Connecticut  
COUNTY OF Fairfield

} ss Danbury, CT

On 25 MAR 09 before me, Pamela LeRose, Notary Public, personally appeared Dennis O. Overfield, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

*Pamela LeRose*  
SIGNATURE OF NOTARY PUBLIC

**PAMELA LeROSE**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES MAY 31, 2009 *25 MAR 09 pal*

IN TESTIMONY WHEREOF, I hereunder set my hand this 25 day of March, 2009

Anthony J. Bryant  
Anthony J. Bryant

STATE OF Connecticut

COUNTY OF Fairfield

)  
) ss Danbury, CT  
)

On 25 MAR 09 before me, Pamela LeRose, Notary Public, personally appeared Anthony J. Bryant, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

Pamela LeRose  
SIGNATURE OF NOTARY PUBLIC

**PAMELA LeROSE**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES MAY 31, 2009 *pal 25 MAR 09*

\*\*\*

IN TESTIMONY WHEREOF, I hereunder set my hand this \_\_\_ day of \_\_\_\_\_, 2009

\_\_\_\_\_  
Tom He

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

)  
) ss  
)

On \_\_\_\_\_ before me, \_\_\_\_\_, Notary Public, personally appeared Tom He, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

\_\_\_\_\_  
SIGNATURE OF NOTARY PUBLIC







IN TESTIMONY WHEREOF, I hereunder set my hand this 4 day of June, 2009

[Signature]  
Scott McLean

STATE OF Connecticut  
COUNTY OF Fairfield

)  
) ss Shelton  
)

On June 4, 2009 before me, Kelly Bloom Daniels, Notary Public, personally appeared Scott McLean, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal  
[Signature]  
SIGNATURE OF NOTARY PUBLIC

\*\*\*

IN TESTIMONY WHEREOF, I hereunder set my hand this \_\_\_ day of \_\_\_\_\_, 2009

\_\_\_\_\_  
Alfred Mann

STATE OF Conn <sup>KDB 6.4.09</sup>  
COUNTY OF \_\_\_\_\_

)  
) ss  
)

On \_\_\_\_\_ before me, \_\_\_\_\_, Notary Public, personally appeared Alfred Mann, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

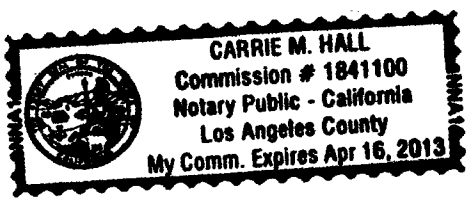
WITNESS my hand and official seal  
[Signature]  
SIGNATURE OF NOTARY PUBLIC

KDB  
6.4.09

~~\_\_\_\_\_~~  
\*\*\*

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California }  
 County of Los Angeles }  
 On 5/12/09 before me, Carrie M. Hall, Notary Public  
Date Here Insert Name and Title of the Officer  
 personally appeared Xiaohai (Tom) He  
Name(s) of Signer(s)



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 Carrie M. Hall  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: Assignment Docket # 1951300-0007465  
 Document Date: 5/12/09 Number of Pages: 2  
 Signer(s) Other Than Named Above: Anthony G. Bryant

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: Tom He  
 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  
 Trustee  
 Guardian or Conservator  
 Other: \_\_\_\_\_  
 Signer Is Representing: \_\_\_\_\_

