504571546 09/28/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4618256

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHAD C. SMUTNEY	07/10/2013
BENOIT ADAMO	07/10/2013
BRENDAN F. LAURENZI	07/10/2013
P. SPENCER KINSEY	07/10/2013

RECEIVING PARTY DATA

Name:	MANNKIND CORPORATION
Street Address:	30930 RUSSELL RANCH ROAD, SUITE 301
City:	WESTLAKE VILLAGE
State/Country:	CALIFORNIA
Postal Code:	91362

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15706504

CORRESPONDENCE DATA

Fax Number: (949)253-0902

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: 949-253-0900

Email: stephanie.new@klgates.com

Correspondent Name: K&L GATES LLP

Address Line 1: 1 PARK PLAZA, 12TH FLOOR Address Line 4: 1 RVINE, CALIFORNIA 92614

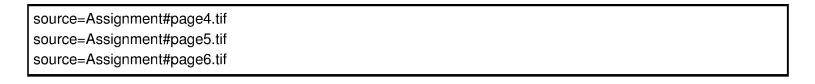
ATTORNEY DOCKET NUMBER:	1951300.00324CON(252)
NAME OF SUBMITTER:	STEPHANIE NEW
SIGNATURE:	/Stephanie New/
DATE SIGNED:	09/28/2017

Total Attachments: 6

504571546

source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif

> PATENT REEL: 043731 FRAME: 0626



PATENT REEL: 043731 FRAME: 0627

ASSIGNMENT

THIS ASSIGNMENT is made by Chad C. Smutney, Benoit Adamo, Brendan F. Laurenzi, and P. Spencer Kinsey (hereafter, together with any successors, legal representatives, or assigns thereof, "ASSIGNORS") to MannKind Corporation a corporation duly organized and existing under and by the laws of the State of Delaware and having its principal place of business at 28903 North Avenue Paine, Valencia, California 91355, (hereafter, together with any successors, legal representatives, or assigns thereof, "ASSIGNEE").

WHEREAS, ASSIGNORS have invented and own rights in, to and under a new and useful invention for which application(s) for Letters Patent entitled "Dry Powder Drug Delivery Systems and Methods" as follows:

U.S. Application	61/671,041	Filed July 12, 2012

WHEREAS, ASSIGNORS believes themselves to be the original and true inventors of the Patent Rights;

WHEREAS, ASSIGNEE wants to acquire Patent Rights and improvements thereto owned by ASSIGNORS;

AND WHEREAS, ASSIGNORS and ASSIGNEE desire to have a recordable instrument assigning ASSIGNEE as owners of the entire right, title and interest in, to, and under the Patent Rights and improvements thereto owned by ASSIGNORS;

NOW, THEREFORE, for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS do hereby assign, transfer, endorse, sell, set over and convey unto ASSIGNEE its full and entire right, title and interest in, to and under the Patent Rights including its full and entire right, title and interest in, to and under 1) any patent application which has been or will be filed that is entitled to a benefit of priority to the patents and patent applications listed in the Patent Rights, or any other legal instrument equivalent thereof including, without limitation, continuation, division, continuation-in-part, substitute, reexamination, renewal, inventor's certificate, utility model or any other legal instrument equivalent thereto, which may be submitted therefor and thereon in the United States of America, its territorial possessions or in any and all foreign countries and any letters patent or any other legal instrument equivalent thereof which may be granted therefor and thereon in the United States of America, its territorial possessions, or in any and all foreign countries, under national laws or under the provisions of the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and any other international treaty equivalent thereof, for the full term or terms for which the same may be granted; 2) any reissue, extension, or any other legal instrument equivalent thereof of the patents and patent applications listed in the Patent Rights which has been or may be granted therefor and thereon in the United States of America, its territorial possessions, or in any and all foreign countries, under national laws or under the provisions of the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and any other international treaty equivalent thereof; the same right, title and interest in, to and under the Patent Rights to be held and enjoyed by ASSIGNEE for the use of ASSIGNEE for the full term or terms for which the same may be granted, as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this Assignment not been made;

IN TESTIMONY WHEREOF, I hereunder set my hand this <u>10</u> day of <u>July</u>, 2013.

Brendan F. Laurenzi

By: buda lawy

State of CT)
County of Fairfield)

ss.:

On this <u>fo</u> day of <u>Tuly</u>, 2013, before me, <u>Mana T. Hall</u>, personally appeared Brendan F. Laurenzi, who 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.

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.

MARIA T. HALL NOTARY PUBLIC

MY COMMISSION EXPIRES DEC 31, 2014

IN TESTIMONY WHEREOF, I hereunder set my hand this10 day ofJuly_, 2013.
P. Spencer Kinsey
By: PS 4
State of CT)
State of CT) County of Fair Field) ss.:
On this _/_ day of, 2013, before me,, Ad/, personally appeared P. Spencer Kinsey, who 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.
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. MARIA T. HALL NOTARY PUBLIC MY COMMISSION EXPIRES DEC. 31, 2014

ASSIGNORS hereby further covenant and agree to and with ASSIGNEE that where lawful and desirable and whenever requested by ASSIGNEE, without charge to ASSIGNOR, but at the cost and expense of ASSIGNEE, ASSIGNORS will generally perform any action which may be necessary and desirable to secure and to vest in ASSIGNEE the full and entire right, title and interest in, to and under the Patent Rights hereto assigned in the manner herein set forth, including, but not limited to promptly communicating and providing any and all known and accessible facts, data or any other pertinent information thereof; promptly executing and delivering any and all papers, documents, forms, declarations, oaths, affidavits and other legal instrument thereof; promptly assisting and participating in any and all depositions, hearings, proceedings, trials, appeals, or other legal procedure thereof; promptly testifying under oath in any and all interference, litigation or any other judicial proceeding thereof; and promptly completing any and all actions necessary or desirable to carry out any and all purposes thereof, relating to any and all proceedings in connection with the submission, procurement, issuance, maintenance, enforcement or defense relating to the transferred right, title and interest in, to and under the Patent Rights hereto assigned in the manner herein set forth.

IN TESTIMONY WHEREOF, I hereunder set my hand this day of	of <u>July</u> , 2013.
Chad C. Smutney	
By Art	my /
State of CT) ss.:	
State of Cl) ss.: County of Fairfield)	
On this <u>///</u> day of <u></u>	nd acknowledged to me nature on the instrument
I certify under PENALTY OF PERJURY under the laws of the Stat foregoing paragraph is true and correct.	e of California that the
Witness my hand and official seal.	Hall

MARIA T. HALL

NOTARY PUBLIC

MY COMMISSION EXPIRES DEC. 31. 2014

Benoit Adamo

By: But damo

By: But damo

State of Of Of On this Oday of Oday

MY COMMISSION EXPIRES DEC. 31, 2014

ACKNOWLEDGED AND CONFIRMED, I hereunder set my hand this 10 day of July 2013, as a duly authorized representative of ASSIGNEE.
MannKind Corporation
By: Thelma Chen Cleland
Name: Thelma Chen Cleland
Title: Senior Director, IP
State of County of Fairfield) ss.: On this 10 day of 1
MARIA T. HALL NOTARY PUBLIC MY COMMISSION EXPIRES DEC. 31, 2014