505026425 07/30/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EDWIN AMORO	12/06/2010
KAREL VANACKERE	12/20/2010
MICHAEL A. WHITE	12/06/2010

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15407375

CORRESPONDENCE DATA

Fax Number: (617)646-8646

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Phone: 617-646-8000

Email: patents_BillM@wolfgreenfield.com **Correspondent Name:** WOLF, GREENFIELD & SACKS, P.C.

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ATTORNEY DOCKET NUMBER:	M1117.70006US03	
NAME OF SUBMITTER:	DORIS A. CHAMPAGNE	
SIGNATURE:	/Doris A. Champagne/	
DATE SIGNED:	07/30/2018	

Total Attachments: 4

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PATENT 505026425 REEL: 046500 FRAME: 0731

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PATENT REEL: 046500 FRAME: 0732

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- 1. Sell, assign and transfer to MannKind Corporation, a Delaware corporation having a place of business at 28903 North Avenue Paine; Valencia, California 91355, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on November 2, 2010 under No. 12/917,623, bearing Attorney Docket No. M1117,70006US01, and entitled APPARATUS AND METHOD FOR CRYOGRANULATING A PHARMACEUTICAL COMPOSITION, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea, as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and non-US patent authorities to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;
- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

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This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America. 72/01/10 Date Édwin Amoro Inventor: Address: 60 Kelsey Avenue West Haven, CT 06516 Citizenship: US STATE/COMMONWEA _____, _______, before me, the undersigned notary public, day of (On this proved to me through satisfactory evidence of Edwin Amoro personally appeared identification, which were to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL

My commission expires:

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20 December 2010

Date

Inventor: Karel Vanackere

Address: Paul Parmentierlaan 251

Appt. 4.1

8300 Knokke-Heist

BELGIUM

Citizenship: Belgium

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Citizenship: US
STATE/COMMONWEALTH OF COMMENTALL COUNTY OF FAICHELE
On this day of
to be the person who signed the preceding or attached document in my presence and swore or affirme to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.
SEAL Notary Public
My commission expires: Allember 31, 2014

Inventor: Michael A.

Address: 24 Ironworks Hill Road

Brookfield, Connecticut 06804

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RECORDED: 07/30/2018