PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6955168

SUBMISSION TYPE:		NEW ASSIGN	NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT				
CONVEYING PARTY							
		Name			Execution Date		
UNITED THERAPEUTI	CS CORP				03/30/2021		
					00,00,2021		
RECEIVING PARTY D	ΑΤΑ						
Name:	LUNG E	LUNG BIOTECHNOLOGY PBC					
Street Address:	1040 SF	1040 SPRING STREET					
City:	SILVER	SILVER SPRING					
State/Country:	MARYL	MARYLAND					
Postal Code:	20910						
	·						
PROPERTY NUMBERS	S Total: 2			_			
Property Type		Numl	Number				
Application Number: 6266		2664494					
Application Number: 1639		6398070					
CORRESPONDENCE							
Fax Number:		781)622-5933 the e-meil eddrese	first, if that is un		it will be cont		
Correspondence will l using a fax number, if							
Phone:	•	7816225930					
Email:	k	atentadmin@morse	tadmin@morse.law				
Correspondent Name: STAN			NLEY F. CHALVIRE, ESQ.				
Address Line 1:			SE, BARNES-BROWN & PENDLETON, P.C.				
Address Line 2:			POINT, 480 TOTTEN POND ROAD, 4TH FLOOR FHAM, MASSACHUSETTS 02451				
Address Line 4:	,	VALTHAM, MASSA	CHUSETTS 02451				
ATTORNEY DOCKET N	UMBER:	VIVO-005-101	VIVO-005-101 - 4				
NAME OF SUBMITTER:		STANLEY F. C	STANLEY F. CHALVIRE, ESQ.				
SIGNATURE:		/Stanley F. Ch	/Stanley F. Chalvire/				
DATE SIGNED:		10/06/2021	10/06/2021				
Total Attachments: 3							
source=UTC to Lung Bio	•••						
source=UTC to Lung Bio	•••						
source=UTC to Lung Bio	technology	r#page3.tit					

ASSIGNMENT

WHEREAS, United Therapeutics Corporation (hereinafter "ASSIGNOR") has acquired rights in the subject matter disclosed in certain patent applications and/or granted Letters Patent as indicated in Exhibit A attached hereto (hereinafter "PATENT RIGHTS"); and

WHEREAS, ASSIGNOR's wholly-owned subsidiary, Lung Biotechnology PBC (hereinafter "ASSIGNEE"), a Delaware public benefit corporation, having principal offices at 1040 Spring Street, Silver Spring, MD 20910 desires to acquire an interest therein in accordance with agreements duly entered into with ASSIGNOR:

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged. ASSIGNOR has sold, assigned and transferred and by these presents does hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, its entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said PATENT RIGHTS, together with its entire right, title and interest in and to said PATENT RIGHTS and foreign counterparts and such Letters Patent issued or as may issue in whole or in part thereon, and any reissue and continuing applications and foreign counterpart applications thereof as well as any Letters Patent issued or issuing in whole or in part thereon, and including the right to claim priority under any applicable statute, treaty or convention based on said PATENT RIGHTS; said PATENT RIGHTS to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by ASSIGNOR had this assignment not been made: ASSIGNOR hereby conveys all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any applications for Letters Patent containing said PATENT RIGHTS, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. ASSIGNOR hereby acknowledges that this assignment, being of its entire right, title and interest in and to said PATENT RIGHTS, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, ASSIGNOR hereby further agrees for itself and its executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid PATENT RIGHTS to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

Page 1

PATENT REEL: 057715 FRAME: 0996 AND, ASSIGNOR does hereby authorize and request the Commissioner of Patents of the United States and/or any foreign patent offices to issue such Letters Patent as shall be granted upon said PATENT RIGHTS to said ASSIGNEE, its successors, assigns, and legal representatives.

Signature on behalf of ASSIGNOR: havn Printed Name: nade al ors Title: °.0% Signature on behalf of ASSIGNEZ: John 05 Printed Name: Cencert Counsel Title:

PATENT REEL: 057715 FRAME: 0997

EXHIBIT A

Title	Serial Number	Status	Country	Filing Date	
APPARATUS AND METHOD FOR CONTROLLING FLUID FLOW	62/664,494	Expired	US	30 April 2018	
APPARATUS AND METHOD FOR CONTROLLING FLUID FLOW	16/398.070	Pending	US	29 April 2019	
APPARATUS AND METHOD FOR CONTROLLING FLUID FLOW	PCT/US201 9/029736	Pending	РСТ	29 April 2019	
APPARATUS FOR EXCHANGING SMALL MOLECULES WITH BLOOD AND METHODS	63/154,470	Pending	US	26 February 2021	
SENSOR APPARATUS FOR SENSING CHARACTERISTIC OF FLUID, AND METHOD	63/154,463	Pending	US	26 February 2021	
SYSTEMS AND METHODS FOR EXCHANGING SMALL MOLECULES WITH FLUID	62/852,517	Expired	US	24 May 2019	
Ender Start Ward and Starten and start and start in	PCT/US2020/ 034408	Pending	РСТ	22 May 2020	

(M673) (M673) (

PATENT REEL: 057715 FRAME: 0998

RECORDED: 10/06/2021