505718914 10/11/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHRISTINE I. WOODDELL	06/09/2015
DAVID L. LEWIS	06/09/2015
DARREN H. WAKEFIELD	06/09/2015
LAUREN ALMEIDA	06/09/2015
STEVEN B. KANNER	06/09/2015

RECEIVING PARTY DATA

Name:	ARROWHEAD MADISON INC.
Street Address:	465 SCIENCE DRIVE
Internal Address:	STE. C
City:	MADISON
State/Country:	WISCONSIN
Postal Code:	53711

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16428431

CORRESPONDENCE DATA

Fax Number:

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.

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Correspondent Name: ROBERT M. TEIGEN
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ATTORNEY DOCKET NUMBER:	30624-US3
NAME OF SUBMITTER:	ROBERT M. TEIGEN
SIGNATURE:	/Robert M. Teigen/
DATE SIGNED:	10/11/2019

Total Attachments: 2

PATENT REEL: 050687 FRAME: 0193

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PATENT REEL: 050687 FRAME: 0194

ASSIGNMENT

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as, Docket No. 30624 US1, entitled

Compositions and Methods for Inhibiting Gene Expression of Alpha-1 AntiTrypsin

WHEREAS, ARROWHEAD MADISON INC., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having its principal place of business at Madison, Wisconsin, is desirous of acquiring the entire interest in and to said invention, said application and the Patent to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said ARROWHEAD MADISON INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as Docket No. **30624 US1** and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

UPON SAID CONSIDERATION, we do hereby covenant and agree with the said Assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance obtaining provisional, making application for and original, continuation-in-part, divisional, reissued, re-examined or extended Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, including but not limited to, giving testimony in any proceedings or transactions involving such applications or patents, and executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of all parties hereto.

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this of <u>June</u> 2015.	<u>i</u> day
R	
Lauren Almeida	
490 Togstad Glenn, Madison, WI 53711, US	
Steven B. Kanner	
360 W. Washington Ave., Madison, WI 53703, US	
David L. Lewis	
Mailing address 505 Maple Avenue, Madison, WI 53704, US	
Darren H. Wakefield	
3168 Stoneman Drive, Fitchburg, WI 53711, US	
Clfhooddell)
Christine I. Wooddell	•

ACKNOWLEDGMENT

State of Wisconsin County of Dane

4321 DeVolis Parkway, Madison, WI 53711, US

On June 7, 2015, before me personally appeared, <u>Lauren Almeida</u>, <u>Steven B. Kanner</u>, <u>David L. Lewis</u>, <u>Darren H. Wakefield</u>, and <u>Christine I. Wooddell</u>, to me known to be the person described in the foregoing Assignment, who acknowledged that he/she executed the foregoing Assignment of his/her own free will for the purposes therein set forth.

Kirk Ekena, Notary Public

My commission expires 12 March 2017

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