505458745 05/03/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5505548

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
J. FRASER WRIGHT	12/03/2012	
GUANG QU	12/04/2012	
BERND HAUCK	12/03/2012	
KATHERINE HIGH	12/03/2012	

RECEIVING PARTY DATA

Name:	THE CHILDREN'S HOSPITAL OF PHILADELPHIA	
Street Address:	3401 CIVIC CENTER BOULEVARD	
City:	PHILADELPHIA	
State/Country:	PENNSYLVANIA	
Postal Code:	19104	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15081001

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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ATTORNEY DOCKET NUMBER:	0439CIPCON
NAME OF SUBMITTER:	CAMILLE JOLLY-TORNETTA
SIGNATURE:	/Camille Jolly-Tornetta/
DATE SIGNED:	05/03/2019

Total Attachments: 4

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PATENT 505458745 REEL: 049069 FRAME: 0043

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PATENT REEL: 049069 FRAME: 0044

ASSIGNMENT OF INVENTION

WHEREAS, WE, J. Fraser Wright, Guang Qu, Bernd Hauck and Katherine High (for herself and as agent for the Howard Hughes Medical Institute), hereafter referred to as INVENTORS, have made a certain new and useful invention in Scalable Manufacturing Platform for Viral Vector Purification and Viral Vectors So Purified for Use in Gene Therapy and have filed an application Serial No. 13/561,753 for Letters Patent of the United States based thereon on July 30, 2012.

WHEREAS, WE, the INVENTORS, are associated with THE CHILDREN'S HOSPITAL OF PHILADELPHIA as employees of THE CHILDREN'S HOSPITAL OF PHILADELPHIA or were employees at the time of the conceived invention at THE CHILDREN'S HOSPITAL OF PHILADELPHIA.

WHEREAS, THE CHILDREN'S HOSPITAL OF PHILADELPHIA, a non-profit Corporation, organized and existing under the laws of the Commonwealth of Pennsylvania and having an office and place of business at 34th Street & Civic Center, Boulevard, Philadelphia, Pennsylvania 19104, is desirous of acquiring the entire right, title and interest in and to the invention and all improvements thereon which may be made, conceived or acquired by INVENTORS, during the course of their association with THE CHILDREN'S HOSPITAL OF PHILADELPHIA, aforesaid and for one year thereafter, in and throughout the United States, its territories and all countries foreign thereto, and in and to said application for Letters Patent, and in and to any and all utility patent applications and Letters Patents of the United States and all countries foreign thereto which have been granted or may be granted on said invention or any part thereof.

NOW, THEREFORE, IN CONSIDERATION of one or more of the following: (i) my continued employment at THE CHILDREN'S HOSPITAL OF PHILADELPHIA including its Research Institute (collectively, "THE CHILDREN'S HOSPITAL OF PHILADELPHIA"); (ii) my continued participation in research at THE CHILDREN'S HOSPITAL OF PHILADELPHIA; (iii) my continued access to THE CHILDREN'S HOSPITAL OF PHILADELPHIA facilities, funds, and other resources; and/or (iv) my continued opportunity to share in royalties and other inventor/author rights outlined in THE CHILDREN'S HOSPITAL OF PHILADELPHIA's current "Patent Policy" (the "Patent Policy), and intending to be legally bound, hereby agree to be legally bound by the Patent Policy and all of its terms conditions, wherein the receipt of such consideration is hereby acknowledged; INVENTORS, by these presents do hereby sell, assign and transfer unto the said THE CHILDREN'S HOSPITAL OF PHILADELPHIA the entire right, title, and interest in and throughout the United States, its territories and all countries foreign thereto in and to said invention, in and to said application for Letters Patent and any and all utility patent applications and Letters Patents and extensions thereof, of the United States and countries foreign thereto which have been or may be granted on said invention or any part thereof and any international priority rights associated therewith;

TO BE HELD AND ENJOYED by the said THE CHILDREN'S HOSPITAL OF PHILADELPHIA and its legal representatives and assigns to the full ends of the terms United States Patent Application No. 13/561,753 for which said Letters Patent, or any of them, have been granted as fully and entirely as the same would have been held and enjoyed by INVENTORS, had no sale and assignment of said interest been made; and INVENTORS, do hereby authorize and request the

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Commissioner of Patents and Trademarks to issue any and all Letters Patents which may be granted upon the said application above referred to, or any of them or upon said invention or any part thereof, to THE CHILDREN'S HOSPITAL OF PHILADELPHIA, and INVENTORS, hereby agree for myself, my heirs, executors and administrators, to execute without further consideration, any further legal documents and any further assignments and any releases, reissues, renewals or other application for Letters Patents that may be deemed necessary by THE CHILDREN'S HOSPITAL OF PHILADELPHIA, to fully secure to THE CHILDREN'S HOSPITAL OF PHILADELPHIA, its interest as aforesaid in and to said invention or any part thereof and in and to several Letters Patent or any of them.

INVENTORS, do hereby covenant for their self and their legal representatives, and agree with THE CHILDREN'S HOSPITAL OF PHILADELPHIA and its legal representatives, that INVENTORS, has granted no license to make or sell the said invention, that prior to the execution of this deed our right, title and interest in the said invention has not been encumbered, that INVENTORS, then had good right and title in and to the invention and that INVENTORS, have not executed and will not execute any instrument in conflict therewith.

IN WITNESS WHEREOF, I, J. Fraser Wrigh	t intending to be legally be	ound, have here	unto affixed
my hand and seal this day 23 of	m 500 2012.		
•	The same of the sa		
a	J. Fraser Wright	FIX	
STATE OF RANSYLVENIA		/	ě.
CITY OF Philadelphia ss.			
Defere me nerconally appeared said T. Fra	serWright		wledged the 2012.
foregoing instrument to be his free act and de	ed this day 3rd of Lecu	~ <i>Dcr</i>	2012.
Lephanidasle	_(SEAL)		
Notary Public Project Phanch 23	DONL		
My Commission Expires: bculbu & 3,0	7017		
COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL NUMBER NOTARIAL SEAL NUMBER NOTARIAL SEAL			
STEPHANIE LASTE, Notary 1 City of Philadelphia, Phila. County My Commission Expires December 23, 2014			

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IN WITNESS WHEREOF, I, Guang Qu, intending to be legally bound, have hereunto affixed my hand and seal this day 4 of
hand and sear this day _ r _ of _ ves.
Cuana Ou
Guang Qu
STATE OF PENNSY VANIA SITY OF Philadelphia
CITY OF Philadelphia
Before me personally appeared said \(\) \
Notary Public My Commission Expires: STEPHANIE LASTE, Notary Public City of Philadelphia, Phila. County My Commission Expires: My Commission Expires December 23, 2014
IN WITNESS WHEREOF, I, Bernd Hauck, intending to be legally bound, have hereunto affixed my hand and seal this day 3 of <u>Decea Con</u> 2012.
Bernd Hauck
STATE OF PENNSYLVANIA
SS. CITY OF PHILADELPHIA
Before me personally appeared said Bendhauck and acknowledged the foregoing instrument to be his free act and deed this day 3rd of Dconber 2012.
Lephanie Ocht (SEAL)
My Commission Expires: Describe 23, 2014
COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL STEPHANIE LASTE, Notary Public City of Philadelphia, Phila. County My Gammission Expires December 23, 2014
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IN WITNESS WHEREOF, I, Katherine High, (for myself and as agent for the Howard Hughes
Medical Institute) intending to be legally bound, have hereunto affixed my hand and seal this day
3rd of Deamber 2012.
Matherine High Katherine High
Katherine High
(for myself and as agent for the Howard Hughes Medical Institute)
STATE OF PENNSYLLINIA SS.
CITY OF Philadelphia ss.
Before me personally appeared said Milhamie high and acknowledged the foregoing instrument to be his free act and deed this day 3/d of December 2012.
foregoing instrument to be his free act and deed this day Ma of Manual Transfer
Lephaniolate (SEAL)
Nothry Public D. 12 12 111
My Commission Expires: December 3, 2014
NOTARIAL SEAL STEPHANIE LASTE, Notary Public
City of Philadelphia, Phila. County
My Commission Expires December 23, 2014