507084593 01/20/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7131430

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHARLES RIVER DISCOVERY RESEARCH SERVICES UK LIMITED	04/24/2019

RECEIVING PARTY DATA

Name:	CHARLES RIVER LABORATORIES, INC.
Street Address:	251 BALLARDVALE STREET
City:	WILMINGTON
State/Country:	MASSACHUSETTS
Postal Code:	01887

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16908497

CORRESPONDENCE DATA

Fax Number: (617)502-5002

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: 617-248-5000

Email: PatentDocket@choate.com

Correspondent Name: CHOATE HALL & STEWART LLP-PATENT DOCKET

Address Line 1: TWO INTERNATIONAL PLACE

Address Line 4: BOSTON, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER:	2006685-1696
NAME OF SUBMITTER:	NICHOLAS J. PACE, PHD, JD
SIGNATURE:	/Nicholas J. Pace/
DATE SIGNED:	01/20/2022

Total Attachments: 3

source=PAT7074US03 Assignment (CRDRS to CRL)#page1.tif source=PAT7074US03 Assignment (CRDRS to CRL)#page2.tif source=PAT7074US03 Assignment (CRDRS to CRL)#page3.tif

507084593 PATENT REEL: 058712 FRAME: 0889

CONFIRMATION OF PATENT ASSIGNMENT

This Confirmation of Patent Assignment is entered into by and between Charles River Laboratories, Inc., having a principal place of business at 251 Ballardvale Street, Wilmington, MA 01887 ("CRL"), Charles River Discovery Research Services UK Limited, a company registered in England and Wales with company number 04622227 having a registered office at Robinson Building, Chesterford Research Park, Saffron Walden, Essex, CB10 1XL, UK ("Discovery UK"), and Shire Human Genetic Therapies, Inc., with an office located at 300 Shire Way, Lexington, MA 02421 ("Shire").

WHEREAS, CRL has acquired an interest in the patent applications identified by United States Application Serial No. 16/299,996, filed March 12, 2019, International Patent Application No. PCT/US19/21897, filed March 12, 2019, Taiwan Application No. 108108497, filed March 13, 2019, and is aware of United States Application Nos. 62/757,728, filed November 8, 2018, and 62/642,376, filed March 13, 2018 (the "Patents") from its affiliate Discovery UK);

WHEREAS, CRL and Shire have signed a master services agreement effective as of August 19, 2014 (the "Master Services Agreement") for CRL and/or one or more of its affiliates to provide scientific consulting, drug discovery, and development services to Shire; and

WHEREAS, Discovery UK and CRL wish to confirm that Discovery UK has sold, conveyed, transferred, assigned, and delivered and/or does hereby sell, convey, transfer, assign, and deliver to CRL, its successors, legal representatives and assigns, Discovery UK's whole past, present, and future right, title, and interest in and to the Patents; and

WHEREAS, CRL and Shire wish to confirm that pursuant to obligations to assign and transfer under the Master Services Agreement, CRL has sold, conveyed, transferred, assigned, and delivered and/or does hereby sell, convey, transfer, assign, and deliver to Shire, its successors, legal representatives and assigns, CRL's whole past, present, and future right, title, and interest in and to the Patents.

NOW THEREFORE, in consideration of agreements previously and duly entered into among CRL, Discovery UK, and Shire, and/or for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Discovery UK hereby confirms that it has sold, conveyed, transferred, assigned, and delivered and/or does hereby sell, convey, transfer, assign, and deliver to CRL, Discovery UK's whole past, present, and future right, title, and interest, free from all encumbrances, in and throughout the United States of America, its territories, and all foreign countries, in and to the Patents. including any right of priority thereto. Further in consideration of the Master Services Agreement previously and duly entered into between CRL and Shire, CRL hereby confirms that it has sold, conveyed, transferred, assigned, and delivered and/or does hereby sell, convey, transfer, assign, and deliver to Shire, CRL's whole past, present, and future right, title, and interest, free from all encumbrances, in and throughout the United States of America, its territories, and all foreign countries, in and to the Patents, including any right of priority thereto. This Confirmation of Patent Assignment applies to the Patents, and to any patent application that is based in whole or in part on the Patents, including any continuations, divisions, continuations-in-part, extensions, reissues, re-examinations, and other patent application(s), including any patent application(s) that claim foreign priority to or domestic benefit of the Patents. Also, this Confirmation of Patent Assignment pertains to any and all other rights, privileges, and advantages, including any and all rights to damages, profits, or recoveries of any nature for past, present, and future infringements of the Patents, arising under or pursuant to any and all international agreements, treaties, or laws relating to the protection of industrial property, including all

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PATENT REEL: 058712 FRAME: 0890 rights of priority under the International Convention for the Protection of Industrial Property, and in and to any such patent(s) as may issue thereon including any and all original and reissued patents which have been or shall be issued in the United States and foreign countries; said patent applications and patent(s) to be held and enjoyed by Shire for its own use and for each of its successors, legal representatives, and assigns, to the full end of the term for which said patent(s) may be granted as fully and entirely as the same would have been held by Discovery UK prior to assignment to CRL.

AND for the same consideration, Discovery UK and CRL hereby covenant and agree to and with Shire, their successors, legal representatives, and assigns that Discovery UK and CRL will, at the cost and expense of Shire, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the recordation of this Confirmation of Patent Assignment to Shire.

AND Discovery UK and CRL hereby request the Director of the United States Patent and Trademark Office to issue any and all patents of the United States arising from such United States patents and patent applications included in the Patents to Shire, its respective successors, legal representatives, and assigns.

IN WITNESS	WHEREOI	, I hereto se	t my hand	d and seal	at SAFF	<u>kon </u>
MALDEN,	UK	this	24 m	day of	APRIL.	, 2019.
Mer	*					
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Vame: DK	JACKIE	MACRI	TCHIE			
Title: Sewi	or man	acquica i	DIREC	TOR		
Charles River	Discovery F	tesearch Se	rvices UI	CLimited		
in witness U.S.	WHEREGI	7 I hereto se	t my hane	d and seal	at Wilming	gton, Mass.
U.S.	AA STEATHER OF	this	24th	day of	April	. 2019.
	P. Johst	(GZ	7	, ,,,,,,,, ,		
Title: Corpo	rate Execut	ive Vice Pro	esident			
Charles River	Laboratori	es, anc.				
IN WITNESS	WHEREO	F. I bereto se	et my han	d and seal	at	
MIA AA WWI AMIDID	(1,202,12,022,03	this		day of		, 2019.
				- · · ·		
Name: Kevin	McGough		<i>-</i> 2		• •	
Title: Global l				IP and T	rademarks	
Storma K. Krones Gra	Canarie The	ranies. Inc.				

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rights of priority under the International Convention for the Protection of Industrial Property, and in and to any such patent(s) as may issue thereon including any and all original and reissued patents which have been or shall be issued in the United States and foreign countries; said patent applications and patent(s) to be held and enjoyed by Shire for its own use and for each of its successors, legal representatives, and assigns, to the full end of the term for which said patent(s) may be granted as fully and entirely as the same would have been held by Discovery UK prior to assignment to CRL.

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IN WITNESS WHEREOF, I hereto set my hat this	day of	, 2019.
Vame:		
Fitle: Charles River Discovery Research Services U	K Limited	
IN WITNESS WHEREOF, I hereto set my ha	nd and seal at	
this	day of	. 2019.
Name: Fitle: Charles River Laboratories, Inc.		
Name: Fitle: Charles River Laboratories, Inc.	nd and scal at Lesing	ston MA
Name: Fitle:	nd and scal at <u>Lesing</u> _day of <u>May</u>	Hon, MA, 2019.

RECORDED: 01/20/2022

Title: Global Head Internal Medicine, Oncology IP and Trademarks

Shire Human Genetic Therapies, Inc.

PATENT

REEL: 058712 FRAME: 0892