PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5213537

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
ROBERT TOSO	04/12/2018
RICHARD SPANGGORD	04/12/2018
MEI TAN	04/10/2018
VAN TAIRIOL	04/06/2018
YEKATERINA LIN	04/17/2018

RECEIVING PARTY DATA

Name:	SHIRE HUMAN GENETIC THERAPIES, INC.	
Street Address:	300 SHIRE WAY	
City:	LEXINGTON	
State/Country:	MASSACHUSETTS	
Postal Code:	02421	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16048999

CORRESPONDENCE DATA

Fax Number: (617)856-8201

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: 617-856-8483

Email: ip@brownrudnick.com

Correspondent Name: THOMAS C. MEYERS, ESQ.
Address Line 1: BROWN RUDNICK LLP
Address Line 2: ONE FINANCIAL CENTER

Address Line 4: BOSTON, MASSACHUSETTS 02111

ATTORNEY DOCKET NUMBER:	SHIR-009/01US 33543/63	
NAME OF SUBMITTER:	THOMAS C. MEYERS	
SIGNATURE:	/Thomas C. Meyers/	
DATE SIGNED:	10/30/2018	

Total Attachments: 10

PATENT REEL: 047358 FRAME: 0151

505166769

source=SHIR-009-01US-Assignment#page1.tif	
source=SHIR-009-01US-Assignment#page2.tif	
source=SHIR-009-01US-Assignment#page3.tif	
source=SHIR-009-01US-Assignment#page4.tif	
source=SHIR-009-01US-Assignment#page5.tif	
source=SHIR-009-01US-Assignment#page6.tif	
source=SHIR-009-01US-Assignment#page7.tif	
source=SHIR-009-01US-Assignment#page8.tif	
source=SHIR-009-01US-Assignment#page9.tif	
source=SHIR-009-01US-Assignment#page10.tif	

ASSIGNMENT

WHEREAS we, the below named inventor(s),

Robert Toso;
Richard Spanggord;
Mei Tan;
Van Tairiol; and
Yekaterina Lin.

hereinafter referred to as "Assignor(s)" have made an invention(s), hereinafter referred to as the "Invention(s)," set forth in an application for patent, entitled: ANTIBODY-RESIN COUPLING, which is at

- (1) [X] provisional application
 - (a) [] to be filed herewith; or
 - (b) [X] bearing Application No. 62/541,601, and filed on August 4, 2017; or
- (2) [X] non-provisional application
 - (a) [] to be filed herewith; or
 - (b) [X] bearing Application No. 16/048,999 filed on July 30, 2018.

WHEREAS, SHIRE HUMAN GENETIC THERAPIES, INC., which has a post office address at 300 Shire Way, Lexington, MA 02421 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Inventions; the applications for patent identified above; the right to file applications for patent of any country on the Inventions; any application for patent of any country claiming priority to these applications; any provisional or other right to recover damages, including royalties, for prior infringements of these patents applications; and any patent of any country that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified above;

- (c) the right to file applications for patent of any country on the Invention(s), including all rights under the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;
 - (d) any application(s) for patent of any country claiming the Invention(s);
- (e) any application(s) for patent of any country claiming priority to the application for patent identified above or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and
- (g) any patent(s) of any country that may be granted for or on any application for patent identified in the preceding paragraphs (b) (e), including any reissue(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of BROWN RUDNICK LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application identified in paragraph (1) or (2) when known.

The Assignor hereby requests the patent authority to issue/grant said patents of their respective country to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Robert Toso County of Alanda) State of California On April 12,2018, before me, Elizabeth Ruiz Notary Public, personally appeared Robert Toso, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true is correct. ELIZABETH RUIZ Commission # 2119801 WITNESS my hand and official seal. Hotary Public - California **Alameda County** My Comm. Expires Jul 17, 2019

Date: /2 APR 2018 By: Richard Spanggord
State of California) 58.
County of Aloned) 55.
On April 12,2018, before me, Elizabeth Ruiz,
Notary Public, personally appeared Richard Spanggord, who proved to me on the basis
of satisfactory evidence to be the person whose name is subscribed to the within
instrument and acknowledged to me that he executed the same in his authorized capacity,
and that by his signature on the instrument the person, or the entity upon behalf of which
the person acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true is correct.
ELIZABETH RUIZ
WITNESS my hand and official seal. Commission # 2119801 Hotary Public - California
Signature (Seal)
My Commission Expires: 11, 2019

Date: April 10, 2018 By: Mei Tan
State of California) County of San Wates) ss.
On April 10th 2018, before me, Suison, Notary Public, personally appeared Mei Tan, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true is correct.
WITNESS my hand and official seal. J. BUISON COMM. 2161946 NOTARY PUBLIC - CALIFORNIA SAN MATEO COUNTY My COMMISSION SEICHES August 64, 2020
Signoture (Seal)

My Commission Expires: 08/04/2020

Date: APRIL 6, 2018 By: Van Tairiol

State of California

County of El Dorado)

On April 06, 2018, before me, Sittle Daniel, Motary Public, personally appeared Van Tairiol, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true is correct.

WITNESS my hand and official seal.

(Seal)

Signature

PATENT REEL: 047358 FRAME: 0159

SUSAN BARNEY Comm. # 2209105 Attorney Docket No. SHIR-009/00US 33543/43 Page 8 of 9

Date: <u>/7 / 107 201 </u>		By _{./}	Yekaterina I/M	cocce
State of California)	55.		
County of		13134	south rate	l de la constantina della cons
On	, befor	e me	nter production of the state of	7
		erina 1	Lin, who proved to me on the basis	of
satisfactory evidence to be the p	person whos	e nam	ne is subscribed to the within instrume	831
	W	es.	ne in his authorized capacity, and that	
1			e entity upon behalf of which the pers	-
acted, executed the instrument.	Ż		100 F 1	
I certify under PENALTY OF	PERJURY	under	the laws of the State of California th	a
the foregoing paragraph is true i	s correct.			
WITNESS my hand and official	l seal.			
	*************************************		(Seal)	
Signature				

My Commission Expires:

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

A notary public or other officer completing this certificate is attached, and no	ificate verifies only the identity of the individual who signed to the truthfulness, accuracy, or validity of that document.
State of California)
County of Faulty Clare	N. S.
Southly of Santanana and Santananana)
On <u>04 17 [2018</u> before me, <u>04</u>	110 TOSEPH BOUSQUET, NOSTAMA PUBL
Date	Here Insert Name and Title of the Officer
personally appeared	aterina A (n
	Name(s) of Signer(s)
subscribed to the within instrument and ackno	iny evidence to be the person(s) whose name(s) is wiedged to me that he strictly executed the same his reprint heir signature(s) on the instrument the person acted, executed the instrument. I certify under PENALTY OF PERJURY under the later the second s
*	of the State of California that the foregoing paragris true and correct.
	WITNESS my hand and official seal.
STORY OF SERVICE BESSELET	
Tay Commission vi 2300000	
	Signature /// // /
S VESTOV Seeta Cest & Contrib S Vesto Compa. Explose May Col. 2016	/ Signature of Notary Public
Biogo Motore Coal About	
Piace Notary Seal Above	P0W99P9 & 6 & 5
	PTIONAL — is information can deter alteration of the document of
fraudulani rasitachment of th	is information can deter alteration of the document of his form to an unintended document,
	The second of th
escription of Attached Document	Altornoy Dacked No SHIN-009
tile or Type of Document:	Alfornor Document Date:
umber of Pages: Signer(s) Other Th	nan Named Above:
apacity(ies) Claimed by Signer(s)	Cierraria Sinone.
gner's Name: Corporate Officer — Title(s):	Signer's Name: ☐ Corporate Officer — Title(s):
Partner — ☐Limited ☐ General	☐ Partner — ☐ Limited ☐ General
Individual Attorney in Fact	☐ Individual ☐ Attorney in Fact
Trustee	☐ Trustee ☐ Guardian or Conservator
The second secon	Other:
Other:	
Other:gner Is Representing:	Signer Is Representing:

Attorney Docket No. SHIR-009/00US 33543/43 Page 9 of 9

Date: April 24,2018	Signature:	Patrick	S. Eastern
	Title:	\$ 	mmunology & Biosimilars IP
	, in the second sec	SHIRE HUMAN	GENETIC THERAPIES, INC.
Illims State of C aliforni a County of <u>Lake</u>)	SS.	
On <u>April 26,2017</u>	, before		oa Ann Nagel meil 5. Ezgleman er
	e person whose he executed th nt the person, o	e name is subsc le same in his au	- •
I certify under PENALTY O		inder the laws o	of the State of California that
WITNESS my hand and offici	ial seal.		
Glorian Napl		(Seal)	OFFICIAL SEAL ROSE ANN NAGEL
Signature		——————————————————————————————————————	Notary Fublic - State of Illinois My Commission Expires 10/22/2
My Commission Expires: 06	1060 22, 2019		

PATENT REEL: 047358 FRAME: 0162

RECORDED: 10/30/2018