504185028 01/18/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4231703

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
LAURENCE J.N. COOPER		02/19/2016
HIROKI TORIKAI		01/12/2016
LING ZHANG		01/12/2016
HELEN HULS		12/14/2016
FENG WANG-JOHANNING		01/15/2016
LENKA HURTON		02/09/2016
SIMON OLIVARES		01/15/2016

JANANI KRISHNAMURTHY

RECEIVING PARTY DATA

Name:	BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM
Street Address:	201 WEST 7TH STREET
City:	AUSTIN
State/Country:	TEXAS
Postal Code:	78701

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14890977

CORRESPONDENCE DATA

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		e-mail address first; if that is unsuccessful, it will be sent nat is unsuccessful, it will be sent via US Mail.		
Phone:	5123	123342900		
Email:	chamilton@phiplaw.com			
Correspondent Name:	CAROLINE HAMILTON, PARKER HIGHLANDER PLLC			
Address Line 1:	1120 S. CAPITAL OF TEXAS HIGHWAY			
Address Line 2:	BUILDING ONE, SUITE 200			
Address Line 4:	AUSTIN, TEXAS 78746			
ATTORNEY DOCKET NUMBE	R:	UTSC.P1222US		
NAME OF SUBMITTER:		CAROLINE HAMILTON		
SIGNATURE:		/Caroline Hamilton/		

PATENT REEL: 041012 FRAME: 0210

12/14/2016

DATE SIGNED:	01/18/2017	
Total Attachments: 9		
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ASSIGNMENT

We, Laurence J.N. COOPER, of Houston, Texas, a citizen of the United States of America, and Hiroki TORIKAI, of Houston, Texas, a citizen of Japan, Ling ZHANG, of Houston, Texas, a citizen of Canada, Helen HULS, of Houston, Texas, a citizen of the United States of America, Feng WANG-JOHANNING, of Bastrop, Texas, a citizen of the United States of America, Lenka HURTON, of Houston, Texas, a citizen of Canada, Simon OLIVARES, of Houston, Texas, a citizen of the United States of America, and Janani KRISHNAMURTHY, of Houston, Texas, a citizen of India, have invented HUMAN APPLICATION OF ENGINEERED CHIMERIC ANTIGEN RECEPTOR (CAR) T-CELLS. This is an Assignment of the following rights, title and interest (check all that apply):

United States of America rights, title and interest in the invention

 \boxtimes Foreign rights, title and interest in the invention

An application to the Commissioner for Patents of the United States of America filed herewith

United States Provisional Patent Application Serial No. 61/823,253 filed on May 14, 2013

United States Patent Application Serial No. 14/890,977 filed on November 13, 2015

United States Patent No(s).

International (PCT) Patent Application Serial No. PCT/US2014/038005 filed on May 14, 2014

Other (specify):

We were employed by The University of Texas M. D. Anderson Cancer Center, a State Institution of Higher Education established under the laws of the State of Texas within The University of Texas System, at the time the invention was made. The conditions under which said invention was made are such that the Board of Regents, The University of Texas System (hereinafter SYSTEM), having a place of business at 201 West 7th St., Austin, TX 78701, owns the entire right, title, and interest in the invention, in the United States and all other countries throughout the world.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the undersigned, have voluntarily sold, assigned, and transferred and do voluntarily sell, assign, and transfer to SYSTEM, and successors and assigns, our full and exclusive right, title and interest in and to the invention(s) disclosed in said application throughout the world, including the United States and its territorial possessions and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in said application. This includes an assignment of all Letters Patent that may be granted on the invention in the United States of America and all countries throughout the world, and any divisional, renewal, continuation in whole or in part, substitution, conversion, reexamination, reissue, prolongation or extension thereof; and the right to claim priority from the patent application as provided for by United States law, the Patent Cooperation Treaty, the European Patent Convention, the Paris Convention, or other applicable law.

We have authorized SYSTEM to file and prosecute this patent application, as well as any corresponding international or national applications that claim priority from it. SYSTEM has the right to select attorneys or agents of its choice to prosecute at its discretion these applications on

its behalf. We authorize and request the issuance of said Letters Patent to SYSTEM, as assignee of the entire right, title, and interest to be held as fully and entirely as the same would have been held by us had this assignment not been made.

We warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied that will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of the present assignment. We shall not communicate nor cooperate in any manner with any third party, other than SYSTEM, that claims any rights in and to said invention(s) and said application.

We also hereby assign all rights, title and interest to any improvements related to said invention(s) to SYSTEM and agree to promptly and fully communicate to SYSTEM any facts and information known to us respecting any improvements related to said invention(s) and said application while any patent application anywhere in the world is still pending that claims priority, whether directly or indirectly, from said invention(s) or said application(s). We will maintain any such facts and information in confidence and will only reveal such facts and information to SYSTEM or its assigns.

We also covenant that we will communicate to SYSTEM, its representatives, assigns or agents, any facts known to us respecting said invention(s) or said application(s), and to testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths, provide all requested documents, and do everything reasonably possible to aid SYSTEM and its assigns to obtain and enforce proper patent protection for said invention(s) or said application(s) in the United States or any foreign country. These provisions are binding upon our heirs, legal representatives, administrators and assigns.

We grant SYSTEM, the power to insert on this Assignment any further information that may be necessary or desirable in order to comply with all applicable legal requirements, including the rules of the United States Patent and Trademark Office, for submitting and recording this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

STATE OF	7	:s::	x ~ x
orwin or			£.

Laurence JN/COOPER

This <u>19</u> day of <u> \mathcal{IU} </u>. 2016, before me personally came the above-named Laurence J.N. COOPER, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.



Notary Public for Jexas

My commission expires: 4/25/2018

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Dated:	1-12-2016	<u>.</u>
STATE O	F <u>TEXAS</u>	
COUNTY	OF 1+ADDIS) ss)

Talka

Hiroki TORIKAI

This 12^{M} day of 12^{M} , 2016, before me personally came the above-named Hiroki TORIKAI, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.



This (2) day of $(1 \land (2) \land$

	SS- ·
	Notary Public for TEXAS
[SEA] (SEA) NANCY & BOSIRE My Commission Expires August 3, 2019	My commission expires: <u>Angust 3</u> , 2019
Dated:	
STATE OF)	Helen HULS
) ss.) ss.)	

This _____ day of ______, 2016, before me personally came the above-named Helen HULS, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

Notary Public for _____

[SEAL]

My commission expires:

(UTSC.P1222US - Assignment)

3

Dated:	
STATE OF)	Hiroki TORIKAI
STATE OF) > ss. COUNTY OF)	
TORIKAI, who executed the foregoing A	before me personally came the above-named Hiroki Assignment in my presence, and who acknowledged to 's own free will for the purposes set forth therein.
	Notary Public for
[SEAL]	My commission expires:
Dated:	
STATE OF)	Ling ZHANG
STATE OF) ss. COUNTY OF)	
ZHANG, who executed the foregoing Ass	before me personally came the above-named Ling signment in my presence, and who acknowledged to me wn free will for the purposes set forth therein.
[SEAL]	My commission expires:
Dated: <u>Dec. 14</u> 2014 STATE OF <u>Cexes</u> ss. COUNTY OF <u>S</u> s. This <u>U</u> day of <u>December</u> , 2016, before who executed the foregoing Assignment is was executed under that person's own free	Helen HULS Helen HULS te me personally came the above-named Helen HULS, in my presence, and who acknowledged to me that it will for the purposes set forth therein.
B YVONNE LOFTIN Notory Public, Storie of Texas My Commission Expires Morch 30, 2019 SEAL	Notary Public for <u>Taxan</u> My commission expires: <u>3-30-2019</u>
{UTSC.P1222US - Assignment}	3

Dated:/	<u>15~/16</u>	
STATE OF	alifornin)
COUNTY OF	Sur M.A.) ss)

Feng WANG-JOHANNING

This Kay of 1400 manager, 2016, before me personally came the above-named Feng WANG-JOHANNING, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

Planser Comer Sollies I. V	- James Cars
Lac As bar chan a D	Notary Public for Court
[SEAL]	My commission expires: <u>Same 22 2019</u>

Dated:	·····	
STATE OF)	Lenka HURTON
) ss.	
COUNTY OF)	

This _____ day of ______, 2016, before me personally came the above-named Lenka HURTON, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

[SEAL]

-----Notary Public for _____ My commission expires:

Dated: STATE OF _____)

Simon OLIVARES

) \$8. COUNTY OF

This ____ day of ______, 2016, before me personally came the above-named Simon OLIVARES, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

> ------Notary Public for _____

[SEAL]

My commission expires:

{UTSC.P1222US - Assignment}

4

	ACKNOWLEDGMENT
ce W at	notary public or other officer completing this artificate verifies only the identity of the individual ho signed the document to which this certificate is tached, and not the truthfulness, accuracy, or alidity of that document.
Stat Cou	e of California inty ofSAN MATEO)
On .	01/15/2016
pers	ionally appearedFENG WANG-JOHANNING
who subs his/f	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are scribed to the within instrument and acknowledged to me that he/she/they executed the same her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the hon(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
l cer para	tify under PENALTY OF PERJURY under the laws of the State of California that the foregoin graph is true and correct.
WITI	NESS my hand and official seal.
Sion	ature (Seal)

Feng WANG-JOHANNING

This ______day of ______, 2016, before me personally came the above-named Feng WANG-JOHANNING, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

Notary Public for
My commission expires:

Dated: <u>2/9/2016</u> STATE OF <u>72×45</u>) STATE OF <u>72×45</u>) SS. COUNTY OF <u>Brazoria</u>)

[SEAL]

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And Carlos Carlos	With an and the second s
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	M _N

Lenka HURTON

This $\mathcal{P}^{\mathcal{K}}$ day of $\mathcal{F}_{\mathcal{K}\mathcal{K}\mathcal{M}\mathcal{M}}$, 2016, before me personally came the above-named Lenka HURTON, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

[SEAL SEAL (SEAL) (SEAL (SEAL) (SEAL (SEAL) (SEAL (SEAL) (SEAL) (SEAL (SEAL) (S	Notary Public for $7ex_{GS}$ My commission expires: $02/22/2007$
Dated:	
STATE OF)	Simon OLIVARES
COUNTY OF) ss.	

This ______day of ______, 2016, before me personally came the above-named Simon OLIVARES, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

	Notary Public for
SEAL]	My commission expires:

{UTSC P122208 - Assignment}

Ĩ

Feng WANG-JOHANNING

This ______day of _______, 2016, before me personally came the above-named Feng WANG-JOHANNING, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

	Notary Public for
[SEAL]	My commission expires:

eet. te		
Dated:	455	4
STATE 0)F)
COUNT) ss

52

Lenka HURTON

This ______ day of ______, 2016, before me personally came the above-named Lenka HURTON, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

Notary Public for _____

[SEAL]

My commission expires:

Dated: 15^{+}	JAN 2016	
STATE OF	TEXAS	2
COUNTY OF	HARRIS) ss. _)

Commune Commune	7 4
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Some Cler	

Simon OLIVARES

This \underline{C} day of $\underline{TAmumae}$, 2016, before me personally came the above-named Simon OLIVARES, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

NANCY K BOSIRE Ny Commission Expires	Notary Public for $\underline{\forall \in \times \land \varsigma}$
[SEAL]	My commission expires: Amount 3rd 2019

{UTSC P1222US - Assignment}

4

Vanani KRISHNAMURTHŸ

STATE OF MASSACHUSED S) ss. COUNTY OF CAMBANDLE

Dated: 12 - 14 - 20 13

This $\underbrace{\downarrow 0}_{\text{day of }}^{h}$, 2016, before me personally came the above-named Janani Jec KRISHNAMURTHY, who executed the foregoing Assignment in my presence, and who acknowledged to me that it was executed under that person's own free will for the purposes set forth therein.

Middleser Notary Public for auntre

[SEAL]

08-31-2023 My commission expires:



{UTSC P1222US - Assignment}

RECORDED: 01/18/2017

PATENT **REEL: 041012 FRAME: 0220**

5