503269932 04/17/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3316550

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HOWARD HUGHES MEDICAL INSTITUTE	03/19/2015

RECEIVING PARTY DATA

Name:	CALIFORNIA INSTITUTE OF TECHNOLOGY	
Street Address:	1200 EAST CALIFORNIA BLVD.	
Internal Address:	MS 6-32	
City:	PASADENA	
State/Country:	CALIFORNIA	
Postal Code:	91125	
Name:	THE ROCKEFELLER UNIVERSITY	
Street Address:	1230 YORK AVENUE	
City:	NEW YORK	
State/Country:	NEW YORK	
Postal Code:	10065	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13924469

CORRESPONDENCE DATA

Fax Number: (626)577-8800

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: 626-795-9900 **Email:** pto@cph.com

Correspondent Name: CHRISTIE, PARKER & HALE, LLP

Address Line 1: P.O. BOX 29001

Address Line 4: GLENDALE, CALIFORNIA 91209-9001

ATTORNEY DOCKET NUMBER:	70713/C766 NBC/CLM	
NAME OF SUBMITTER:	CHRISTINA L. MALINOSKY	
SIGNATURE:	/Christina L. Malinosky/	
DATE SIGNED:	04/16/2015	

PATENT 503269932 REEL: 035439 FRAME: 0550

Total Attachments: 6 source=HHMI2CalTechAssign#page1.tif source=HHMI2CalTechAssign#page2.tif source=HHMI2CalTechAssign#page3.tif source=HHMI2CalTechAssign#page4.tif source=HHMI2CalTechAssign#page5.tif source=HHMI2CalTechAssign#page5.tif

PATENT REEL: 035439 FRAME: 0551

ASSIGNMENT

WHEREAS, HOWARD HUGHES MEDICAL INSTITUTE ("HHMI" and "ASSIGNOR"), having an address at 4000 Jones Bridge Road, Chevy Chase, Maryland 20815, is an owner by the assignments recorded at (a) Reel/Frame 035131/0299 from Pamela J. Bjorkman, executed on August 1, 2011 and (b) Reel/Frame 035131/0296 from Michel C. Nussenzweig, executed on August 1, 2011, of certain new and useful improvements disclosed in an application for United States Letters Patent entitled ANTIBODIES TARGETING HIV ESCAPE MUTANTS, filed June 21, 2013, Application No. 13/924,469, together with claim to the priority of United States Provisional Application Nos. 61/662,594, filed June 21, 2012;

AND WHEREAS CALIFORNIA INSTITUTE OF TECHNOLOGY, a California educational institution, having a place of business at 1200 East California Boulevard, Mail Stop 201-85, Pasadena, California 91125 and THE ROCKEFELLER UNIVERSITY, a New York educational institution, having a place of business at 1230 York Avenue, New York, New York 10065 (hereafter, together with any of their respective successors, legal representatives or assigns thereof, collectively referred to as "ASSIGNEES") want to acquire the entire right, title and interest in and to said improvements and application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to HHMI in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, HHMI has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over, to ASSIGNEES the entire right, title and interest in and to said improvements and application, including all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues, reexaminations and extensions thereof. including the right to sue or otherwise bring action and to collect and receive damages therefrom, including for past infringement thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and HHMI hereby authorizes and requests the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEES in accordance with the terms of this ASSIGNMENT;

AND HHMI HEREBY covenants that it has full right to convey the entire interest herein assigned, and that it has not executed and will not execute, any agreement in conflict herewith;

AND HHMI HEREBY further covenants and agrees that it will communicate to ASSIGNEES any facts known to HHMI respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications,

PATENT REEL: 035439 FRAME: 0552 ASSIGNMENT Docket No. 70713/C766 Application No. 13/924,469

Joint

make all rightful oaths, and generally do everything possible to aid ASSIGNEES to obtain and enforce proper patent protection for said improvements in all countries.

AND WHEREAS HHMI has appointed PAMELA J. BJORKMAN and MICHEL C. NUSSENZWEIG its agents for the purpose of assigning, by execution of this ASSIGNMENT, the rights of HHMI in said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues, reexaminations and extensions thereof, as evidenced by the APPOINTMENT OF INVESTIGATOR AS AGENT OF PAMELA J. BJORKMAN and the APPOINTMENT OF INVESTIGATOR AS AGENT OF MICHEL C. NUSSENZWEIG, both executed on August 8, 2011.

IN TESTIMONY WHEREOF, I hereum 20 15	to set my hand this 17 day of March	
	James Mars	
,	Pamela J. Bjorkman Appointed Agent for	
	Howard Hughes Medical Institute	
IN TESTIMONY WHEREOF, I hereunt	to set my hand this day of	
	Michel C. Nussenzweig Appointed Agent for Howard Hughes Medical Institute	

NBC PAS1345625.1-*-03/17/15 3;33 PM

APPOINTMENT OF INVESTIGATOR AS AGENT

Appointment by the Howard Hughes Medical Institute ("HHMI") of Pamela J. Bjorkman, PhD, an employee of HHMI, as its agent for the purpose of assigning certain rights to California Institute of Technology ("Institution").

WHEREAS, HHMI and Institution collaborate in the active conduct of medical research pursuant to an Agreement between them dated as of May 1, 1991 (the "Agreement");

WHEREAS, pursuant to the Agreement, HHMI has agreed to assign to Institution HHMI's rights with respect to intellectual property resulting from research by HHMI employees, alone or with others, at the Institution during the term of the Agreement, whether or not patentable or copyrightable, and whether funded in whole or in part by HHMI (each a "Subject Property");

WHEREAS, research conducted pursuant to the Agreement by Pamela J. Bjorkman, PhD while employed by HHMI at Institution has resulted in the invention of a certain Subject Property entitled "Overcoming HIV Pathways for Escape Using Rationally-Designed Anti-HIV Antibodies," which is the subject of a patent application entitled "Overcoming HIV Pathways for Escape Using Rationally-Designed Anti-HIV Antibodies" filed in the U.S. Patent and Trademark Office on June 21, 2012 with Serial Number 61/662,594 (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, HHMI wishes Pamela J. Bjorkman, PhD to act as its agent for the purpose of assigning to Institution the rights HHMI has in the Invention by reason of the research program conducted at Institution.

NOW THEREFORE, HHMI hereby appoints Pamela J. Bjorkman, PhD as its agent for the purpose of assigning the rights HHMI has or may acquire in the Invention by reason of the research program conducted at Institution to Institution in accordance with and subject to the conditions of the Agreement.

Executed: August 13, 2012

HOWARD HUGHES MEDICAL INSTITUTE

By:

Jack E. Dixa.

Jack E. Dixon, PhD

Vice President and Chief Scientific Officer

ATTESTED:

Craig A Alexander

Vice President and General Counsel

CIT 6235P HHMI 05201 Docket No. 70713/C766 Application No. 13/924,469

Joint

ASSIGNMENT

WHEREAS, HOWARD HUGHES MEDICAL INSTITUTE ("HHMI" and "ASSIGNOR"), having an address at 4000 Jones Bridge Road, Chevy Chase, Maryland 20815, is an owner by the assignments recorded at (a) Reel/Frame 035131/0299 from Pamela J. Bjorkman, executed on August 1, 2011 and (b) Reel/Frame 035131/0296 from Michel C. Nussenzweig, executed on August 1, 2011, of certain new and useful improvements disclosed in an application for United States Letters Patent entitled ANTIBODIES TARGETING HIV ESCAPE MUTANTS, filed June 21, 2013, Application No. 13/924,469, together with claim to the priority of United States Provisional Application Nos. 61/662,594, filed June 21, 2012;

AND WHEREAS CALIFORNIA INSTITUTE OF TECHNOLOGY, a California educational institution, having a place of business at 1200 East California Boulevard, Mail Stop 201-85, Pasadena, California 91125 and THE ROCKEFELLER UNIVERSITY, a New York educational institution, having a place of business at 1230 York Avenue, New York, New York 10065 (hereafter, together with any of their respective successors, legal representatives or assigns thereof, collectively referred to as "ASSIGNEES") want to acquire the entire right, title and interest in and to said improvements and application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to HHMI in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, HHMI has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over, to ASSIGNEES the entire right, title and interest in and to said improvements and application, including all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues, reexaminations and extensions thereof, including the right to sue or otherwise bring action and to collect and receive damages therefrom, including for past infringement thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and HHMI hereby authorizes and requests the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEES in accordance with the terms of this ASSIGNMENT;

AND HHMI HEREBY covenants that it has full right to convey the entire interest herein assigned, and that it has not executed and will not execute, any agreement in conflict herewith;

AND HHMI HEREBY further covenants and agrees that it will communicate to ASSIGNEES any facts known to HHMI respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications,

PATENT REEL: 035439 FRAME: 0555 ASSIGNMENT Docket No. 70713/C766 Application No. 13/924,469

Joint

make all rightful oaths, and generally do everything possible to aid ASSIGNEES to obtain and enforce proper patent protection for said improvements in all countries.

AND WHEREAS HHMI has appointed PAMELA J. BJORKMAN and MICHEL C. NUSSENZWEIG its agents for the purpose of assigning, by execution of this ASSIGNMENT, the rights of HHMI in said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon, and all reissues, reexaminations and extensions thereof, as evidenced by the APPOINTMENT OF INVESTIGATOR AS AGENT OF PAMELA J. BJORKMAN and the APPOINTMENT OF INVESTIGATOR AS AGENT OF MICHEL C. NUSSENZWEIG, both executed on August 8, 2011.

IN TESTIMONY WHEREOF, I hereunto 20	set my hand this day of,
	Pamela J. Bjorkman Appointed Agent for Howard Hughes Medical Institute
IN TESTIMONY WHEREOF, I hereunto 20_15	set my hand this 3/S day of MARC1+, Michel C. Nussenzweig Appointed Agent for Howard Hughes Medical Institute

NBC PAS1345625.1-*-03/17/15 3:33 PM

APPOINTMENT OF INVESTIGATOR AS AGENT

Appointment by the Howard Hughes Medical Institute ("HHMI") of Michel C. Nussenzweig, MD, PhD, an employee of HHMI, as its agent for the purpose of assigning certain rights to The Rockefeller University ("Institution").

WHEREAS, HHMI and Institution collaborate in the active conduct of medical research pursuant to an Agreement between them dated as of August 12, 1986 (the "Agreement");

WHEREAS, pursuant to the Agreement, HHMI has agreed to assign to Institution HHMI's rights with respect to intellectual property resulting from research by HHMI employees, alone or with others, at the Institution during the term of the Agreement, whether or not patentable or copyrightable, and whether funded in whole or in part by HHMI (each a "Subject Property");

WHEREAS, research conducted pursuant to the Agreement by Michel C. Nussenzweig, MD, PhD while employed by HHMI at Institution has resulted in the invention of a certain Subject Property entitled "Overcoming HIV Pathways for Escape Using Rationally-Designed Anti-HIV Antibodies," which is the subject of a patent application entitled "Overcoming HIV Pathways for Escape Using Rationally-Designed Anti-HIV Antibodies" filed in the U.S. Patent and Trademark Office on June 21, 2012 with Serial Number 61/662,594 (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, HHMI wishes Michel C. Nussenzweig, MD, PhD to act as its agent for the purpose of assigning to Institution the rights HHMI has in the Invention by reason of the research program conducted at Institution.

NOW THEREFORE, HHMI hereby appoints Michel C. Nussenzweig, MD, PhD as its agent for the purpose of assigning the rights HHMI has or may acquire in the Invention by reason of the research program conducted at Institution to Institution in accordance with and subject to the conditions of the Agreement.

Executed: July 11, 2012

HOWARD HUGHES MEDICAL INSTITUTE

By:

Jack E. Dixon.

Jack E. Dixon.

Vice President and Chief Scientific Officer

ATTESTED:

Craig A Alexander

Vice President and General Counsel

RU 1097 HHMI 05201

> PATENT REEL: 035439 FRAME: 0557

RECORDED: 04/17/2015