505052745 08/21/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5099500

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
JULIA JOUNG	08/15/2018

RECEIVING PARTY DATA

Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
Street Address:	77 MASSACHUSETTS AVENUE	
City:	CAMBRIDGE	
State/Country:	MASSACHUSETTS	
Postal Code:	02139	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15844530

CORRESPONDENCE DATA

Fax Number: (240)359-4879

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: 912-257-4864

Email: docketing@jmi-iplaw.com

Correspondent Name: JOHNSON, MARCOU & ISAACS, LLC

Address Line 1: 27 CITY SQUARE, SUITE 1
Address Line 4: HOSCHTON, GEORGIA 30548

ATTORNEY DOCKET NUMBER:	BROD-3480US2	
NAME OF SUBMITTER:	F. BRENT NIX	
SIGNATURE:	/F. BRENT NIX/	
DATE SIGNED:	08/21/2018	

Total Attachments: 2

source=BI_2015_092_SIGNED_ASSIGNMENT_JOUNG_BROD_3480US2#page1.tif source=BI_2015_092_SIGNED_ASSIGNMENT_JOUNG_BROD_3480US2#page2.tif

PATENT 505052745 REEL: 046641 FRAME: 0666

ASSIGNMENT

WHEREAS, we, **OMAR O. ABUDAYYEH**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 and **JULIA JOUNG**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, have invented with others certain inventions and improvements disclosed in a patent application entitled "**NOVEL CRISPR ENZYMES AND SYSTEMS**," filed with the United States Patent and Trademark Office on December 16, 2017 and assigned U.S. Patent Application No. 15/844,530; and

WHEREAS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, having a principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, is desirous of acquiring an interest in the same; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which we hereby acknowledge, we, OMAR O. ABUDAYYEH and JULIA JOUNG, by these presents, do sell, assign, and transfer unto said Assignee, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, our full, exclusive, and entire right, title, and interest in and to said application, in and to any divisions, continuations, reexaminations, and reissues thereof, and in and to all inventions and improvements disclosed and described in said applications, preparatory to obtaining Letters Patent of the United States therefor; and we hereby request the Director of the U.S. Patent and Trademark Office to issue any and all Letters Patent of the United States resulting from said applications, or from a division, continuation, reexamination, or reissue thereof, to MASSACHUSETTS INSTITUTE OF TECHNOLOGY, for its interest and for the use and benefit of MASSACHUSETTS INSTITUTE OF TECHNOLOGY, as assignee, and its assigns and legal representatives;

For the same consideration, we, by these presents, do sell, assign, and transfer to MASSACHUSETTS INSTITUTE OF TECHNOLOGY, our full, exclusive, and entire right, title, and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Letters Patent and similar protective rights granted on said foreign applications, and in and to the right to claim any applicable priority rights arising from or required for said foreign applications under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of MASSACHUSETTS INSTITUTE OF TECHNOLOGY, or its designees insofar as permitted by applicable law;

AND, for the same consideration, we agree to sign all lawful papers, execute all division, continuing, reexamination, reissue, and other applications, make all assignments and rightful oaths, and generally do everything possible to aid MASSACHUSETTS INSTITUTE OF TECHNOLOGY, its successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

In testimony whereof, we hereunto set our hands and seals on the dates indicated below.

	OMAR O. ABUDAYYEH	Date
COMMONWEALTH OF MASSACHU	SETTS	
COUNTY OF MIDDLESEX		
	and for the aforementioned state, on this , personally appeared OMAR O. ABUD lged the foregoing Assignment.	
∆ TARA BURKE	NOTARY PUBLIC	
Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires January 20, 2023	My Commission Expires:	
	Africa De la companya della companya	8/15/18
	KETA JOUNG	Date
COMMONWEALTH OF MASSACHU	SETTS	
COUNTY OF MIDDLESEX		1
Before me, a Notary Public in a 20 / 20 / 5 sworn, signed and acknowledged the for	and for the aforementioned state, on this, personally appeared JULIA JOUNG, regoing Assignment.	day day who, being du
	C/A/	
	NOTARY PUBLIC //	n / 1 7
	My Commission Expires: // / /	

[END OF SIGNATURE PAGE]

Page 2 of 2