10/15/2015 503525032

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3571658

UBMISSION TYPE:		NEW ASSIGNMENT	
IATURE OF CONVEYAN	CE:	ASSIGNMENT	
CONVEYING PARTY DA	TA		
		Name	Execution Date
J. KEITH JOUNG			08/08/2014
JAMES ANGSTMAN			08/11/2014
JEFFRY D. SANDER			08/19/2014
MORGAN MAEDER			07/31/2014
SHENGDAR TSAI			08/08/2014
RECEIVING PARTY DAT	A		
		IERAL HOSPITAL CORPORATION	l
Street Address:	55 FRUIT STREET		
City:	BOSTON		
-	MASSACHUSETTS		
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Total Attachments: 7

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PCT ASSIGNMENT

ASSIGNMENT

For valuable consideration, we, J. KEITH JOUNG of Winchester, Massachusetts; JAMES ANGSTMAN of Cambridge, Massachusetts; JEFFRY D. SANDER of Ankeny, Iowa; MORGAN MAEDER of Boston, Massachusetts; and SHENGDAR TSAI of Charlestown, Massachusetts; hereby assign to: The General Hospital Corporation, a Massachusetts corporation having a place of business at: 55 Fruit Street, Boston, MA 02114; and its successors and assigns (collectively hereinafter called "the Assignce"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of a PCT application entitled INCREASING SPECIFICITY FOR RNA-GUIDED GENOME EDITING, filed March 14, 2014, and assigned PCT Serial Number PCT/US2014/029304, this assignment including said application, any and all United States and foreign patents, utility patents and models, continuations, continuations-in-part, divisionals, reexaminations, reissues and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under all treaties; we hereby confirm our prior authorization of the Assignce to apply in all countries in our names or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignce may reasonably request to effect uate fully this assignment; and we hereby covenant that we have the full right to convey the entire right, title, and interest herein assigned and that we have not executed and will not execute any agreement in conflict herewith.

PATENT REEL: 036802 FRAME: 0831

IN WITNESS WHEREOF, I hereto set my hand and seal at 13 retow MA 8th day of luguet ___, 20<u>/4</u>___ this _ L.S. J. KEITH JOUNG State of <u>MA</u> : : ss. County of SUFFOLK : Before me this <u>8th</u> day of <u>*Ougeest*</u>, 20<u>14</u>, personally appeared J. KEITH JOUNG known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained. Dorathy a. Benjord Notary Public My Commission Expires: July 1, 2021 مرور ما الانتهام ورور مرور ما ب eal Here] COROTHY A. SIXFORD **Notary Put** 188 Jul 9, 2021

IN WITNESS WHEREOF, I heret	o set my hand and scal at	10:30	
this 11th day of August	20-14		
15	v //	11111111111111111111111111111111111111	L.S.
JAMES ANGS	TMAN		
State of Massachusetts :			
: 85.			
County of <u>Suffolk</u> :			
	0		
Before me this $1/2$ da	ay of <u>Cluque</u>	, 20//4	, personally
appeared JAMES ANGSTMAN know	wn to me to be the person	whose name is su	bscribed to the
foregoing Assignment and acknowled	lged that he executed the	same as his free ac	t and deed for
the purposes therein contained.			
	Donothy L Notary Public	2. Binfo	rd
່ ແມ່ ເຮັ້ອ	My Commission By	inor la tra	12021

[Notary's Scal Here]

My Commission Expires: July 1, 202



IN WITNESS WHEREOF, I hereto set my hand and seal at _____ he 1911 this day of 20 /4 LS. JEFPRY D. SANDER State of : \$8. County of \mathcal{O} * Before me this 194day of 20____, personally appeared JEFFRY D. SANDER known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

ny Public

My Commission Expires: 01-15-2016

[Notary's Seal Here]

مار من الماريكية. ماريخ	
Me.	Spencer Ellis Begby Commission Number: 776470
1207	My Commission Expires:
	01/15/2016
sind and a	

IN WITNESS WHEREOF, I hereto set my hand and seal at <u>Echilas Wedness</u> ,
this $31st$ day of $301y$, 2014
L.S.
MORGAN MAEDER
State of Massachuse Hs :
: ss.
County of <u>Middlesex</u> :
Before me this <u>3</u> day of <u>JJy, 20<u>14</u>, personally</u>

appeared <u>MORGAN MAEDER</u> known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

_____ Jemp Frankly Notary Public

My Commission Expires: 2|5|2|

[Notary's Seal Here]



IN WITNESS WHEREOF, I hereto set my hand and seal at Baston MA Sty day of August 2014 this C 5 L.S. SHENGDAR TSAI State of <u>MA</u> : : ss. County of <u>SUFFOLK</u>: Before me this <u>875</u> day of <u>Curguest</u>, 20<u>14</u>, personally appeared SHENGDAR TSAL known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained. Dorathy A: Binford Notary Public My Commission Expires: July 1, 2021 Herel **DOROTHY A. BINFORD** Notary Public

Massachusetta mmission Expires Jul 9, 2021



The Assignce hereby acknowledges and accepts the foregoing assignment. Assignee: THE GENERAL ACORPORATION 130/14 Signature: Date; Daniel A. Castro Name: Associate Director, Innovation Title: Partners HealthCare The General Hospital Corporation The Commonwealth of Massachusetts falk On this 30 day of 20/4 before me, the undersigned officer, personally appeared _ , proved to me through evidence of identification, to wit: MA Drunt / Knot to be the person(s) whose name(s) is/are signed on the attached document, and who acknowledged to me that Amiel CASTRO signed it voluntarily for its stated purpose. Notary Public

ANTHONY W. SUTTON Notary Public Commonwealth of Massachusetts My Commission Expires April 26, 2019

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RECORDED: 10/15/2015