

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2630176

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>BROOKE EMERLING</td> <td>10/17/2013</td> </tr> <tr> <td>ATSUO SASAKI</td> <td>10/23/2013</td> </tr> <tr> <td>LEWIS C. CANTLEY</td> <td>10/17/2013</td> </tr> <tr> <td>JONATHAN HUROV</td> <td>10/21/2013</td> </tr> </tbody> </table>		Name	Execution Date	BROOKE EMERLING	10/17/2013	ATSUO SASAKI	10/23/2013	LEWIS C. CANTLEY	10/17/2013	JONATHAN HUROV	10/21/2013
Name	Execution Date										
BROOKE EMERLING	10/17/2013										
ATSUO SASAKI	10/23/2013										
LEWIS C. CANTLEY	10/17/2013										
JONATHAN HUROV	10/21/2013										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>BETH ISRAEL DEACONESS MEDICAL CENTER, INC.</td> </tr> <tr> <td>Street Address:</td> <td>330 BROOKLINE AVENUE</td> </tr> <tr> <td>City:</td> <td>BOSTON</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>02215</td> </tr> </table>		Name:	BETH ISRAEL DEACONESS MEDICAL CENTER, INC.	Street Address:	330 BROOKLINE AVENUE	City:	BOSTON	State/Country:	MASSACHUSETTS	Postal Code:	02215
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PROPERTY NUMBERS Total: 3											
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CORRESPONDENCE DATA											
Fax Number:	(617)428-7045										
Phone:	6174280200										
Email:	patentadministrator@clarkelbing.com										
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>											
Correspondent Name:	KRISTINA BIEKER-BRADY, PH.D.										
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Address Line 2:	101 FEDERAL STREET										
Address Line 4:	BOSTON, MASSACHUSETTS 02110										
ATTORNEY DOCKET NUMBER:	01948-193002										

NAME OF SUBMITTER:	KRISTINA BIEKER-BRADY, PH.D.
Signature:	/Kristina Bieker-Brady, Ph.D./
Date:	11/26/2013
<b>Total Attachments: 6</b> source=01948_193002_Assignment#page1.tif source=01948_193002_Assignment#page2.tif source=01948_193002_Assignment#page3.tif source=01948_193002_Assignment#page4.tif source=01948_193002_Assignment#page5.tif source=01948_193002_Assignment#page6.tif	

# ASSIGNMENT

For valuable consideration, we,

Full Name of Assignor	City	State (and Country if not USA)
Brooke EMERLING	Boston	MA
Atsuo SASAKI	Newton	MA
Lewis C. CANTLEY	Cambridge	MA
Jonathan HUROV	Cambridge	MA

hereby assign to

Full Name of Assignee	State of Incorporation	Business Address
Beth Israel Deaconess Medical Center, Inc.	MA	330 Brookline Avenue Boston, MA 02215

and to its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title, and interest throughout the world in the inventions and improvements which are subject of one or more applications for United States Patent signed by us, identified as:

Title of Application	Filing Date	Serial Number
MODULATION OF PHOSPHATIDYLINOSITOL-5-PHOSPHATE-4-KINASE ACTIVITY	February 14, 2011	61/442,622
MODULATION OF PHOSPHATIDYLINOSITOL-5-PHOSPHATE-4-KINASE ACTIVITY	August 14, 2013	13/985,462
MODULATION OF PHOSPHATIDYLINOSITOL-5-PHOSPHATE-4-KINASE ACTIVITY	January 13, 2012	PCT/US2012/021266

and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment includes said application, any and all United States and foreign patents, utility models, 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 the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee 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; and 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 Assignee may reasonably request to effectuate fully this assignment. This assignment also includes the right to sue for past acts of infringement, whether based on any patents listed herein, patents issuing from applications listed herein, or provisional rights from any patent applications listed herein.

IN WITNESS WHEREOF, I hereto set my hand and seal at New York, New York  
this 17 day of October, 2013  
Brooke Emerling L.S.  
Brooke EMERLING  
STATE OF NEW YORK  
COUNTY OF Queens :ss.

On this 17 day of October, 2013 before me, the undersigned notary public, personally appeared Brooke EMERLING, proved to me through satisfactory evidence of identification, which consisted of Work ID Card, to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Tonya McKnight  
Notary Public

My Commission Expires:

[Notary's Seal Here]

TONYA MCKNIGHT  
Notary Public, State of New York  
No. 01MC6030259  
Qualified in Queens County  
Commission Expires 10/28/15

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_  
this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. L.S.

Atsuo SASAKI

STATE OF \_\_\_\_\_ :ss.  
COUNTY OF \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared Atsuo SASAKI, proved to me through satisfactory evidence of identification, which consisted of \_\_\_\_\_, to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

\_\_\_\_\_  
Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at this 17 day of October, 2013

New York, New York

L.S.  
Louis G. CANTLEY

STATE OF New York  
COUNTY OF Queens :ss.

On this 17 day of October, 2013, before me, the undersigned notary public, personally appeared Louis C. CANTLEY, proved to me through satisfactory evidence of identification, which consisted of Work ID Card, to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Tonya McKnight  
Notary Public

My Commission Expires:

[Notary's Seal Here]

TONYA McKNIGHT  
Notary Public, State of New York  
No. 01MC8030259  
Qualified in Queens County  
Commission Expires 11/28/13

IN WITNESS WHEREOF, I hereto set my hand and seal at this 21 day of Oct, 2013

Cambridge, MA

L.S.  
Jonathan HUROV

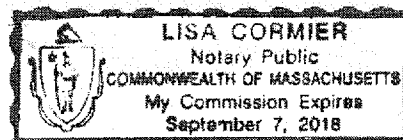
STATE OF Massachusetts  
COUNTY OF Middlesex :ss.

On this 21 day of OCT, 2013, before me, the undersigned notary public, personally appeared Jonathan HUROV, proved to me through satisfactory evidence of identification, which consisted of College, to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Lisa Cormier  
Notary Public

My Commission Expires:

[Notary's Seal Here]



# ASSIGNMENT

For valuable consideration, we,

Full Name of Assignor	City	State (and Country if not USA)
Brooke EMERLING	Boston	MA
Atsuo SASAKI	Newton	MA
Lewis C. CANTLEY	Cambridge	MA
Jonathan HUROV	Cambridge	MA

hereby assign to

Full Name of Assignee	State of Incorporation	Business Address
Beth Israel Deaconess Medical Center, Inc.	MA	330 Brookline Avenue Boston, MA 02215

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and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment includes said application, any and all United States and foreign patents, utility models, 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 the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee 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; and 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 Assignee may reasonably request to effectuate fully this assignment. This assignment also includes the right to sue for past acts of infringement, whether based on any patents listed herein, patents issuing from applications listed herein, or provisional rights from any patent applications listed herein.

IN WITNESS WHEREOF, I hereto set my hand and seal at  
this 17 day of October, 2013

New York, New York

Brooke EMERLING

L.S.

STATE OF New York

COUNTY OF Queens

.SS.

On this 17 day of October, 2013, before me, the undersigned notary public, personally appeared Brooke EMERLING, proved to me through satisfactory evidence of identification, which consisted of Work ID Card, to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Tonya McKnight  
Notary Public

My Commission Expires:

(Notary's Seal Here)

TONYA McKNIGHT  
Notary Public, State of New York  
No. 01MC6030259  
Qualified in Queens County  
Commission Expires 11/23/13

IN WITNESS WHEREOF, I hereto set my hand and seal at  
this 23 day of OCTOBER, 2013

Cincinnati, Ohio

Atsuo SASAKI

L.S.

STATE OF OHIO

COUNTY OF HAMILTON

.SS.

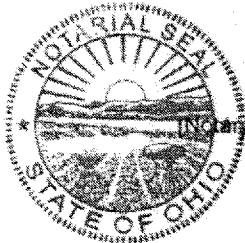
On this 23 day of OCTOBER, 2013, before me, the undersigned notary public, personally appeared Atsuo SASAKI, proved to me through satisfactory evidence of identification, which consisted of DRIVERS LICENSE, to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Paige Newman  
Notary Public

My Commission Expires:

Paige Newman

Notary Public, State of Ohio  
My Commission Expires 07-22-2018



IN WITNESS WHEREOF, I hereto set my hand and seal at New York, New York  
this 17 day of October, 2013

Lewis C. Cantley L.S.  
Lewis C. CANTLEY

STATE OF New York  
COUNTY OF Queens SS.

On this 17 day of October, 2013, before me, the undersigned notary public,  
personally appeared Lewis C. CANTLEY, proved to me through satisfactory evidence of identification,  
which consisted of Work ID Card, to be the person whose name is subscribed to  
the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and  
deed for the purposes therein contained.

Tonya McKnight  
Notary Public

(Notary's Seal Here)

My Commission Expires:

TONYA McKNIGHT  
Notary Public, State of New York  
No. 01MC8030259  
Qualified in Queens County  
Commission Expires 11/23/13

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_  
this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Jonathan HUROV L.S.

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_ SS.

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public,  
personally appeared Jonathan HUROV, proved to me through satisfactory evidence of identification, which  
consisted of \_\_\_\_\_, to be the person whose name is subscribed to the  
foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for  
the purposes therein contained.

\_\_\_\_\_  
Notary Public

(Notary's Seal Here)

My Commission Expires: