502481184 09/03/2013

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Karl Deisseroth	07/05/2013
Alexander Aravanis	04/19/2013
Feng Zhang	04/24/2013
M. Bret Schneider	04/20/2013
Jaimie M. Henderson	04/22/2013

RECEIVING PARTY DATA

Name:	The Board of Trustees of the Leland Stanford Junior University	
Street Address:	1705 El Camino Real	
City:	Palo Alto	
State/Country:	CALIFORNIA	
Postal Code:	94306-1106	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13847785

CORRESPONDENCE DATA

Fax Number: 6503273231

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 6503273400
Email: hall@bozpat.com
Correspondent Name: Paula A. Borden

Address Line 1: 1900 University Avenue

Address Line 2: Suite 200

Address Line 4: East Palo Alto, CALIFORNIA 94303

ATTORNEY DOCKET NUMBER:	STAN-913DIV
NAME OF SUBMITTER:	Paula A. Borden
	PATENT

502481184 REEL: 031128 FRAME: 0664

OP \$40.00 13847785

Signature:	/Paula A. Borden, Reg. No. 42,344/
Date:	09/03/2013
Total Attachments: 5 source=Stan-913DIV_Executed_Assignmer source=Stan-913DIV_Executed_Assignmer source=Stan-913DIV_Executed_Assignmer source=Stan-913DIV_Executed_Assignmer source=Stan-913DIV_Executed_Assignmer	nts#page2.tif nts#page3.tif nts#page4.tif

PATENT REEL: 031128 FRAME: 0665

ASSIGNMENT OF APPLICATION

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THIS ASSIGNMENT, by **Deisseroth, Karl** residing in Stanford, California, **Aravanis**, **Alexander** residing in San Diego, California, **Zhang, Feng** residing in Cambodge, Massachusetts, **Schneider**, **M. Bret** residing in Portola Valley. California and **Henderson**, **Jaimie M.** residing in Stanford, California (bereinafter referred to as the assignors), witnesseth:

"Optical Tissue Interface Method and Apparatus for Stroutating Cells"

WHEREAS, the said assignors have invented certain new and useful improvements in:

X	filed on March 20, 2013 as U.S. 7	Application Serial No.	or PCT International	Application No.	13/847,785
	designating the United States:				
	for which an application for a Un	ited States Patent was	executed on and		

WHEREAS, The Board of Trustees of the Leland Stunford Junior University, a non-profit organization duly organized under and pursuant to the laws of California, and having its principal place of business at 1705 El Camino Real, Palo Alto. California 94306-1106 (hereinafter referred to as the assignee), is desirous of acquiring their right, title and interest in and to said invention and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents. United States or foreign, to be obtained therefor and thereon:

NOW THEREFORE, for good and sufficient considerations, the receipt of which is hereby acknowledged, said assignors have sold, assigned transferred and set over, and by these presents do self, assign, transfer and set over, unto the assignee, its successors, legal representatives and assigns, all of their right, title and interest in and to the above mentioned invention, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, us successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said invention in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said invention and the Letters Patent to be assed thereon for the use and behalf of said assignee, its successors, legal representatives and assigns.

Date	Name of Inventor Deisseroth, Karl
Date	Name of InventorAravanis, Alexander

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ASSIGNMENT OF APPLICATION

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THIS ASSIGNMENT, by Deisseroth, Karl residing in Stanford, California, Aravanis, Alexander residing in San Diego, California, Zhang, Feng residing in Cambridge, Massachusetts, Schneider, M. Bret residing in Portola Valley, California and Henderson, Jaimie M. residing in Stanford, California (hereinafter referred to as the assignors), witnesseth:

WHEREAS, the said assignors have invented certain new and useful improvements in:

"Optical Tissue Interface Method and Apparatus for Stimulating Cells"

X filed on March 20, 2013 as U.S. Application Serial No. or PCT International Application No. 13/847,785 designating the United States.

for which an application for a United States Patent was executed on ____, and

WHEREAS, The Board of Trustees of the Leland Stanford Junior University, a non-profit organization duly organized under and pursuant to the laws of California, and having its principal place of business at 1705 El Camino Real, Palo Alto, California 94306-1106 (hereinafter referred to as the assignee), is desirous of acquiring their right, title and interest in and to said invention and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW THEREFORE, for good and sufficient considerations, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the assignce, its successors, legal representatives and assigns, all of their right, title and interest in and to the above-mentioned invention, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said invention in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said invention and the Letters Patent to be issued thereon for the use and hehalf of said assignee, its successors, legal representatives and assigns.

Date	Name of Inventor
Date 4/19/2013	Deisseroth, Karl Name of Inventor Arayants, Alexander

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ASSIGNMENT OF APPLICATION			
	Atty Docket No. STAN-913DIV Page 2 of 2		
Date 4-24-2013 Name	e of Inventor		
Date Name	s of InventorSchneider, M. Bret		
Date Name	of Inventor Henderson, Jaimie M.		
Hereby accepted on behalf of the assignee			
Signature			
Date	Name (print)		
Title and Company			

ASSIGNMENT OF APPLICATION			
ASSIGNMENT OF APPLICATION			
Atty Docket	No. STAN-913DIV Page 2 of 2		
Date Name of Inventor Date 4/20/2013 Name of Inventor Schneider, M. Bret Date Name of Inventor Henderson, Jaimie M.			
Hereby accepted on behalf of the assignee			
Signature			
Date Name (print)			
Title and Company			

	ASSIGNMENT OF APPLICATION	
:	Any	Docket No. STAN-913DIV Page 2 of 2
Date	Name of Inventor	*
Date	Name of Inventor	······································
Date 4/22/13	Name of Inventor Henderson, Jaimie M.	
Hereby accepted on behalf of the assig	Inee	*
<u>Sule</u>		
Signature		
Aug. 23, 2013	Paula A. Borden	
Date	Name (print)	
Polent Agent; Title and Company	Bozicevic, Field & Fr.	ancis LLP