

**PATENT ASSIGNMENT**

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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
<b>CONVEYING PARTY DATA</b>									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Feng Zhang</td> <td>12/30/2009</td> </tr> <tr> <td>Karl Deisseroth</td> <td>12/01/2009</td> </tr> <tr> <td>Edward S. Boyden</td> <td>11/18/2009</td> </tr> </tbody> </table>		Name	Execution Date	Feng Zhang	12/30/2009	Karl Deisseroth	12/01/2009	Edward S. Boyden	11/18/2009
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Feng Zhang	12/30/2009								
Karl Deisseroth	12/01/2009								
Edward S. Boyden	11/18/2009								
<b>RECEIVING PARTY DATA</b>									
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								
<b>PROPERTY NUMBERS Total: 1</b>									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12522520</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12522520				
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Application Number:	12522520								
<b>CORRESPONDENCE DATA</b>									
Fax Number:	(651)686-7111								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	651-686-6633								
Email:	waltigney@ip-firm.com								
Correspondent Name:	CRAWFORD MAUNU PLLC								
Address Line 1:	1150 NORTHLAND DRIVE								
Address Line 2:	STE 100								
Address Line 4:	SAINT PAUL, MINNESOTA 55120								
ATTORNEY DOCKET NUMBER:	STFD.199US								
NAME OF SUBMITTER:	Robert J. Crawford, Esq.								

Total Attachments: 4  
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**PATENT  
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Docket No. STFD.199US (S06-398A)

Att: Robert  
Crawford  
From: Dr. Karl Deisseroth  
Spgt.

**ASSIGNMENT**

WHEREAS, We, Feng Zhang, residing at 334 Olmsted Road, #347, Stanford, California 94305; Karl Deisseroth, residing at 70 Peter Courtts Circle, Palo Alto, California 94305; and Edward Stuart Boyden, residing at 100 Memorial Drive #11-2C, Cambridge, Massachusetts 02142 made certain new and useful inventions and improvements for which we herewith filed an application for Letters Patent of the United States, U.S. Patent Application Serial-No. 12/522,520 filed on July 8, 2009 and entitled: **SYSTEM FOR OPTICAL STIMULATION OF TARGET CELLS** (Attorney Docket No. STFD.199US); this U.S. patent application being a national stage filing under 35 U.S.C. 371 of International Application No. PCT/US2008/050745 filed on January 10, 2008, which claims benefit under 35 U.S.C. § 119(e) of U.S. Provisional Patent Application Serial No. 60/879,669 filed on January 10, 2007, and of U.S. Provisional Patent Application Serial No. 60/903,248 filed on February 23, 2007.

AND WHEREAS, The Board of Trustees of the Leland Stanford Junior University, a corporation organized and existing under and by virtue of the laws of the State of California, and having an office and place of business at 1705 El Camino Real, Palo Alto, California 94306-1106 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the application, all divisions, continuations, conversions, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said

improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this date:

30 - Dec - 2009  
(day) (month) (year)

Feng Zhang  
Feng Zhang

IN TESTIMONY WHEREOF, I have hereunto set my hand on this date:

\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_  
(day) (month) (year)

\_\_\_\_\_  
Karl Deisseroth

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Docket No. STFD.199US (S06-398A)

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Karl Deisseroth

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Feng Zhang

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\_\_\_\_\_  
Karl Deisseroth

IN TESTIMONY WHEREOF, I have hereunto set my hand on this date:

| 11 - 18 - 2009  
(day) (month) (year)

\_\_\_\_\_  
/Edward S.

Boyden/\_\_\_\_\_

\_\_\_\_\_  
Edward Stuart Boyden