

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2776619

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	QIANG XIONG	03/10/2014
	JIANYI ZHANG	03/19/2014
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	REGENTS OF THE UNIVERSITY OF MINNESOTA	
<b>Street Address:</b>	450 MCNAMARA ALUMNI CENTER	
<b>Internal Address:</b>	200 OAK STREET S.E.	
<b>City:</b>	MINNEAPOLIS	
<b>State/Country:</b>	MINNESOTA	
<b>Postal Code:</b>	55455-2070	
<b>PROPERTY NUMBERS Total: 2</b>		
	<b>Property Type</b>	<b>Number</b>
	<b>Application Number:</b>	61762619
	<b>Application Number:</b>	14175518
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>		
<b>Email:</b>	sara.kerstein@quarles.com	
<b>Correspondent Name:</b>	SARA J. KERSTEIN	
<b>Address Line 1:</b>	411 E. WISCONSIN AVENUE	
<b>Address Line 2:</b>	QUARLES & BRADY, LLP	
<b>Address Line 4:</b>	MILWAUKEE, WISCONSIN 53202	
<b>ATTORNEY DOCKET NUMBER:</b>	920171.00054	
<b>NAME OF SUBMITTER:</b>	SARA J. KERSTEIN	
<b>SIGNATURE:</b>	/Sara J. Kerstein/	
<b>DATE SIGNED:</b>	03/20/2014	
<b>Total Attachments: 2</b>		
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source=UMN Assignment#page2.tif		

**ASSIGNMENT**

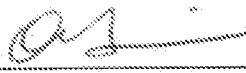
WHEREAS, the undersigned have made certain inventions which are described in an application for Letters Patent of the United States entitled: **METHOD FOR IN VIVO MEASUREMENT OF ADENOSINE TRIPHOSPHATE HYDROLYSIS RATE USING DOUBLE SATURATION TRANSFER MAGNETIC RESONANCE IMAGING AND SPECTROSCOPY** under U.S. Provisional Application No. 61/762,619 filed February 8, 2013, and **SYSTEM AND METHOD FOR ASSESSING ADENOSINE TRIPHOSPHATE HYDROLYSIS RATE USING DOUBLE SATURATION TRANSFER MAGNETIC RESONANCE IMAGING AND SPECTROSCOPY** under U.S. Application No. 14/175,518, filed February 7, 2014, and

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA, a corporation organized and existing under and by virtue of the laws of the State of Minnesota, and having a business address of 450 McNamara Alumni Center, 200 Oak Street S.E., Minneapolis, MN 55455-2070 is desirous of acquiring the entire interest in said inventions throughout the United States of America and the territories thereof, for all other countries and under all international agreements,

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00), and other good and valuable consideration, receipt whereof is hereby acknowledged, the undersigned hereby sell(s), assign(s) and transfer(s) unto said Company, its successors and assigns, the entire right, title and interest throughout the United States of America and the territories thereof, for all foreign countries and under all international agreements in and to said inventions, the aforesaid application, all other applications hereafter filed in the United States, in any other country, or under any international agreement based in whole or in part on said inventions, and all Letters Patents granted upon said applications by the United States, by any other country or under any international agreement, and do hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said Company.

The undersigned further grant to said Company, its successors and assigns, the right to claim for any of said applications the full benefits and priority rights of any international agreement between the United States and any foreign country or countries of between any other countries. The undersigned hereby warrants that they have the full right to make the conveyance herein, and hereby covenants that the heirs, legal representatives and assigns of the undersigned, will when requested, communicate to said Company, its representatives, successors and assigns, all facts known respecting said inventions, execute all divisional, continuing, reissue, reexamination and foreign or international applications, together with individual assignment therefore, make all rightful oaths, sign all lawful papers, testify in any legal proceeding and generally do everything possible to aid said Company, its successors and assigns, in the obtaining of Letters Patent.

IN TESTIMONY WHEREOF, the undersigned have hereunto executed this assignment at the location and on the date indicated below.

Signature:   
 Name: Qiang Xiong  
 Address: 250 Massachusetts Ave.  
Cambridge, MA 02139  
 Date: 3/10/2014

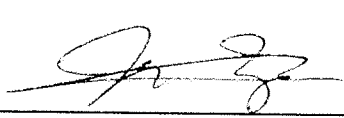
STATE OF: \_\_\_\_\_  
 COUNTY OF: United States

Before me on this \_\_\_\_\_ day of \_\_\_\_\_, 2014 came Qiang Xiong, to me known to be the person named in the foregoing assignment and he/she acknowledges his/her execution therefore to be his/her free act and deed.

(SEAL)

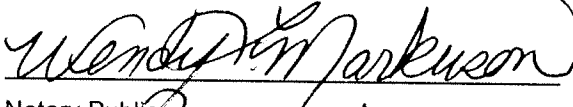
\_\_\_\_\_  
 Notary Public,

State of \_\_\_\_\_

Signature:  3/19/2014  
 Name: Jianyl Zhang STATE OF: Minnesota  
 Address: 401 E River Pkwy, Rm 268 COUNTY OF: Anoka  
Minneapolis, MN 55455  
 Date: 3/19/2014

Before me on this 19<sup>th</sup> day of March, 2014 came Jianyl Zhang, to me known to be the person named in the foregoing assignment and he/she acknowledges his/her execution therefore to be his/her free act and deed.

(SEAL)

  
 Notary Public  
 State of Minnesota

