

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Robert H. Mach</td><td>07/28/2009</td></tr><tr><td>Wenhua Chu</td><td>03/31/2009</td></tr><tr><td>Richard S. Hotchkiss</td><td>08/10/2009</td></tr><tr><td>William G. Hawkins</td><td>03/31/2009</td></tr><tr><td>Rebecca L. Aft</td><td>08/07/2009</td></tr><tr><td>Suwanna Vangveravong</td><td>03/31/2009</td></tr><tr><td>Zhude Tu</td><td>07/27/2009</td></tr></tbody></table>		Name	Execution Date	Robert H. Mach	07/28/2009	Wenhua Chu	03/31/2009	Richard S. Hotchkiss	08/10/2009	William G. Hawkins	03/31/2009	Rebecca L. Aft	08/07/2009	Suwanna Vangveravong	03/31/2009	Zhude Tu	07/27/2009
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Suwanna Vangveravong	03/31/2009																
Zhude Tu	07/27/2009																
RECEIVING PARTY DATA																	
Name:	Washington University																
Street Address:	One Brookings Drive																
City:	St. Louis																
State/Country:	ILLINOIS																
Postal Code:	63130																
PROPERTY NUMBERS Total: 1																	
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11776533</td></tr></tbody></table>		Property Type	Number	Application Number:	11776533												
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CORRESPONDENCE DATA																	
Fax Number: (314)259-5959																	
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
Phone: 314-259-5859																	
Email: patents@sonnenschein.com																	
Correspondent Name: G. Harley Blosser																	
Address Line 1: PO Box 061080																	
Address Line 2: Wacker Drive Station, Sears Tower																	
Address Line 4: Chicago, ILLINOIS 60606																	
ATTORNEY DOCKET NUMBER:	60005161-0306																

OP \$40.00 11776533

500936737

PATENT
REEL: 023098 FRAME: 0533

NAME OF SUBMITTER:

Elizabeth C. Holtmann

Total Attachments: 10

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TECHNOLOGY ASSIGNMENT

WU Case: 006766

ASSIGNORS:

Name: Robert H. Mach Ph.D.
Resident City/State: Eureka, MO
Name: Wenhua Chu
Resident City/State: St. Louis, MO
Name: Richard S. Hotchkiss M.D.
Resident City/State: ,
Name: William G. Hawkins
Resident City/State: ,
Name: Rebecca L. Aft MD, PhD
Resident City/State: ,
Name: Suwanna Vangveravong
Resident City/State: ,
Name: Zhude Tu
Resident City/State: ,

WHEREAS, the aforementioned individuals (the "ASSIGNORS") have developed a certain INVENTION having WU OTM Case No. 006766 and being entitled Sigma-2 Receptor Ligands as Chemosensitizers (collectively, with all future enhancements and improvements thereto as well as all related original works of authorship related thereto other than those solely of an artistic, literary or scholarly nature, as the "INVENTION");

WHEREAS, the ASSIGNORS have executed an APPLICATION for a United States Patent based on the INVENTION, entitled SIGMA 2 RECEPTOR LIGANDS AND THERAPUTIC USES THEREFOR,
7-11-2007
filed on 7-11-2007, and assigned APPLICATION Serial No. 11/776,533.
(the "APPLICATION");

WHEREAS, Washington University, a corporation of the State of Missouri having its principal office and place of business at One Brookings Drive, St. Louis, Missouri, 63130, ("ASSIGNEE") is desirous of acquiring the entire and exclusive right, title, and interest in and to the INVENTION and the APPLICATION;

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the ASSIGNORS hereby sell, assign and transfer to ASSIGNEE the full and exclusive right, title and interest in the United States (including its territories and dependencies) and all countries foreign thereto in, to and under the INVENTION,

the APPLICATION, and any other United States APPLICATIONS (including provisional, non-provisional, divisional, continuing and reissue APPLICATIONS) based in whole or in part on the APPLICATION or in whole or in part on the INVENTION, and any patents (including extensions thereof) of any country that have been or may be granted on any of the aforesaid APPLICATIONS or on the INVENTION or any part thereof and including all rights to claim priority through any international convention or treaty and all copyrights on or related to the INVENTION;

ASSIGNORS each agree, to each creator's binding personal share of any income generated by the INVENTION as delineated in the attached Exhibit A, and that all future agreements regarding such personal shares shall be in writing and signed by all creators;

ASSIGNORS hereby warrant and represent to Assignee, its successors, legal representatives and assigns, that at the time of execution of this assignment, the ASSIGNORS listed above are the sole individuals employed by the ASSIGNEE who have made contributions to the INVENTION, that the ASSIGNORS are unencumbered and have good and full right and lawful authority to sell and convey the same in the manner herein set forth, and that all works of authorship assigned herein are original works created solely by the ASSIGNORS and are free from plagiarized, libelous, obscene or infringing material;

ASSIGNORS hereby authorize and request the Commissioner of Patents of the United States of America, to issue any and all United States Patents that may be granted on any assigned APPLICATION or on the INVENTION or any part thereof, in the name of ASSIGNEE;

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this sale, assignment and transfer;

ASSIGNORS hereby grant to ASSIGNEE and its agents and attorneys the power and right to insert herein the title, serial number and filing date of the APPLICATION, the OTM case number and title of the INVENTION after this Assignment is executed by the ASSIGNORS; and

ASSIGNORS further covenant that upon ASSIGNEE's request they will provide promptly to ASSIGNEE all pertinent facts and documents relating to the aforesaid APPLICATIONS and the INVENTION as may be known and accessible to ASSIGNORS, and ASSIGNORS will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives without further consideration any and all

papers, instruments or affidavits required to apply for, obtain, maintain and enforce the aforesaid APPLICATIONS that may be deemed necessary or desirable by ASSIGNEE to carry out the purposes hereof.

For the event that ASSIGNEE is unable, after reasonable effort, to secure any ASSIGNOR's signature on any APPLICATION, paper or other instrument relating to any patent, patent APPLICATION, letters patent, copyright or other analogous protection relating to the INVENTION in any country, whether because of the ASSIGNOR's mental incapacity, death or for any other reason whatsoever, each ASSIGNOR hereby irrevocably designates and appoints ASSIGNEE and its duly authorized officers and agents as each ASSIGNOR's agent and attorney in fact to act for and to execute and file any such APPLICATION, paper or other instrument on ASSIGNOR's behalf and to do all other lawfully permitted acts to further the prosecution and issuance of any patent, patent APPLICATION, letters patent, copyright or any other analogous protection related to the INVENTION with the same legal force and effect as if executed by such ASSIGNOR.

For the convenience of the parties, any number of counterparts of the Assignment may be executed by the parties hereto. Each such counterpart shall be and shall be deemed to be an original instrument but all such counterparts taken together shall constitute one and the same assignment.

IN WITNESS WHEREOF, the ASSIGNORS have hereunto set their hand to the foregoing assignment.

Robert H. Mach

Signature – Robert H. Mach Ph.D.

7/28/09
Date

HOME ADDRESS:
519 Meramec View Drive

Eureka, MO 63025

ACKNOWLEDGMENT

STATE OF Missouri)

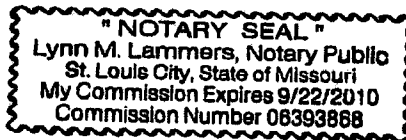
CITY OF St. Louis) SS.

On this 28 day of July, 2009, before me, a Notary Public,
personally appeared Robert H. Mach Ph.D., known to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.

Lynn M. Lammers
Notary Public

My Commission Expires:
09/22/2010 [SEAL]



Wenhua Chu
Signature -- Wenhua Chu

3/31/09
Date

HOME ADDRESS:
10333 Garibaldi Place

St. Louis, MO 63131

ACKNOWLEDGMENT

STATE OF Missouri)
CITY OF St Louis) SS.

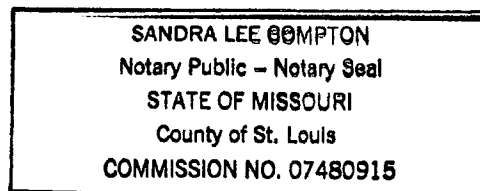
On this 31st day of March, 2009, before me, a Notary Public,
personally appeared Wenhua Chu, known to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.

Sandra Lee Compton
Notary Public

My Commission Expires:

6-12-2011 [SEAL]



Richard S Hotchkiss

Signature -- Richard S. Hotchkiss M.D.

8/10/09

Date

HOME ADDRESS:

5566

CSRB

ACKNOWLEDGMENT

STATE OF Missouri
CITY OF St. Louis) SS.

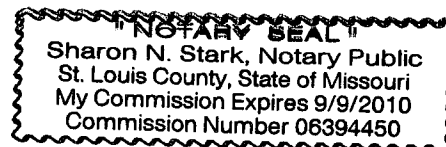
On this 10 day of August, 2009, before me, a Notary Public,
personally appeared Richard S Hotchkiss to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.

Sharon N. Stark
Notary Public

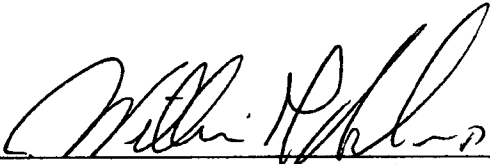
My Commission Expires:

_____ [SEAL]



PATENT

REEL: 023098 FRAME: 0540


Signature -- William G. Hawkins

3/31/09.
Date

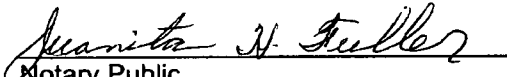
HOME ADDRESS:

ACKNOWLEDGMENT

STATE OF Missouri)
CITY OF St. Louis) SS.

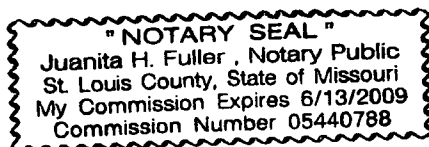
On this 31st day of March, 2009, before me, a Notary Public,
personally appeared William G. Hawkins, known to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.


Notary Public

My Commission Expires:

6/13/2009 [SEAL]



Rebecca L. Aft
Signature -- Rebecca L. Aft MD, PhD

8/7/09
Date

HOME ADDRESS:
3348
CSRB

ACKNOWLEDGMENT

STATE OF Missouri)
COUNTY St. Louis) SS.
CITY OF St. Louis)

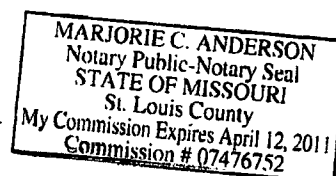
On this 7th day of August, 2009, before me, a Notary Public,
personally appeared Rebecca Aft, known to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.

Marjorie C. Anderson
Notary Public

My Commission Expires:

April 12, 2011 [SEAL]



Suwanna Vangveravong

Signature -- Suwanna Vangveravong

3/31/09

Date

HOME ADDRESS:
Campus Box 8225

ACKNOWLEDGMENT

STATE OF Missouri)

CITY OF St Louis) SS.

On this 31st day of March, 2009, before me, a Notary Public,
personally appeared Suwanna Vangveravong, known to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.

Sandra Lee Compton
Notary Public

My Commission Expires:

6-12-2011 [SEAL]



Zhude Tu
Signature – Zhude Tu Date 2009-07-27

HOME ADDRESS: 10329 Cable ave
Frontenac, MO 63131

ACKNOWLEDGMENT

STATE OF Missouri)
CITY OF St. Louis) SS.

On this 28 day of July, 2009, before me, a Notary Public,
personally appeared Zhude Tu, known to me to be the person described, in
and who executed, the foregoing assignment and acknowledged that he executed
said instrument as his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official seal
the day and year first above written.

Lynn M. Lammers
Notary Public

My Commission Expires:
09/22/2010 [SEAL]

