

Form PTO-1595 (Rev. 01-09)
OMB No. 0651-0027 (exp. 02/28/2009)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

- (1) David P. Cardin - Executed October 6, 2009
- (2) Paul Greenspan - Executed September 23, 2009
- (3) Stepan Vyskocil - Executed October 20, 2009
- (4) Jeffrey Gaulin - Executed September 22, 2009

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) See dates above and on addit'l pg.

- Assignment Merger
- Security Agreement Change of Name
- Joint Research Agreement
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other _____

2. Name and address of receiving party(ies)

Name: Millennium Pharmaceuticals, Inc.

Internal Address: _____

Street Address: 40 Lansdowne Street

City: Cambridge

State: MA

Country: United States Zip: 02139

Additional name(s) & address(es) attached? Yes No

4. Application or patent number(s):

This document is being filed together with a new application.

A. Patent Application No.(s)

12/456,455

B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Karoline K.M. Shalr

Internal Address: Millennium Pharmaceuticals, Inc.

Street Address: 40 Lansdowne Street

City: Cambridge

State: MA Zip: 02139

Phone Number: 617-444-3227

Fax Number: 617-551-8820

Email Address: karoline.shalr@mpl.com

6. Total number of applications and patents involved:

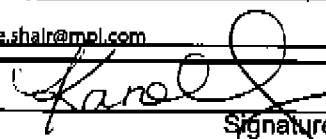
7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

8. Payment Information

Deposit Account Number 501668

Authorized User Name Karoline K.M. Shalr

9. Signature:

Signature

December 15, 2009

Date

Karoline K.M. Shalr
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

39

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

CH \$40.00 501668 12456455

Patent Application No. 12/456,455

Tianlin Xu

Execution Date: September 23, 2009

Christelle C. Renou

Execution Date: September 24, 2009

Practitioner's Docket No. MPI08-002P2RM

PATENT

For: U.S. and Foreign Rights

For: U.S. Application

By: Inventors

ASSIGNMENT OF INVENTION

WHEREAS,

ASSIGNORS:

F *DPL 6-6-2009*
David Cardin
26 Fairview Avenue, Wilmington, Massachusetts 01887
Nationality: United States

Paul Greenspan
8 Overlook Drive, Acton, Massachusetts 01720
Nationality: United States

Stepan Vyskocil
24 Hovey Street, Watertown, Massachusetts 02472
Nationality: Czech Republic

Jeffrey Gaulin
17 Justin Circle, Londonderry, Rockingham, New Hampshire 03053
Nationality: _____

Tianlin Xu
2 Arrowwood Drive, Shrewsbury, Massachusetts 01545
Nationality: _____

Christelle C. Renou
3 Plaza Avenue, Stoneham, Massachusetts 02180
Nationality: France

have co-invented a certain invention entitled:

HETEROARYLS AND USES THEREOF

for which they have executed a provisional application for a United States patent, which was filed on June 17, 2009, under U.S. Patent Application Serial No. 12/456,455; and

Practitioner's Docket No. MPI08-002P2RM

WHEREAS,

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS, INC.
40 Landsdowne Street
Cambridge, Massachusetts 02139
State of Incorporation: Delaware

is desirous of acquiring ASSIGNORS' entire domestic and foreign right, title, and interest in and under the invention described in the patent application;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby, without reservations, sell, assign and transfer to ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and to the invention in the United States and in every foreign country, and our entire right, title, and interest in and to the patent application and such other applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications and utility model applications) as may be filed on the invention in the United States or in any foreign country, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon; said invention, applications, and patents to be held and enjoyed by ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made.

ASSIGNORS hereby authorize the ASSIGNEE to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

ASSIGNORS hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein. ASSIGNORS further acknowledge that this assignment carries with it the right in ASSIGNEE to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of the United States application (or any other application on the invention) to gain priority with respect to other applications.

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

ASSIGNORS further covenant that we will at any time upon request, without further or additional consideration, but at the expense of the ASSIGNEE, execute and deliver such additional assignments and other writings and do such additional acts as the ASSIGNEE may

Practitioner's Docket No. MPI08-002P2RM

deem necessary or desirable to perfect the ASSIGNEE's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the United States or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representative of all parties hereto.

AND, ASSIGNORS do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 6th day of October, 2009.

David P. Cardin
Signature of Inventor ~~DAVID CARDIN~~ David P. Cardin DPC 10/6-2009

Courtney Cellis
Witness 1 Signature

Courtney Cellis
Witness 1 (Typed or Handwritten) Name

122 Springs Rd. Bedford, MA 01730
Witness 1 Address

Jeffrey Ciavari
Witness 2 Signature

Jeffrey Ciavarri
Witness 2 (Typed or Handwritten) Name

30 Winthrop Ave, Reading, MA 01867
Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor PAUL GREENSPAN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor STEPAN VYSKOCIL

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor JEFFREY GAULIN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor TIANLIN XU

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 24th day of September, 2009.

Reno
Signature of Inventor **CHRISTELLE C. RENO**

Kenneth Gigstal
Witness 1 Signature

Kenneth Gigstal
Witness 1 (Typed or Handwritten) Name

18 Briarwood Drive, Westford, MA 01886
Witness 1 Address

He Xu
Witness 2 Signature

He Xu
Witness 2 (Typed or Handwritten) Name

2, Walden Dr., #9, Natick, MA 01760
Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

PATENT

For: U.S. and Foreign Rights
For: U.S. Application
By: Inventors

ASSIGNMENT OF INVENTION

WHEREAS,

ASSIGNORS:

David Cardin
26 Fairview Avenue, Wilmington, Massachusetts 01887
Nationality: United States

Paul Greenspan
8 Overlook Drive, Acton, Massachusetts 01720
Nationality: United States

Stepan Vyskocil
24 Hovey Street, Watertown, Massachusetts 02472
Nationality: Czech Republic

Jeffrey Gaulin
17 Justin Circle, Londonderry, Rockingham, New Hampshire 03053
Nationality: _____

Tianlin Xu
2 Arrowwood Drive, Shrewsbury, Massachusetts 01545
Nationality: China

From Sept 23rd, 2009

Christelle C. Repou
3 Plaza Avenue, Stoneham, Massachusetts 02180
Nationality: France

have co-invented a certain invention entitled:

HETEROARYLS AND USES THEREOF

for which they have executed a provisional application for a United States patent, which was filed on June 17, 2009, under U.S. Patent Application Serial No. 12/456,455; and

Practitioner's Docket No. MPI08-002P2RM**WHEREAS,****ASSIGNEE:****MILLENNIUM PHARMACEUTICALS, INC.**

40 Landsdowne Street

Cambridge, Massachusetts 02139

State of Incorporation: Delaware

is desirous of acquiring ASSIGNORS' entire domestic and foreign right, title, and interest in and under the invention described in the patent application;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby, without reservations, sell, assign and transfer to ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and to the invention in the United States and in every foreign country, and our entire right, title, and interest in and to the patent application and such other applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications and utility model applications) as may be filed on the invention in the United States or in any foreign country, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon; said invention, applications, and patents to be held and enjoyed by ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made.

ASSIGNORS hereby authorize the ASSIGNEE to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

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Practitioner's Docket No. MPI08-002P2RM

deem necessary or desirable to perfect the ASSIGNEE's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the United States or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representative of all parties hereto.

AND, ASSIGNORS do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor DAVID CARDIN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor PAUL GREENSPAN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor STEPAN VYSKOCIL

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor JEFFREY GAULIN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 23rd day of September, 2009.



Signature of Inventor **TIANLIN XU**



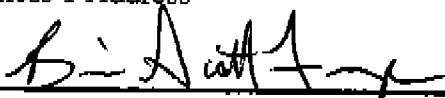
Witness 1 Signature

CEO TAKAOKA

Witness 1 (Typed or Handwritten) Name

2366 Commonwealth Ave #2-2, NEWTON, MA 02466

Witness 1 Address



Witness 2 Signature

Brian Scott Freeze

Witness 2 (Typed or Handwritten) Name

67 Gates St Unit 1 Boston, MA 02127

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor CHRISTELLE C. RENO

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

PATENT

For: U.S. and Foreign Rights

For: U.S. Application

By: Inventors

ASSIGNMENT OF INVENTION

WHEREAS,

ASSIGNORS:

David Cardin

26 Fairview Avenue, Wilmington, Massachusetts 01887

Nationality: United States

Paul Greenspan

8 Overlook Drive, Acton, Massachusetts 01720

Nationality: United States

Stepan Vyskocil

24 Hovey Street, Watertown, Massachusetts 02472

Nationality: Czech Republic

Jeffrey Gaulin

17 Justin Circle, Londonderry, Rockingham, New Hampshire 03053

Nationality: United States *JG 09/22/2009*

Tianlin Xu

2 Arrowwood Drive, Shrewsbury, Massachusetts 01545

Nationality: _____

Christelle C. Renou

3 Plaza Avenue, Stoneham, Massachusetts 02180

Nationality: France

have co-invented a certain invention entitled:

HETEROARYLS AND USES THEREOF

for which they have executed a provisional application for a United States patent, which was filed on June 17, 2009, under U.S. Patent Application Serial No. 12/456,455; and

Practitioner's Docket No. MPI08-002P2RM**WHEREAS,****ASSIGNEE:****MILLENNIUM PHARMACEUTICALS, INC.**

40 Landsdowne Street

Cambridge, Massachusetts 02139

State of Incorporation: Delaware

is desirous of acquiring ASSIGNORS' entire domestic and foreign right, title, and interest in and under the invention described in the patent application;

Now, **THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby, without reservations, sell, assign and transfer to ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and to the invention in the United States and in every foreign country, and our entire right, title, and interest in and to the patent application and such other applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications and utility model applications) as may be filed on the invention in the United States or in any foreign country, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon; said invention, applications, and patents to be held and enjoyed by ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made.

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Practitioner's Docket No. MPI08-002P2RM

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AND, ASSIGNORS do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor DAVID CARDIN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor PAUL GREENSPAN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor STEPAN VYSKOCIL

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name


Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 22 day of September, 2009.



Signature of Inventor **JEFFREY GAULIN**



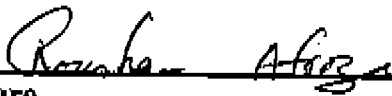
Witness 1 Signature

Tzu Tshin Wong

Witness 1 (Typed or Handwritten) Name

74 Flett Rd, Belmont, MA 02478

Witness 1 Address



Witness 2 Signature

ROUSHAN AFROZE

Witness 2 (Typed or Handwritten) Name

61 Laconia St Lexington MA 02420

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor TIANLIN XU

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor CHRISTELLE C. RENO

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM**PATENT**

For: U.S. and Foreign Rights

For: U.S. Application

By: Inventors

ASSIGNMENT OF INVENTION**WHEREAS,****ASSIGNORS:**David Cardin26 Fairview Avenue, Wilmington, Massachusetts 01887Nationality: United StatesPaul Greenspan8 Overlook Drive, Acton, Massachusetts 01720Nationality: United StatesStepan Vyskocil~~24 Hovey Street, Watertown, Massachusetts 02472~~Nationality: Czech Republic*34 EUSTIS STREET,
ARLINGTON, MA 02476*Jeffrey Gaulin17 Justin Circle, Londonderry, Rockingham, New Hampshire 03053

Nationality: _____

*CC*Tianlin Xu2 Arrowwood Drive, Shrewsbury, Massachusetts 01545

Nationality: _____

Christelle C. Renou3 Plaza Avenue, Stoneham, Massachusetts 02180Nationality: France

have co-invented a certain invention entitled:

HETEROARYLS AND USES THEREOF

for which they have executed a provisional application for a United States patent, which was filed on June 17, 2009, under U.S. Patent Application Serial No. 12/456,455; and

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WHEREAS,

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MILLENNIUM PHARMACEUTICALS, INC.

40 Landsdowne Street

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IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor DAVID CARDIN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature


Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 7th day of September, 2009.


Signature of Inventor **PAUL GREENSPAN**


Witness 1 Signature

Christopher Blackburn
Witness 1 (Typed or Handwritten) Name

25 Western Ave
Witness 1 Address

Natick MA 01760

Tricia J Vos Tricia J Vos
Witness 2 Signature

203 Woburn St Medford, MA 02155
Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 20 day of OCTOBER, 2009.



Signature of Inventor **STEPAN VYSKOCIL**



Witness 1 Signature

Paul Fleming

Witness 1 (Typed or Handwritten) Name

38 Fairview Weston MA 02493

Witness 1 Address



Witness 2 Signature

Jeffrey Ciavanni

Witness 2 (Typed or Handwritten) Name

30 Winthrop Ave, Reading MA 01867

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor JEFFREY GAULIN

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor TIANLIN XU

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address

Practitioner's Docket No. MPI08-002P2RM

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of _____, 2009.

Signature of Inventor CHRISTELLE C. RENO

Witness 1 Signature

Witness 1 (Typed or Handwritten) Name

Witness 1 Address

Witness 2 Signature

Witness 2 (Typed or Handwritten) Name

Witness 2 Address