

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>Jiatao Zhang</td> <td>06/19/2012</td> </tr> <tr> <td>Yun Tang</td> <td>07/06/2012</td> </tr> <tr> <td>Min Ouyang</td> <td>07/01/2012</td> </tr> </tbody> </table>		Name	Execution Date	Jiatao Zhang	06/19/2012	Yun Tang	07/06/2012	Min Ouyang	07/01/2012
Name	Execution Date								
Jiatao Zhang	06/19/2012								
Yun Tang	07/06/2012								
Min Ouyang	07/01/2012								
RECEIVING PARTY DATA									
Name:	University of Maryland, College Park								
Street Address:	0133 Cole Student Activities Building								
City:	College Park								
State/Country:	MARYLAND								
Postal Code:	20742								
PROPERTY NUMBERS Total: 2									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>61467994</td> </tr> <tr> <td>Application Number:</td> <td>13428516</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	61467994	Application Number:	13428516		
Property Type	Number								
Application Number:	61467994								
Application Number:	13428516								
CORRESPONDENCE DATA									
Fax Number:	(301)670-2814								
Phone:	3016702818								
Email:	epatent@ipatlaw.com								
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	Jeffrey I. Auerbach								
Address Line 1:	2275 Research Blvd.								
Address Line 2:	Suite 500								
Address Line 4:	Rockville, MARYLAND 20850								
ATTORNEY DOCKET NUMBER:	2105.0053C								
NAME OF SUBMITTER:	Jeffrey I. Auerbach								
Total Attachments: 3 source=ExecutedAssignment#page1.tif source=ExecutedAssignment#page2.tif source=ExecutedAssignment#page3.tif									

OP \$80.00 61467994

INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

THIS AGREEMENT by and between: **Min Ouyang**, an individual having a principal residence at **4808 Flanders Avenue, Kensington, MD 20895** (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. **PS-2010-031** and Attorney Docket No. **2105.0053C** entitled "**Methods for the Production of Nanoscale Heterostructures**" and further described in US provisional patent application number **61/467994** filed **March 26, 2011** and application for Letters Patent in the United States serial number **13/428516** filed **March 23, 2012** and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Policy on Intellectual Property, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the University of Maryland Policy on Intellectual Property as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

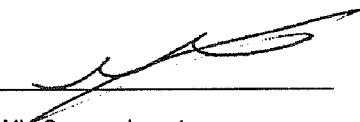
WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR

Agreed to by: _____

Printed Name: Min Ouyang, Inventor

Date: _____

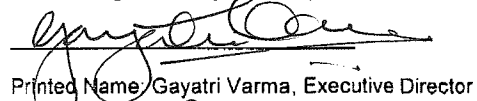

7/1/2012

ASSIGNEE (University of Maryland)

Acknowledged and Agreed to by: _____

Printed Name: Gayatri Varma, Executive Director

Date: _____


July 9, 2012

INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

THIS AGREEMENT by and between: Yun Tang, an individual having a principal residence at 100 Memorial Drive, #02-12C, Cambridge, MA 02142 (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. PS-2010-031 and Attorney Docket No. 2105.0053C entitled "Methods for the Production of Nanoscale Heterostructures" and further described in US provisional patent application number 61/467994 filed March 26, 2011 and application for Letters Patent in the United States serial number 13/428516 filed March 23, 2012 and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Policy on Intellectual Property, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the University of Maryland Policy on Intellectual Property as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR

Agreed to by:

Printed Name: Yun Tang, Inventor

Date:



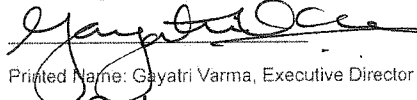
July 06, 2012

ASSIGNEE (University of Maryland)

Acknowledged and Agreed to by:

Printed Name: Gayatri Varma, Executive Director

Date:


July 9, 2012

of Technology, Beijing, China 100081 INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT No. 8 Building 306, Beijing Institute

THIS AGREEMENT by and between: Jiatao Zhang, an individual having a principal residence at 4305 Rowall Drive, Apt. 302, College Park, MD 20740 (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. **PS-2010-031** and Attorney Docket No. **2105.0053C** entitled "**Methods for the Production of Nanoscale Heterostructures**" and further described in US provisional patent application number **61/467994** filed **March 26, 2011** and application for Letters Patent in the United States serial number **13/428516** filed **March 23, 2012** and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Policy on Intellectual Property, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the University of Maryland Policy on Intellectual Property as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR

Agreed to by:

Printed Name: Jiatao Zhang, Inventor

Date:

2012.6.19

ASSIGNEE (University of Maryland)

Acknowledged and Agreed to by:

Printed Name: Gayatri Varma, Executive Director

Date:

July 9, 2012

PATENT