

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3486758

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	NADIA PERVEZ	04/17/2012
	IOANNIS KYMISSIS	07/17/2012
	ZHANG JIA	04/09/2012
	MARSHALL COX	04/17/2012
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK	
<b>Street Address:</b>	535 WEST 116TH STREET	
<b>Internal Address:</b>	412 LOW MEMORIAL LIBRARY	
<b>City:</b>	NEW YORK	
<b>State/Country:</b>	NEW YORK	
<b>Postal Code:</b>	10027	
<b>PROPERTY NUMBERS Total: 1</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Application Number:</b>	14507175	
<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 using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
<b>Email:</b>	request@slwip.com	
<b>Correspondent Name:</b>	SCHWEGMAN, LUNDBERG & WOESSNER, P.A.	
<b>Address Line 1:</b>	P.O. BOX 2938	
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402	
<b>ATTORNEY DOCKET NUMBER:</b>	2413.136US2	
<b>NAME OF SUBMITTER:</b>	KASIE GROVER	
<b>SIGNATURE:</b>	/Kasie Grover/	
<b>DATE SIGNED:</b>	08/18/2015	
<b>Total Attachments: 13</b>		
source=2413136US2Recordation#page1.tif		
source=2413136US2Recordation#page2.tif		

source=2413136US2Recordation#page3.tif  
source=2413136US2Recordation#page4.tif  
source=2413136US2Recordation#page5.tif  
source=2413136US2Recordation#page6.tif  
source=2413136US2Recordation#page7.tif  
source=2413136US2Recordation#page8.tif  
source=2413136US2Recordation#page9.tif  
source=2413136US2Recordation#page10.tif  
source=2413136US2Recordation#page11.tif  
source=2413136US2Recordation#page12.tif  
source=2413136US2Recordation#page13.tif

RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: 2413.136US2

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Nadia Pervez, Ioannis Kymissis, Zhang Jia, Marshall Cox

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement ☐ Change of Name

☐ Other

2. Name and address of receiving party(ies):

Name: The Trustees of Columbia University in the City of New York

Street Address: 535 West 116th Street  
412 Low Memorial Library

City: New York State: New York Zip: 10027

Country: United States of America

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

Execution Date: April 17, 2012, July 17, 2012, April 9, 2012, April 17, 2012

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

Serial No. 14/507,175

Additional numbers attached? ☐ Yes ☒ No

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

Name: Timothy J. Christman

Address:

Schwegman Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402--0938

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 0.00

☐ Enclosed

☐ Authorized to be charged to deposit account 19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Timothy J. Christman/Reg. No. 59,481

Name of Person Signing



Signature

August 14, 2015

Date

Total number of pages including cover sheet: 13

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Mail Stop Assignment Recordation Services  
P.O. Box 1450  
Alexandria, VA 22313-1450

PATENT  
REEL: 036345 FRAME: 0356

ASSIGNMENT

*(NKP) 4/17/12*  
11249-11214, WHEREAS, We, Nadia Pervez, residing at 113 S. 2nd Street #1A, Brooklyn, NY 11249-11214, and Ioannis Kymissis, residing at 526 W 113th Street #43, New York, NY 10025, and Zhang Jia, residing at 104-21 68th Dr. Apt. B37, Forest Hills, NY 11375, and Marshall Cox, residing at 400W-119th Street-2K, New York, NY 10027, made certain *(MPL) 4/17/12*  
new and useful inventions and improvements which are described in an application for *119 Madison St. #43*  
U.S. Letters Patent on December 20, 2011, which application was assigned U.S. patent *Brooklyn, NY 11201*  
application serial number 13/331,392, and is entitled PHOTONIC CRYSTAL SPECTROMETER;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, ASSIGN AND TRANSFER to The Trustees of Columbia University in the City of New York (the "Assignee"), a corporation of the State of New York, having a place of business at 535 West 116th Street, 412 Low Memorial Library, New York, New York 10027, our entire right, title and interest for the United States and all foreign countries in and to: any and all inventions and improvements which are disclosed in the identified application for U.S. Letters Patent, and which may be further identified below, and any and all improvements thereto; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries based in whole or in part on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries based in whole or in part on such inventions and/or improvements; any application based in whole or in part on any of the foregoing; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based in whole or in part on the identified application or any of the foregoing;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. 68836 may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

Additional Application Information

*U.S. Provisional Application Serial No. 61/278,773, filed on October 12, 2009.*

*U.S. Provisional Application Serial No. 61/349,570, filed on May 28, 2010.*

*U.S. Provisional Application Serial No. 61/425,681, filed on December 21, 2010.*

*U.S. Provisional Application Serial No. 61/427,977, filed on December 29, 2010.*

*No U.S. Non-Provisional claim for priority is being made at this time.*

*PCT Application Serial No. PCT/US2010/052180, filed on October 11, 2010.*

*PCT Application Serial No. PCT/US2011/066167, filed on December 20, 2011.*

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;


WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned, and is to extend to the benefit of the successors, assigns and nominees of the Assignee.

AGREED as of the date of my signature below:

IN TESTIMONY WHEREOF, I have hereunto set my hand this 17 day of  
April, 2012.

  
\_\_\_\_\_  
Nadia Pervez

STATE OF \_\_\_\_\_)

)ss

COUNTY OF \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally appeared  
Nadia Pervez, to me known and known to me to be the person described in and who executed the  
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the  
uses and purposes therein set forth.


[SEAL]

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

Page 4 of 6

Serial Number: 13/331,392

APRIL, 2012.



STATE OF \_\_\_\_\_ )

}ss

COUNTY OF \_\_\_\_\_

[SEAL]

Notary Public

ASSIGNMENT  
Assignors: Nadia Pervez et al.  
Title: PHOTONIC CRYSTAL SPECTROMETER  
Page 5 of 6

Docket No: 2413.136US1  
Serial Number: 13/331,392

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Zhang Jia

STATE OF \_\_\_\_\_ )  
 )ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally appeared Zhang Jia, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]

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



Assignors: Nadiu Perez et al.  
Title: PHOTONIC CRYSTAL SPECTROMETER  
Page 6 of 6

IN TESTIMONY WHEREOF, I have hereunto set my hand this 17 day of

April, 2012.

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_)

[SEAL]

Notary Public

### ASSIGNMENT

WHEREAS, We, Nadia Pervez, residing at 113 S. 2nd Street #1A, Brooklyn, NY 11211, and Ioannis Kymissis, residing at 526 W 113th Street #43, New York, NY 10025, and Zhang Jia, residing at 104-21 68th Dr. Apt. B37, Forest Hills, NY 11375, and Marshall Cox, residing at 400W 119th Street 2K, New York, NY 10027, made certain new and useful inventions and improvements which are described in an application for U.S. Letters Patent on December 20, 2011, which application was assigned U.S. patent application serial number 13/331,392, and is entitled PHOTONIC CRYSTAL SPECTROMETER;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, ASSIGN AND TRANSFER to The Trustees of Columbia University in the City of New York (the "Assignee"), a corporation of the State of New York, having a place of business at 535 West 116th Street, 412 Low Memorial Library, New York, New York 10027, our entire right, title and interest for the United States and all foreign countries in and to: any and all inventions and improvements which are disclosed in the identified application for U.S. Letters Patent, and which may be further identified below, and any and all improvements thereto; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries based in whole or in part on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries based in whole or in part on such inventions and/or improvements; any application based in whole or in part on any of the foregoing; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based in whole or in part on the identified application or any of the foregoing;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. 68836 may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

#### Additional Application Information

*U.S. Provisional Application Serial No. 61/278,773, filed on October 12, 2009.*

*U.S. Provisional Application Serial No. 61/349,570, filed on May 28, 2010.*

*U.S. Provisional Application Serial No. 61/425,681, filed on December 21, 2010.*

*U.S. Provisional Application Serial No. 61/427,977, filed on December 29, 2010.*

*No U.S. Non-Provisional claim for priority is being made at this time.*

*PCT Application Serial No. PCT/US2010/052180, filed on October 11, 2010.*

*PCT Application Serial No. PCT/US2011/066167, filed on December 20, 2011.*

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned, and is to extend to the benefit of the successors, assigns and nominees of the Assignee.

AGREED as of the date of my signature below:

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of  
\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Nadia Pervez

STATE OF \_\_\_\_\_ )  
\_\_\_\_\_)ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally appeared  
Nadia Pervez, to me known and known to me to be the person described in and who executed the  
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the  
uses and purposes therein set forth.

[SEAL]

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

Docket No: 24(3,136US)  
Serial Number: 13/331,392

**PATENT**  
**REEL: 036345 FRAME: 0366**

IN TESTIMONY WHEREOF, I have hereunto set my hand this 9<sup>th</sup> day of

April, 2012

Zhang Jia

Zhang Jia

STATE OF MA

)ss

COUNTY OF ~~Worcester~~ Middlesex

ZJ 4/16/2012  
S.K 4/16/2012

On this 9 day of April, 2012 before me personally appeared Zhang Jia, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.



SHAWN S. KARIMI  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
November 30, 2012

[Signature]  
Notary Public

