

PATENT ASSIGNMENT

Electronic Version v1.1
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| 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>Chee Wei Wong</td> <td>12/17/2008</td> </tr> <tr> <td>Rohit Chatterjee</td> <td>12/18/2008</td> </tr> <tr> <td>Xiaochun Li</td> <td>12/30/2008</td> </tr> <tr> <td>Xugang Zhang</td> <td>12/22/2008</td> </tr> </tbody> </table> | | Name | Execution Date | Chee Wei Wong | 12/17/2008 | Rohit Chatterjee | 12/18/2008 | Xiaochun Li | 12/30/2008 | Xugang Zhang | 12/22/2008 |
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| Chee Wei Wong | 12/17/2008 | | | | | | | | | | |
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| Xiaochun Li | 12/30/2008 | | | | | | | | | | |
| Xugang Zhang | 12/22/2008 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| Name: | The Trustees of Columbia University in the City of New York | | | | | | | | | | |
| Street Address: | 412 Low Memorial Library, | | | | | | | | | | |
| Internal Address: | 535 West 116th Street | | | | | | | | | | |
| City: | New York | | | | | | | | | | |
| State/Country: | NEW YORK | | | | | | | | | | |
| Postal Code: | 10027 | | | | | | | | | | |
| 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>12905974</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 12905974 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 12905974 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| Fax Number: | | | | | | | | | | | |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> | | | | | | | | | | | |
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| Email: | patents@hugheshubbard.com | | | | | | | | | | |
| Correspondent Name: | Hughes Hubbard & Reed LLP | | | | | | | | | | |
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| Address Line 4: | New York, NEW YORK 10004 | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 011827-52389 | | | | | | | | | | |
| NAME OF SUBMITTER: | Lisa A. Chiarini | | | | | | | | | | |
| Total Attachments: 4 source=52389Assignment#page1.tif source=52389Assignment#page2.tif source=52389Assignment#page3.tif source=52389Assignment#page4.tif | | | | | | | | | | | |

CH \$40.00 12905974

ASSIGNMENT

WHEREAS, we, Chee Wei Wong, residing at 560 Riverside Drive, Apt. 8G, New York, NY 10027 USA; Rohit Chatterjee, residing at D3, Sical Race View Apts., 2 Race Course Road, Chennai, IN 600032; Xiaochun Li, residing at 8421 Castle Pines Drive, Madison, WI 53717 USA; and Xugang Zhang, residing at ~~129 Lathrop, Madison, WI 53726 USA~~ ^{222 W. Hampton Ave. Apt. 105, Milwaukee, WI 53217 USA} X, Z. 12/22/08 are the inventors of a certain new and useful invention and discovery, for which a patent application entitled "SYSTEMS AND METHODS FOR SENSING PROPERTIES OF A WORKPIECE AND EMBEDDING A PHOTONIC SENSOR IN METAL" was filed with the United States Patent and Trademark Office on July 3, 2008 as U.S. Patent Application No. 12/160,043 ("the Application").

WHEREAS, The Trustees of Columbia University in the City of New York, existing under the laws of the State of New York, having its principal office at 412 Low Memorial Library, 535 West 116th Street, New York, NY 10027, which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited.

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignors hereby assign to Assignee all of Assignors' right, title and interest in and to the Invention, all improvements therein, the Application and all priority rights arising therefrom, and any applications and/or patents, and any reissues and extensions thereof, which issue in any country upon any patent applications which correspond with any of the following: the Application; any application that claims priority from the Application (including utility applications, divisionals, continuations, continuations-in-part, international applications and/or any foreign regional and/or national applications), or any application based in whole or in part on any of the foregoing.

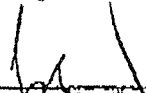
Assignors agree that such Assignors and Assignors' heirs and legal representatives will, without further consideration, cooperate with Assignee in the prosecution of all of the above applications, execute, verify, acknowledge and deliver all such further papers, including applications for patents and for reissues and extensions therefor, and instruments of assignment and transfer thereof, and will communicate any facts known to Assignors relating to the Invention, to obtain or maintain or enforce patents for the Invention and improvements therein in any and all countries and to vest title thereto in Assignee. Assignors further agree that such Assignors will, without further compensation to Assignors during the term of such Assignors' employment by Assignee and thereafter for reasonable compensation as determined by Assignee, perform such other acts as may be reasonably required

Assignment
U.S. Patent Application No.: 12/160,943

Attorney Docket No.: 19240.539-US2

when requested by Assignee, including attending depositions, preparing and executing declarations and affidavits and testifying as a witness, to obtain or maintain or enforce patents for the Invention and improvements therein in any and all countries and to vest title thereto in Assignee.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 17th day of Dec (Month/Year) 2008

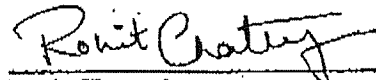


Chee Wei Wong

On this 17th day of Dec 2008 (Month/Year), Chee Wei Wong personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.

WITNESS: Jakson G. Gaudin
Printed Name: Jakson Gaudin
Residential Address: 507 Marshall Court
Uniondale, NY 11553

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 18th day of Dec (Month/Year) 2008



Rohit Chatterjee

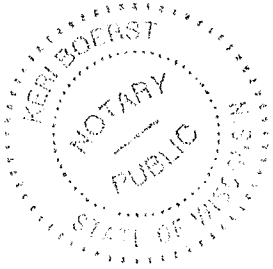
On this 18th day of Dec 2008 (Month/Year), Rohit Chatterjee, personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.

WITNESS: Kevin Cognetti
Printed Name: KEVIN COGNETTI
Residential Address: 114 OLD ORCHARD ROAD
CLARKS GREEN, PA 18411

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 30th day of 12/2008 (Month/Year)

Xiaochun Li
Xiaochun Li

On this 5th day of 12/2008 (Month/Year), Xiaochun Li, personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.



*Expires
9/2/12*

WITNESS: Keri Boerst
Printed Name: Keri Boerst
Residential Address: 1025 Menard Street
Abilene TX 79602

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this ___ day of ___ (Month/Year)

Xugang Zhang

On this ___ day of ___ (Month/Year), Xugang Zhang, personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.

WITNESS: _____
Printed Name: _____
Residential Address: _____

Assignment
U.S. Patent Application No.: 12/160,043

Attorney Docket No.: 19240.539-US2

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this ____ day of ____ (Month/Year)

Xiaochun Li

On this ____ day of ____ (Month/Year), Xiaochun Li, personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.

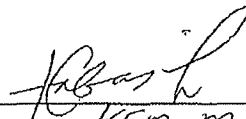
WITNESS: _____
Printed Name: _____
Residential Address: _____

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 22 day of 12/2008 (Month/Year)



Xugang Zhang

On this 22nd day of December, 2008 (Month/Year), Xugang Zhang, personally known to me to be the same individual who executed the foregoing Assignment, and who acknowledged to me that execution of the same was of his own free will for the use and purposes therein set forth.

WITNESS: 
Printed Name: KEN M. OBASIH
Residential Address: 2385 Wynfield Ct
Brookfield, WI 53045

