


Form PTO-1595 (Rev. 08/05)
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To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<p>1. Name of conveying party(ies): Ranojoy Bose Chee Wei Wong Xiaodong Yang Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK</u> Internal Address: _____ Street Address: _____ 412 Low Memorial Library 535 West 116th Street City: <u>New York</u> State: <u>New York</u> Country: <u>United States of America</u> Zip: <u>10027</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>10/9/2006</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____</p>	<p>4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>11/405,732</u> Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No B. Patent No.(s)</p>
<p>5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Matthew T. Byrne</u> <u>WILMER CUTLER PICKERING HALE AND DORR LLP</u> Internal Address: <u>Atty. Dkt.: 19240.371-US2</u> Street Address: <u>399 Park Avenue</u> City: <u>New York</u> State: <u>NY</u> Zip: <u>10022</u> Phone Number: <u>(212) 230-8800</u> Fax Number: <u>(212) 230-8888</u> Email Address: <u>matthew.byrne@wilmerhale.com</u></p>	<p>6. Total number of applications and patents involved: 1</p> <p>7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u> <input type="checkbox"/> Authorized to be charged by credit card <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)</p>
<p>8. Payment Information a. Credit Card Last 4 Numbers _____ Expiration Date _____ b. Deposit Account Number <u>08-0219</u> Authorized User Name <u>Matthew T. Byrne</u></p>	
<p>9. Signature:  _____ Signature <u>October 17, 2006</u> Date <u>Matthew T. Byrne - 40,934</u> Name of Person Signing Total number of pages including cover sheet, attachments, and documents: 4</p>	

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimile to the Patent and Trademark Office, facsimile no. (571) 273-0140, on the date shown below.

Dated: October 17, 2006 Signature: _____ (Matthew T. Byrne)

CH \$40.00 080219 11405732

Attorney Docket No.: 19240.371-US2

ASSIGNMENT

9/21/06

WHEREAS, we, Ranooj Bose, residing at ~~1986 Teehan Lane, Baldwin, NY 11510, Baldwin, NY 11510~~ ^{43-44 Kissena Blvd, Apt-146, Flushing, NY} 11355 USA; Chee Wei Wong, residing at 560 Riverside Drive, #11F, New York, NY 10027 USA and Xiaodong Yang, residing at 423 W. 125th St., Apt. 8, New York, NY 10027 USA (collectively the "Assignors") are the inventors of a certain new and useful invention and discovery, for which a patent application entitled "LIGHT EMISSION USING QUANTUM DOT EMITTERS IN A PHOTONIC CRYSTAL" was filed with the United States Patent and Trademark Office on April 18, 2006 as U.S. Patent Application No. 11/405,732 ("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 110 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

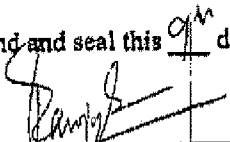
11/18/06 including attending depositions, preparing and executing declarations
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Assignment
U.S. Patent Application No.: 11/405,732

Attorney Docket No.: 19240.371-US2

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 9th day of Oct/2006 (Month/Year)




Ranojoy Bose.

On this 9th day of Oct/2006 (Month/Year), Ranojoy Bose, 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: Jae Jie
Printed Name: JIE GAO
Residential Address: 362 Riverside Drive #5D3
New York, NY 10025

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 9 day of 10 (Month/Year)



Chee Wei Wong

On this 9th day of Oct/2006 (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: Jae Jie
Printed Name: JIE GAO
Residential Address: 362 Riverside Drive #5D3
New York, NY 10025

Assignment
U.S. Patent Application No.: 11/405,732

Attorney Docket No.: 19240.371-US2

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 9th day of Oct/2006 (Month/Year)

Xiaodong Yang
Xiaodong Yang

On this 9th day of Oct/2006 (Month/Year), Xiaodong Yang, 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: Jaeje
Printed Name: JEE GAO
Residential Address: 36a Riverside Drive #5D3
New York, NY 10025

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