

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4616332

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JAE-HYUN RYOU	04/10/2015
SHAHAB SHERVIN	04/10/2015
SEUNG HWAN KIM	04/10/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	UNIVERSITY OF HOUSTON SYSTEM
<b>Street Address:</b>	4800 CALHOUN ROAD
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77004
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15562462
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(713)238-8008
<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>Phone:</b>	713-238-8000
<b>Email:</b>	eskaggs@conleyrose.com
<b>Correspondent Name:</b>	GREGORY L. MAAG/CONLEY ROSE, P.C.
<b>Address Line 1:</b>	575 N. DAIRY ASHFORD RD., SUITE 1102
<b>Address Line 4:</b>	HOUSTON, TEXAS 77079
<b>ATTORNEY DOCKET NUMBER:</b>	2483-07002
<b>NAME OF SUBMITTER:</b>	GREGORY L. MAAG
<b>SIGNATURE:</b>	/gregory l. maag/
<b>DATE SIGNED:</b>	09/28/2017
<b>Total Attachments: 4</b>	
source=2483-07000 Executed Assignment#page1.tif	
source=2483-07000 Executed Assignment#page2.tif	
source=2483-07000 Executed Assignment#page3.tif	
source=2483-07000 Executed Assignment#page4.tif	

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION to us by UNIVERSITY OF HOUSTON SYSTEM, and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we, Jae-Hyun RYOU, Shahab SHERVIN, and Seung Hwan KIM ("ASSIGNORS"), having made an invention in "EXTERNALLY-STRAIN-ENGINEERED SEMICONDUCTOR PHOTONIC AND ELECTRONIC DEVICES AND ASSEMBLIES AND METHODS OF MAKING THEREOF" ("INVENTION"), while in the employ either as an employee or consultant of UNIVERSITY OF HOUSTON SYSTEM, a university organized and existing under the laws of the State of Texas, doing business at 4800 Calhoun Road, Houston, Texas 77004 (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL, and CONVEY to UNIVERSITY OF HOUSTON SYSTEM, its successors, and assigns, the entire right, title, and interest throughout the world in and to:

1. Said invention in "EXTERNALLY-STRAIN-ENGINEERED SEMICONDUCTOR PHOTONIC AND ELECTRONIC DEVICES AND ASSEMBLIES AND METHODS OF MAKING THEREOF;"
2. United States of America provisional patent application on said invention, filed as U.S. Patent Application No. 62/144,715 on April 8, 2015 (Attorney's File No. 2483-07000), and entitled "EXTERNALLY-STRAIN-ENGINEERED SEMICONDUCTOR PHOTONIC AND ELECTRONIC DEVICES AND ASSEMBLIES AND METHODS OF MAKING THEREOF;"
3. All applications for patent or like protection on the INVENTION that have now been or may in the future be made by us or our legal representatives, including any continuation, continuation-in-part and any other utility applications that may be based on the INVENTION, whether in the United States of America or any other place anywhere in the world;
4. All patents and like protection that have now been or may in the future be granted on the INVENTION to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
5. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of the applications and patents and like grants, including without limitation, those obtained or permissible under past, present, and future laws and statutes;
6. All rights of action on account of past, present, and future unauthorized use of the INVENTION and for infringement of the patents and like protection;

7. The right in ASSIGNEE to file in its name applications for patents and like protection for the INVENTION in any country or countries foreign to the United States; and
8. All international rights of priority associated with the INVENTION, applications, patents, and like protection; and

we covenant that we, and our heirs, legal representatives, assigns, administrators, and executors, will, at the expense of ASSIGNEE, its successors, and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors, and assigns, the full benefit of this Assignment. Further, ASSIGNOR warrants that the INVENTION is not encumbered by another assignment or obligation of assignment to a third-party and that ASSIGNOR has the full ability and authority to assign and encumber the INVENTION.

\*\*\*\*\*

EXECUTED on the date indicated below, opposite my signature.

Signature:   
Jae-Hyun Ryou

Date: 04/10/15

Witnessed by:   
Signature

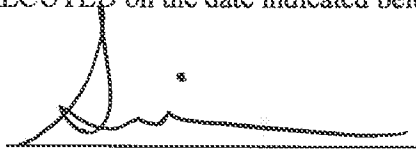
Date: 4/10/2015

Joanna Taormina  
Printed Name of Witness

\*\*\*\*\*

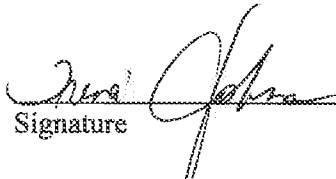
EXECUTED on the date indicated below, opposite my signature.

Signature:

  
\_\_\_\_\_  
Shahab Shervin

Date: 04/10/15

Witnessed by:

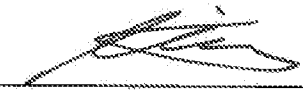
  
\_\_\_\_\_  
Signature  
  
Trina Johnson  
\_\_\_\_\_  
Printed Name of Witness

Date: 4/10/15

\*\*\*\*\*

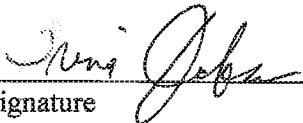
EXECUTED on the date indicated below, opposite my signature.

Signature:

  
\_\_\_\_\_  
Seung Hwan Kim

Date: 4/10/2015

Witnessed by:

  
\_\_\_\_\_  
Signature

Date: 4/10/2015

Trina Johnson  
Printed Name of Witness