

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT								
NATURE OF CONVEYANCE:	Corrective Assignment to correct the the spelling of Assignor, Peng Kevin Chen's name, previously recorded on Reel 027924 Frame 0475. Assignor(s) hereby confirms the Assignment of Assignors Interest.								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>JOEL FALK</td> <td>12/14/2011</td> </tr> <tr> <td>PENG KEVIN CHEN</td> <td>03/22/2012</td> </tr> <tr> <td>MICHAEL PAUL BURIC</td> <td>12/14/2011</td> </tr> </tbody> </table>		Name	Execution Date	JOEL FALK	12/14/2011	PENG KEVIN CHEN	03/22/2012	MICHAEL PAUL BURIC	12/14/2011
Name	Execution Date								
JOEL FALK	12/14/2011								
PENG KEVIN CHEN	03/22/2012								
MICHAEL PAUL BURIC	12/14/2011								
RECEIVING PARTY DATA									
Name:	UNIVERSITY OF OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION								
Street Address:	200 GARDNER STEEL CONFERENCE CENTER								
Internal Address:	O'HARA AND THACKERAY STREETS								
City:	PITTSBURGH								
State/Country:	PENNSYLVANIA								
Postal Code:	15260								
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>13300988</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13300988				
Property Type	Number								
Application Number:	13300988								
CORRESPONDENCE DATA									
Fax Number:	(412)566-6099								
Phone:	(412)566-6000								
Email:	ipmail@eckertseamans.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:	Philip E. Levy								
Address Line 1:	ECKERT SEAMANS CHERIN & MELLOTT, LLC								
Address Line 2:	600 GRANT STREET, 44TH FLOOR								
Address Line 4:	PITTSBURGH, PENNSYLVANIA 15219								
ATTORNEY DOCKET NUMBER:	269901-00003								

OP \$40.00 13300988

NAME OF SUBMITTER:

Philip E. Levy

Total Attachments: 7

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page1.tif

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page2.tif

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page3.tif

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page4.tif

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page5.tif

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page6.tif

source=13300988-CORRECTED ASSIGNMENT (J1615361)#page7.tif

501865450 03/26/2012

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>JOEL FALK</td> <td>12/14/2011</td> </tr> <tr> <td>PENG KEVIN CHENG</td> <td>03/22/2012</td> </tr> <tr> <td>MICHAEL PAUL BURIC</td> <td>12/14/2011</td> </tr> </tbody> </table>		Name	Execution Date	JOEL FALK	12/14/2011	PENG KEVIN CHENG	03/22/2012	MICHAEL PAUL BURIC	12/14/2011				
Name	Execution Date												
JOEL FALK	12/14/2011												
PENG KEVIN CHENG	03/22/2012												
MICHAEL PAUL BURIC	12/14/2011												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>UNIVERSITY OF OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION</td> </tr> <tr> <td>Street Address:</td> <td>200 GARDNER STEEL CONFERENCE CENTER</td> </tr> <tr> <td>Internal Address:</td> <td>O'HARA & THACKERAY STREETS</td> </tr> <tr> <td>City:</td> <td>PITTSBURGH</td> </tr> <tr> <td>State/Country:</td> <td>PENNSYLVANIA</td> </tr> <tr> <td>Postal Code:</td> <td>15260</td> </tr> </table>		Name:	UNIVERSITY OF OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION	Street Address:	200 GARDNER STEEL CONFERENCE CENTER	Internal Address:	O'HARA & THACKERAY STREETS	City:	PITTSBURGH	State/Country:	PENNSYLVANIA	Postal Code:	15260
Name:	UNIVERSITY OF OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION												
Street Address:	200 GARDNER STEEL CONFERENCE CENTER												
Internal Address:	O'HARA & THACKERAY STREETS												
City:	PITTSBURGH												
State/Country:	PENNSYLVANIA												
Postal Code:	15260												
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>13300988</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13300988								
Property Type	Number												
Application Number:	13300988												
CORRESPONDENCE DATA													
Fax Number:	(412)566-6099												
Phone:	(412)566-6000												
Email:	ipmail@eckertseamans.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:	ECKERT SEAMANS CHERIN & MELLOTT												
Address Line 1:	600 GRANT STREET												
Address Line 2:	44TH FLOOR												
Address Line 4:	PITTSBURGH, PENNSYLVANIA 15219												
ATTORNEY DOCKET NUMBER:	214001-01448												
NAME OF SUBMITTER:	Philip E. Levy												

OP \$40.00 13300988

ASSIGNMENT

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we, **JOEL FALK**, residing at 7 Shadyside Lane, Pittsburgh, Pennsylvania 15232, a citizen of the United States of America; **PENG KEVIN CHEN**, residing at 804 Birchfield Court, Wexford, Pennsylvania 15090, a citizen of Canada; and **MICHAEL PAUL BURIC**, residing at 831 North Avenue, Pittsburgh, Pennsylvania 15209, a citizen of the United States of America;

Hereby sell, assign and transfer to the **University of Pittsburgh-Of the Commonwealth System of Higher Education**, a non-profit Pennsylvania corporation, having a place of business at 200 Gardner Steel Conference Center, O'Hara and Thackeray Streets, Pittsburgh, Pennsylvania 15260, in the County of Allegheny and Commonwealth of Pennsylvania, its successors, assigns and legal representatives, our entire right, title and interest, for all countries, in and to any and all improvements which are disclosed and claimed, and any and all improvements which are disclosed but not claimed, in United States Patent Application No. 13/300,988 for **GAS SENSING SYSTEM EMPLOYING RAMAN SCATTERING** (Attorney Docket No. 214001-01430-1; University Ref. 02277) filed November 21, 2011 and United States Provisional Patent Application No. 61/416,936 for **GAS SENSING SYSTEM EMPLOYING RAMAN SCATTERING** (Attorney Docket No. 214001-01430; University Ref. 02277) filed November 24, 2010, and in and to said applications and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed on any of said improvements disclosed in said applications; and in and to all original and reissued patents which have been or shall be issued on said improvements;

Authorize and request the Commissioner of Patents and Trademarks to issue to said Assignee, the University of Pittsburgh Of the Commonwealth System of Higher Education, its successors, assigns and legal representatives, in accordance with this Assignment, any and all United States Letters Patent on said improvements, or any of them, disclosed in said applications;

Agree that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment we will, for all countries, execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful

oaths and other papers; communicate to said Assignee, its successors, assigns and representatives, all facts known to us relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said improvements, and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives;

Covenant with said Assignee, its successors, assigns and legal representatives that we have made to others no assignment, grant, mortgage, license or other agreement affecting the rights and property conveyed, and that we have full right to convey the same as herein expressed.

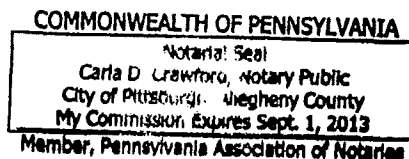
EXECUTED December 14 2011

Joel Falk (SEAL)
JOEL FALK

Commonwealth of Pennsylvania)
County of Allegheny) SS:

Before me this 14th day of December, 2011, personally appeared **JOEL FALK**, to me personally known to be the person who is described in and who executed the above instrument, and he acknowledged to me that he executed the same of his own free will for the purposes therein set forth.

Carla D Crawford



EXECUTED March 22, ²⁰¹²~~2011~~


(SEAL)
PENG KEVIN CHEN

Commonwealth of Pennsylvania)
County of Allegheny) SS:

Before me this 22nd day of March ²⁰¹²~~2011~~, personally appeared
PENG KEVIN CHEN, to me personally known to be the person who is described in and who
executed the above instrument, and he acknowledged to me that he executed the same of his own
free will for the purposes therein set forth.



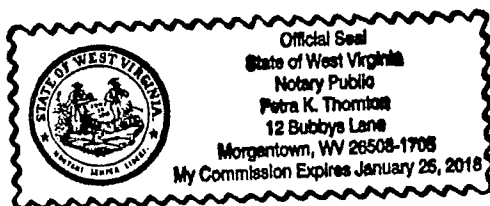
COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Carla D. Crawford, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires Sept. 1, 2013
Member, Pennsylvania Association of Notaries

EXECUTED December 14, 2011

Michael Paul Buric (SEAL)
MICHAEL PAUL BURIC

Commonwealth of Pennsylvania)
) SS:
County of)

Before me this 14th day of December, 2011, personally appeared
MICHAEL PAUL BURIC, to me personally known to be the person who is described in and
who executed the above instrument, and he acknowledged to me that he executed the same of his
own free will for the purposes therein set forth.



Petra K. Thomason
(Notary Public)