

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LINGJIE JAY GUO	09/11/2015
RECEIVING PARTY DATA	
Name:	THE REGENTS OF UNIVERSITY OF MICHIGAN
Street Address:	1600 HURON PARKWAY
Internal Address:	2ND FLOOR
City:	ANN ARBOR
State/Country:	MICHIGAN
Postal Code:	48109-2590
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14701806
CORRESPONDENCE DATA	
Fax Number:	(248)641-0270
<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>	
Phone:	248-641-1600
Email:	rwilson@hdp.com, jwoodside@hdp.com
Correspondent Name:	HARNES, DICKEY AND PIERCE, PLC
Address Line 1:	P.O. BOX 828
Address Line 4:	BLOOMFIELD HILLS, MICHIGAN 48303
ATTORNEY DOCKET NUMBER:	2115-005854-US
NAME OF SUBMITTER:	JENNIFER M. WOODSIDE WOJTALA
SIGNATURE:	/Jennifer Woodside Wojtala/
DATE SIGNED:	09/14/2015
Total Attachments: 2	
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ASSIGNMENT

Each person signing below ("Assignor") has made or authorized to be made the following patent applications ("Patent Applications"):

U.S. Provisional Application No. 61/987,849, filed May 2, 2014, titled REAL-TIME DETECTION AND IMAGING OF TERAHERTZ PULSE RADIATION BY USING PHOTOACOUSTIC CONVERSION;

U.S. Application No. 14/701,806, filed May 1, 2015, titled REAL-TIME DETECTION AND IMAGING OF TERAHERTZ PULSE RADIATION BY USING PHOTOACOUSTIC CONVERSION, the declaration for which was executed on the same day as this Assignment

The Patent Applications disclose, whether claimed or unclaimed, inventions ("Inventions"), of which Assignor believes Assignor is an original inventor or an original joint inventor.

THE REGENTS OF THE UNIVERSITY OF MICHIGAN ("Assignee"), having a place of business at 1600 Huron Parkway, 2nd Floor, Ann Arbor, Michigan, 48109-2590, United States of America desires to acquire all right, title, and interest in and to "Intellectual Property" as defined below.

Assignor acknowledges and confirms any prior assignment(s) or obligation(s) of assignment from Assignor to Assignee of any part of the Intellectual Property.

For good and valuable consideration, the receipt and adequacy of which is acknowledged, Assignor irrevocably assigns, sells, and transfers all legal and equitable right, title, and interest in and to the Intellectual Property to Assignee. Assignee acknowledges and accepts the assignment, sale, and transfer. The right, title, and interest shall be held and enjoyed by Assignee and Assignee's successors in interest to the full end of any term, and to the full extent, as the Intellectual Property would have been held and enjoyed by Assignor if no assignment had been made to Assignee.

The Intellectual Property includes:

- a. the Inventions;
- b. the Patent Applications;
- c. any application to which one of the Patent Applications could have claimed priority or benefit directly or indirectly, where "application" encompasses (i) applications filed under the laws and treaties of the United States, other countries, regions, and international bodies, (ii) provisional patent applications and non-provisional patent applications, and (iii) other applications for the protection of intellectual property, including applications for utility models, design patents, and statutory invention registrations;
- d. any application that claims or could have claimed priority to or benefit of one of the Patent Applications directly or indirectly (including divisionals, continuations, continuations-in-part, patents of addition, and non-U.S. applications);
- e. any application, whether or not linked by priority/benefit claim to the Patent Applications, that describes or claims at least one of the Inventions;
- f. any official grant (including a United States Patent) arising from any application identified in parts (a)-(e);
- g. any modification or extension of any official grant, including reissues, reexaminations, renewals, substitutes, patents of addition, and extensions;
- h. any improvements to the Inventions that were conceived by Assignor prior to execution of this Assignment; and
- i. all interest in works of authorship by Assignor related to the Inventions, whether reproduced in the Patent Applications or not, and including computer code, user interfaces, graphic works, and the Patent Applications themselves, including the written descriptions, the drawings, and the claims.

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- c. all rights to sue for, and recover for, infringements of, or liabilities for, the Intellectual Property, including those infringements occurring and liabilities accruing prior to execution of this Assignment.

Assignor requests, in each country in which an application encompassed by the Intellectual Property is filed, that any official whose duty it is to make an official grant (such as the Director of the country's Patent Office) issue the official grant to Assignee.

Assignor represents that Assignor has not, and agrees that Assignor will not, enter into any assignment, sale, license, agreement, transfer, or encumbrance that would conflict with this Assignment. Assignor further agrees not to challenge, or assist in any challenge to, the Intellectual Property.

Assignor agrees to fully cooperate ("Cooperation") with Assignee and Assignee's successors in interest to (i) acquire or defend title to the Intellectual Property, (ii) make, prosecute, and issue applications identified in the Intellectual Property, (iii) defend the validity of the Intellectual Property, and (iv) enforce the Intellectual Property. The cooperation encompasses proceedings in front of administrative tribunals (such as an appeals board of the United States Patent and Trademark Office or the Patent Office of any other country, region, or international body) and in courts of law or equity in any country, region, or international body. The proceedings include litigation (such as disputes regarding validity, infringement, and indemnification), reexamination proceedings, reissue proceedings, interference proceedings, derivation proceedings, opposition proceedings, post-grant review, *inter partes* review, covered business method review, and any similar proceedings.

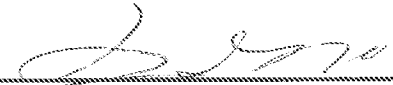
Cooperation includes, at Assignee's request and without further or other compensation beyond the good and valuable consideration recited above, (i) promptly reviewing and executing all truthful instruments or documents, (ii) promptly providing Assignee with all pertinent facts and documents relating to the Intellectual Property as may be known and accessible to Assignor, and (iii) testifying truthfully, under oath if necessary, orally and in writing.

For any reason, including by operation of law, in any respect and in any jurisdiction:

- a. to the extent that the assignment, sale, and transfer fails, Assignor grants Assignee an unconditional, irrevocable, perpetual, worldwide, fully paid-up, royalty-free, exclusive license, including the right to sublicense;
- b. to the extent that the exclusive license fails, the exclusive license shall operate as a non-exclusive license; and
- c. to the extent that the non-exclusive license fails, Assignor grants Assignee, Assignee's successors in interest, and each of their respective direct and indirect customers, a covenant not-to-sue, binding on Assignor's successors in interest.

If any provision of this Assignment is determined to be invalid or unenforceable for any reason, including by operation of law, all other provisions shall remain in full force and effect, and the court or tribunal making such a finding shall substitute an enforceable provision that most closely reflects the original.

Assignor grants Harness, Dickey & Pierce, P.L.C. the power and authority to insert the corresponding application numbers, filing dates, and titles in the spaces provided above for any of the Patent Applications after execution of this Assignment.



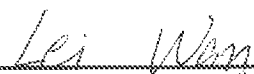
 Lingjie Jay Guo

9/11/2015

 Date

Witness 1: 

 Name: WITNESS NAME

Witness 2: 

 Name: WITNESS NAME

10/14/2015