

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4674032

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TOAN HUYNH	01/04/2016
JASON E. KREUTZ	01/08/2016
WEISHAN LIU	05/18/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	UNIVERSITY OF CHICAGO
<b>Street Address:</b>	5801 S. ELLIS AVENUE
<b>City:</b>	CHICAGO
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60637
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15000864
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(650)938-5200
<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>	415-875-2427
<b>Email:</b>	sfuentes@fenwick.com
<b>Correspondent Name:</b>	NICHOLAS HURT
<b>Address Line 1:</b>	801 CALIFORNIA STREET
<b>Address Line 4:</b>	MOUNTAIN VIEW, CALIFORNIA 94041
<b>ATTORNEY DOCKET NUMBER:</b>	32592-30805/US
<b>NAME OF SUBMITTER:</b>	NICHOLAS HURT, REG. NO. 65204
<b>SIGNATURE:</b>	/Nicholas Hurt/
<b>DATE SIGNED:</b>	11/03/2017
<b>Total Attachments: 7</b>	
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source=30805 US Assignment Fully Executed University of Chicago#page7.tif

## ASSIGNMENT

Pursuant to our obligation to **THE UNIVERSITY OF CHICAGO** ("ASSIGNEE"), an Illinois not for profit corporation having its principal place of business at 5801 S. Ellis Avenue, Chicago, Illinois 60637, and for other valuable and sufficient consideration, receipt whereof is hereby acknowledged, we:

**TOAN HUYNH**

**JASON E. KREUTZ**

confirm that we have sold, assigned, and conveyed unto ASSIGNEE, its successors and assigns, or to the extent we have not yet sold, assigned or conveyed, do hereby sell, assign and convey unto ASSIGNEE, its successors and assigns, our entire right, title, and interest -

(1) in and to an invention entitled "**DIGITAL ASSAY FOR QUANTIFYING AND CONCENTRATING ANALYTES**" ("INVENTION") for which we have executed United States PCT Application PCT/US14/47092 filed on July 17, 2014, which claims the benefit of priority of United States Provisional Application 61/969,008 filed on March 21, 2014, and United States Provisional Application 61/880,399 filed on September 20, 2013, and United States Provisional Application 61/856,155 filed on July 19, 2013;

(2) in and to said United States patent applications, in and to all other patent applications (including US Utility, divisional, continuation, continuation-in-part, §111(b) provisional, §111(a), and reissue applications) based upon said invention, including the right to claim priority to said Provisional patent application and to all other applications based upon said invention, and in and to the patent or patents to be granted thereon, including reissues thereof, if any, to the full end



of the term or terms for which said patent or patents may be granted. The effective date of this Assignment is July 19, 2013;

(3) in and to all patent applications based on INVENTION now or hereafter filed in countries foreign to the United States of America, and in and to any and all patents granted on said foreign applications to the full end of the term or terms for which said foreign patents may be granted; AND

(4) in and to the right the claim the full benefits and priority rights under the International Convention (and any other international agreement to which the United States adheres) in and to any and all patent applications – both United States and foreign patent applications – based on INVENTION now or hereafter filed.

And we hereby agree that, under the International Convention, any United States patent application(s) and any foreign application(s) which may be filed shall be filed in the name of ASSIGNEE with a claim to priority based on said United States Application.

And we hereby agree that we will, upon request of ASSIGNEE, its successors or assigns, and without further consideration to us, execute any and all papers that may be necessary – or deemed by ASSIGNEE, its successors or assigns, to be necessary – to a complete fulfillment of the intents and purposes of this Assignment, it being understood that any expense incident to the execution of such papers shall be paid by ASSIGNEE, its successors or assigns, and not by us.

And the Commissioner of Patents and Trademarks of the United States is hereby authorized and requested to issue said United States patent or patents to ASSIGNEE.

01/04/2016

Date

01/04/2016

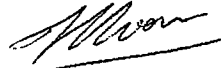
Date

Date

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Date

1/11/16



Toan Huynh

  
Witness Signature

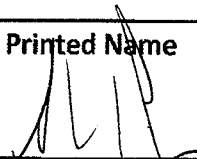
ROBYN BECKWITH

Witness Printed Name

Jason E. Kreutz

Witness Signature

Witness Printed Name



Alan Thomas

Associate Vice President & Director,  
Center for Technology Development & Ventures, The  
University of Chicago

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**TOAN HUYNH**

**JASON E. KREUTZ**

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of the term or terms for which said patent or patents may be granted. The effective date of this Assignment is July 19, 2013;

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And we hereby agree that we will, upon request of ASSIGNEE, its successors or assigns, and without further consideration to us, execute any and all papers that may be necessary – or deemed by ASSIGNEE, its successors or assigns, to be necessary – to a complete fulfillment of the intents and purposes of this Assignment, it being understood that any expense incident to the execution of such papers shall be paid by ASSIGNEE, its successors or assigns, and not by us.

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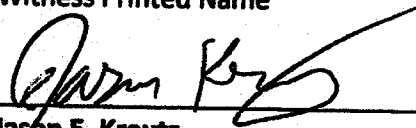
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Date

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Witness Signature


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Witness Printed Name  
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Jason E. Kreutz

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Alison Thompson  
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Witness Printed Name  
\_\_\_\_\_  


**Alan Thomas**  
Associate Vice President & Director,  
Center for Technology Development & Ventures, The  
University of Chicago



**PATENT ASSIGNMENT**

Docket Number: 45546-706.601  
CIT 6262-PCT

WHEREAS, the undersigned:

1. Weishan LIU,  
San Jose, CA

(hereinafter "Inventor(s)," have invented certain new and useful improvement in

**DIGITAL ASSAY FOR QUANTIFYING AND CONCENTRATING ANALYTES**

- for which application serial number PCT/US2014/047092 was filed on 17 July 2014 in the U.S. Receiving Office of the Patent Cooperation Treaty;

hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s).

WHEREAS, California Institute of Technology, a University of the State of California, having a place of business at 1200 E. California Boulevard, M/C 6-32, Pasadena, CA 91125, and the University of Chicago, a University of the State of Illinois, having a place of business at 5801 Ellis Avenue, Chicago, IL 60637, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collective referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)").

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Application(s), including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation or continuation-in-part of any said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing form any of the foregoing; (e) in and to each and every reissue, reexamination, renewal or extension of any kind of the foregoing; (f) in and to each and every patent and application filed outside the United States and corresponding to any of the foregoing; and (g) in and to all claims for past, present and future infringement of the Patents, including all rights to sue for and to receive and recover for Assignee's own use all past, present and future lost profits, royalties, and damages of whatever nature recoverable from an infringement of the Patents.

2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting substitute divisional, continuing or additional applications covering said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patents; (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.

4. Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal representative and assigns.

6. This instrument will be interpreted and construed in accordance with the law of the State of California, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement.

IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:

Date: 5/18/2015 Weishan Liu  
WEISHAN LIU

**PATENT**