## 504280670 03/20/2017

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4327351

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
THE CURATORS OF THE UNIVERSITY OF MISSOURI	06/17/2016

#### **RECEIVING PARTY DATA**

Name:	ST. LOUIS MEDICAL DEVICES, INC.
Street Address:	1190 MOUNTAIN VIEW ALVISO ROAD, SUITE P
City:	SUNNYVALE
State/Country:	CALIFORNIA
Postal Code:	94089

### **PROPERTY NUMBERS Total: 1**

Property Type	Number			
Application Number:	15464253			

#### **CORRESPONDENCE DATA**

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	SLMD-00511
NAME OF SUBMITTER:	JONATHAN O. OWENS
SIGNATURE:	/Jonathan O. Owens/
DATE SIGNED:	03/20/2017

#### **Total Attachments: 10**

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## **EXHIBIT A: PATENT ASSIGNMENT**

THIS PATENT ASSIGNMENT ("AGREEMENT") is made and entered into this 17th day of June, 2016 ("EFFECTIVE DATE"), by and between THE CURATORS OF THE UNIVERSITY OF MISSOURI, a public corporation of the State of Missouri having a principal office at 341 Woods Hall, One University Blvd., St. Louis, MO 63121 ("UNIVERSITY"), and ST. LOUIS MEDICAL DEVICES, INC., a Missouri corporation having a principal place of business at 1190 Mountain View Alviso Road, Ste. P, Sunnyvale, California 94089 USA ("ASSIGNEE"). UNIVERSITY and ASSIGNEE may sometimes be referred to herein as a "PARTY" or "PARTIES" as the case may be.

WHEREAS, Dr. Zhi Xu is the sole inventor for the inventions described in one or more of the patent applications and issued patents within the PATENTS (as defined herein) which is the subject of UM Invention Disclosure No. UM Disclosure Nos. 07UMS108 dated 5/21/2007 entitled "New Near Infrared Optical Device for Non-Invasive Blood Test"; 07UMS121 dated 6/28/2007 entitled "Development of New Optical Detection System for Non-Invasive Glucose Detection"; 08UMS001 dated 7/6/2007 entitled "New Electronic Data Collection System for Non-Invasive Glucose Detection"; 08UMS002 dated 7/24/2007 entitled "New Optical Illumination and Collection System for Non-Invasive Glucose Detection"; 08UMS006 dated 11/20/2007 entitled "New Methodology for Non-Invasive Blood Glucose Detection"; 08UMS013 dated 4/14/2008 entitled "Methodology for Non-Invasive Optical Blood Glucose Detection"; 09UMS008 dated 3/16/2009 entitled "New Optical Device for Non-Invasive Blood Glucose Detection";

WHEREAS, Dr. Zhi Xu has assigned all of his right, title, and interest in the PATENTS as defined herein to UNIVERSITY;

WHEREAS, ASSIGNEE is desirous of acquiring all of UNIVERSITY's right, title and interest in the PATENTS (as defined herein) based on the patent applications/patents set forth in Exhibit B under the terms and conditions set forth in a Patent Assignment Agreement dated March 29th, 2016 ("MAIN AGREEMENT");

- Assignment Subject to and conditioned upon the terms and conditions herein and in consideration of the mutual understandings set forth above and the financial terms set forth in the MAIN AGREEMENT, UNIVERSITY hereby assigns, transfers, and conveys to ASSIGNEE, and ASSIGNEE hereby accepts, all of UNIVERSITY's right, title and interest in and to:
  - a. the invention disclosed and claimed in the patent applications/patents set forth in Exhibit B;
  - b. all patents and patent applications that have been or may hereafter be filed which are based on the patent applications/patents set forth in Exhibit B, including any provisional, non-provisional, divisional, continuation (but not continuations-in-part), extension, renewal, re-examination, reissue, substitute, supplementary protection certificate, utility model, or similar legal protection based on the PATENT APPLICATIONS ("PATENTS");
  - c. the right to claim priority to any of the PATENTS under the patent laws of the United States, the International Convention for the Protection of Industrial

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- Property, or any other international agreement or laws of the country in which the PATENTS are filed, as may be applicable; and
- d. all rights of action, powers, and benefits arising from ownership of the PATENTS, including the right to sue for past, present, and future infringement of the PATENTS, the right to collect royalties, fees, damages, and payments now or hereafter due or payable with respect to the PATENTS, the right to seek injunctive relief based on the PATENTS, and the right to pursue all causes of action and all enforcement rights relating to the PATENTS, whether known or unknown, currently pending or otherwise.

UNIVERSITY authorizes and requests the Director of the United States Patent and Trademark Office, and any corresponding entity, agency, or official of any other country whose duty it is to issue patents or similar legal protection, to issue the PATENTS to ASSIGNEE such that the PATENTS will be held by ASSIGNEE for its own use and benefit, for the full term for which the PATENTS are or may be granted.

- 2. Further Assurances. Upon the reasonable request of ASSIGNEE, UNIVERSITY agrees to execute such documents and perform such acts as may be necessary to give full effect to the assignment terms of this AGREEMENT. Without limiting the generality of the foregoing, UNIVERSITY agrees to execute any and all assignments and other documents that may be needed to record, vest, or perfect ASSIGNEE's right, title, and interest in and to the Assigned Rights as fully and entirely as the same would have been held and enjoyed by UNIVERSITY if this assignment had not been made. UNIVERSITY also agrees to execute any and all declarations, oaths, specifications, and other documents reasonably requested by ASSIGNEE in connection with prosecution of the PATENTS.
- 3. The PATENTS are assigned "as is" without warranty or recourse.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, UNIVERSITY has caused this Assignment to be duly executed by its authorized representative on the date set forth below.

For UNIVERSITY

Coloret in Church	Date: 6/17/14
Name: Dr. Robert W. Schwartz Title: Interim Vice President for Academic	
Ack	nowledgement
STATE OF Missouri )  COUNTY OF Boone )	
State and County aforesaid, personally ap	, 2016, before me, a Notary Public in and for the peared Dr. Robert W. Schwartz, to me known and who signed and sealed the foregoing instrument, and and deed.  Notary Public
(SEAL)	HOBINALIA PROBLEM
My Commission Expires:	NOTARY PUBLIC SEAL SEAL SEAL SEAL SEAL SEAL SEAL SEAL
For ASSIGNEE	OF MISSON MINIMUM
Name: George Chen	Date: 3/29/2016.
Title: President and CEO	•
St. Louis Medical Devices, Inc.	

APPROVED
LEGAL FORM

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# EXHIBIT B: PATENTS

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UMSL TC Ref No.	Title	Case Type	Status	Country	Application No.	Filing Date	Patent No.	Issue Date
08UMS002 65000- 126489	OPTICAL DEVICE COMPONENTS	DIV	Published	China (People's Republic)	201310489245.0	9/12/2008		
08UMS002 65000- 81257	OPTICAL DEVICE COMPONENTS	ORD	Granted	United States	12/209807	9/12/2008	7961304 B2	6/14/2011
08UMS002 65000- 88864	OPTICAL DEVICE COMPONENTS	РСТ	Pending	Brazil	PI0816925-0	9/12/2008		
08UMS002 65000- 88865	OPTICAL DEVICE COMPONENTS	PCT	Published	Canada	2699626	9/12/2008		
08UMS002 65000- 88866	OPTICAL DEVICE COMPONENTS	PCT	Published	China (People's Republic)	200880114960.3	9/12/2008		
08UMS002 65000- 88868	OPTICAL DEVICE COMPONENTS	PCT	Pending	India	1186/KOLNP/2010	9/12/2008		
08UMS002 65000- 95950	OPTICAL DEVICE COMPONENTS	RCN	Published	Hong Kong	11103079.5	9/12/2008		
07UMS121 65000- 89139	AN APPARATUS FOR NON- INVASIVE BLOOD CHEMICALS DETECTION (VARIANTS)	PCT	Granted	Russian Federation	2010117396/28(02475	10/3/2008	2478197	3/27/2013
07UMS121 65000- 81260	OPTICAL DEVICE COMPONENTS	ORD	Granted	United States	12/245298	10/3/2008	7809418 B2	10/5/2010
07UMS121 65000- 89132	OPTICAL DEVICE COMPONENTS	PCT	Granted	Australia	2008307505	10/3/2008	2008307505	5/16/2013
07UMS121 65000- 89133	OPTICAL DEVICE COMPONENTS	PCT	Pending	Brazil	PI0818177-2	10/3/2008		
07UMS121 65000- 89134	OPTICAL DEVICE COMPONENTS	PCT	Published	Canada	2700996	10/3/2008		
07UMS121 65000- 89135	OPTICAL DEVICE COMPONENTS	PCT	Granted	China (People's Republic)	200880116752.7	10/3/2008	ZL2008801167 52.7	8/29/2012
07UMS121 65000- 89136	OPTICAL DEVICE COMPONENTS	PCT	Published	European Patent Convention	8836010.2	10/3/2008		
07UMS121 65000- 89137	OPTICAL DEVICE COMPONENTS	PCT	Pending	India	1311/KOLNP/2010	10/3/2008		
07UMS121 65000- 97134	OPTICAL DEVICE COMPONENTS	RCN	Granted	Hong Kong	11105392	10/3/2008	HK1151351	6/7/2013
08UMS006 65000- 81455	METHOD AND SYSTEM FOR NON- INVASIVE BLOOD GLUCOSE DETECTION UTILIZING	ORD	Published	United States	12/407999	3/20/2009		

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	SPECTRAL DATA OF ONE OR MORE COMPONENTS OTHER THAN GLUCOSE							
08UMS006 65000- 92520	METHOD AND SYSTEM FOR NON- INVASIVE BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA OF ONE OR MORE COMPONENTS OTHER THAN GLUCOSE	PCT	Pending	Brazil	PI0909825-9	3/20/2009		
08UMS006 65000- 139034	METHOD AND SYSTEM FOR NON- INVASIVE BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA OF ONE OR MORE COMPONENTS OTHER THAN GLUCOSE	DIV	Published	Japan	2014-245584	3/20/2009		
08UMS013 65000- 82159	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	ORD	Granted	United States	12/425535	4/17/2009	8340738 B2	12/25/2012
08UMS013 65000- 93715	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	PCT	Pending	Brazil	PI0913130-2	4/17/2009		
08UMS013 65000- 93766	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	РСТ	Granted	Japan	2011-510533	4/17/2009	5676432	1/9/2015

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08UMS013 65000- 93767	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL. BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	PCT	Granted	China (People's Republic)	200980126116.7	4/17/2009	ZL2009801261 16.7	4/15/2015
08UMS013 65000- 94194	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	PCT	Published	India	4886/KOLNP/2010	4/17/2009		
08UMS013 65000- 94195	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	РСТ	Allowed	Russian Federation	2010152373	4/17/2009		
08UMS013 65000- 99107	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	REP	Published	Hong Kong	11110197.7	4/17/2009		
08UMS013 65000- 94193	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS	РСТ	Published	European Patent Convention	9751083.8	4/17/2009		
08UMS013 65000- 108647	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA	DIV	Allowed	China (People's Republic)	103006236	4/17/2009	201210420830. 0	9/23/2015

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	ANALYSIS	-1	1					
	(Group B - Claims 6-11 & 32-37)							
08UMS013 65000- 108648	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Group C - Claims 12-17 & 38-43)	DIV	Published	China (People's Republic)	201210419740.X	4/17/2009		
08UMS013 65000- 108649	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Group D - Claims 18-21)	DIV	Granted	China (People's Republic)	201210420843.8	4/17/2009	ZL2012104208 43.8	4/15/2015
08UMS013 65000- 108650	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Group E - Claims 22-28)	DIV	Allowed	China (People's Republic)	102961146	4/17/2009	201210419849.	9/23/2015
08UMS013 65000- 108651	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Group F - Claims 44-49)	DIV	Granted	China (People's Republic)	201210419811.6	4/17/2009	ZL2012104198 11.6	4/1/2015
09UMS008 65000- 106398	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETECTION	РСТ	Published	Canada	2789658	3/23/2010		

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	AND		1					
	ASSOCIATED METHOD OF USE							
9UMS008 65000- 106614	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETFCTION AND ASSOCIATED METHOD OF USE	RCN	Granted	Hong Kong	12110865.7	3/23/2010	HK1169934	8/21/2015
09UMS008 65000- 88652	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	ORD	Granted	United States of America	12/729886	3/23/2010	8552359 B2	10/8/2013
09UMS008 65000- 99382	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	РСТ	Granted	China (People's Republic)	201080022242.0	3/23/2010	ZL2010800222 42.0	11/26/2014
09UMS008 65000- 99383	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	РСТ	Pending	India	4144/KOLNP/2011	3/23/2010		
09UMS008 65000- 99384	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	РСТ	Published	Japan	2012-503498	3/23/2010		
09UMS008 65000- 99385	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE	РСТ	Published	European Patent Convention	10759220.6	3/23/2010		

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	BLOOD GLUCOSE DETECTION AND							
	ASSOCIATED METHOD OF USE							
09UMS000 65000- 99386	GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	PCT	Published	Russian Federation	2011144084	3/23/2010		
09UMS008 65000- 99387	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BI.OOID GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	PCT	Pending	Brazil	PI1010304-0	3/23/2010		
09UMS008 65000- 99806	OPTICAL SPECTROSCOP Y DEVICE FOR NON- INVASIVE BLOOD GLUCOSE DETECTION AND ASSOCIATED METHOD OF USE	PCT	Granted	Australia	2010232841	3/23/2010	2010232841	8/7/2014
08UMS013 65000- 106239	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Species A, Claims 1-5, 29- 31)	VID	Published .	United States of America	13/610140	9/11/2012		
08UMS013 65000- 106240	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Species C,	DIV	Published	United States of America	13/610256	9/11/2012		

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	Claims 12-17, 38-43)						
08UMS013 65000- 106241	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Species D, Claims 18-21)	DIV	Published	United States of America	13/610,342	9/11/2012	
08UMS013 65000- 106242	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Species E, Claims 22-28)	DIV	Published	United States of America	13/610387	9/11/2012	
08UMS013 65000- 106243	METHOD AND SYSTEM FOR NON- INVASIVE OPTICAL BLOOD GLUCOSE DETECTION UTILIZING SPECTRAL DATA ANALYSIS (Species F, Claims 44-49)	IJΙV	Published	United States of America	13/610423	9/11/2012	

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**PATENT REEL: 041649 FRAME: 0316** 

**RECORDED: 03/20/2017**