PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4578194

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRUCE L. DANIEL	04/01/2016
BRIAN A. HARGREAVES	04/01/2016
SUBASHINI SRINIVASAN	04/01/2016

RECEIVING PARTY DATA

Name:	THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY	
Street Address:	3000 EL CAMINO REAL, BUILDING FIVE, THIRD FLOOR	
City:	PALO ALTO	
State/Country:	CALIFORNIA	
Postal Code:	94306	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15476810

CORRESPONDENCE DATA

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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.

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Email: bob@lumen.com

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Address Line 2: SUITE 225

Address Line 4: PALO ALTO, CALIFORNIA 94306

ATTORNEY DOCKET NUMBER:	S16-072/US
NAME OF SUBMITTER:	ROBERT LODENKAMPER
SIGNATURE:	/Robert Lodenkamper/
DATE SIGNED:	09/02/2017

Total Attachments: 3

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PATENT 504531488 REEL: 043475 FRAME: 0765

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PATENT REEL: 043475 FRAME: 0766

ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of April 1, 2016, by and between Bruce L. Daniel, an individual residing in Stanford, CA, US, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is 3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA (the "Assignee").

- 1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US provisional patent application 62/317112 filed 4/1/2016 entitled FAT-BASED REGISTRATION OF DYNAMIC WATER IMAGES IN CONSTRAST-ENHANCED IMAGING (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s). including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.
- Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).
- Assignor agrees that Assignee may apply for foreign patents relating to said invention(s). and irrevocably authorizes Assignee and grants Assignee the right to do so.
- 4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful caths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.
- 5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.
- 6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of April 1, 2016.

Signature:

Assignor: Bruce L. Daniel

Lumen Ref.: S16~072/PROV

PID: 22635 IID: 4960

PATENT REEL: 043475 FRAME: 0767

ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of April 1, 2016, by and between Subashini Srinivasan, an individual residing in Palo Alto, CA, US, (the "Assignor") and The Board of Trustees of the Leland Stanford Junior University, an entity whose address is 3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA (the "Assignee").

- 1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assigner hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US provisional patent application 62/317112 filed 4/1/2016 entitled FAT-BASED REGISTRATION OF DYNAMIC WATER IMAGES IN CONSTRAST. ENHANCED IMAGING (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.
- 2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).
- Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.
- 4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful paths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.
- 5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made,
- 6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of April 1, 2016.

Signature:

Assignor: Subashini Srinivasan

Lumen Ref.: S16-072/PROV PID: 22635 HD: 5936

ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of April 1, 2016, by and between Brian A. Hargreaves, an individual residing in Menlo Park, CA, US, (the "Assignor") and The Board of Trustees of the Leland Stanford Junior University, an entity whose address is 3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA (the "Assignee").

- 1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US provisional patent application 62/317112 filed 4/1/2016 entitled FAT-BASED REGISTRATION OF DYNAMIC WATER IMAGES IN CONSTRAST-ENHANCED IMAGING (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.
- 2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).
- 3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.
- 4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.
- 5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.
- 6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **April 1, 2016**.

Signature:

Assignor: **Brian A. Hargreaves**

Lumen Ref.: S16-072/PROV PID: 22635 IID: 4039

PATENT REEL: 043475 FRAME: 0769

RECORDED: 09/02/2017