

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5517514

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
EMAD M. BOCTOR	05/10/2019
IULIAN I. IORDACHITA	03/07/2019
XIAOYU GUO	05/08/2019
ALEXIS CHANG	03/28/2019
HAICHONG ZHANG	05/09/2019
FERESHTEH AALAMIFAR	04/07/2019
RECEIVING PARTY DATA	
Name:	THE JOHNS HOPKINS UNIVERSITY
Street Address:	3400 N. CHARLES STREET
City:	BALTIMORE
State/Country:	MARYLAND
Postal Code:	21218
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14690232
CORRESPONDENCE DATA	
Fax Number:	(571)432-0808
<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:	5714320800
Email:	rallen@harrityllp.com
Correspondent Name:	HARRITY & HARRITY, LLP
Address Line 1:	11350 RANDOM HILLS ROAD
Address Line 2:	SUITE 600
Address Line 4:	FAIRFAX, VIRGINIA 22030
ATTORNEY DOCKET NUMBER:	0105-0013
NAME OF SUBMITTER:	JENNY ROSENFELD
SIGNATURE:	/JENNY ROSENFELD/
DATE SIGNED:	05/10/2019

Total Attachments: 13

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WORLDWIDE ASSIGNMENT

WHEREAS, We, Emad M. BOCTOR, of 6232 A Green Meadow Parkway, Apt. A, Baltimore, MD 21209 US; Iulian I. IORDACHITA, of 14 Gorsuch Road, Lutherville, MD 21093 US; Xiaoyu GUO, of 500 West University Parkway Apt. 14M, Baltimore, MD 21210 US; Alexis CHENG, of 116 West University Parkway Unit 807, Baltimore, MD 21210 US; Haichong Kai ZHANG, of 3501 Saint Paul St., Apt. 512, Baltimore, MD 21218 US; Fereshteh AALAMIFAR, of 3400 North Charles St., Baltimore, MD 21218 US; hereinafter collectively referred to as the ASSIGNOR(s), have invented a certain new and useful improvement relating to ROBOT ASSISTED ULTRASOUND SYSTEM (JHU Ref. No. C12963), hereinafter referred to as the INVENTION(s), for which an application was filed in the United States Patent and Trademark Office on April 17, 2015, as United States Patent Application Number 14/690,232, in addition to:

[X] said application(s) having been filed as U.S. Provisional Patent Application(s) on April 17, 2014, and given Application No.(s) 61/981,069; wherein all applications listed above being hereinafter referred to as the APPLICATION(s);

WHEREAS, The Johns Hopkins University, a corporation duly organized under the laws of the State of Maryland, having a place of business at 3400 N. Charles Street, Baltimore, Maryland 21218, USA, hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to the INVENTION(s) and the APPLICATION(s) and each and every priority right that is or may be predicated upon or arise from the INVENTION(s) and APPLICATION(s), including any divisions, continuations, substitutions, renewals, reissues, reexaminations, and extensions thereof, and any and all applications claiming priority therefrom, and the entire right, title, and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, that for good and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR(s) hereby sells, assigns, transfers, and sets over, and has assigned, sold, transferred, and set over, to ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the INVENTION(s) and the APPLICATION(s) and each and every priority right that is or may be predicated upon or arise from the INVENTION(s) and APPLICATION(s), including any divisions, continuations, substitutions, renewals, reissues, reexaminations, and extensions thereof, and any and all applications claiming priority therefrom, and the entire right, title, and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries, the same to be held and enjoyed by ASSIGNEE, for its own use and benefit and for the use and benefit of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(s), had this sale and assignment not been made;

AND for the same consideration, ASSIGNOR(s) hereby represent and warrant to ASSIGNEE, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to ASSIGNEE under law or that have already been transferred to

ASSIGNEE, ASSIGNOR(s) are the sole and lawful owners of the entire right, title and interest in and to the INVENTION(s) and APPLICATION(s) for Letters Patent, and that the same are unencumbered, and that ASSIGNOR(s) have good and full right and lawful authority to sell and convey the same in the manner set forth herein;

AND for the same consideration, ASSIGNOR(s) hereby covenant and agree to and with ASSIGNEE, its successors, legal representatives, and assigns, that ASSIGNOR(s) will sign, execute, and deliver to ASSIGNEE all papers and documents, including, but not limited to, petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance that may be requested by ASSIGNEE, to communicate to or furnish ASSIGNEE with any and all facts relating to the INVENTION(s) or the history thereof and any and all documents, data, photographs, models, samples, prototypes, biological deposits, or other physical exhibits which may embody the INVENTION(s), to testify in any proceedings relating to the INVENTION(s), patent applications, and/or Letters Patent, take all lawful oaths, and otherwise do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of any Letters Patent and applications for Letters Patent for said INVENTION(s), without charge to ASSIGNEE, its successors, legal representatives and assigns, whenever counsel of ASSIGNEE, or counsel of its successors, legal representatives, and assigns, shall advise that any proceeding, including, but not limited to, interference proceedings, in connection with said INVENTION(s), or said APPLICATION(s) for Letters Patent, or Letters Patent, and each and every priority right that is or may be predicated upon or arise from the INVENTION(s) and APPLICATION(s), including any divisions, continuations, substitutions, renewals, reissues, reexaminations, and extensions thereof, and any and all applications claiming priority therefrom, in the United States and its territorial possessions and in any and all foreign countries is lawful and desirable;

AND ASSIGNOR(s) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions, including the Commissioner of Patent and Trademarks, and Patent Office Officials in any and all foreign countries to issue any and all of said Letters Patent, when granted, to ASSIGNEE as the assignee of my/our entire right, title, and interest in said INVENTION(s) and the Letters Patent to be issued thereon, for the sole use and benefit of ASSIGNEE, its successors, legal representatives, and assigns, to the full end of the term or terms for which said Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR(s) had this Assignment not been made;

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IN WITNESS WHEREOF, each individual collectively referred to as ASSIGNOR has caused this Assignment to be executed.

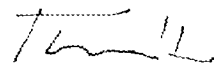
EXECUTED this 10th day of May, 2019.

ASSIGNOR: Emad M. BOCTOR

Signature: 

Name: Emad M Boctor Mikhail

WITNESS:

Signature: 

Name: Thomas M. Haas

EXECUTED this ____ day of ____, 2019.

ASSIGNOR: Iulian I. IORDACHITA

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of ____, 2019.

ASSIGNOR: Xiaoyu GUO

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of ____, 2019.

ASSIGNOR: Alexis CHENG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of ____, 2019.

ASSIGNOR: Haichong Kai ZHANG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of ____, 2019.

ASSIGNOR: Fereshteh AALAMIFAR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

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[X] said application(s) having been filed as U.S. Provisional Patent Application(s) on April 17, 2014, and given Application No.(s) 61/981,069; wherein all applications listed above being hereinafter referred to as the APPLICATION(s);

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AND for the same consideration, ASSIGNOR(s) hereby represent and warrant to ASSIGNEE, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to ASSIGNEE under law or that have already been transferred to

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AND for the same consideration, ASSIGNOR(s) hereby covenant and agree to and with ASSIGNEE, its successors, legal representatives, and assigns, that ASSIGNOR(s) will sign, execute, and deliver to ASSIGNEE all papers and documents, including, but not limited to, petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance that may be requested by ASSIGNEE, to communicate to or furnish ASSIGNEE with any and all facts relating to the INVENTION(s) or the history thereof and any and all documents, data, photographs, models, samples, prototypes, biological deposits, or other physical exhibits which may embody the INVENTION(s), to testify in any proceedings relating to the INVENTION(s), patent applications, and/or Letters Patent, take all lawful oaths, and otherwise do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of any Letters Patent and applications for Letters Patent for said INVENTION(s), without charge to ASSIGNEE, its successors, legal representatives and assigns, whenever counsel of ASSIGNEE, or counsel of its successors, legal representatives, and assigns, shall advise that any proceeding, including, but not limited to, interference proceedings, in connection with said INVENTION(s), or said APPLICATION(s) for Letters Patent, or Letters Patent, and each and every priority right that is or may be predicated upon or arise from the INVENTION(s) and APPLICATION(s), including any divisions, continuations, substitutions, renewals, reissues, reexaminations, and extensions thereof, and any and all applications claiming priority therefrom, in the United States and its territorial possessions and in any and all foreign countries is lawful and desirable;

AND ASSIGNOR(s) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions, including the Commissioner of Patent and Trademarks, and Patent Office Officials in any and all foreign countries to issue any and all of said Letters Patent, when granted, to ASSIGNEE as the assignee of my/our entire right, title, and interest in said INVENTION(s) and the Letters Patent to be issued thereon, for the sole use and benefit of ASSIGNEE, its successors, legal representatives, and assigns, to the full end of the term or terms for which said Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR(s) had this Assignment not been made;

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IN WITNESS WHEREOF, each individual collectively referred to as ASSIGNOR has caused this Assignment to be executed.

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Emad M. BOCTOR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this 7th day of March, 2019.

ASSIGNOR: Iulian I. IORDACHITA

Signature: *Iulian Iordachita*

Name: IULIAN IORDACHITA

WITNESS:

Signature: *Ashley Moriarty*

Name: Ashley Moriarty

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Xiaoyu GUO

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Alexis CHENG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Haichong Kai ZHANG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Fereshteh AALAMIFAR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

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EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Emad M. BOCTOR

WITNESS:

Signature: _____

Signature: _____

Name: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Julian I. IORDACHITA

WITNESS:

Signature: _____

Signature: _____

Name: _____

Name: _____

EXECUTED this 8th day of May, 2019.

ASSIGNOR: Xiaoyu GUO

WITNESS:

Signature: [Signature]

Signature: Xing

Name: Xiaoyu Guo

Name: Xing Xing

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Alexis CHENG

WITNESS:

Signature: _____

Signature: _____

Name: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Haichong Kai ZHANG

WITNESS:

Signature: _____

Signature: _____

Name: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Fereshteh AALAMIFAR

WITNESS:

Signature: _____

Signature: _____

Name: _____

Name: _____

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IN WITNESS WHEREOF, each individual collectively referred to as ASSIGNOR has caused this Assignment to be executed.

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Emad M. BOCTOR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Iulian I. IORDACHITA

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Xiaoyu GUO

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this 23 day of MARCH, 2019.

ASSIGNOR: Alexis CHENG

Signature: [Signature]

Name: Alexis Cheng

WITNESS:

Signature: [Signature]

Name: WANG, Zhen

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Haichong Kai ZHANG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Fereshieh ALAMIFAR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

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Signature: _____

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ASSIGNOR: Iulian I. IORDACHITA

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Xiaoyu GUO

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Alexis CHENG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this 9 day of May, 2019.

ASSIGNOR: Haichong Kai ZHANG

Signature: _____

Name: Haichong Zhang

WITNESS:

Signature: 津羽 泰亨

Name: Ryosuke Tsumura

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Fereshteh ALAMIFAR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

WORLDWIDE ASSIGNMENT

WHEREAS, We, Emad M. BOCTOR, of 6232 A Green Meadow Parkway, Apt. A, Baltimore, MD 21209 US; Iulian I. IORDACHITA, of 14 Gorsuch Road, Lutherville, MD 21093 US; Xiaoyu GUO, of 500 West University Parkway Apt. 14M, Baltimore, MD 21210 US; Alexis CHENG, of 116 West University Parkway Unit 807, Baltimore, MD 21210 US; Haichong Kai ZHANG, of 3501 Saint Paul St., Apt. 512, Baltimore, MD 21218 US; ~~4027 Great Notch Ter, North Potomac, MD 20878~~ Fereshieh AALAMIFAR, of ~~3400 North Charles St., Baltimore, MD 21218 US~~; hereinafter collectively referred to as the ASSIGNOR(s), have invented a certain new and useful improvement relating to ROBOT ASSISTED ULTRASOUND SYSTEM (JHU Ref. No. C12963), hereinafter referred to as the INVENTION(s), for which an application was filed in the United States Patent and Trademark Office on April 17, 2015, as United States Patent Application Number 14/690,232, in addition to:

- [X] said application(s) having been filed as U.S. Provisional Patent Application(s) on April 17, 2014, and given Application No.(s) 61/981,069; wherein all applications listed above being hereinafter referred to as the APPLICATION(s);

WHEREAS, The Johns Hopkins University, a corporation duly organized under the laws of the State of Maryland, having a place of business at 3400 N. Charles Street, Baltimore, Maryland 21218, USA, hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to the INVENTION(s) and the APPLICATION(s) and each and every priority right that is or may be predicated upon or arise from the INVENTION(s) and APPLICATION(s), including any divisions, continuations, substitutions, renewals, reissues, reexaminations, and extensions thereof, and any and all applications claiming priority therefrom, and the entire right, title, and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, that for good and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR(s) hereby sells, assigns, transfers, and sets over, and has assigned, sold, transferred, and set over, to ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the INVENTION(s) and the APPLICATION(s) and each and every priority right that is or may be predicated upon or arise from the INVENTION(s) and APPLICATION(s), including any divisions, continuations, substitutions, renewals, reissues, reexaminations, and extensions thereof, and any and all applications claiming priority therefrom, and the entire right, title, and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries, the same to be held and enjoyed by ASSIGNEE, for its own use and benefit and for the use and benefit of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(s), had this sale and assignment not been made;

AND for the same consideration, ASSIGNOR(s) hereby represent and warrant to ASSIGNEE, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to ASSIGNEE under law or that have already been transferred to

IN WITNESS WHEREOF, each individual collectively referred to as ASSIGNOR has caused this Assignment to be executed.

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Emad M. BOCTOR

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Imhan I. IORDACHITA

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Xiaoyu GUO

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Alexis CHENG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this ____ day of _____, 2019.

ASSIGNOR: Haichong Kai ZHANG

Signature: _____

Name: _____

WITNESS:

Signature: _____

Name: _____

EXECUTED this 7th day of April, 2019.

ASSIGNOR: Fereshteh AALAMIFAR

Signature: F. Aalameh

Name: Fereshteh Aalamifar

WITNESS:

Signature: Reza Seifabadi

Name: REZA SEIFABADI