

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT6410389

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JOHN F. BARRY	09/20/2019
ERIK R. EISENACH	12/11/2019
MICHAEL F. O'KEEFFE	12/11/2019
JONAH A. MAJUMDER	12/11/2019
LINH M. PHAM	12/11/2019
ISAAC CHUANG	08/30/2020
ERIK M. THOMPSON	09/20/2019
CHRISTOPHER LOUIS PANUSKI	11/06/2019
XINGYU ZHANG	09/20/2019
DANIELLE A. BRAJE	09/20/2019
RECEIVING PARTY DATA	
Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
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City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	16551799
PCT Number:	US2019048238
CORRESPONDENCE DATA	
Fax Number:	
<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>	
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Address Line 2:	SUITE 401
Address Line 4:	BOSTON, MASSACHUSETTS 02116

PATENT

ATTORNEY DOCKET NUMBER:	MIT-20819US01
NAME OF SUBMITTER:	CHRISTOPHER MAX COLICE
SIGNATURE:	/Christopher Max Colice/
DATE SIGNED:	11/19/2020
Total Attachments: 9 source=MIT-20819US01_Assignment_-_EXECUTED#page1.tif source=MIT-20819US01_Assignment_-_EXECUTED#page2.tif source=MIT-20819US01_Assignment_-_EXECUTED#page3.tif source=MIT-20819US01_Assignment_-_EXECUTED#page4.tif source=MIT-20819US01_Assignment_-_EXECUTED#page5.tif source=MIT-20819US01_Assignment_-_EXECUTED#page6.tif source=MIT-20819US01_Assignment_-_EXECUTED#page7.tif source=MIT-20819US01_Assignment_-_EXECUTED#page8.tif source=MIT-20819US01_Assignment_-_EXECUTED#page9.tif	

ASSIGNMENT

John F. Barry, residing at 1 Chauncy St., Apt. 6, Cambridge, MA 02138, United States; **Erik R. Eisenach**, residing at 410 Memorial Drive, Apt 342, Cambridge, MA 02139, United States; **Michael F. O'Keeffe**, residing at 31 Bartel Ter., Medford, MA 02115, United States; **Jonah A. Majumder**, residing at 2130 Massachusetts Ave., #3D, Cambridge, MA 02140, United States; **Linh M. Pham**, residing at 72 Margaret St., Arlington, MA 02474, United States; **Isaac Chuang**, residing at 35 Cary Ave, Lexington, MA 02421, United States; **Erik M. Thompson**, residing at 33 Middlesex Circle, #17, Waltham, MA 02452, United States; **Christopher Louis Panuski**, residing at 16 South St. #2, Somerville, MA 02143, United States; **Xingyu Zhang**, residing at 19 Garden St., Apt. 25, Cambridge, MA 02138, United States; and **Danielle A. Braje**, residing at 14 Mayflower Road, Winchester, MA 01890, United States (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent entitled **Microwave Resonator Readout of an Ensemble Solid State Spin Sensor**, and which is a:

- (1) ☒ non-provisional application
 - (a) ☐ to be filed herewith; or
 - (b) ☒ bearing Application No.16/551,799, and filed on 2019-08-27; and/or
- (2) ☒ PCT application
 - (a) ☒ bearing Application No. PCT/US2019/48238, and filed on 2019-08-27.

WHEREAS, Massachusetts Institute of Technology, a University having its principal place of business at **77 Massachusetts Ave, Cambridge, MA 02139, United States**, its successors, legal representatives and assigns, (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention(s); the application(s) for patent identified above; the right to file applications for patent of the United States or other countries on the Invention(s); any application(s) for patent of the United States or other countries claiming priority to, and/or the benefit of, these applications; any provisional or other right to recover any and all past, present, and future damages, including royalties, for any and all past, present, and future infringements of these application(s); and any and all patent(s) of the United States or other countries that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee or a predecessor in interest of the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee

or a predecessor in interest of the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application(s) for patent identified above;
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Hague Convention, the Paris Convention for the Protection of Industrial Property, and under the Patent Cooperation Treaty, and all rights of claiming priority in any country of the world;
- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);
- (e) any application(s) for patent of the United States or other countries claiming priority to, and/or the benefit of, at least one of the application(s) for patent identified above or any application(s) for patent claiming the Invention(s), including any priority application(s), substitute application(s), division(s), continuation(s), and continuation(s)-in-part;
- (f) any provisional or other right to recover any and all past, present, and future damages, including royalties, for any and all past, present, and future infringements of any application for patent identified in the preceding paragraphs (b)-(e) and of any and all patent(s) granted based thereon in the United States and in all other countries; and
- (g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b)-(e), including any reissue(s), reexamination(s), revival(s), renewal(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein, and

that Assignor will not make or enter into any assignment, sale, agreement or encumbrance which would conflict with these presents.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said application(s), and said patent(s), including interference and derivation proceedings, and any post-grant proceedings (e.g., opposition proceedings, post-grant reviews, *Inter partes* reviews, supplemental examinations, etc.) without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of Smith Baluch LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application(s) identified above when known.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Inventor Signature: John Barry Date: 9/20/19
John F. Barry
Witness Signature: Scott Alsid Date: 20 SEP 2019
Print Witness Name: Scott Alsid


Inventor Signature: _____ Date: _____
Erik R. Eisenach
Witness Signature: _____ Date: _____
Print Witness Name: _____

Inventor Signature: _____ Date: _____
Michael F. O'Keeffe
Witness Signature: _____ Date: _____
Print Witness Name: _____

Inventor Signature: _____ Date: _____
John F. Barry

Witness Signature: _____ Date: _____

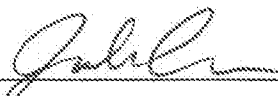
Print Witness Name: _____

Inventor Signature:  _____ Date: 12/11/2019
Erik R. Eisenach

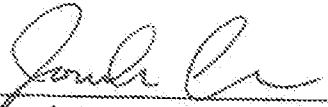
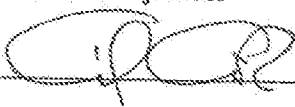
Witness Signature:  _____ Date: 12/11/2019


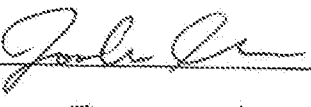
Print Witness Name: Jonah Majumder

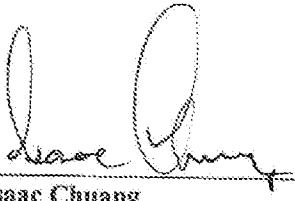
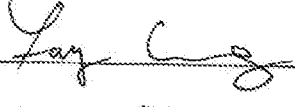
Inventor Signature:  _____ Date: 12/11/2019
Michael F. O'Keeffe

Witness Signature:  _____ Date: 12/11/19

Print Witness Name: Jonah Majumder

Inventor Signature:  Date: 12/11/19
Jonah A. Majumder
Witness Signature:  Date: 12/11/19
Print Witness Name: Erik Eisenach

Inventor Signature:  Date: 12/11/2019
Linh M. Pham
Witness Signature:  Date: 12/11/2019
Print Witness Name: Jonah Majumder

Inventor Signature:  Date: 30 Aug 2020
Isaac Chuang
Witness Signature:  Date: 08/30/20
Print Witness Name: Fay Chang

Inventor Signature: Erik M. Thompson Date: 9/20/2019
Erik M. Thompson

Witness Signature: Scott Alsid Date: 20 SEP 2019

Print Witness Name: Scott Alsid

Inventor Signature: _____ Date: _____
Christopher Louis Panuski

Witness Signature: _____ Date: _____

Print Witness Name: _____

Inventor Signature: Xingyu Zhang Date: 9/20/2019
Xingyu Zhang


Witness Signature: Scott Alsid Date: 20 SEP 2019

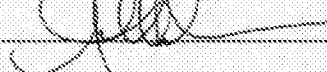
Print Witness Name: Scott Alsid

Inventor Signature: _____ Date: _____
Erik M. Thompson

Witness Signature: _____ Date: _____

Print Witness Name: _____

Inventor Signature:  _____ Date: 06 NOV 2019
Christopher Louis Panuski

Witness Signature:  _____ Date: 06 NOV 2019

Print Witness Name: MIHIRA PRABHU

Inventor Signature: _____ Date: _____
Xingyu Zhang

Witness Signature: _____ Date: _____

Print Witness Name: _____

Inventor Signature: Danielle A. Braje Date: 9/20/2019
Danielle A. Braje
Witness Signature: Scott Alsid Date: 20 SEP 2019
Print Witness Name: Scott Alsid

For and on behalf of ASSIGNEE:

Date: Sep 28/2020 By: Jonathan Hromi
Name: JONATHAN HROMI
Title: MIT Intellectual Property Officer
University: Massachusetts Institute of Technology

Witness Signature: Joseph Lee Date: 9/28/2020
Print Witness Name: Joseph Lee