

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5645582

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the SPELLING OF THE ASSIGNEE NAME TO BE MASSACHUSETTS INSTITUTE OF TECHNOLOGY previously recorded on Reel 040249 Frame 0081. Assignor(s) hereby confirms the SPELLING OF THE ASSIGNEE NAME TO BE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ALAN J. FENN	04/28/2016
BEIJIA ZHANG	05/09/2016
PETER T. HURST	05/04/2016
KENNETH E. KOLODZIEJ	04/28/2016
LARRY L. RETHERFORD	05/03/2016
CHRISTIAN D. AUSTIN	05/04/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
<b>Street Address:</b>	77 MASSACHUSETTS AVENUE
<b>City:</b>	CAMBRIDGE
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02139
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15302063
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(781)401-9966
<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>Email:</b>	sbl@dc-m.com
<b>Correspondent Name:</b>	DALY, CROWLEY, MOFFORD & DURKEE, LLP
<b>Address Line 1:</b>	ONE UNIVERSITY AVENUE
<b>Address Line 2:</b>	SUITE 201B
<b>Address Line 4:</b>	WESTWOOD, MASSACHUSETTS 02090
<b>ATTORNEY DOCKET NUMBER:</b>	MIT-316AUS
<b>NAME OF SUBMITTER:</b>	DAVID E. BLAU
<b>SIGNATURE:</b>	/David E. Blau, #60,625/

**DATE SIGNED:**

07/31/2019

**Total Attachments: 11**

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Corrective Assignment

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

NOVEMBER 9, 2016

PTAS

DALY, CROWLEY, MOFFORD & DURKEE, LLP  
354A TURNPIKE STREET  
SUITE 301A  
CANTON, MA 02021-2714

504039692

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 10/06/2016

REEL/FRAME: 040249/0081  
NUMBER OF PAGES: 9

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: MIT-316AUS

ASSIGNOR:  
FENN, ALAN J.

DOC DATE: 04/28/2016

ASSIGNOR:  
ZHANG, BEIJIA

DOC DATE: 05/09/2016

ASSIGNOR:  
HURST, PETER T.

DOC DATE: 05/04/2016

ASSIGNOR:  
KOLODZIEJ, KENNETH E.

DOC DATE: 04/28/2016

ASSIGNOR:  
RETFERFORD, LARRY L.

DOC DATE: 05/03/2016

ASSIGNOR:  
AUSTIN, CHRISTIAN D.

DOC DATE: 05/04/2016

Corrective Assignment

040249/0081 PAGE 2

ASSIGNEE:

~~MASSACHUSETTS INSTITUTE OF TECHNOLOGY~~

Massachusetts Institute of Technology

77 MASSACHUSETTS AVENUE  
CAMBRIDGE, MASSACHUSETTS 02139

APPLICATION NUMBER: 15302063

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: MULTIPOLARIZED VECTOR SENSOR ARRAY ANTENNA SYSTEM FOR SEARCH AND  
RESCUE APPLICATIONS

ASSIGNMENT RECORDATION BRANCH

PUBLIC RECORDS DIVISION

**PATENT ASSIGNMENT COVER SHEET**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT														
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT														
<b>CONVEYING PARTY DATA</b>															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>ALAN J. FENN</td> <td>04/28/2016</td> </tr> <tr> <td>BEIJIA ZHANG</td> <td>05/09/2016</td> </tr> <tr> <td>PETER T. HURST</td> <td>05/04/2016</td> </tr> <tr> <td>KENNETH E. KOLODZIEJ</td> <td>04/28/2016</td> </tr> <tr> <td>LARRY L. RETHERFORD</td> <td>05/03/2016</td> </tr> <tr> <td>CHRISTIAN D. AUSTIN</td> <td>05/04/2016</td> </tr> </tbody> </table>		Name	Execution Date	ALAN J. FENN	04/28/2016	BEIJIA ZHANG	05/09/2016	PETER T. HURST	05/04/2016	KENNETH E. KOLODZIEJ	04/28/2016	LARRY L. RETHERFORD	05/03/2016	CHRISTIAN D. AUSTIN	05/04/2016
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<b>RECEIVING PARTY DATA</b>															
<p style="text-align: center;"><i>Massachusetts Institute of Technology</i></p> <table border="1"> <tr> <td><b>Name:</b></td> <td>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</td> </tr> <tr> <td><b>Street Address:</b></td> <td>77 MASSACHUSETTS AVENUE</td> </tr> <tr> <td><b>City:</b></td> <td>CAMBRIDGE</td> </tr> <tr> <td><b>State/Country:</b></td> <td>MASSACHUSETTS</td> </tr> <tr> <td><b>Postal Code:</b></td> <td>02139</td> </tr> </table>		<b>Name:</b>	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	<b>Street Address:</b>	77 MASSACHUSETTS AVENUE	<b>City:</b>	CAMBRIDGE	<b>State/Country:</b>	MASSACHUSETTS	<b>Postal Code:</b>	02139				
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<b>Fax Number:</b>	(781)401-9966														
<b>Email:</b>	dm@dc-m.com														
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<b>Correspondent Name:</b>	DALY, CROWLEY, MOFFORD & DURKEE, LLP														
<b>Address Line 1:</b>	354A TURNPIKE STREET														
<b>Address Line 2:</b>	SUITE 301A														
<b>Address Line 4:</b>	CANTON, MASSACHUSETTS 02021-2714														
<b>ATTORNEY DOCKET NUMBER:</b>	MIT-316AUS														
<b>NAME OF SUBMITTER:</b>	CHRISTOPHER S. DALY														

Signature:	/csd/
Date:	10/06/2016
<b>Total Attachments: 7</b> source=TO_PTO_ASSIGN_MIT_316AUS#page1.tif source=TO_PTO_ASSIGN_MIT_316AUS#page2.tif source=TO_PTO_ASSIGN_MIT_316AUS#page3.tif source=TO_PTO_ASSIGN_MIT_316AUS#page4.tif source=TO_PTO_ASSIGN_MIT_316AUS#page5.tif source=TO_PTO_ASSIGN_MIT_316AUS#page6.tif source=TO_PTO_ASSIGN_MIT_316AUS#page7.tif	
<b>RECEIPT INFORMATION</b>	
EPAS ID:	PAT4086353
Receipt Date:	10/06/2016

## ASSIGNMENT

Whereas we, the undersigned, Alan J. Fenn, Beijia Zhang, Peter T. Hurst, Kenneth E. Kolodziej, Larry L. Retherford, and Christian D. Austin hereby have made certain inventions or discoveries (or both) set forth in an application filed under the Patent Cooperation Treaty (PCT) entitled: MULTIPOLARIZED VECTOR SENSOR ARRAY ANTENNA SYSTEM FOR SEARCH AND RESCUE APPLICATIONS, identified as Attorney Docket No. MIT-316AWO, and 17792L, which application was filed on April 13, 2016 and assigned PCT Application No. PCT/US2016/027269. In the event that the filing date and/or Application No. are not entered above or are incorrect at the time we executed this document, and if such information is deemed necessary, we hereby authorize and request the attorneys at DALY, CROWLEY, MOFFORD & DURKEE, LLP, 354A Turnpike Street, Suite 301A, Canton, MA 02021-2714, to insert above the filing date and/or Application No. of said application.

Whereas Massachusetts Institute of Technology, a Massachusetts Corporation having a place of business at 77 Massachusetts Avenue, Cambridge, MA 02139, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

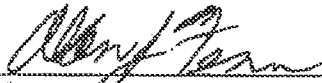
Now, therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said PCT Application, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, re-examination and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent and any provisional applications from which priority is claimed in said Letters Patent;
2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
3. Authorize and request the empowered officials of all governments and/or all authorized entities to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance;

5. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in my control or in the control of my heirs, legal representatives or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

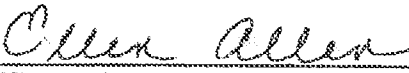
In testimony of which we have each executed this Assignment as an instrument on the date indicated next to our name(s).

Dated: 4/28/2016

  
Alan J. Form

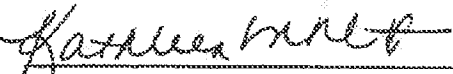
Witnessed by:

Dated: 4/28/2016

  
First Witness Signature

Ellen Allen  
First Witness Printed Name

Dated: 4-28/2016

  
Second Witness Signature

Kathleen m. Nett  
Second Witness Printed Name



PATENT ASSIGNMENT  
Atty. Dckt. No.: MIT-316AWO  
Client Case No.: 17792L

Dated: 5/9/2016

Beijia Zhang  
Beijia Zhang

Witnessed by:

Dated: 5/9/2016

Peter A. Schulz  
First Witness Signature

Peter A. Schulz  
First Witness Printed Name


Dated: 5/9/2016

Joyce Michaels  
Second Witness Signature

Joyce Michaels  
Second Witness Printed Name


PATENT ASSIGNMENT  
Atty. Dckt. No.: MIT-316AWO  
Client Case No.: 17792L

Dated: 4 May 2016

  
\_\_\_\_\_  
Peter T. Hurst

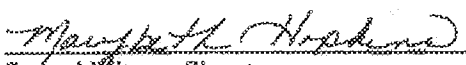
Witnessed by:

Dated: 5/4/16

  
\_\_\_\_\_  
First Witness Signature

Sarah Baur  
\_\_\_\_\_  
First Witness Printed Name

Dated: 5/4/16

  
\_\_\_\_\_  
Second Witness Signature

Meredith Hopkins  
\_\_\_\_\_  
Second Witness Printed Name

PATENT ASSIGNMENT  
Atty. Dckt. No.: MIT-316AWO  
Client Case No.: 17792L

Dated: 4/28/16

Kenneth Kolodziej  
Kenneth E. Kolodziej

Witnessed by:

Dated: 4/28/16

Ellen Allen  
First Witness Signature

Ellen Allen  
First Witness Printed Name

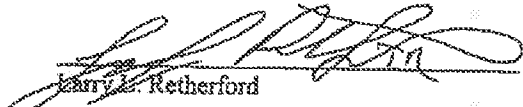
Dated: 4/28/16

Kathleen M. Nett  
Second Witness Signature

Kathleen M. Nett  
Second Witness Printed Name

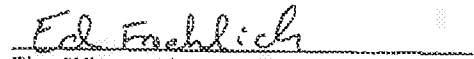
PATENT ASSIGNMENT  
Atty. Dckt. No.: MIT-316AWO  
Client Case No.: 17792L

Dated: 05/3/2016

  
\_\_\_\_\_  
Harry E. Retherford

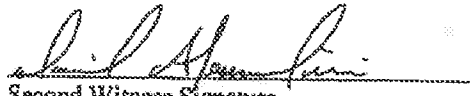
Witnessed by:

Dated: 5/3/2016

  
\_\_\_\_\_  
First Witness Signature

Ed Froehlich  
\_\_\_\_\_  
First Witness Printed Name

Dated: 5/3/2016

  
\_\_\_\_\_  
Second Witness Signature

David Alessandrini  
\_\_\_\_\_  
Second Witness Printed Name

PATENT ASSIGNMENT  
Atty. Dckt. No.: MIT-316AWO  
Client Case No.: 17792L

Dated: 5/4/2016

Christian D. Austin  
Christian D. Austin

Witnessed by:

Dated: 5/4/16

Sarah Baur  
First Witness Signature

Sarah Baur  
First Witness Printed Name

Dated: 5/4/16

Marabeth Hopkins  
Second Witness Signature

Marabeth Hopkins  
Second Witness Printed Name

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