PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MAI VU	08/08/2016

RECEIVING PARTY DATA

Name:	TRUSTEES OF TUFTS COLLEGE	
Street Address:	TUFTS UNIVERSITY, BALLOU HALL	
Internal Address:	4TH FLOOR	
City:	MEDFORD	
State/Country:	MASSACHUSETTS	
Postal Code:	02155	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15617361

CORRESPONDENCE DATA

Fax Number: (617)500-2499

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.

Phone: 617-500-2500

Email: guarino@orpatent.com

Correspondent Name: OCCHIUTI & ROHLICEK LLP

Address Line 1: 321 SUMMER STREET

Address Line 4: BOSTON, MASSACHUSETTS 02210

ATTORNEY DOCKET NUMBER:	70011-066001	
NAME OF SUBMITTER:	FAY E. GUARINO	
SIGNATURE:	/ Fay E. Guarino /	
DATE SIGNED:	06/09/2017	

Total Attachments: 5

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> PATENT REEL: 042658 FRAME: 0563

Customer No.:64884 Docket No.: T8000-0003-P002

The attached Assignment document is prepared by Bergman & Song LLP and serves to transfer substantial legal rights. Bergman & Song LLP represents the Trustees of Tufts College in this transaction. The Assignors are advised to seek independent legal counsel to ensure that they understand the rights transferred by this instrument.

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ASSIGNMENT

THIS ASSIGNMENT, by Mai VU, an individual residing at 120 Elm Street, Apt. 1, Belmont, MA 02478 (hereinafter referred to as Assignor);

WHEREAS, Assignor now possesses certain new and useful inventions entitled SIGNAL DESIGN TO ACHIEVE THE CAPACITY OF MULTI-INPUT SYSTEMS

WITH PER-INPUT POWER CONSTRAINT set forth in an application for Letters

Patent of the United States already filed on June 4, 2012 as US Provisional Patent

Application No. 61/655,011, and entitled THE CAPACITY OF MIMO CHANNELS WITH

PER-ANTENNA POWER CONSTRAINT set forth in an application for Letters Patent of the United States already filed on June 3, 2013 as US Provisional Patent Application

No. 61/830,328, and entitled SYSTEM, METHOD AND APPARATUS FOR MULTI-INPUT MULTI-OUTPUT COMMUNICATIONS OVER PER-TRANSMITTER POWER-CONSTRAINED CHANNELS set forth in an application for Letters Patent of the United States already filed on June 4, 2013 as US Utility Patent Application No. 13/910,093, and;

WHEREAS, Trustees of Tufts College, a school doing business at Tufts College, Medford, MA 02155 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions, and improvements thereon, and in and to said application for Letters Patent of the United States, and any Letters Patent of the United States, and of foreign jurisdictions, to be obtained therefor and thereon, as well as the right of action and all other rights, including the right to sue or otherwise bring action and to collect and receive damages therefrom for past infringement thereof, and to collection of reasonable royalties based on provisional rights thereof;

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NOW, THEREFORE, in consideration of One Dollar (\$1.00) in hand paid, and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and said improvements and said application for Letters Patent, and in and to any and all patent applications claiming priority therefrom including, but not limited to, all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said inventions and improvements in any foreign country including, but not limited to, all divisions, continuations, continuations-in-part thereof, and further including, but not limited to, extensions, renewals, substitutes and reissues granted for said inventions and improvements in any foreign country, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which such Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made;

AND for the same consideration, Assignor hereby sells, assigns, transfers and sets over to Assignee, any and all claims and demands that Assignor may have against any person or entity relating to the right, title and interest in and to said inventions

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and improvements thereon, and said application for Letters Patent of the United States, and any Letters Patent of the United States, and of foreign jurisdictions, or other rights to be obtained therefor and thereon, including but not limited to, any claim of infringement of rights, including provisional rights, whether heretofore or hereafter accrued, together with the right to retain for Assignee any and all sums that Assignee may obtain or recover as a result of the assertion or enforcement of any such claim or demand;

AND for the same consideration, Assignor hereby represents and warrants 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 is the sole and lawful owner of the entire right, title and interest in and to: the said inventions and improvements thereon, and said application for Letters Patent above-mentioned, and any Letters Patent of the United States and of any foreign jurisdiction to be obtained therefor and thereon, and that the same are unencumbered, and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that Assignor will sign all papers and documents, take all lawful oaths and 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 inventions, 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 in connection with said inventions, or said application for Letters

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Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable;

AND for the same consideration, Assignor hereby authorizes and requests the United States Commissioner for Patents, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to Assignee, for the sole use and benefit of Assignee, its successors, legal representatives and assigns;

AND Assignor acknowledges an obligation of assignment of this invention to Assignee at the time the invention was made.

United States of America
State of Mai Vu

United States of America
State of Massachusetts) ss.:
County of Middle Sex

On this S day of Middle Sex

On this S day of Middle Sex

On this of Mai Vu

To me known to be the person described herein and who executed the foregoing instrument, and acknowledged execution of the same.

DONNA MARIE CIRELLI
Notary Public
Commonwealth of Massachusetts
My Commission Expires
October 12, 2018

RECORDED: 06/09/2017

Mai Vu, an Individual,

Notary Public

My commission expires:

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