505245293 12/19/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5292072

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DON M. BOROSON	01/05/2016
BRYAN S. ROBINSON	01/05/2016
BRYAN M. REID	01/05/2016

RECEIVING PARTY DATA

Name: MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
Street Address:	77 MASSACHUSETTS AVE
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	16225073		

CORRESPONDENCE DATA

Fax Number:

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: 6179477280

Email: lovato@smithbaluch.com
Correspondent Name: SMITH BALUCH LLP
Address Line 1: 376 BOYLSTON ST.

Address Line 2: SUITE 401

Address Line 4: BOSTON, MASSACHUSETTS 02116

ATTORNEY DOCKET NUMBER:	MIT-17253US01	
NAME OF SUBMITTER:	CHRISTOPHER MAX COLICE	
SIGNATURE:	/Christopher Max Colice/	
DATE SIGNED:	12/19/2018	

Total Attachments: 6

source=MIT-117253US01 Executed Assignment#page1.tif source=MIT-117253US01 Executed Assignment#page2.tif source=MIT-117253US01 Executed Assignment#page3.tif

PATENT 505245293 REEL: 047818 FRAME: 0606

source=MIT-117253US01 Executed Assignment#page4.tif source=MIT-117253US01 Executed Assignment#page5.tif source=MIT-117253US01 Executed Assignment#page6.tif

PATENT REEL: 047818 FRAME: 0607

ASSIGNMENT

DON M. BOROSON, residing at 139 Tudor Road, Needham, MA 02492; **BRYAN S. ROBINSON**, residing at 118 Newport Street, Arlington, MA 02476; and **BRYAN M. REID**, residing at 7 Zeus Drive, Chelmsford, MA 01824; (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled **NETWORK OF EXTREMELY HIGH BURST RATE OPTICAL DOWNLINKS**, and which is a:

(1)	provisional application (a) to be filed herewith; or (b) bearing Application No, and filed on; and/or
(2)	 ⊠ non-provisional application (a) ☐ to be filed herewith; or (b) ☑ bearing Application No. 14/991,394, and filed on January 8, 2016, and/or
(3)	PCT application (a) bearing Application No. <u>PCT/US16/12644</u> , and filed on <u>January 8, 2016</u> .

WHEREAS, Massachusetts Institute of Technology, a corporation duly organized under and pursuant to the laws of Massachusetts, and having its principal place of business at 77 Massachusetts Avenue, Cambridge, MA 02139 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention(s); the application for patent identified in paragraph (1), (2) and/or (3); the right to file applications for patent of the United States or other countries on the Invention(s); any applications; any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent 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 if the Assignor has already done so via a prior agreement with 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 for patent identified in paragraph (1) (2) and/or (3);

126161650 v1

- (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;
- (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 the application for patent identified in paragraph (1), (2) and/or (3) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); 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) 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.

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 applications, and said patents, including interference proceedings, without charge to the Assignor, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

126161650 v1

The Assignor hereby authorizes and requests the attorneys of **COOLEY LLP** to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application identified in paragraph (1), (2) and/or (3) when known.

The Assignor understands and agrees that the attorneys and agents of the law firm of COOLEY LLP do not personally represent Assignor or Assignor's legal interests. Since said attorneys and agents cannot provide legal advice to the Assignor with respect to this Assignment, Assignor acknowledges its right to seek its own independent legal counsel.

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: Jam Be Date: 1/5/16 DON M. BOROSON	
Witness Signature: July Welch Date: 1/5/16 Print Witness Name: Terri Welch	
Address: 1 Russell Circle Burlington MMA 01803	
Inventor Signature: Buy S. Robinson Date: 1/5/16	· · · · · · · · · · · · · · · · · · ·
Witness Signature: Jem Welch Date: 1/5/16 Print Witness Name: Terri Welch	
Address: 1 Russell Circle Burlington MA 01803	

126161650 v1

PATENT REEL: 047818 FRAME: 0611

Inventor Signature: BRYAN M. REID	Date:	1/5/2016
Witness Signature: Print Witness Name: Terni Welch	Date:	1/5/2016
Address: Russell Circle Burlington WA 01803		

Date:	9	123	18016	By-UU C	iluli			
					Name: Michele E. Ryan Harty Title: Manager of Patent Administration Company: Massachusetts Institute of Technology			
Witness	Signa	iture:§	Army	Patel	Date: 9-23-16			
				Patel				
Address	<i>[[</i> :	N N	lassac	husetts.	Ave.			
C	arr	ıbr	idge, 1	MA OLI39	9			

126161650 v1

PATENT REEL: 047818 FRAME: 0613

RECORDED: 12/19/2018