## 506387784 12/07/2020

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JACQUES JOHANNES CAROLAN	06/06/2017
MIHIKA PRABHU	06/06/2017
YICHEN SHEN	06/01/2017
SCOTT SKIRLO	06/05/2017
MARIN SOLJACIC	06/01/2017
NICHOLAS CHRISTOPHER HARRIS	06/01/2017
DIRK ROBERT ENGLUND	06/01/2017

## **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:	16986383

## **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:** spakowski@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-18794US03
NAME OF SUBMITTER:	CHRISTOPHER MAX COLICE
SIGNATURE:	/Christopher Max Colice/
DATE SIGNED:	12/07/2020

# Total Attachments: 7 source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page1.tif source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page2.tif source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page3.tif source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page4.tif source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page5.tif source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page6.tif source=MIT-18794US03\_Executed\_Assignment\_\_copy\_#page7.tif

# Attorney Docket No. MITX-8794/01US 317239-2562

## **ASSIGNMENT**

Jacques Johannes CAROLAN, residing at 19 Hanson Street, Somerville, Massachusetts 02143; Mihika PRABHU, residing at 100 Memorial Drive, Apt. 2-10A, Cambridge, Massachusetts 02142; Scott SKIRLO, residing at 84 Myrtle Street, Unit 4, Boston, Massachusetts 02139; Yichen SHEN, residing at 169 Monsignor Obrien Hwy, Unit 315, Cambridge, Massachusetts 02141; Marin SOLJACIC, residing at 44 Westlund Road, Belmont, Massachusetts 02478; Nicholas Christopher HARRIS, residing at 6B Hingham Street, Cambridge, Massachusetts 02138; and Dirk Robert ENGLUND, residing at 100 Pacific St., No. 9, Cambridge, Massachusetts 02139 (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent entitled APPARATUS AND METHODS FOR OPTICAL NEURAL NETWORK, and which is a:

(1)	provisional application (a) to be filed herewith; or	
	(b) bearing Application No., and filed	l on;
(2)	<ul> <li>X non-provisional application</li> <li>(a) to be filed herewith;</li> <li>(b) X or bearing Application No. 15/612</li> </ul>	2,043, and filed on 06/02/2017
(3)	X PCT application (a) X bearing Application No.	, and filed on
	and/or	
(4)	attached hereto.	

WHEREAS, Massachusetts Institute of Technology, a university having its principal place of business at 77 Massachusetts Ave., Cambridge, Massachusetts 02139, 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.

MITX-8794/01US 317239-2562

**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 COOLEY 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.

146205117 v1

# Page 4 of 6 Attorney Docket No. MITX-8794/01US 317239-2562

Inventor Signature:	Date:
Jacques Johannes Carolan	
Witness Signature	Dates
Witness Signature:	Date.
Print Witness Name:	
Inventor Signature:	Date:
Inventor Signature: Mihika Prabhu	
Witness Signature:	Date:
Print Witness Name:	
Time without name.	
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Inventor Signature: <u>Scott Skirlo</u>	Date: 6/03/2017
Scott Skillo	
Witness Signature:	Data: 05 /05 /20/7
	Date: 06/05/2017
Print Witness Name: 40SoloN Gilles	
Inventor Signature:  Vichen Shen	Date:
Yichen Shen	
Witness Signature:	Date:
Print Witness Name:	

146205117 v1

Inventor Signature:	Macques Johannes Carolan	Date:	6/6/17
Witness Signature	foliations	Date:	6/6/17
Print Witness Name	: GABRIGE GROSSO		
Inventor Signature:	Mihika Prabhu	Date:	616117
Witness Signature	202	Date:	6/6/17
	: Josques Conton		
	·		
Inventor Signature:	Scott Skirlo	Date:	
Witness Signature:		Date:	
Print Witness Name			
Inventor Signature:	ik soli	Date:	<b>B</b> 6/1/2017
Witness Signature:	Vichen Shen  Manian Spring	Date: _	6/1/2017
Print Witness Name	: MARIN SOLLACIC		

Inventor Signature: Marin Soljacic Marin Soljacic	Date: 1 JUNE 2017
Witness Signature:	Date: 6/1/2017
Time withoss ivanie.	
Inventor Signature: Nicholas Christopher Harris	Date: 6/1/17
Witness Signature: Dirk England Print Witness Name: DIRK	
Inventor Signature: Dirk Robert England	Date: 6/1/17
Witness Signature:	Date:6/1/17
Print Witness Name: Vichen Shen	

## Page 6 of 6 Attorney Docket No. MITX-8794/01US 317239-2562

For and on behalf of the Assignee:

Date: U

By

у,

Lauren C. Foster

Associate Director

**Technology Licensing Office** 

Name:

Title:

Company: Massachusetts Institute of Technology

Witness Signature: \_\_\_

Date:

Print Witness Name: \_

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**RECORDED: 12/07/2020**