

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5637317

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PHILIPP WALK	02/21/2019
BABAK HASSIBI	02/21/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CALIFORNIA INSTITUTE OF TECHNOLOGY
<b>Street Address:</b>	1200 E. CALIFORNIA BOULEVARD
<b>Internal Address:</b>	M/C 6-32
<b>City:</b>	PASADENA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	91125
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16260059
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(949)852-0004
<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>Phone:</b>	9498520000
<b>Email:</b>	pair@kppb.com
<b>Correspondent Name:</b>	KPPB LLP
<b>Address Line 1:</b>	2190 S. TOWNE CENTRE PLACE
<b>Address Line 2:</b>	SUITE 300
<b>Address Line 4:</b>	ANAHEIM, CALIFORNIA 92806
<b>ATTORNEY DOCKET NUMBER:</b>	C9-05896
<b>NAME OF SUBMITTER:</b>	LESLIE PARK
<b>SIGNATURE:</b>	/Leslie Park/
<b>DATE SIGNED:</b>	07/25/2019
<b>Total Attachments: 5</b>	
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## RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

Philipp Walk; Babak Hassibi

**2. Name and address of receiving party(ies)**

Name: California Institute of Technology

Internal Address: M/C 6-32

Additional name(s) of conveying party(ies) attached?  Yes  No

Street Address: 1200 E. California Boulevard

City: Pasadena

State: CA

Country: US Zip: 91125

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) February 21, 2019; February 21, 2019

- Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

**4. Application or patent number(s):**

This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

B. Patent No.(s)

16/260,059

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: KPPB LLP

Internal Address: Suite 300

Street Address: 2190 S. Towne Centre Place

City: Anaheim

State: CA Zip: 92806

Phone Number: 949.852.0000

Docket Number: C9-05896

Email Address: pair@kppb.com

**6. Total number of applications and patents involved:** 1

**7. Total fee (37 CFR 1.21(h) & 3.41)** \$ \_\_\_\_\_

- Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number \_\_\_\_\_

Authorized UserName \_\_\_\_\_

**9. Signature:** /Isaac M. Fine/

July 25, 2019

Signature

Date

Isaac M. Fine

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

**5**

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

**PATENT**

**REEL: 049865 FRAME: 0557**

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## ASSIGNMENT AGREEMENT

WHEREAS, I/We, Philipp Walk and Babak Hassibi (**Assignor(s)**) have made certain new and useful inventions, improvements and/or designs set forth in an application for Letters Patent entitled Systems and Methods for Communicating by Modulating Data on Zeros, filed on January 28, 2019 and having been assigned Application No. 16/260,059 (**Assigned Patent Application**);

WHEREAS, California Institute of Technology, a California corporation, having a place of business at 1200 E. California Blvd., M/C 6-32, Pasadena, California 91125 (**Assignee**), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements, and/or designs and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefore;

NOW, THEREFORE, **Assignor(s)** and **Assignee** do hereby enter into the following Assignment Agreement.

### 1. Definitions

The **Assigned Patent Rights** means certain new and useful inventions, improvements, and designs made by the **Assignor(s)** for which the **Assigned Patent Application** has been filed.

The **Assigned Patent Rights** also includes:

- the **Assigned Patent Application**;
- all Letters Patent granted based upon an application for Letters Patent forming part of the **Assigned Patent Rights**;
- any inventions, improvements, and designs disclosed by an application for Letters Patent forming part of the **Assigned Patent Rights**;
- any provisional patent application to which priority is claimed under 35 U.S.C. § 119(e) by an application for Letters Patent forming part of the **Assigned Patent Rights** that has not previously been assigned by the **Assignors**;
- all divisional applications, continuation applications, continuation-in-part applications, and design patent applications claiming priority to an application for Letters Patent forming part of the **Assigned Patent Rights**, as well as any conversions, revival and prologations of an application for Letters Patent forming part of the **Assigned Patent Rights**;
- the authority to prosecute/initiate any reissue, reexamination, renewal or extension of the Assigned Patent Application or of any Letters Patent granted

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based upon an application for Letters Patent forming part of the **Assigned Patent Rights**;

- any substitute application filed based upon an application for Letters Patent forming part of the **Assigned Patent Rights**;
- any priority rights associated with an application for Letters Patent forming part of the **Assigned Patent Rights**, including priority under International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms and all applications in which a right of priority is claimed and any Letters Patent, Design Patent, Utility Model, or equivalent granted therefrom;
- any legal equivalents of priority rights associated with an application for Letters Patent forming part of the **Assigned Patent Rights**, including priority under International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms and all applications in which a right of priority is claimed and any Letters Patent, Design Patent, Utility Model, or equivalent granted therefrom; and
- any right to sue for infringement of any right arising from the filing of an application for Letters Patent forming part of the **Assigned Patent Rights**.

## 2. Assignment of the Assigned Patent Rights

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, **Assignor(s)** have and/or do hereby sell, assign, and transfer to **Assignee**, its successors and assigns, all right, title, and interest for the United States and its territorial possessions and in all foreign countries in and to the **Assigned Patent Rights**.

## 3. Cooperation Agreement

The **Assignor(s)** further agree without further or additional consideration, but at the expense of **Assignee**, to:

- promptly provide **Assignee**, upon request, with all pertinent facts and documents relating to the **Assigned Patent Rights**;
- cooperate with **Assignee** in the protection and prosecution of the **Assigned Patent Rights**;
- testify with respect to all pertinent facts and documents relating to the **Assigned Patent Rights** in any interference, post grant review, inter partes review, litigation, or proceeding relating thereto;

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- review, execute, verify, acknowledge and deliver to Assignee or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue, or enforce the **Assigned Patent Rights**; and
- perform such other acts as Assignee lawfully may request to obtain or maintain the **Assigned Patent Rights**, or to vest title thereto in said Assignee.

#### 4. Assignors Representations

The Assignor(s) hereby represent and warrant that they have not entered, and will not enter, into any assignment, license agreement, sale agreement, or encumbrance that conflicts with the assignment of the **Assigned Patent Rights**.

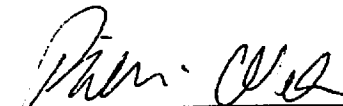
#### 5. Authorization to issue patents in name of Assignee

The Assignor(s) and Assignee hereby confirm that the assignment to the Assignee of the **Assigned Patent Rights** includes authorization by the Assignor(s) for the United States Commissioner of Patents and Trademarks, and officials of any other country whose duty it is to issue patents on applications, to issue any Letters Patent arising from the **Assigned Patent Rights** to the Assignee, its successors, or assigns.

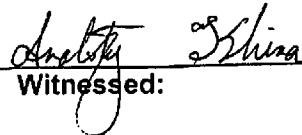
Assignor(s) grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

IN TESTIMONY WHEREOF, I, Philipp Walk, hereunto set my hand this 21 day of February, 2019.



Philipp Walk  
1361 E. Del Mar Blvd., Apt 5  
Pasadena, CA 91106



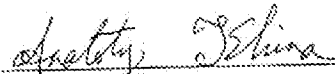
Witnessed:

C9-05896

IN TESTIMONY WHEREOF, I, Babak Hassibi, hereunto set my hand this 21 day of February, 2019.

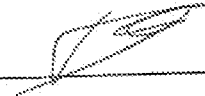


Babak Hassibi  
2205 Lorain Road  
San Marino, CA 91108



Witnessed:

Assignee hereby accepts this Assignment:

 \_\_\_\_\_ 3/5/2019  
Name Title Date

**Fred Farina**

Chief Innovation & Corporate Partnerships Officer  
Office of Technology Transfer & Corporate Partnerships