

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6381088

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
OSKAR PAINTER	10/20/2019
JIE LUO	06/05/2019
MICHAEL T. FANG	06/03/2019
ALP SIPAHIGIL	06/10/2019
PAUL B. DIETERLE	05/30/2019
MAHMOUD KALAEI	07/08/2019
JOHANNES M. FINK	06/05/2019
ANDREW J. KELLER	07/31/2019
GREGORY MACCABE	06/21/2019
HENGJIANG REN	07/05/2019
JUSTIN D. COHEN	09/04/2020
RECEIVING PARTY DATA	
Name:	California Institute of Technology
Street Address:	1200 East California Blvd.
City:	Pasadena
State/Country:	CA
Postal Code:	91125
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17087400
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Email:	mward@kilpatricktownsend.com
Correspondent Name:	MATTHEW WARD
Address Line 1:	2175 NORTH CALIFORNIA BOULEVARD, SUITE 600
Address Line 4:	WALNUT CREEK, CALIFORNIA 94596
ATTORNEY DOCKET NUMBER:	086544-1217914-022440US

NAME OF SUBMITTER:	MATTHEW WARD
SIGNATURE:	/MATTHEW WARD/
DATE SIGNED:	11/02/2020
Total Attachments: 12 source=assign#page1.tif source=assign#page2.tif source=assign#page3.tif source=assign#page4.tif source=assign#page5.tif source=assign#page6.tif source=assign#page7.tif source=assign#page8.tif source=assign#page9.tif source=assign#page10.tif source=assign#page11.tif source=assign#page12.tif	

ASSIGNMENT
(Patent Application)

We, the undersigned, have invented certain inventions and improvements disclosed in a utility (provisional or non-provisional) or design patent application entitled

“TECHNIQUES FOR BIDIRECTIONAL TRANSDUCTION OF QUANTUM LEVEL SIGNALS BETWEEN OPTICAL AND MICROWAVE FREQUENCIES USING A COMMON ACOUSTIC INTERMEDIARY,”

the specification of which is provided with this Assignment and identified by the Attorney Docket No. above. (Serial No. 16/293,457, filed on March 5, 2019).

For good and valuable consideration, the receipt and sufficiency of which we acknowledge, we:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to California Institute of Technology, having a principal place of business at 1200 E. California Blvd., M/C 210-85, Pasadena, CA 91125 (“Assignee”), the entire right, title, and interest in and to:
 - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
 - (b) the above-referenced patent application, and all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
 - (c) the right to claim priority to the above-referenced patent application, and any and all applications referenced in subsection (b); and
 - (d) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and

ASSIGNMENT

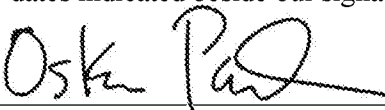
TECHNIQUES FOR BIDIRECTIONAL TRANSDUCTION OF QUANTUM LEVEL
SIGNALS BETWEEN OPTICAL AND MICROWAVE FREQUENCIES USING A
COMMON ACOUSTIC INTERMEDIARY

Attorney Docket No. 086544-1128308-022420US

Page 2 of 3

- (e) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.
2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
 3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
 4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us, as well as our heirs, legal representatives, and assigns.
 5. Promise and affirm that we have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
 6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our signatures.

Signature:  Date: 10.20.2019
Oskar Painter

Signature: _____ Date: _____
Jie Luo

Signature: _____ Date: _____
Michael T. Fang

ASSIGNMENT

TECHNIQUES FOR BIDIRECTIONAL TRANSDUCTION OF QUANTUM LEVEL
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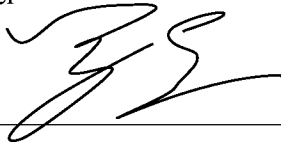
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Signed on the dates indicated beside our signatures.

Signature: _____ Date: _____

Oskar Painter



Signature: _____ Date: June 5, 2019

Jie Luo

Signature: _____ Date: _____

Michael T. Fang

ASSIGNMENT

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Signed on the dates indicated beside our signatures.

Signature: _____ Date: _____
Oskar Painter

Signature: _____ Date: _____
Jie Luo

Signature:  _____ Date: 6/3/2019
Michael T. Fang

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Page 3 of 3

Signature:  Date: 06/10/2019
Alp Sipahigil

Signature: _____ Date: _____
Paul B. Dieterle

Signature: _____ Date: _____
Mahmoud Kalae

Signature: _____ Date: _____
Johannes M. Fink

Signature: _____ Date: _____
Andrew J. Keller

Signature: _____ Date: _____
Gregory MacCabe

Signature: _____ Date: _____
Ren Hengjiang

Signature: _____ Date: _____
Justin D. Cohen

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Page 3 of 3

Signature: _____ Date: _____

Alp Sipahigil

Signature: _____ Date: 05/30/19

Paul B. Dieterle

Signature: _____ Date: _____

Mahmoud Kalaei

Signature: _____ Date: _____

Johannes M. Fink

Signature: _____ Date: _____

Andrew J. Keller

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Gregory MacCabe

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Page 3 of 3

Signature: _____ Date: _____

Alp Sipahigil

Signature: _____ Date: _____

Paul B. Dieterle

Signature: M. Kalae Date: 07/08/2019

Mahmoud Kalae

Signature: _____ Date: _____

Johannes M. Fink

Signature: _____ Date: _____

Andrew J. Keller

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Gregory MacCabe

Signature: _____ Date: _____

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Signature: _____ Date: _____

Alp Sipahigil

Signature: _____ Date: _____

Paul B. Dieterle

Signature: _____ Date: _____

Mahmoud Kalace

Signature: _____ Date: June 5, 2019

Johannes M. Fink

Signature: _____ Date: _____

Andrew J. Keller

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Signature: Andrew J. Keller Date: 7/31/2019

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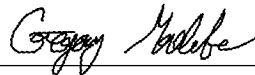
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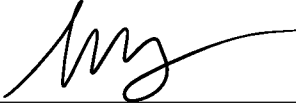
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Hengjiang Ren

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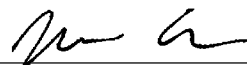
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Andrew J. Keller

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Gregory MacCabe

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Ren Hengjiang

Signature:  _____ Date: 9/4/2020
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