505267856 01/08/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GARRETT M. MIYAKE	08/28/2013
RAYMOND WEITEKAMP	09/05/2013
ROBERT H. GRUBBS	08/26/2013
VICTORIA PIUNOVA	11/15/2013

RECEIVING PARTY DATA

Name:	CALIFORNIA INSTITUTE OF TECHNOLOGY
Street Address:	1200 EAST CALIFORNIA BOULEVARD
Internal Address:	MC201-85
City:	PASADENA
State/Country:	CALIFORNIA
Postal Code:	91125

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15243788

CORRESPONDENCE DATA

Fax Number: (312)616-5700

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: 720-795-7976

assignments@leydig.com, rfriedland@leydig.com Email:

Correspondent Name: RONALD FRIEDLAND

Address Line 1: 4940 PEARL EAST CIRCLE, SUITE 200

Address Line 4: **BOULDER, COLORADO 80301**

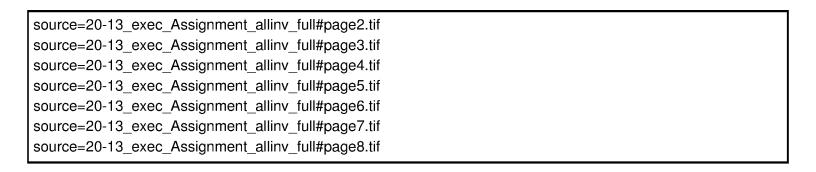
ATTORNEY DOCKET NUMBER:	333864: 20-13A US
NAME OF SUBMITTER:	STEPHEN B. BARONE
SIGNATURE:	/sbbaroneREG53968/
DATE SIGNED:	01/08/2019

Total Attachments: 8

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PATENT REEL: 047932 FRAME: 0532

505267856



PATENT REEL: 047932 FRAME: 0533

L&G Ref.: 548299 (20-13 US)

ASSIGNMENT

WHEREAS, I:

1. Garrett M. MIYAKE,

residing at 385 S. Catalina Ave., Pasadena, California, 91106 USA;

2. Raymond WEITEKAMP,

residing at 1205 Corona Dr., Glendale, California, 91205 USA;

3. Robert H. GRUBBS,

residing at 1700 Spruce St., South Pasadena, California, 91030 USA;

4. Victoria PIUNOVA,

residing 834 Alameda Street, Altadena, California, 91001 USA;

herein called individually an "ASSIGNOR" and collectively "ASSIGNORS," in connection with the invention entitled:

"PHOTONIC STRUCTURES FROM SELF ASSEMBLY OF BRUSH BLOCK COPOLYMERS AND POLYMER BLENDS"

for which the following patent applications:

Application Serial No.	Filing Date
13/930,400	June 28, 2013
61/665,696	June 28, 2012
	13/930,400

were submitted or filed (the "LISTED APPLICATIONS");

AND WHEREAS, California Institute of Technology (herein called "ASSIGNEE"), an entity organized and existing under the laws of the State of California, having a principal place of business at:

1200 East California Boulevard, MC201-85 Pasadena, California 91125 United States of America

is desirous of obtaining my entire right, title and interest in, to and under the said invention and the said LISTED APPLICATIONS;

NOW, THEREFORE, in consideration of my contractual and other legal obligations, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, a said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the invention(s) and discoveries disclosed in the LISTED APPLICATIONS, and the LISTED APPLICATIONS and all divisions, renewals, continuations and subsequent applications thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for

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L&G Ref.: 543912 (19-13 US)

Assignment

said invention(s) in any country or countries foreign to the United States; together with the right to file such applications and the right to claim for the same the priority of said patent applications listed herein and applications thereof and therefrom under The International Union for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application and applications thereof and therefrom is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention(s) in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith:

AND I HEREBY authorize the above-mentioned ASSIGNEE or its legal representative to insert in this instrument the filing date and serial number of said application(s) or any other information 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;

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention(s) and discoveries, and testify in any legal proceeding, sign all lawful papers, execute all continuing and subsequent applications, including divisional, reissue and foreign applications, make all rightful oaths, and generally cooperate and do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain, maintain, and enforce proper protection for said invention(s) and discoveries in any and all countries:

IN TESTIMONY WHEREOF, I hereunto set my hand and seal (if applicable) the day and year set opposite my signature.

Page 2 of 4

CIT No. 6215 L&G Ref.: 543912 (19-13 US) Assignment	
8 28 13 Date	GARRET M. MIYAKE
STATE OF CALIFORNIA COUNTY OF Los Angeles))ss.)
7	Amy Woodall-Ojeda, Notary Public Name and Title of Officer (e.g. "Jane-Doe, Notary Public")
personally appeared <u>Garret</u> N	Name(s) of Signer(s)
	□ personally known to me
AMY ALLISON WOODALL-OJEDA Commission # 1937997 Notary Public - California Los Angeles County My Comm. Expires May 23, 2015	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
Place Notary Seal Above	WITNESS my hand and official seal.
7 5 13 Date	RAYMOND WEITEKAMP
STATE OF CALIFORNIA COUNTY OF LOS Angeles) ss.)
On Sextenuber 5, 2013 before me,	Network Dukarbessy, Notary Public") Name and Title of Officer (e.g. "Jane Doe, Notary Public")
personally appeared Kaymo	Name(s) of Signer(s) personally known to me
MELINDA BAKARBESSY Commission ** 1934339 Notary Public - California Los Angeles County My Comm. Expires Apr 29, 2015	personally known to me proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they-executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
Place Notary Seal Above	WITNESS my hand and official seal.

Additional Assignors on additional sheets: Yes

Page 3 of 4

CIT No. 6215 L&G Ref.: 543912 (19-13 US) Assignment Date	ROBERT H. GRUBBS
STATE OF CALIFORNIA COUNTY OF Los Angles)) ss.) Amy Wodall-Oida, Notary Public Name and Title of Officer (e.g. "Jane Doe, Notary Public")
personally appeared Robert H.	Name(s) of Signer(s)
	personally known to me
AMY ALLISON WOODALL-OJEDA Commission # 1937997 Notary Public - California Los Angeles County My Comm. Expires May 23, 2015	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
	WITNESS my hand and official seal.
Place Notary Seal Above	
Date	Victoria PIUNOVA
STATE OF CALIFORNIA COUNTY OF))ss.
	,
On, before me,	Name and Title of Officer (e.g. "Jane Doe, Notary Public")
personally appeared	Name(s) of Signer(s)
	personally known to me
	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrumen and acknowledged to me that he/she/they executed the same ir his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upor behalf of which the person(s) acted, executed the instrument.
	WITNESS my hand and official seal.
Place Notary Seal Above	
Additional Assignors on additional shee	ets: No

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L&G Ref.: 548299 (20-13 US)

ASSIGNMENT

WHEREAS, I:

1. Garrett M. MIYAKE.

residing at 385 S. Catalina Ave., Pasadena, California, 91106 USA;

2. Raymond WEITEKAMP,

residing at 1205 Corona Dr., Glendale, California, 91205 USA;

3. Robert H. GRUBBS,

residing at 1700 Spruce St., South Pasadena, California, 91030 USA;

4. Victoria PIUNOVA,

residing 834 Alameda Street, Altadena, California, 91001 USA;

herein called individually an "ASSIGNOR" and collectively "ASSIGNORS," in connection with the invention entitled:

"PHOTONIC STRUCTURES FROM SELF ASSEMBLY OF BRUSH BLOCK COPOLYMERS AND POLYMER BLENDS"

for which the following patent applications:

Application Type	Application Serial No.	Filing Date
United States Patent Application	13/930,400	June 28, 2013
U.S. Provisional Patent Application	61/665,696	June 28, 2012

were submitted or filed (the "LISTED APPLICATIONS");

AND WHEREAS, California Institute of Technology (herein called "ASSIGNEE"), an entity organized and existing under the laws of the State of California, having a principal place of business at:

1200 East California Boulevard, MC201-85 Pasadena, California 91125 United States of America

is desirous of obtaining my entire right, title and interest in, to and under the said invention and the said LISTED APPLICATIONS;

NOW, THEREFORE, in consideration of my contractual and other legal obligations, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, a said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the invention(s) and discoveries disclosed in the LISTED APPLICATIONS, and the LISTED APPLICATIONS and all divisions, renewals, continuations and subsequent applications thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for

Page 1 of 4

L&G Ref.: 543912 (19-13 US)

Assignment

said invention(s) in any country or countries foreign to the United States; together with the right to file such applications and the right to claim for the same the priority of said patent applications listed herein and applications thereof and therefrom under The International Union for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application and applications thereof and therefrom is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention(s) in any country or countries foreign to the United States and all extensions, renewals and reissues thereof:

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith:

AND I HEREBY authorize the above-mentioned ASSIGNEE or its legal representative to insert in this instrument the filing date and serial number of said application(s) or any other information 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;

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention(s) and discoveries, and testify in any legal proceeding, sign all lawful papers, execute all continuing and subsequent applications, including divisional, reissue and foreign applications, make all rightful oaths, and generally cooperate and do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain, maintain, and enforce proper protection for said invention(s) and discoveries in any and all countries;

IN TESTIMONY WHEREOF, I hereunto set my hand and seal (if applicable) the day and year set opposite my signature.

Assignment	
Date	GARRET M. MIYAKE
	ON WELL IN INCOME.
STATE OF CALIFORNIA)) ss.
COUNTY OF)
On, before me, Date	Name and Title of Officer (e.g. "Jane Doe, Notary Public")
personally appeared	
	Name(s) of Signer(s)
	personally known to me
10	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
	WITNESS my hand and official seal.
Place Notary Seal Above	
Date	RAYMOND WEITEKAMP
STATE OF CALIFORNIA)
COUNTY OF) ss.)
On, before me,	
Date	Name and Title of Officer (e.g. "Jane Doe, Notary Public")
personally appeared	
	Name(s) of Signer(s) personally known to me
	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upor behalf of which the person(s) acted, executed the instrument.
	WITNESS my hand and official seal.
Place Notary Seal Above	

Additional Assignors on additional sheets: Yes

CIT No. 6215

L&G Ref.: 543912 (19-13 US)

Assignment	
Date	ROBERT H. GRUBBS
STATE OF CALIFORNIA)
COUNTY OF) ss.)
On, before me, _	Name and Title of Officer (e.g. "Jane Doe, Notary Public")
personally appeared	
	Name(s) of Signer(s)
	personally known to me
	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
	WITNESS my hand and official seal.
Place Notary Seal Above	
///15/2013 Date	Victoria PIUNQVA
STATE OF CALIFORNIA)
COUNTY OF, before me,	Name and Title of Officer (e.g. Jane Doe, Notary Public")
personally appeared	Name(s) of Signer(s)
	personally known to me
	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
	WITNESS my hand and official seal.
Place Notary Seal Above	

Page 4 of 4

Additional Assignors on additional sheets: No

CIT No. 6215

L&G Ref.: 543912 (19-13 US)