

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5096812

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
RATNAKUMAR V KUMAR	08/10/2018
ANDREW KINDLER	08/11/2018
THOMAS I VALDEZ	08/06/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CALIFORNIA INSTITUTE OF TECHNOLOGY
<b>Street Address:</b>	1200 EAST CALIFORNIA BOULEVARD
<b>Internal Address:</b>	MC 6-32
<b>City:</b>	PASADENA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	91125
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14641168
<b>Application Number:</b>	61948890
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)616-5700
<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>	7207957976
<b>Email:</b>	assignments@leydig.com, tsharp@leydig.com
<b>Correspondent Name:</b>	LEYDIG, VOIT & MAYER, LTD.
<b>Address Line 1:</b>	4875 PEARL EAST CIRCLE, SUITE 301
<b>Address Line 4:</b>	BOULDER, COLORADO 80301
<b>ATTORNEY DOCKET NUMBER:</b>	333826: 4-15 US
<b>NAME OF SUBMITTER:</b>	MARY BREEN SMITH
<b>SIGNATURE:</b>	/Mary Breen Smith/
<b>DATE SIGNED:</b>	08/14/2018
<b>Total Attachments: 15</b>	
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## ASSIGNMENT

WHEREAS, I:

1. **Ratnakumar V. BUGGA**  
residing at 160 West Floral, Arcadia, California 91006, USA;
2. **Andrew KINDLER**  
residing at 616 Plymouth Rd., San Marino, California 91108; and
3. **Thomas I. VALDEZ**  
residing at 1659 E. Edgecomb St., Covina, California 91724

herein called individually an "ASSIGNOR" in connection with the invention entitled:

### **"SEPARATOR ENCLOSURES FOR ELECTRODES AND ELECTROCHEMICAL CELLS"**

for which the following patent application(s):

Application Type	Application Serial No.	Filing Date
U.S. Patent Application	14/641,168	March 6, 2015
U.S. Provisional Patent Application	61/948,890	March 6, 2014

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  
MC 6-32  
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 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.

08/10/18

Date

Ratnakumar V Bugga

Ratnakumar V. BUGGA

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

☐ 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

Additional Assignors on additional sheets: YES



\_\_\_\_\_  
Date Thomas I. VALDEZ

STATE OF CALIFORNIA )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

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entity upon 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: NO*

**ASSIGNMENT**

WHEREAS, I:

1. **Ratnakumar V. BUGGA**  
residing at 160 West Floral, Arcadia, California 91006, USA;
2. **Andrew KINDLER**  
residing at 616 Plymouth Rd., San Marino, California 91108; and
3. **Thomas I. VALDEZ**  
residing at 108 Gorsuch Road, Timonium, MD, 21093

herein called individually an "ASSIGNOR" in connection with the invention entitled:

**"SEPARATOR ENCLOSURES FOR ELECTRODES AND  
ELECTROCHEMICAL CELLS"**

for which the following patent application(s):

Application Type	Application Serial No.	Filing Date
U.S. Patent Application	14/641,168	March 6, 2015
U.S. Provisional Patent Application	61/948,890	March 6, 2014

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MC 6-32  
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 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;

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

\_\_\_\_\_  
Date Ratnakumar V. BUGGA

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 upon 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*

Date 8/11/18

Andrew KINDLER

STATE OF CALIFORNIA )  
 ) ss.  
COUNTY OF \_\_\_\_\_)

On \_\_\_\_\_, before me, \_\_\_\_\_,  
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Additional Assignors on additional sheets: YES

\_\_\_\_\_  
Date Thomas I. VALDEZ

STATE OF CALIFORNIA )  
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COUNTY OF \_\_\_\_\_ )

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