503955105 08/10/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4001761

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| JASON E. BARA | 02/13/2012 |
| TREVOR K. CARLISLE | 03/12/2012 |
| EVAN S. HATAKEYAMA | 03/14/2012 |
| DOUGLAS L. GIN | 02/22/2012 |
| RICHARD D. NOBLE | 02/16/2012 |
| ROBERT L. KERR | 03/16/2012 |
| ANDREW L. LAFRATE | 03/12/2012 |

RECEIVING PARTY DATA

| Name: | THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE |
|-------------------|---|
| Street Address: | 1800 GRANT STREET |
| Internal Address: | 8TH FLOOR |
| City: | DENVER |
| State/Country: | COLORADO |
| Postal Code: | 80203 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14590690 |

CORRESPONDENCE DATA

Fax Number: (215)972-1936

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: 215-972-1089
Email: patents@saul.com
Correspondent Name: DOMINGOS J. SILVA
Address Line 1: SAUL EWING LLP

Address Line 2:1500 MARKET STREET, 38TH FLOORAddress Line 4:PHILADLEPHIA, PENNSYLVANIA 19102

ATTORNEY DOCKET NUMBER: 205948-0021US2 (00054)

NAME OF SUBMITTER: DOMINGOS J. SILVA

PATENT 503955105 REEL: 039398 FRAME: 0058

| SIGNATURE: | IGNATURE: /Domingos J. Silva/ | |
|---|-------------------------------|--|
| DATE SIGNED: | 08/10/2016 | |
| Total Attachments: 9 | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page1.tif | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page2.tif | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page3.tif | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page4.tif | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page5.tif | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page6.tif | | |
| source=205948-0021US2_Executed_Assignment_Parent_13386780#page7.tif | | |
| source=205948-0021US2 Executed Assignment Parent 13386780#page8.tif | | |

 $source = 205948 - 0021 US2_Executed_Assignment_Parent_13386780 \# page 9.tif$

PATENT REEL: 039398 FRAME: 0059

ASSIGNMENT

WHEREAS, WE:

- Jason E. BARA, residing at 4340 Evangeline Way, Tuscaloosa, AL 35406 USA;
- Trevor K. CARLISLE, residing at 2880 Kalmia Avenue, Apt. 303, Boulder, CO 80301 USA;
- 3. Evan S. HATAKEYAMA, residing at 2174 NW Thorncroft Drive, Apt 1016, Hillsboro, OR 97124 USA;
- 4. Douglas L. GIN, residing at 708 Teal Circle, Longmont, CO 80503 USA;
- 5. Richard D. NOBLE, residing at 1262 Bear Mountain Court, Boulder, CO 80305 USA:
- 6. Robert L. KERR, residing at 666 E. Dyer Rd., Santa Ana, CA 92705 USA;
- Andrew L. LaFRATE, residing at 1176-A Monroe Drive, Boulder, CO 80303 USA;

(herein called "ASSIGNORS"), are the inventors of the invention entitled:

"Imidazolium-Based Room-Temperature Ionic Liquids, Polymers, Monomers, and Membranes Incorporating Same";

for which the following patent application(s):

| Application Type | Application Serial No. | Filing Date |
|---|------------------------|------------------|
| United States Provisional Patent Application | 61/228,669 | July 27, 2009 |
| United States Provisional Patent Application | 61/228,433 | July 24, 2009 |
| United States Patent Application | 13/386,780 | January 24, 2012 |
| International Application (WO) | PCT/US2010/043124 | |

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

AND WHEREAS, The Regents of the University of Colorado, a body corporate (herein called "ASSIGNEE"), an entity organized and existing under the laws of the State of Colorado, having a principal place of business at:

1800 Grant Street, 8th Floor Denver, CO 80203,

is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application(s);

NOW, THEREFORE, in consideration of my contractual and other legal obligations, and other good and valuable consideration, the receipt of which is 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

Page 1 of 6

ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said United States Application 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 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 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, 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 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 6

| 2/13/12 | | FL. | | |
|---|---|-----------------------------------|--|--|
| Date | Jaso n | E. BARA | | ······································ |
| STATE OF <u>Claberna</u> COUNTY OF Juealosa |)) ss.) | | | |
| BEFORE ME, the undersigned a 20/2 (year), personally person whose name is subscrib s/he executed the same of his herein expressed. Date: 2/13/2 My Cor | appeared the ped to this instrustrus/her own free | above persument and wwill for the | on, known toin ho acknowledge purposes and o | ne to be the ed to me that consideration |
| My Commission expires: | uly 29, 2015 | 1162 | Notary Public | |
| Date | Trevo | or K. CARLIS | SLE | |
| STATE OF |) | | | |
| COUNTY OF |) ss.) | | | |
| BEFORE ME, the undersigned (year), personally person whose name is subscribus/he executed the same of his herein expressed. | appeared the ped to this instru | above pers ument and w | on, known to n ho acknowledge | ne to be the ed to me that |
| Date: | | | 81.2. Pt 1.8. | *************************************** |
| My Commission expires: | | | Notary Public | |
| - | | | | |

Additional Assignors on additional sheets: Yes

Page 3 of 6

| Date | Jason E. BARA |
|--|--|
| STATE OF |) |
| COUNTY OF |) ss.) |
| (year), personally a person whose name is subscribed | hority, on this day of (month), opeared the above person, known to me to be the to this instrument and who acknowledged to me that er own free will for the purposes and consideration |
| Date: | |
| My Commission expires: | Notary Public |
| 3/12/12 Date STATE OF <i>Colorado</i> COUNTY OF <i>Bould ex</i> | HEAOL V' CAUTIOTE |
| COUNTY OF Boyld ex |) |
| BEFORE ME, the undersigned au <u>70/2</u> (year), personally a person whose name is subscribed | thority, on this $\frac{12^{10}}{\text{day of }}$ day of $\frac{Malen}{\text{day of month}}$ (month), opeared the above person, known to me to be the to this instrument and who acknowledged to me that er own free will for the purposes and consideration |
| | Notani Dublic |
| My Commission expires: <u>F/Lo/</u> Additional Assignors on additional | NOTARY |

Page 3 of 6

| March 14th 2012 Date | Evan S. HATAKEYAMA |
|---|--|
| STATE OF <u>Overgin</u>) ss. county of <u>washington</u>) | |
| 2012 (year), personally appear person whose name is subscribed to the | y, on this $14^{4\nu}$ day of $16^{4\nu}$ day of $16^{4\nu}$ (month), red the above person, known to me to be the his instrument and who acknowledged to me that wn free will for the purposes and consideration |
| Date: <u>Maych 14, 2012</u> | Jessela Morra Notary Public |
| My Commission expires: <u>Nwv. 9, 201</u> | |
| Date | Douglas L. GIN |
| STATE OF) | |
| COUNTY OF) ss. | |
| person whose name is subscribed to the | y, on this day of (month), red the above person, known to me to be the his instrument and who acknowledged to me that wn free will for the purposes and consideration |
| Date: | Notary Public |
| My Commission expires: | |
| | |

Additional Assignors on additional sheets: Yes

Page 4 of 6

Additional Assignors on additional sheets: Yes

| Date | Evan S. HATAKEYAMA |
|--|--|
| STATE OF) | |
| COUNTY OF) ss. | |
| (year), personally appeard person whose name is subscribed to thi | on this day of (month), and the above person, known to me to be the sinstrument and who acknowledged to me that in free will for the purposes and consideration |
| Date: | |
| My Commission expires: | Notary Public |
| 02/23/13 Date C. Landon | Douglas L. GIN |
| STATE OF <u>Colorado</u>))ss. COUNTY OF <u>Boulder</u>) | |
| BEFORE ME, the undersigned authority 2012 (year), personally appear person whose name is subscribed to th | on this <u>22</u> day of <u>February</u> (month), ed the above person, known to me to be the is instrument and who acknowledged to me that in free will for the purposes and consideration |
| Date: 2/22/2012 | Notary Public STAP 201 |
| My Commission expires: 10/27/24 | Notary Public STOTAR TO ST |
| | My Commission Fynices 10/77/2012 |

Page 4 of 6

Additional Assignors on additional sheets: Yes

| Date Richard D. NOBLE |
|--|
| STATE OF <u>Colorado</u>) ss. |
| STATE OF <u>Colorado</u>)) ss. COUNTY OF <u>Bondor</u>) |
| BEFORE ME, the undersigned authority, on this \(\begin{array}{c} \) day of \(\begin{array}{c} \) \(\left(\reft(\left(\left(\left(\left(\left(\left(\left(\left(\reft(\left(\text{\reft(\left(\text{\reft(\left(\left(\left(\left(\text{\reft(\text{\reft(\left(\left(\text{\reft(\text{\reft(\text{\reft(\text{\reft(\text{\reft(\text{\r |
| Date: 2/16/2012 Just 27 Mys (5) A Mys |
| Date:2/16/2012 |
| My Commission Expires 10/27/2012 |
| Date Robert L. KERR |
| STATE OF |
| COUNTY OF |
| BEFORE ME, the undersigned authority, on this day of (month), (year), personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that she executed the same of his/her own free will for the purposes and consideration herein expressed. |
| Date: |
| My Commission expires: |
| |

Page 5 of 6

| Date | Richard D. NOBLE |
|---|---|
| STATE OF) | • |
|) ss. () () () () () () () () () (| |
| (year), personally appeare person whose name is subscribed to this | on this day of (month), ad the above person, known to me to be the s instrument and who acknowledged to me that n free will for the purposes and consideration |
| Date: | Notary Public |
| My Commission expires: | * |
| Date STATE OF California))ss. | Robert L. KERR |
| COUNTY OF Orange) | |
| 2012 (year), personally appeare person whose name is subscribed to this | on this 16 day of March (month), and the above person, known to me to be the instrument and who acknowledged to me that it free will for the purposes and consideration. Notary Public |
| Additional Assignors on additional sheets | SANIE L. SEACH Commission # 1944558 Matsry Public - California # Crange County |

Page 5 of 6

| 3-12-12 | A= |
|--|---|
| Date | Andrew L. LaFRATE |
| STATE OF <u>Colorado</u> COUNTY OF <u>BOILDER</u> |) } |
| COUNTY OF <u>BOULDLER</u> |) ss.) |
| <u>2012</u> (year), personally apperson whose name is subscribed | thority, on this 12 day of 100000000000000000000000000000000000 |
| | DRESS! |
| | TARY TARY |

Additional Assignors on additional sheets: No

RECORDED: 08/10/2016

Page 6 of 6