505375813 03/14/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5422606

| SUBMISSION TYPE: | | NEW ASSIGNMENT | | | |
|--|--|---|--------------------|------------------------|--|
| NATURE OF CONVEYANCE: | | LICENSE | LICENSE | | |
| CONVEYING PARTY D | ΑΤΑ | | | | |
| | | Name | | Execution Date | |
| UNIVERSITY OF WATE | RLOO | | | 03/13/2019 | |
| RECEIVING PARTY DA | | | | | |
| Name: | UNITED STATES GOVERNMENT / DEPARTMENT OF ENERGY | | | | |
| Street Address: | 1000 INDEPENDENCE AVE. SW | | | | |
| City: | WASHINGTON | | | | |
| State/Country: | D.C. | | | | |
| Postal Code: | 20585 | | | | |
| | DATA | | | | |
| CORRESPONDENCE | ΔΤΑ | | | | |
| | | | | | |
| Fax Number: | • | 519)576-6030 the e-meil address first, if the | t ia unavaa | aceful it will be cont | |
| Fax Number: Correspondence will b | be sent to t | 519)576-6030 t <mark>he e-mail address first; if tha</mark> if that is unsuccessful, it will | | | |
| Fax Number: Correspondence will b | pe sent to t provided; | the e-mail address first; if tha | | | |
| Fax Number: <i>Correspondence will k</i> <i>using a fax number, if</i> Phone: Email: | be sent to t provided; 5 W | <i>the e-mail address first; if tha</i> <i>if that is unsuccessful, it will</i> 19-576-6910 Vaterloo.IP@gowlingwlg.com | be sent via | | |
| Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: | be sent to t provided; 5 W G | <i>the e-mail address first; if tha</i> <i>if that is unsuccessful, it will</i> 19-576-6910 Vaterloo.IP@gowlingwlg.com OWLING WLG (CANADA) LLF | be sent via | | |
| Fax Number: <i>Correspondence will & using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: | be sent to t provided; 5 W G S | <i>the e-mail address first; if tha</i> <i>if that is unsuccessful, it will</i> 19-576-6910 Vaterloo.IP@gowlingwlg.com GOWLING WLG (CANADA) LLF GUITE 1020, 50 QUEEN STREE | <i>be sent via</i> | | |
| Fax Number: <i>Correspondence will & using a fax number, if</i> Phone: Email: Correspondent Name: | be sent to t provided; 5 W G S | <i>the e-mail address first; if tha</i> <i>if that is unsuccessful, it will</i> 19-576-6910 Vaterloo.IP@gowlingwlg.com OWLING WLG (CANADA) LLF | <i>be sent via</i> | | |
| Fax Number: <i>Correspondence will & using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: | pe sent to t provided; 5 W C S K | <i>the e-mail address first; if tha</i> <i>if that is unsuccessful, it will</i> 19-576-6910 Vaterloo.IP@gowlingwlg.com GOWLING WLG (CANADA) LLF GUITE 1020, 50 QUEEN STREE | <i>be sent via</i> | | |
| Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: | De sent to t provided; 5 W G S K UMBER: | the e-mail address first; if tha if that is unsuccessful, it will 19-576-6910 Vaterloo.IP@gowlingwlg.com GOWLING WLG (CANADA) LLF GUITE 1020, 50 QUEEN STREE (ITCHENER, CANADA N2H 6M | <i>be sent via</i> | | |
| Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER: | De sent to t provided; 5 W G S K UMBER: | the e-mail address first; if tha if that is unsuccessful, it will 19-576-6910 Vaterloo.IP@gowlingwlg.com GOWLING WLG (CANADA) LLF GUITE 1020, 50 QUEEN STREE (ITCHENER, CANADA N2H 6M K0558537 | <i>be sent via</i> | | |
| Fax Number: <i>Correspondence will & using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: | De sent to t provided; 5 W G S K UMBER: | the e-mail address first; if tha if that is unsuccessful, it will 19-576-6910 Vaterloo.IP@gowlingwlg.com GOWLING WLG (CANADA) LLF GUITE 1020, 50 QUEEN STREE (ITCHENER, CANADA N2H 6M K0558537 NEIL HENDERSON | <i>be sent via</i> | | |



Department of Energy Office of Science science.energy.gov/isc/services/legal/

CONFIRMATORY LICENSE

Title of Invention:Electrode materials for rechargeable zinc cells and batteries produced therefrom
ADAMS, Brian D.; KUNDU, DipanInventor(s):ADAMS, Brian D.; KUNDU, DipanPatent Application Serial No:US 15/461,849Patent Number:US 9,780,412Name of Contractor (i.e. Contractor, Subcontractor, Grant, or Cooperative Agreement, as applicable):

Name of Contractor: University of Waterloo

DOE Contract No. (i.e. Contract, Subcontract, Grant, or Cooperative Agreement, as applicable):

DEAR 952,227-11 DOE Case No.: S-117,066

Contractor Docket No.: K0558537

The Contractor has reported the above-identified invention as a Subject Invention to DOE and has elected to retain title thereto.

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, paid-up, worldwide license in this subject invention, patent application and any resulting patent, including any continuation, divisional, reissue, or supplemental application thereof, to practice or to have practiced for or on behalf of the United States throughout the world; and of all other rights acquired by the Government by the patent rights clause in the above-identified contract,

It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the above-identified subject invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Contractor Name Official's Name

Jame James Rush

Official's Title Vice-President, Academic and Provost

University of Waterloo

Business Address 200 University Avenue West, Waterloo, Ontario, N2L 3G1, Canada

Signed on: Mart 13,2019

PATENT REEL: 048602 FRAME: 0790

RECORDED: 03/14/2019