PATENT ASSIGNMENT COVER SHEET

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| MIN SUNG KIM | 08/03/2015 |
| GIL BONG LEE | 08/03/2015 |
| YOUNG JIN BAIK | 08/03/2015 |
| JUN HYUN CHO | 08/03/2015 |
| HO SANG RA | 08/03/2015 |

RECEIVING PARTY DATA

| Name: | KOREA INSTITUTE OF ENERGY RESEARCH |
|-----------------|------------------------------------|
| Street Address: | 71-2, JANG-DONG, YUSEONG-GU |
| City: | DAEJEON |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 305-343 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14818245 |

CORRESPONDENCE DATA

Fax Number: (866)613-4037

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: 7033506181

Email:mail@revolutioniplaw.comCorrespondent Name:REVOLUTION IP, PLLC

Address Line 1: 1940 DUKE ST.
Address Line 2: SUITE 200

Address Line 4: ALEXANDRIA, VIRGINIA 22314

| ATTORNEY DOCKET NUMBER: | 2430-005 |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | HYUN YONG LEE |
| SIGNATURE: | /Hyun Yong Lee/ |
| DATE SIGNED: | 08/04/2015 |
| | |

Total Attachments: 4

PATENT REEL: 036252 FRAME: 0031 source=3-2430-005DeclarationandAssignment#page1.tif
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PATENT REEL: 036252 FRAME: 0032

REVOLUTION IP, PLLC Attorneys At Law

LC Attorney Docket No.: 2430-005 Clinet's Docket No.: 14YPO-018US1

ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

| w named inventor and Assignor, I declare that: |
|--|
| nment and declaration are directed to: |
| ne attached application, or |
| nited States application or PCT international application number |
| *** |

The above-identified Application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the Application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("Invention") disclosed in the Application,

Whereas, Assignor desires to convey all rights, titles, and interests in and to the same to:

KOREA INSTITUTE OF ENERGY RESEARCH

71-2, Jang-dong, Yuseong-gu, Daejeon 305-343, Republic of Korea

KOREA INSTITUTE OF ENERGY RESEARCH herein further referred to as ("Assignee").

Now, for valuable consideration by Assignee to Assignor, the receipt of which is hereby acknowledged, and for other good and valuable consideration, Assignee and Assignor hereby agree as follows:

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the

REVOLUTION IP, PLLC Attorneys At Law

First Inventor's and Assignor's Name:

Attorney Docket No.: 2430-005 Clinet's Docket No.: 14YPO-018US1

Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

Assignor hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Assignor further covenants that Assignee will, upon Assignee's request, be provided promptly with all pertinent facts and documents relating to the Invention, Patent, Application and any patents granted thereon, as may be known and accessible to Assignor, and Assignor will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to Assignee or Assignee's legal representative any and all papers, instruments or affidavits required to apply for, protect, obtain, maintain, issue, defend and enforce the Application, Patent, Invention, whether in the US or any and all foreign countries and any patents granted thereon and/or for obtaining any reissue or reissues of any patent which may be granted for the invention and perform such further acts which may be necessary or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

KIM, Min Sung

| Address: | (Jeonmin-dong, Expo Apt.), 108-dong 1301-ho, 448, Expo-ro, Yuseong-gu, Daejeon 305-761, Republic of Korea |
|--|---|
| First Inventor's and Assignor's Signature: | <u> </u> |
| Date: | 8/3/15 |

| REVOLUTION IP, PLLC Attorneys At Law | Attorney Docket No.: 2430-005 Clinet's Docket No.: 14YPO-018US1 |
|--|---|
| | |
| Second Inventor's and Assignor's Name: | LEE, Gil Bong |
| Address: | (Bongmyeong-dong), 1505-ho, 53, Daehak-ro, Yuseong-gu, Daejeon 305-301, Republic of Korea |
| Second Inventor's and Assignor's Signature: | |
| Date: | 2015-08-03 |
| Third Inventor's and Assignor's Name: | BAIK, Young Jin |
| Address: | (Eceun-dong), 203-ho, 11, Nongdee-ro 2beon-gil, Yuseong-gu, Daejeon 305-807, Republic of Korea |
| Third Inventor's and Assignor's Signature: | young jin Baik |
| Date: | 08/03/2015 |
| | |
| Fourth Inventor's and Assignor's Name: | CHO, Jun Hyun |
| Address: | (Bongmyeong-dong, Yuseong Purgio City), beta-dong 1610-ho, 45, Oncheon-ro, Yuseong-gu, Daejeon 305-301, Republic of Korea |
| Fourth Inventor's and Assignor's Signature: | |
| Date: | 2015-08-03 |

| REVOLUTION IP, PLLC Attorneys At Law | Attorney Docket No.: 2430-005 Clinet's Docket No.: 14YPO-018US1 |
|--|--|
| Fifth Inventor's and Assignor's Name: | Ra, Ho Sang |
| Address | (Dunsan-dong, Cheongsol Kolon Apt.), 4-dong 906-ho, 223, Dunsan-ro, Seo-gu, Daejeon 302-841, Republic of Korea |
| Fifth Inventor's and Assignor's Signature: | <u> </u> |

Date:

RECORDED: 08/04/2015

2015 - od-03