

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

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| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                                     |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                                         |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                                    |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                              |
| SE JIN KU                                                                                                                                                                                       | 04/04/2017                                         |
| MI SOOK LEE                                                                                                                                                                                     | 04/04/2017                                         |
| HYUNG JU RYU                                                                                                                                                                                    | 04/04/2017                                         |
| JUNG KEUN KIM                                                                                                                                                                                   | 04/04/2017                                         |
| SUNG SOO YOON                                                                                                                                                                                   | 04/05/2017                                         |
| NO JIN PARK                                                                                                                                                                                     | 04/04/2017                                         |
| JE GWON LEE                                                                                                                                                                                     | 04/04/2017                                         |
| EUN YOUNG CHOI                                                                                                                                                                                  | 04/04/2017                                         |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                                    |
| <b>Name:</b>                                                                                                                                                                                    | LG CHEM, LTD.                                      |
| <b>Street Address:</b>                                                                                                                                                                          | 128, YEOUI-DAERO                                   |
| <b>Internal Address:</b>                                                                                                                                                                        | YEONGDEUNGPO-GU                                    |
| <b>City:</b>                                                                                                                                                                                    | SEOUL                                              |
| <b>State/Country:</b>                                                                                                                                                                           | KOREA, REPUBLIC OF                                 |
| <b>Postal Code:</b>                                                                                                                                                                             | 07336                                              |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                                    |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                                      |
| Application Number:                                                                                                                                                                             | 15514929                                           |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                                    |
| <b>Fax Number:</b>                                                                                                                                                                              | (908)654-7866                                      |
| <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>                                                                                                                                                                                   | (908) 518-6320                                     |
| <b>Email:</b>                                                                                                                                                                                   | assignment@lernerdavid.com                         |
| <b>Correspondent Name:</b>                                                                                                                                                                      | LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP |
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| <b>Address Line 4:</b>                                                                                                                                                                          | WESTFIELD, NEW JERSEY 07090                        |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | LGCHEM 3.3F-1009                                   |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | MELINDA C. CORMIER                                 |

|                                                                                                                                                     |                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>SIGNATURE:</b>                                                                                                                                   | /Melinda C. Cormier/                                       |
| <b>DATE SIGNED:</b>                                                                                                                                 | 04/10/2017                                                 |
|                                                                                                                                                     | This document serves as an Oath/Declaration (37 CFR 1.63). |
| <b>Total Attachments: 2</b><br>source=LGCHEM 3.3F-1009-Assignment Declaration#page1.tif<br>source=LGCHEM 3.3F-1009-Assignment Declaration#page2.tif |                                                            |



## SUPPLEMENTAL SHEET

| DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ADDITIONAL INVENTOR(S)<br>Supplemental Sheet |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Inventor two: <u>Mi Sook LEE</u><br>Signature: <u>Mi Sook LEE</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Date: <u>April. 04. 2017</u>                 |
| Inventor three: <u>Hyung Ju RYU</u><br>Signature: <u>Hyung Ju RYU</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date: <u>April. 04. 2017</u>                 |
| Inventor four: <u>Jung Keun KIM</u><br>Signature: <u>Jung Keun KIM</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Date: <u>April 104/2017</u>                  |
| Inventor five: <u>Sung Soo YOON</u><br>Signature: <u>Sung Soo YOON</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Date: <u>April. 05. 2017.</u>                |
| Inventor six: <u>No Jin PARK</u><br>Signature: <u>No Jin PARK</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Date: <u>April. 04. 2017</u>                 |
| Inventor seven: <u>Je Gwon LEE</u><br>Signature: <u>Je Gwon LEE</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Date: <u>April. 04. 2017</u>                 |
| Inventor eight: <u>Eun Young CHOI</u><br>Signature: <u>Eun Young CHOI</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Date: <u>April. 04. 2017</u>                 |
| Inventor nine: _____<br>Signature: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Date: _____                                  |
| Inventor ten: _____<br>Signature: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Date: _____                                  |
| <p><b>WARNING:</b></p> <p>According to 37 C.F.R. 1.63 (c), "[a] person may not execute an oath or declaration unless the person has reviewed and understands the contents of the application, including the claims and is aware of the duty to disclose to the Office all information known to be material to patentability as defined in 1.56."</p> <p>Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.</p> |                                              |

