


Form PTO-1595 (Rev. 03-11)
OMB No. 0651-0027 (exp. 03/31/2015)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies): MinAh Kang (04/05/2013), Young-Min Kim (04/05/2013), Chang Bum Ko (04/05/2013), and Ok Sun Kim (04/02/2013) Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies) Name: <u>LG Chem, Ltd.</u> Internal Address: _____ Street Address: _____ LG Twin Towers 20, Yeouido-dong Yeongdeungpo-gu City: <u>Seoul</u> State: _____ Country: <u>Republic of Korea</u> Zip: <u>150-721</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>In parentheses after inventor name</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>13/805,875</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kelly Y. Hwang</u> <u>LERNER, DAVID, LITTENBERG,</u> <u>KRUMHOLZ & MENTLIK, LLP</u> Internal Address: <u>Atty. Dkt.: LGCHEM 3.3-295</u> Street Address: <u>600 South Avenue West</u> City: <u>Westfield</u> State: <u>NJ</u> Zip: <u>07090</u> Phone Number: <u>908-654-5000</u> Fax Number: <u>908-654-7866</u> Email Address: <u>ataylor@ldlkm.com</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title) 8. Payment Information Deposit Account Number <u>12-1095</u> Authorized User Name <u>Kelly Y. Hwang</u>
9. Signature: <div style="text-align: center;">  Signature </div> <div style="text-align: right;"> <u>April 22, 2013</u> Date </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <u>Kelly Y. Hwang - 51,831</u> Name of Person Signing </div> <div> Total number of pages including cover sheet, attachments, and documents: 5 </div> </div>	

CH \$40.00 121095 13805875

<small>former PTO/SB/15 (8-00) Modified LDLKM</small> ASSIGNMENT OF UTILITY APPLICATION		Docket Number (Optional) LGCHEM 3.3-295
<p>Whereas, I, <u>MinAh Kang</u> of <u>702 Hongsyille, Dunsan-dong, Seo-gu, Daegu; REPUBLIC OF KOREA 302-120</u></p> <p>hereafter referred to as assignor, have with others invented certain new and useful improvements in <u>BINDER FOR SECONDARY BATTERY EXHIBITING EXCELLENT ADHESION FORCE</u></p> <p><input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on <u>December 20, 2012</u></p> <p style="padding-left: 40px;">Application Number <u>13/805,875</u></p> <p><input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on _____</p> <p><input checked="" type="checkbox"/> for which an International Application was filed on <u>July 13, 2011</u>, as <u>PCT/KR2011/005143</u>, designating the United States.</p> <p>And</p> <p>Whereas, <u>LG Chem, Ltd.</u> a corporation of _____ herein referred to as "assignee" whose mailing address is <u>LG Twin Towers, 20, Yeouido-dong, Yeongdeungpo-gu, Seoul; REPUBLIC OF KOREA 150-721</u> is desirous of acquiring the entire right, title and interest in the same;</p> <p>NOW, THEREFORE, in consideration of the sum of <u>one</u> dollar (\$ <u>1.00</u>), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee</p> <p>And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="text-align: center;"> <u>April 5, 2013</u> Date </div> <div style="text-align: center;"> <u>MinAh Kang</u> MinAh Kang </div> </div> <div style="margin-top: 20px;"> _____ Witness </div> <div style="margin-top: 20px;"> _____ Typed Name of Witness </div>		
<input checked="" type="checkbox"/> Total of <u>4</u> forms are submitted.		

300000_1.DOC

ASSIGNMENT OF UTILITY APPLICATION	<small>Form PTO/SB-15 (8-00) Modified LG/KAN</small> Docket Number (Optional) LG/CHEM 3.3-295
------------------------------------------	------------------------------------------------------------------------------------------------------------

Whereas, I, Young-Min Kim of 8-1002, Garam Apt., Samcheon-dong, Seo-gu, Daejeon, REPUBLIC OF KOREA 302-744 hereafter referred to as assignor, have with others invented certain new and useful improvements in BINDER FOR SECONDARY BATTERY EXHIBITING EXCELLENT ADHESION FORCE

☒ for which an application for a United States Letters Patent was filed on December 20, 2012 Application Number 13/805,875

☐ for which an application for a United States Letters Patent was executed by me on _____

☒ for which an International Application was filed on July 13, 2011 as PCT/KR2011/005143 designating the United States.

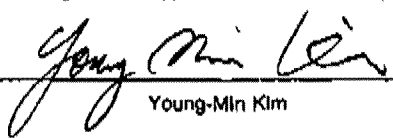
And

Whereas, LG Chem, Ltd. a corporation of _____ herein referred to as "assignee" whose mailing address is LG Twin Towers, 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721 is desirous of acquiring the entire right, title and interest in the same:

NOW, THEREFORE, in consideration of the sum of one dollar (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known

April 5, 2013
 Date


 Young-Min Kim

 Witness

 Typed Name of Witness

<input checked="" type="checkbox"/>	*Total of <u>4</u> forms are submitted.
-------------------------------------	-----------------------------------------

ASSIGNMENT OF UTILITY APPLICATION		Docket Number (Optional) LGCHEM 3.3-295
<p>Whereas, I, <u>Chang Bum Ko</u> of <u>103-1209, Hwangsil Town Apt., Wolpyeong-dong, Seo-gu, Daejeon, REPUBLIC OF KOREA, 302-280</u> hereafter referred to as assignor, have with others invented certain new and useful improvements in <u>BINDER FOR SECONDARY BATTERY EXHIBITING EXCELLENT ADHESION FORCE</u> <input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on <u>December 20, 2012</u> Application Number <u>13/805,875</u> <input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on _____ <input checked="" type="checkbox"/> for which an International Application was filed on <u>July 13, 2011</u>, as <u>PCT/KR2011/005143</u>, designating the United States.</p> <p>And</p> <p>Whereas, <u>LG Chem, Ltd.</u> a corporation of _____ herein referred to as "assignee" whose mailing address is <u>LG Twin Towers, 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721</u> is desirous of acquiring the entire right, title and interest in the same;</p> <p>NOW, THEREFORE, in consideration of the sum of <u>one</u> dollar (\$ <u>1.00</u>), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interference or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.</p> <p>And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.</p> <p style="text-align: center;"> <u>April 5, 2013</u> Date <u>Changbum Ko</u> Chang Bum Ko _____ Witness _____ Typed Name of Witness </p>		
<input checked="" type="checkbox"/> Total of <u>4</u> forms are submitted.		

ASSIGNMENT OF UTILITY APPLICATION	<small>Form PTO/SB/16 (8-00) Modified LDLKM</small> Docket Number (Optional) LGCHEM 3.3-295
------------------------------------------	----------------------------------------------------------------------------------------------------------

Whereas, I, Ok Sun Kim of
1102, Honorsville, 1380-1, Dunsan 1-dong, Seo-gu, Daejeon, REPUBLIC OF KOREA 302-831
 hereafter referred to as assignor, have with others invented certain new and useful improvements in
BINDER FOR SECONDARY BATTERY EXHIBITING EXCELLENT ADHESION FORCE
☒ for which an application for a United States Letters Patent was filed on December 20, 2012
 Application Number 13/805,875
☐ for which an application for a United States Letters Patent was executed by me on _____
☒ for which an International Application was filed on July 13, 2011, as
PCT/KR2011/005143, designating the United States.


And

Whereas, LG Chem, Ltd.
 a corporation of _____ herein referred to as "assignee" whose mailing address is
LG Twin Towers, 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, REPUBLIC OF KOREA 150-721
 is desirous of acquiring the entire right, title and interest in the same:

NOW, THEREFORE, in consideration of the sum of one dollar (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

2013. 04. 02
 Date


 Ok Sun Kim

 Witness

 Typed Name of Witness

☒ *Total of 4 forms are submitted.