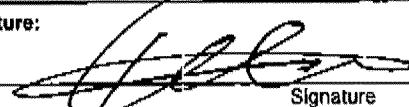


Form PTO-1595 (Rev. 03-11)
OMB No. 0651-0027 (exp. 03/31/2015)

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.

<p>1. Name of conveying party(ies): Yong Ju Lee (09/16/2013), Yoon Ah Kang (09/16/2013), Mi Rim Lee (09/16/2013), Jung Woo Yoo (09/16/2013), and Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>LG Chem, Ltd.</u> Internal Address: _____ Street Address: _____ 20, Yoido-dong Youngdungpo-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</p>
<p>3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>in parentheses after inventor name</u> <input 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 checked="" type="checkbox"/> Other <u>Correction to Document No. 700511110 – legible documents attached as requested</u></p>	<p>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>13/566,599</u> B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>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.:</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>mcormier@ldlkm.com</u></p>	<p>6. Total number of applications and patents involved: 1</p> <p>7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____ <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)</p>
<p>9. Signature:  _____ Signature <u>Kelly Y. Hwang - 51,831</u> Name of Person Signing</p>	<p>8. Payment Information Deposit Account Number <u>12-1095</u> Authorized User Name <u>Kelly Y. Hwang</u></p> <p>_____ November 25, 2013 Date</p> <p>Total number of pages including cover sheet, attachments, and documents: 8</p>

CH \$40.00 121095 13566599

**RECORDATION FORM COVER SHEET (PTO-1595)
(supplemental sheet)**

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Je Young Kim (09/16/2013)

Additional Assignees (2. Continued):

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Additional Applications and/or Patents (4. Continued):

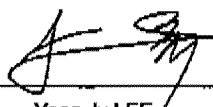
Additional Patent Application Numbers
4A. Continued:

Additional Patent Numbers
4B. Continued:

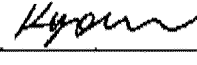
Additional numbers attached?

Yes No

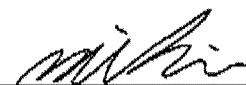
former PTO/9B/15 (8-00) Modified LDLKM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
Whereas, I, <u>Yong Ju LEE</u> of <u>112-207, Samsung Pureun Apt., Jeonmin-dong, Yuseong-gu, Daejeon 305-727, Korea</u>	
hereafter referred to as assignor, have with others invented certain new and useful improvements in	
<u>ELECTRODE ACTIVE MATERIAL FOR SECONDARY BATTERY</u>	
<input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on <u>August 3, 2012</u>	
Application Number <u>13/566,599</u>	
<input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on _____,	
<input type="checkbox"/> for which an International Application was filed on _____, as	
_____, designating the United States.	
And	
Whereas, <u>LG CHEM, LTD.</u>	
a corporation of <u>Republic of Korea</u> herein referred to as "assignee" whose mailing address is	
<u>20, Yoido-dong, Youngdungpo-gu, Seoul 150-721, Republic of Korea</u>	
is desirous of acquiring the entire right, title and interest in the same;	
<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>	
And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.	
<u>September 16, 2013</u> Date	 Yong Ju LEE
<u>YNBAEK</u> Witness	
<u>Yu Na BAEK</u> Typed Name of Witness	
<input checked="" type="checkbox"/> *Total of <u>5</u> forms are submitted.	

former PTO/SB/18 (8-00) Modified LDLKAM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
Whereas, I, <u>Yoon Ah KANG</u> of	
<u>101-1703, Hyundai Apt., Samsong 2-dong, Gangnam-gu, Seoul 135-092, Korea</u>	
hereafter referred to as assignor, have with others invented certain new and useful improvements in	
<u>ELECTRODE ACTIVE MATERIAL FOR SECONDARY BATTERY</u>	
<input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on	<u>August 3, 2012</u>
Application Number	<u>13/566,599</u>
<input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on	_____
<input type="checkbox"/> for which an International Application was filed on	_____, as
_____, designating the United States.	
And	
Whereas, <u>LG CHEM, LTD.</u>	
a corporation of <u>Republic of Korea</u> herein referred to as "assignee" whose mailing address is	
<u>20, Yoido-dong, Youngdungpo-gu, Seoul 150-721, Republic of Korea</u>	
is desirous of acquiring the entire right, title and interest in the same;	
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.	
And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.	
<u>September 16, 2013</u>	
Date	Yoon Ah KANG
<u>YU BAEK</u>	
Witness	
<u>Yu NA BAEK</u>	
Typed Name of Witness	
<input checked="" type="checkbox"/> *Total of <u>5</u> forms are submitted.	

former PTO/SB/15 (8-00) Modified LDLKM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
<p>Whereas, I, <u>MI Rim LEE</u> of <u>2-708, Jangmi 1-Cha Apt., Sincheon-dong, Songpa-gu, Seoul 138-240, Korea</u></p> <p>hereafter referred to as assignor, have with others invented certain new and useful Improvements in</p> <p><u>ELECTRODE ACTIVE MATERIAL FOR SECONDARY BATTERY</u></p> <p><input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on <u>August 3, 2012</u> Application Number <u>13/566,599</u></p> <p><input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on _____,</p> <p><input type="checkbox"/> for which an International Application was filed on _____, as _____, designating the United States.</p> <p>And</p> <p>Whereas, <u>LG CHEM, LTD.</u> a corporation of <u>Republic of Korea</u> herein referred to as "assignee" whose mailing address is <u>20, Yoido-dong, Youngdungpo-gu, Seoul 150-721, Republic of Korea</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> <p style="text-align: center;">September 16, 2013 _____ Date <u>YU NA BAEK</u> _____ Witness <u>Yu NA BAEK</u> _____ Typed Name of Witness</p> <p style="text-align: center;"> _____ MI Rim LEE</p>	


Total of 5 forms are submitted.



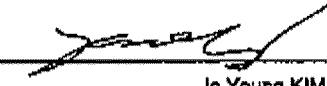
PATENT

REEL: 031852 FRAME: 0266

former PTO/SB/15 (8-00) Modified LDLKAM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
Whereas, I, <u>Jung Woo YOO</u> of <u>1008, Magnolia, 939 Dunsan-dong, Seo-gu, Daejeon 302-828, Korea</u>	
hereafter referred to as assignor, have with others invented certain new and useful improvements in	
<u>ELECTRODE ACTIVE MATERIAL FOR SECONDARY BATTERY</u>	
<input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on <u>August 3, 2012</u>	
Application Number <u>13/566,599</u>	
<input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on _____	
<input type="checkbox"/> for which an International Application was filed on _____, as	
_____, designating the United States.	
And	
Whereas, <u>LG CHEM, LTD.</u>	
a corporation of <u>Republic of Korea</u> herein referred to as "assignee" whose mailing address is	
<u>20, Yoido-dong, Youngdungpo-gu, Seoul 150-721, Republic of Korea</u>	
is desirous of acquiring the entire right, title and interest in the same;	
<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 Trademark 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>	
And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.	
<u>September 16, 2013</u> Date	 _____ Jung Woo YOO
<u>YU NA BAEK</u> Witness	
<u>Yu NA BAEK</u> Typed Name of Witness	
<input checked="" type="checkbox"/> *Total of <u>5</u> forms are submitted.	

former PTO/SB/15 (5-00) Modified LDLK&M

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
Whereas, I, <u>Je Young KIM</u> of	
<u>102-1704, Expo Apt., Jeonmin-dong, Yuseong-gu, Daejeon 305-761, Korea</u>	
hereafter referred to as assignor, have with others invented certain new and useful improvements in	
<u>ELECTRODE ACTIVE MATERIAL FOR SECONDARY BATTERY</u>	
<input checked="" type="checkbox"/> for which an application for a United States Letters Patent was filed on <u>August 3, 2012</u>	
Application Number <u>13/566,599</u>	
<input type="checkbox"/> for which an application for a United States Letters Patent was executed by me on _____	
<input type="checkbox"/> for which an International Application was filed on _____, as	
_____ , designating the United States.	
And	
Whereas, <u>LG CHEM, LTD.</u>	
a corporation of <u>Republic of Korea</u> herein referred to as "assignee" whose mailing address is	
<u>20, Yoldo-dong, Youngdungpo-gu, Seoul 150-721, Republic of Korea</u>	
is desirous of acquiring the entire right, title and interest in the same;	
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.	
And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.	
September 16, 2013	
Date	Je Young KIM
<u>YNBAEK</u>	
Witness	
<u>Yu Na BAEK</u>	
Typed Name of Witness	
<input checked="" type="checkbox"/> Total of <u>5</u> forms are submitted.	



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PATENT

RECORDED: 10/03/2013

REEL: 031852 FRAME: 0268