505013708 07/20/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5060456

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUNG BIN PARK	06/12/2018
YOUNG UK PARK	06/19/2018
JI YOUNG PARK	06/19/2018
BO RAM LEE	06/18/2018
СНІ НО ЈО	06/20/2018
YOUNG CHEOL CHOI	06/18/2018
HYUCK HUR	06/18/2018
WANG MO JUNG	06/18/2018

RECEIVING PARTY DATA

Name:	LG CHEM, LTD.	
Street Address:	128, YEOUI-DAERO	
Internal Address:	YEONGDEUNGPO-GU	
City:	SEOUL	
State/Country:	KOREA, REPUBLIC OF	
Postal Code:	07336	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16070588

CORRESPONDENCE DATA

Fax Number: (908)654-7866

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: (908) 654-5000

Email: assignment@lernerdavid.com

LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP **Correspondent Name:**

Address Line 1: 600 SOUTH AVENUE WEST Address Line 4: WESTFIELD, NEW JERSEY 07090

ATTORNEY DOCKET NUMBER: LGCHEM 3.3F-1458 NAME OF SUBMITTER: MELINDA C. CORMIER

/Melinda C. Cormier/		
07/20/2018		
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COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM¹

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application.

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

POSITIVE ELECTRODE ACTIVE MATERIAL FOR LITHIUM SECONDARY TITLE: BATTERY, COMPRISING LITHIUM COBALT OXIDE FOR HIGH VOLTAGE, AND METHOD FOR PREPARING SAME

for which Assignor is about to make or has made United States or International application for patent.

WHEREAS, as a below named inventor(s), I/(we) hereby declare that:

Section I. Declaration

This declarati	ation is directed to:	
	The attached U.S. non-provisional patent application, or	
	U.S. non-provisional patent application number, or	, filed on
•	PCT international patent application number PCT/KR2017/007599 , 2017 .	filed on <u>July 14,</u>
The above-id	identified application was made or authorized to be made by me (us).	
, ,	ve that I am (we are) the original inventor (original joint inventors) of a dentified application.	claimed invention in
1 This form red	requires the use of an Application Data Sheet.	

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode) Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 1 of $\bf 6$

I (we) 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.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

Section II. Assignment

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and assign(s) to

LG CHEM, LTD.

having an address at **128**, **Yeoui-daero**, **Yeongdeungpo-gu**, **Seoul 07336**, **Republic of Korea** (hereinafter designated as the Assignee(s)), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee(s), and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee(s) and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee(s) to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 2 of 6



the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee(s) without further or other compensation than that above set forth;

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

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee(s), and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee(s).

The undersigned hereby grant(s) the law firm of LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode) Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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PATENT ©LGChem REEL: 046415 FRAME: 0152

Section III. Inventor(s)/Assignor(s) Signature(s)

LEGAL NAME OF	Full Name
FIRST INVENTOR/ASSIGNOR	Sung Bin PARK
SIGNATURE	DATE 18 6.18
LEGAL NAME OF SECOND	Full Name
INVENTOR/ASSIGNOR	Young Uk PARK
SIGNATURE	Park. Younguk DATE 18.6.19
LEGAL NAME OF	Full Name
THIRD INVENTOR/ASSIGNOR	Ji Young PARK
SIGNATURE	DATE 18. 6. 19

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 4 of 6

LEGAL NAME OF	Full Name	
FOURTH INVENTOR/ASSIGNOR	Bo Ram LEE	
SIGNATURE	11MM DATE 12.6, 12	
LEGAL NAME OF	Full Name	
FIFTH INVENTOR/ASSIGNOR	Chi Ho JO	
SIGNATURE	DATE	
LEGAL NAME OF	Full Name	
SIXTH INVENTOR/ASSIGNOR	Young Cheol CHOI	
SIGNATURE	DATE 18.6.18	

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Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 5 of 6

LEGAL NAME OF SEVENTH	Full Name Hyuck HUR	
INVENTOR/ASSIGNOR		
SIGNATURE	Grulcher DATE R. 6.18	
TEAN DANCE OF	Company System	
LEGAL NAME OF EITGHTH	Full Name	
INVENTOR/ASSIGNOR	Wang Mo JUNG	

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode)

Attorney Ref No.

DATE

18.6.18

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 6 of 6

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for which Assignor is about to make or has made United States or International application for patent.

WHEREAS, as a below named inventor(s), I/(we) hereby declare that:

Section I. Declaration

This decla	ration is directed to:
	The attached U.S. non-provisional patent application, or
Ž.	U.S. non-provisional patent application number, filed on, or
	PCT international patent application number <u>PCT/KR2017/007599</u> , filed on <u>July 14, 2017</u> .
The abov	-identified application was made or authorized to be made by me (us).
	eve that I am (we are) the original inventor (original joint inventors) of a claimed invention in identified application.
1 This for	n requires the use of an Application Data Sheet.

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode) Att

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 1 of 6

I (we) 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.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

Section II. Assignment

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LG CHEM, LTD.

having an address at 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea (hereinafter designated as the Assignee(s)), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee(s), and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee(s) and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee(s) to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Cathode)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 2 of 6

the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee(s) without further or other compensation than that above set forth;

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

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee(s), and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee(s).

The undersigned hereby grant(s) the law firm of LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 3 of 6

Section III. Inventor(s)/Assignor(s) Signature(s)

LEGAL NAME OF FIRST	Full Name
INVENTOR/ASSIGNOR	Sung Bin PARK
SIGNATURE	DATE
LEGAL NAME OF SECOND	Full Name
INVENTOR/ASSIGNOR	Young Uk PARK
SIGNATURE	DATE
LEGAL NAME OF	Full Name
THIRD INVENTOR/ASSIGNOR	Ji Young PARK
SIGNATURE	DATE

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Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 4 of 6

LEGAL NAME OF	Full Name
FOURTH INVENTOR/ASSIGNOR	Bo Ram LEE
SIGNATURE	DATE
LEGAL NAME OF	Full Name
FIFTH INVENTOR/ASSIGNOR	Chì Ho JO
SIGNATURE	DATE 6/20/2018
LEGAL NAME OF	Full Name
INVENTOR/ASSIGNOR	Young Cheol CHOI
	A- 0-4
signature _	DATE

LG CHEM Ref No. P2016-1110PCUS (Portfolio: Curbode)

Attorney Rel No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 5 of 6

LEGAL NAME OF SEVENTH INVENTOR/ASSIGNOR	Full Name
	Hyuck HUR
SIGNATURE	DATE
LEGAL NAME OF EITGHTH INVENTOR/ASSIGNOR	Full Name
	Wang Mo JUNG
SIGNATURE	DATE

LG CHEM Ref No. P2016-1110PCUS (Portfolio; Cathode)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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