504956044 06/12/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAE SOO KIM	02/09/2018
HAN YOUNG LEE	02/09/2018
DONG KYU KIM	02/09/2018
SEOK KOO KIM	02/09/2018

RECEIVING PARTY DATA

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City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	07336

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16060552

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	0808-0818PUS1
NAME OF SUBMITTER:	DERYA SEVINC
SIGNATURE:	/Derya Sevinc/
DATE SIGNED:	06/12/2018

Total Attachments: 5

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PATENT 504956044 REEL: 046057 FRAME: 0424

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PATENT REEL: 046057 FRAME: 0425

Attorney Docket No.: 0808-0818PUS1 U.S. Application No.: 16/060,552

Filed Date: 6/8/18

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:

TITLE: BATTERY SYSTEM WITH IMPROVED LIFETIME PROPERTY AND METHOD FOR OPERATING BATTERY SYSTEM

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 declaration is directed	to:
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	The attached U.S. non-provisional patent application, or
	U.S. non-provisional patent application number, filed on, or
	PCT international patent application number <u>PCT/KR2017/003560</u> , filed on <u>March 31</u> , <u>2017</u> .
The above-ide	entified application was made or authorized to be made by me (us).
the state of the s	that I am (we are) the original inventor (original joint inventors) of a claimed invention in entified application.
I (we) hereb	y acknowledge that any willful false statement made in this declaration is punishable
1 This form rec	quires the use of an Application Data Sheet.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 1 of 5

LG CHEM Ref No. P2016-1018PCUS (Portfolio: Cell processing)

PATENT OLG Chem REEL: 046057 FRAME: 0426

Attorney Ref No.

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. P2016-1018PCUS (Portfolio; Cell processing)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 2 of 5



Attorney Docket No.: 0808-0818PUS1

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 BIRCH, STEWART, KOLASCH & BIRCH, 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. P2016-1018PCUS (Portfolio: Cell processing)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 3 of 5



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

LEGAL NAME OF FIRST INVENTOR/ASSIGNOR		Full Name
		Dae Soo KIM
		AM.
SIGNATURE	길떠수	DATE 2018, 2, 9
LEGAL NAME OF SECOND		Full Name
INVENTOR/ASSIGNOR		Han Young LEE
SIGNATURE	4) ikg	DATE 2018 2. q
LEGAL NAME OF		Full Name
THIRD		

LG CHEM Ref No. P2016-1018PCUS (Portfolio: Cell processing)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 4 of 5

LEGAL NAME OF	Full Name	
FOURTH INVENTOR/ASSIGNOR	Seok Koo KIM	
SIGNATURE	DATE Feb. 9, 20, &	2

LG CHEM Ref No. P2016-1018PCUS (Portfolio: Cell processing)

Attorney Ref No.

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