## 507365751 07/01/2022

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT7412674 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MINWOO KIM	03/30/2022
BO HYUN SEO	04/01/2022
SEUNGHYUN LEE	04/01/2022
TAE YOUN KIM	04/01/2022

#### **RECEIVING PARTY DATA**

Name:	LG ENERGY SOLUTION, LTD.
Street Address:	TOWER 1, 108, YEOUI-DAERO
Internal Address:	YEONGDEUNGPO-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	07335

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17790258

#### **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

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

Address Line 1: 20 COMMERCE DR.

Address Line 4: CRANFORD, NEW JERSEY 07016

ATTORNEY DOCKET NUMBER: LGES 3.3F-265

NAME OF SUBMITTER: KATHLEEN REYNOLDS

SIGNATURE: /Kathleen Reynolds/

DATE SIGNED: 07/01/2022

**Total Attachments: 10** source=Assignment#page1.tif

PATENT 507365751 REEL: 060419 FRAME: 0413

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## COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM<sup>1</sup>

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:

The attached U.S. non-provisional patent application, or

# TITLE: BATTERY APPARATUS AND METHOD FOR MEASURING CELL VOLTAGE

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:

	U.S. non-provisional patent application number	, filed on
	, or	
	PCT international patent application number <a href="PCT/KR2021/012929">PCT/KR2021/012929</a> , <a href="23, 2021">23, 2021</a> .	filed on <u>September</u>
The above-ide	entified application was made or authorized to be made by me (us).	
	that I am (we are) the original inventor (original joint inventors) of a ntified application.	claimed invention in
I (we) hereby	acknowledge that any willful false statement made in this decla	ration is punishable
	uires the use of an Application Data Sheet.	

LG Ref No. P2020-3406PCUS (Portfolio: Automobile BMS > Measure) Attorney Ref No. LGES 3.3F-265

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

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 ENERGY SOLUTION, LTD.

having an address at **Tower 1, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul 07335, 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

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

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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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	Full Name		
FIRST INVENTOR/ASSIGNOR	Minwoo KIM		
SIGNATURE	1/11/7 DATE 12.03.30		
LEGAL NAME OF SECOND	Full Name		
INVENTOR/ASSIGNOR			
SIGNATURE	DATE		
LEGAL NAME OF THIRD	Full Name		
INVENTOR/ASSIGNOR	<u> </u>		
SIGNATURE	DATE		

LG Ref No. P2020-3406PCUS (Portfolio: Automobile BMS > Measure)

Attorney Ref No. 1 GES 3.3F-26S

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	Tae Youn KIM	
SIGNATURE	DATE	

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

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BATTERY APPARATUS AND METHOD FOR MEASURING CELL TITLE: VOLTAGE

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The above-ide	entified application was made or authorized to be made by me (us).	
	that I am (we are) the original inventor (original joint inventors) of a centified application.	laimed invention in
I (we) hereby	y acknowledge that any willful false statement made in this declar	ation is punishable
1 This form req	quires the use of an Application Data Sheet.	

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



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



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

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

LEGAL NAME OF	Full Name  Minwoo KIM	
FIRST INVENTOR/ASSIGNOR		
SIGNATURE	DATE	
LEGAL NAME OF Full Name		
SECOND INVENTOR/ASSIGNOR	Bo Hyun SEO	
SIGNATURE	4 2 H DATE 2022/04/01	
LEGAL NAME OF	Full Name	
THIRD INVENTOR/ASSIGNOR	Seunghyun LEE	
SIGNATURE	Sava DATE 2022/04/01	

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Attorney Ref No. 1GES 33F-265

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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LEGAL NAME OF	Full Name	
FOURTH INVENTOR/ASSIGNOR	Т	ae Youn KIM
SIGNATURE _	4 M E	DATE 2022/04/01

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Attorney Ref No. LGES 3.3F-265

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RECORDED: 07/01/2022