### 505339202 02/21/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5385983

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
HEEEUN YOO	02/14/2019
DUCKHYUN KIM	02/14/2019
TAERI KWON	02/15/2019
TAEHYUN BAE	02/15/2019
WOOCHEOL SHIN	02/14/2019
MINJU LEE	02/14/2019
SIYOUNG CHA	02/14/2019

### **RECEIVING PARTY DATA**

Name:	SAMSUNG SDI CO., LTD.
Street Address:	150-20, GONGSE-RO, GIHEUNG-GU,
City:	YONGIN-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	17084

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16327050

### **CORRESPONDENCE DATA**

Fax Number: (703)207-0003

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: 703-207-0008 Email: eoa@lee-iplaw.com **Correspondent Name:** LEE & MORSE, P.C.

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Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	302/1777_00
NAME OF SUBMITTER:	JAY P. BEALE
SIGNATURE:	/Jay P. Beale/
DATE SIGNED:	02/21/2019

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# Total Attachments: 7 source=Combined\_Decl\_and\_Assignment#page1.tif source=Combined\_Decl\_and\_Assignment#page2.tif source=Combined\_Decl\_and\_Assignment#page3.tif source=Combined\_Decl\_and\_Assignment#page4.tif source=Combined\_Decl\_and\_Assignment#page5.tif source=Combined\_Decl\_and\_Assignment#page6.tif source=Combined\_Decl\_and\_Assignment#page7.tif

PATENT REEL: 048396 FRAME: 0966

# 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:

# Title: ELECTROLYTE FOR LITHIUM METAL BATTERY AND LITHIUM METAL BATTERY INCLUDING THE 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		d U.S. non-provisional p	patent application, unless the
			, filed on
$\boxtimes$	PCT international patent August 3, 2017		7/KR2017/008404, filed on
	as amended by the Pre	liminary Amendment att	ached hereto.
	as amended by the Pre	liminary Amendment file	ed on
The above-ide	entified application was mad	de or authorized to be ma	ade by me (us).
	that I am (we are) the origine the above-identified applicat		nt inventors) of a claimed
` /	acknowledge that any willf C. 1001 by fine or imprison		in this declaration is punishable ive (5) years, or both.
•	that I have reviewed and ur neluding the claims (as ame		
	e that I am aware of the duty as defined in 37 CFR § 1.56		which is material to
<sup>1</sup> This form req	uires the use of an Application D	ata Sheet.	
Client Ref No.	20150930007WO1	Attorney Ref No	302/1777_00
COMBIN	ED DECLARATION (37 CFI	R 1.63) FOR UTILITY PA	TENT APPLICATION AND

ASSIGNMENT FORM

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<u>Power of Attorney:</u> I/we hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office practitioners associated with Customer Number 27849.

### 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

### Samsung SDI Co., Ltd.

having an address at 150-20, Gongse-ro, Giheung-gu, Yongin-si, Gyeonggi-do 17084, Republic of Korea (hereinafter designated as the Assignee), 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, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee 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 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 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 without further or other compensation than that above set forth;

Client Ref No.	20150930007WO1	Attorney Ref No.	302/1777_00

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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### SAMSUNG SDI CO., LTD.

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, 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.

The undersigned hereby grant(s) the law firm of LEE & MORSE, P.C. 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.

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

LEGAL NAME OF FIRST	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	Y00	Heeeun	
4			
SIGNATURE	Heeeun Yoo	DATE	19,2.14.

LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	Duckhyun	
OVGINI A SELUDIO	1 m 21	D. 1970	. /
SIGNATURE		DATE	7/14/19

Client Ref No.	20150930007WO1	Attorney Ref No.	302/1777_00

LEGAL NAME OF THIRD	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KWON	Taeri	
SIGNATURE	Taeri kuon	DATE	2019.02.15
LEGAL NAME OF FOURTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	BAE	Tachyun	
SIGNATURE	Tachyyn BAE	DATE	2019.02.15
LEGAL NAME OF FIFTH	Family Name	First Given Name	Second Given Name
NVENTOR/ASSIGNOR	SHIN	Woocheol	
SIGNATURE <sub>.</sub>		DATE	
TO CAT MAN MAN MAN	Attorney	D-CNI-	3/1777 00

ASSIGNMENT FORM
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### SAMSUNG SDI CO., LTD.

LEGAL NAME OF SIXTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	LEE	Minju	
			-
SIGNATURE	lee Min Ju	DATE	19.2,14
***************************************			

LEGAL NAME OF SEVENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	СНА	Siyoung	
,			
SIGNATURE _	CHA Styoung	DATE 19.02.11/4	

Client Ref No.	20150930007WO1	Attornev Ref No.	302/1777 00	

Doc code: Oath

Document Description: Oath or declaration filed

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### SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ELECTROLYTE FOR LITHIUM METAL BATTERY AND LITHIUM METAL BATTERY INCLUDING THE SAME			
r	ent is directed to: ached application,			
OR	эспец аррисаноп,			
	States application or PCT international application number	filed on		
LEGAL NA	ME of inventor to whom this substitute statement appl	ies:		
	Name (first and middle (if any)) and Family Name or Surname)			
Residence (e	except for a deceased or legally incapacitated inventor):	4		
<sub>city</sub> Yong	gin-si, Gyeonggi-do <sub>state</sub>	Republic Republic	of Korea	
Mailing Address (except for a deceased or legally incapacitated inventor): c/o Samsung SDI Co., Ltd., 150-20, Gongse-ro, Giheung-gu,				
<sub>Dity</sub> Yong	gin-si, Gyeonggi-do <sub>state</sub>	<sub>Zip</sub> 17084	Republic of Korea Country	
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.				
The above-identified application was made or authorized to be made by me.				
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.				
Relationship	p to the inventor to whom this substitute statement applies:			
Legal Representative (for deceased or legally incapacitated inventor only),  Assignee,				
	rson to whom the inventor is under an obligation to assign,			
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or  Joint Inventor.				

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This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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### SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:					
Inventor is deceased,					
Inventor is under legal incapacity,					
Inventor cannot be found or reached after diligent effort, or					
Inventor has refused to execute the oath or declaration under 37 CF	FR 1.63.				
If there are joint inventors, please check the appropriate box below:					
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.					
OR					
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).					
WARNING:					
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO is support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, etitioners/applicants should consider redacting such personal information from the documents before submitting them to the ISPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the pplication (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a latent. Furthermore, the record from an abandoned application available to the public if the application is peterenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms are provided in the application file and therefore are not publicly available.					
ERSON EXECUTING THIS SUBSTITUTE STATEMENT:					
Taeweon Heo		Date (Optional):			
signature: Talwess Med					
PPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTION					
the applicant is a juristic entity, list the applicant name and the title of the sign	ier:				
Samsung SDI Co., Ltd.  Applicant Name:					
Fitle of Person Executing This Substitute Statement:  The signer, whose title is supplied shows, is authorized to get up behalf of the applicant.					
The signer, whose the is supplied above, is authorized to act on behalf of the applicant.					
desidence of the signer (unless provided in an application data sheet, PT					
<sub>sity</sub> Yongin-si, Gyeonggi-do <sub>state</sub>	<sub>Country</sub> Repub	olic of Korea			
Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)					
150-20, Gongse-ro, Giheung-gu					
<sub>State</sub> Yongin-si, Gyeonggi-do	<sub>Zip</sub> 17084	Republic of Korea Country			
ote: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached fter diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.					

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**RECORDED: 02/21/2019**