PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6216163

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MIN JI KIM	05/06/2020
KWAN WOO NAM	04/22/2020
SEUNG HYUN LEE	05/06/2020
JE AN LEE	05/06/2020

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16964178

CORRESPONDENCE DATA

Fax Number: (202)739-3001

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: 2027393000

Email: patents@morganlewis.com, kathy.casavecchia@morganlewis.com

Correspondent Name: COLLIN W. PARK

Address Line 1: MORGAN, LEWIS & BOCKIUS LLP
Address Line 2: 1111 PENNSYLVANIA AVENUE NW

Address Line 4: WASHINGTON, D.C. 20004

ATTORNEY DOCKET NUMBER:	120826-5018
NAME OF SUBMITTER:	TOYOMI OHARA
SIGNATURE:	/Toyomi Ohara/
DATE SIGNED: 07/23/2020	
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

PATENT REEL: 053297 FRAME: 0666

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PATENT REEL: 053297 FRAME: 0667

WHEREAS, I have made an invention described and/or claimed in the above-identified application; and

WHEREAS, LG CHEM, LTD., a corporation of the Republic of Korea whose post office address is 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Republic of Korea (hereinafter referred to as the "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application of United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from the Assignee is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, and its lawful successors and assigns, my entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to the Assignee, and its successors and assigns, in accordance with the terms of this Assignment;

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DB1/ 107891156.1

COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with the Assignee, and its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, and its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid the Assignee, and its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, and its successors and assigns.

IN TESTIMONY WHEREOF, I have hereunto set my hands.		
First Inventor (Full Legal Name): Min Ji KIM Signature: 김인치	Date: <u>2020, ot.ob</u>	
Second Inventor (Full Legal Name): Kwan Woo NAM Signature:	Date:	
Third Inventor (Full Legal Name): Seung Hyun LEE	Date: <u>그</u> 020, 항, 0 (
Fourth Inventor (Full Legal Name): Je An LEE Signature:6 ズ似 じ	Date: _ >0>0.05.06	

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DB1/ 107891156.1

COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION	
Title	SEPARATOR FOR SECONDARY BATTERIES HAVING NO SEPARATOR SUBSTRATE
DECLARATION	
As a below nan	med inventor, I hereby declare that:
This declaration	n is directed to:
	he attached application, or
×υ	I.S. application or PCT international application number PCT/KR2019/011213 filed on August 30, 2019.
The above-ider	ntified application was made or authorized to be made by me.
I believe that I	am the original inventor or an original joint inventor of a claimed invention in the application.
I hereby acknow fine or imprisor	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by nment of not more than five (5) years, or both.
Note to Inventor: 37 C.F.R. § 1.63(c) states: A person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56.	
ASSIGNMENT	

WHEREAS, I have made an invention described and/or claimed in the above-identified application; and

WHEREAS, LG CHEM, LTD., a corporation of the Republic of Korea whose post office address is 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Republic of Korea (hereinafter referred to as the "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application of United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from the Assignee is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, and its lawful successors and assigns, my entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to the Assignee, and its successors and assigns, in accordance with the terms of this Assignment;

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PATENT Attorney Docket No. 120826-5018 Assignee Reference No. P2018-1443PCUS

COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with the Assignee, and its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, and its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid the Assignee, and its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, and its successors and assigns.

IN TESTIMONY WHEREOF, I have hereunto set my hands.		
First Inventor (Full Legal Name): Min Ji KIM		
Signature:	Date:	
Second Inventor (Full Legal Name): Kwan Woo NAM		
Signature:	Date: <u>04/22/2020</u>	
Third Inventor (Full Legal Name): Seung Hyun LEE		
Signature:	Date:	
Fourth Inventor (Full Legal Name): Je An LEE		
Signature:	Date:	

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RECORDED: 07/23/2020

PATENT REEL: 053297 FRAME: 0671