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SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY DA	ATA		
		Name	Execution Date
SANGBOK MA			09/09/2019
HYUKJAE KWON			09/09/2019
HYUNPYO LEE			09/09/2019
DONGHWA SEO			09/09/2019
DONGMIN IM			09/09/2019
RECEIVING PARTY DA	ГА		
Name:	SAMSUNG ELECTRONICS CO., LTD.		
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU,		
City:	SUWON-SI, GYEONGGI-DO,		
State/Country:	KOREA, REPUBLIC OF		
Postal Code:	16677		
	Total: 1		
PROPERTY NUMBERS Property Type	Total: 1	Number	
		Number 6595728	
Property Type Application Number:	1		
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Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4: TTORNEY DOCKET NU AME OF SUBMITTER: IGNATURE:	ATA ({ e sent to provided; 8 u C 2 +	6595728 860)286-0115 the e-mail address first; if that is unsucc if that is unsuccessful, it will be sent via 6602862929 Isptopatentmail@cantorcolburn.com CANTOR COLBURN LLP 22ND FL 20 CHURCH STREET HARTFORD, CONNECTICUT 06103 YPL2145US2 GRANT M. EHRLICH /Grant M. Ehrlich/	a US Mail.

Total Attachments: 2

DECLARATION AND ASSIGNMENT

Title of Invention: MIXED CONDUCTOR, ELECTROCHEMICAL DEVICE, AND METHOD OF PREPARING MIXED CONDUCTOR

As a below named inventor, I hereby declare that:

This declaration is directed to:

[X] the attached application (Attorney Docket Number YPL2145US2), or

[] United States application or PCT international application number filed on ______.

The above-identified 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 have reviewed and understand the contents of the application, including the claims.

l am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, each undersigned inventor has made certain inventions, improvements, and discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the ("APPLICATION");

Whereas, <u>SAMSUNG ELECTRONICS CO., LTD.</u>, a corporation of the <u>Republic of Korea</u> having a place of business at <u>129</u>, <u>Samsung-ro</u>, <u>Yeongtong-gu</u>, <u>Suwon-si</u>, <u>Gyeonggi-do</u>, <u>16677</u>, <u>Republic of Korea</u> (herein referred to as "ASSIGNEE"), desires to acquire, and each undersigned inventor desires to grant to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all forcign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned

PATENT REEL: 050652 FRAME: 0918

YPL2145US2 SI-56892-US RF2018070081US0

had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

I 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.

The undersigned hereby grant(s) the law firm of **Cantor Colburn 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.

Legal Name of Inventor: Sangbok Ma Signature:	Date:9/2~0/2~0/9
Legal Name of Inventor: Hyukjae Kwon Signature:	9/9/2019 Date:
Legal Name of Inventor: Hynnpyo Lee	Date: <u>9/9/>819</u>
Legal Name of Inventor: Donghwa Seo	9/9/2019 Date:
Legal Name of Inventor: Dongmin Im Signature:	Date: <u>9/9/2~19</u>
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