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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HYUN SUK JUNG	01/03/2019
SANG MYEONG LEE	01/03/2019
BYEONG JO KIM	01/03/2019
DONG GEON LEE	01/03/2019
JI HYUN BAEK	01/03/2019
JAE MYEONG LEE	01/03/2019
MIN HEE KIM	01/03/2019
WON BIN KIM	01/03/2019
SO YEON PARK	01/03/2019
MIYEON BAEK	01/03/2019

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16240861

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PATENT REEL: 050947 FRAME: 0924

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NAME OF SUBMITTER:	CHARLES A. GREENE	
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DATE SIGNED:	11/07/2019	
Total Attachments: 3		
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PATENT REEL: 050947 FRAME: 0925

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

	DECLARATION
As a below-named inventor, I hereby or to United States Application Number	declare that this declaration is directed to the application attached hereto, per or PCT International Application Number
filed	on(if applicable), entitled:
	ESS MEMORY DEVICE AND PREPARING METHOD THEREOF
	made or authorized to be made by me.
application.	an original joint inventor of a claimed invention in the above-identified
I hereby acknowledge that any willful 1001 by fine or imprisonment of not r	false statement made in this declaration is punishable under 18 USC nore than five (5) years, or both.
I have reviewed and understand the	contents of the above-identified application, including the claims.
me to be material to patentability as	the United States Patent and Trademark Office all information known to defined in 37 CFR 1.56, including for continuation-in-part applications, ilable between the filing date of the prior application and the national or ntinuation-in-part application.
	ASSIGNMENT
For valuable consideration, I, as a be	low-named assignor, hereby assign to:
Research & Business Found 2066, Seobu-ro, Jangan-gu Suwon-si, Gyeonggi-do 1641 Republic of Korea	ation Sungkyunkwan University
and its successors and assigns (colle	ctively hereinafter called "the Assignee"), the entire right, title, and
interest throughout the world in the in	ventions and improvements that are the subject of the application
identified in the above declaration, wh	ich is United States Application Number or PCT International Application
Number 16/240,861	filed on January 7, 2019
Assignment by inserting above the ap	appointed in the above-identified application to hereafter complete this plication number and the filing date of the above-identified application traphical errors that may be discovered in this Assignment.
utility models, and design registrations	dentified application, any and all United States and foreign patents, is granted for any of the inventions and improvements that are the tion, and the right to claim priority based on the filing date of the above

This Assignment includes the above-identified application, any and all United States and foreign patents, utility models, and design registrations granted for any of the inventions and improvements that are the subject of the above-identified application, and the right to claim priority based on the filing date of the above-identified application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations, like rights of exclusion, and inventors' certificates for any of the inventions and improvements that are the subject of the above-identified application; and I agree for myself and my heirs, legal representatives, and assigns without further compensation to perform such lawful acts and to sign such further applications, Assignments, preliminary statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

In witness whereof, I, as a below-named inventor and assignor, intending to be legally bound, have hereunto affixed my signature on the date indicated below next to my signature.

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COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

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