PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAE HYEON SHIN	01/02/2019
SUNG HYUN HWANG	01/02/2019

RECEIVING PARTY DATA

Name:	SK HYNIX INC.	
Street Address: 2091, GYEONGCHUNG-DAERO, BUBAL-EUB		
City: ICHEON-SI GYEONGGI-DO		
State/Country:	KOREA, REPUBLIC OF	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16244932

CORRESPONDENCE DATA

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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.

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Correspondent Name: WILLIAM PARK & ASSOCIATES LTD. Address Line 1: 930 N. YORK ROAD, SUITE 201 Address Line 4: HINSDALE, ILLINOIS 60521

ATTORNEY DOCKET NUMBER:	PA3553-0
NAME OF SUBMITTER:	W. WILLIAM PARK
SIGNATURE:	/W. William Park/
DATE SIGNED: 01/10/2019	
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 2

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> **PATENT REEL: 047959 FRAME: 0367** 505272981

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

[세종, PTPUS201800508]

Title of	MEMORY DEVICE AND OPERATIN	[세종, PIPUS201800508] G METHOD THEREOF	
Invention			
	As the below named inventor(s), I he	ereby declare that:	
	The declaration is directed to:		
	The attached application, or		
	United States application o	r PCT international application number filed on	
Declaration	The above-identified application was	made or authorized to be made by me.	
	I believe that I am the original or ar application.	n original joint inventor of a claimed invention in the	
		villful false statement made in this declaration is fine or imprisonment of not more than five (5) years	
	is acknowledge, and other good and assign and transfer unto said assigned	• •	
	{	SK hynix Inc.]	
Assignment		eub, Icheon-si, Gyeonggi-do, Republic of Korea]	
	and the heirs, successors, assigns and legal representatives of the assignee(s) the full and exclusive right to the said invention in the United States and in its territorial possessions and in any and all foreign countries any and all improvements thereof, the entire rights, title and interest in and to any and all Patents which may be granted therefore in the United States. I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue said United States Patent to said assignee(s), of the entire right, title, and interest in and to the same, for his sole use and for the use of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.		
	I agree promptly upon request of the assignee(s), its heirs, successors, assigns and legal representatives of the assignee(s) to communicate any facts known to it respecting the patent and the invention set forth therein, and to execute and deliver without further compensation any power of attorney. Assignment, application, whether original, continuation, divisional or reissue, or other papers that may be necessary.		
	I hereby covenant that no assignment, sale agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.		
	I further covenant that assignee(s) will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to me and will testify as to the same in any litigation related thereto and will promptly execute and deliver to assignee(s) or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.		
	Inventor Name (First Middle LAST):	Jae Hyeon SHIN	
Legal Name Of Inventor	Inventor Signature:	Jae Hyeon SHIN	
	Date:	Jae Hyesn SHIN 12.2019	

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

[세종, PTPUS201800508]

	Inventor Name (First Middle LAST):	Sung Hyun HWANG
Legal Name Of Inventor	Inventor Signature:	Suns Hynn Hwans
	Date:	1.2.2019

☐ A total of 1 supplemental sheet(s) are attached hereto for additional inventors, if any

