#### 505772307 11/13/2019

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5819124

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

#### **CONVEYING PARTY DATA**

Name	Execution Date
JUNG DAL CHOI	11/05/2019
JUNG SHIK JANG	11/05/2019
JIN KOOK KIM	11/05/2019
DONG SUN SHEEN	11/05/2019
SE YOUNG OH	11/05/2019
KI HONG LEE	11/05/2019
DONG HUN LEE	11/05/2019
SUNG HOON LEE	11/05/2019
SUNG YONG CHUNG	11/05/2019

#### **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:	16683027

#### **CORRESPONDENCE DATA**

**Fax Number:** (630)323-0335

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.

Email: uspto.actions@wpapat.com

Correspondent Name: WILLIAM PARK & ASSOCIATES LTD.

Address Line 1: 930 N. YORK ROAD, SUITE 201

Address Line 4: HINSDALE, ILLINOIS 60521

ATTORNEY DOCKET NUMBER:	PA3911-0
NAME OF SUBMITTER:	W. WILLIAM PARK
SIGNATURE: /W. William Park/	
DATE SIGNED:	11/13/2019

PATENT REEL: 051001 FRAME: 0251

505772307

This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 2** 

source=PA3911-0\_DEC\_ASSIGN#page1.tif source=PA3911-0\_DEC\_ASSIGN#page2.tif

PATENT REEL: 051001 FRAME: 0252

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

[세종, PTPUS201900648]

Title of Invention	SEMICONDU	UCTOR MEMORY DEVICE		
Declaration	As the below named inventor(s), I hereby declare that:  The declaration is directed to:  The attached application, 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 or an original joint inventor of a claimed invention in the application.  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.			
Assignment	NOW, THEREFORE, in consideration of the sum of one dollar (\$1), the receipt whereof is acknowledge, and other good and valuable consideration, I, by these presents do sell, assign and transfer unto said assignee(s)  [SK hynix Inc.]  [2091, Gyeongchung-daero, Bubal-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 representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention a			
Legal Name Of Inventor	Inventor Name (First Middle LAST):  Inventor Signature:	Jung Dal CHOI		
Of inventor	Date:	Jung Ballhoi Nov. 05, 2019		

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

[세종, PTPUS201900648] Inventor Name (First Middle LAST): Jung Shik JANG Juna Shik JANG Inventor Signature: NOV 05, 2019 Date: Jin Kook KIM Inventor Name (First Middle LAST): Jinkook KIM Inventor Signature: NOV. 05, 2019 Date: Inventor Name (First Middle LAST): Dong Sun SHEEN DONG SUN, SHEEN Inventor Signature: NOV. 05. 2014 Date: Se Young OH Inventor Name (First Middle LAST): Se Young OH Inventor Signature: Date: NOV. 05, 2019 Legal Name Of inventor Inventor Name (First Middle LAST). Ki Hong LEE KI HONG LEE Inventor Signature: Nov. 05, 2019 Date: Inventor Name (First Middle LAST): Dong Hun LEE Dong Hun LEE Inventor Signature: Nov. 05,2019 Date: Inventor Name (First Middle LAST): Sung Hoon LEE Inventor Signature: Sung Hoon Lee Nov of 2019 Date: Sung Yong CHUNG Inventor Name (First Middle LAST):

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

Date:

Inventor Signature:

Sury Young Chung

Nov. 05. 2019