506043890 05/04/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6090605

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAE WOONG KIM	04/07/2020

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:	16866149

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:	PA4056-0
NAME OF SUBMITTER:	W. WILLIAM PARK
SIGNATURE:	/W. William Park/
DATE SIGNED:	05/04/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 1

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PATENT REEL: 052564 FRAME: 0115

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

[세종, PTPUS201900868]

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. 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, Bubai-oub, ticheon sit Gyeonggl-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 bountries any and all improvements thereof, the entire right, title, and interest in and both said value request the Director of the U.S. Patent and Trademark Office to issie said United States Patent to said assignee(s), of the entire right, title, and interest sins 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 relessue, or other papers that may be necessary. I hereby covenant	MANAS	
The declaration is directed to: The above-identified application was made or authorized to be made by me.	Title of Invention	MEMORY DEVICE AND METHOD OF OPERATING THE SAME
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, Ichéon-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. Assignment Assignment Assignment 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 an	Declaration	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
Legal Name Of Inventor Signature: Jae Woong CM	Assignment	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 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 affid
	Of inventor	Date: 2020 4 7

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