503579730 11/20/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3626358

١	SUBMISSION TYPE:	NEW ASSIGNMENT
	NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAE HOON KIM	11/20/2015

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14947567

CORRESPONDENCE DATA

Fax Number: (571)327-5452

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.

Phone: 571-327-5450

Email: ipntlaw@ipntlaw.com

Correspondent Name: IP & T GROUP LLP

Address Line 1: 8230 LEESBURG PIKE SUITE 650

Address Line 4: VIENNA, VIRGINIA 22182

ATTORNEY DOCKET NUMBER:	IN-00089-US
NAME OF SUBMITTER:	JUN JEONG PARK
SIGNATURE:	/Jun Jeong PARK/
DATE SIGNED:	11/20/2015
This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 1

source=IN00089US_Executed Assignment & Declaration#page1.tif

PATENT 503579730 REEL: 037151 FRAME: 0309

Attorney Docket No.: IN-00089-US

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

[X] said application being attached hereto; [] said application having been filed in the United States Patent and Trademark Office on	WHEREAS Tae Hoon KIM	_, hereinafter referred to collective	ly as the assignor and			
[X] said application having been filed in the United States Patent and Trademark Office on	inventor, has invented a certain improvement relating to					
And was amended a said application having been filed in the United States Patent and Trademark Office on and was amended on as Application Serial No. and (if applicable): [] the specification of which was filed under the Patent Cooperation Treaty on Serial No. the United States of America being designated. AND WHEREAS SK hynk Inc. AND Said assignee to said assignee to said assignee successors and assigns, rels assign, rels and transfers to said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all adultations which may be granted therefor, including any and all application which may be granted therefor, including any and all patents which may be granted therefor, including any and all patents which may be granted therefor, including any and all patents which may be granted therefor, including any and all patents which may be granted therefor, including any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee and said assignee's successors and assigns, in as ample and benefit for the use and benefit of said assignee and said assignee's successors and assigns, any and all acts relating	DATA STORAGE DEVICE AND METHOD OF PRO	GRAMMING MEMORY CELLS				
AND WHEREAS SK hynix Inc. SeriaPNo. SK hynix Inc. SeriaPNo. Sk hynix Inc. bereinspor referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof. NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, the receipt of which is hereby acknowledged, said assignee, and said assignees, successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations, thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all greatest, reissues and prolongations thereof, said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all all advisions and continuations thereof, and the said invention and say and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, said assignee and advantages in anywise arising from or appertaining thereof, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of any and all renewals, reissues and prolongations thereof, for the use and benefit of any and all renewals, reissues and prolongations thereof, for the use and benefit of a manner as the said assignee of assigns, and all acts relating so the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor hereby series to perform, upon the request of said assignee, or said assignee's successors and assigns, in accordance	[] said application having been filed in the United States Patent, as Application Serial No.					
AND WHEREAS SK hynix Inc. SeriaPNo. SK hynix Inc. SeriaPNo. Sk hynix Inc. bereinspor referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof. NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, the receipt of which is hereby acknowledged, said assignee, and said assignees, successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations, thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all greatest, reissues and prolongations thereof, said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all all advisions and continuations thereof, and the said invention and say and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, said assignee and advantages in anywise arising from or appertaining thereof, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of any and all renewals, reissues and prolongations thereof, for the use and benefit of any and all renewals, reissues and prolongations thereof, for the use and benefit of a manner as the said assignee of assigns, and all acts relating so the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor hereby series to perform, upon the request of said assignee, or said assignee's successors and assigns, in accordance	on (if applicable 1) the enacification of which was filed under the Retart Cooper	i); dian Tambu an				
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hereinsiger referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof. NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, the receipt of which is hereby acknowledged, said assigner hereby assigns, sells and transfers to said assignee, and said assignees and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, said assignee, and said assignees successors and assign, to have, hold, exercise and eight the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof. With all, the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during life serro, or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignees successors and assigns, in as ample and benefit a manurer as the said assignee, or said assignee, and said enjoyed the same, if this assignment had not been made. AND said assignor hereby agraes to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all divisions and continuations thereof, to said assignee, or said assignee's successors and assigns, in a corodance herewith. As an above-named inventor, I hereby declare that	AND WHEREAS SK burdy Inc					
consideration paid by said assignee to said assignee, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the flad exclusive right, title and interest in and to said application, including any and all divisions and continuations, thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all successors and estignory the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all divisions and continuations thereof, and the said invention and any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during his term of terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assigner might or could have held and enjoyed the same, if this assignment had not been masts. AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith. As an above-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby ackno	hereinagter referred to as the assignee or applicant, is desirous of application, including any and all divisions and continuations the	reof, and in and to said invention a				
said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith. As an above-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original inventor 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. ASSIGNOR (INVENTOR): Dute: 20. No. 2015	consideration paid by said assignee to said assignor, the recei assigns, sells and transfers to said assignee, and said assignee's interest in and to said application, including any and all division any and all patents which may be granted therefor, including ar assignee, and said assignee's successors and assigns, to have, hol all divisions and continuations thereof, and the said invention including any and all renewals, reissues and prolongations there anywise arising from or appertaining thereto, for and during ill including any and all renewals, reissues and prolongations ill assignee's successors and assigns, in as ample and beneficial a enjoyed the same, if this assignment had not been made. AND said assignor hereby agrees to perform, upon the assigns, any and all acts relating to the obtaining or to the assert and prolongations thereof.	pt of which is hereby acknowled successors and assigns, the full and a and continuations thereof, and in a gand all remarks, reissues and p d, exercise and enjoy the said apply and all patents which of, with all the rights, powers, pristerm or terms of any and all successf, for the use and benefit of manner as the said assignor might erequest of said assignee, or said ing of said patents, including any	ged, said assignor hereby d exclusive right, title and and to said invention and prolongations thereof; said lication, including any and may be granted therefor, ivileges and advantages in uch patents when granted, if said assignee, and said at or could have held and d assignee's successors or and all renewals, reissues			
made by me, and that I am the original inventor 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. ASSIGNOR (INVENTOR): Date: 20. Nov. 2015	said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and					
by fine or imprisonment of not more than five (5) years, or both. **ASSIGNOR (INVENTOR):** Signature:						
Signature: <u>7/2 920 7200</u> Date: <u>20 Nov. 2015</u>	I hereby acknowledge that any willful false statement of by fine or imprisonment of not more than five (5) years, or both.	nade in this declaration is punisha	ible under 18 U.S.C. 1001			
Signature: <u>7/2 920 7200</u> Date: <u>20 Nov. 2015</u>						
Signature: <u>7/2 920 7200</u> Date: <u>20 Nov. 2015</u>	ASSIGNOR (INVENTOR):					
마이스 경우 이 경우 1일 보고 있다. 이 이 사람들은 사람들은 사람들이 되었다면 보고 함께 되었다. 						
마이스 경우 이 경우 1일 보고 있다. 이 이 사람들은 사람들은 사람들이 되었다면 보고 함께 되었다. 	a	now In New York				
Printed or Typed Name: Tae Hoon KIM	SIERRICS	Wille.				
Printed or Typed Name: Tae Hoon KIM						
	rrinted or Typed Name: <u>Tae Hoon KIM</u>	<u></u>				

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