503062670 11/14/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3109272

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NO-GUEN JOO	11/07/2014
JAE-IL KIM	11/07/2014

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:	14542129

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:	P14H0117/US	
NAME OF SUBMITTER:	MYUNG SOO KIM	
SIGNATURE:	/Myung Soo KIM/	
DATE SIGNED:	11/14/2014	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 2

source=IVX000135400_P14H0117US_ASSIGNMENT&DECLARATION#page1.tif source=IVX000135400_P14H0117US_ASSIGNMENT&DECLARATION#page2.tif

PATENT 503062670 REEL: 034177 FRAME: 0903

SHINSUNG: IVX000135400

Attorney Docket No.:

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT	
WHEREAS JOO, No-Guen	hereinafter
referred to collectively as the assignor and inventor, has invented a certain improvement relating to MEMORY DEVICE	
X] said application being attached hereto; J said application having been filed in the United States Patent and Trademark Office on	was amended
on(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 hynix Inc.	
nereinafter referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in application, including any and all divisions and continuations thereof, and in and to said invention and any arwhich may be granted therefor, including any and all renewals, reissues and prolongations thereof;	n and to said and all patents
NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other go consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive interest in and to said application, including any and all divisions and continuations thereof, and in and to said application, including any and all renewals, reissues and prolongations assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, in all divisions and continuations thereof, and the said invention and any and all patents which may be go including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges are anywise arising from or appertaining thereto, for and during the term or terms of any and all such patent including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or coulemptoned the same, if this assignment had not been made.	assignor hereby re right, title and id invention and ons thereof; said acluding any and granted therefor, and advantages in as when granted, signee, and said
AND said assignor hereby agrees to perform, upon the request of said assignee, or said assigned assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all reand prolongations thereof.	e's successors or enewals, reissues
AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue I said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee assigns, in accordance herewith.	Letters Patent on s successors and
As an above-named inventor, I hereby declare that the above-identified application was made or made by me, and that I am the original inventor or an original joint inventor of a claimed invention in the app	authorized to be lication.
I hereby acknowledge that any willful false statement made in this declaration is punishable under by fine or imprisonment of not more than five (5) years, or both.	18 U.S.C. 1001
ASSIGNOR (INVENTOR):	
Signature: 500 00 GEW Date: November 07,2014	

Page 1 of 1

Printed or Typed Name: <u>JOO, No-Guen</u>

SHINSUNG: IVX000135400

Attorney Docket No	
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ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

wriereas Kim, Jae-II , hereinafter
referred to collectively as the assignor and inventor, has invented a certain improvement relating to MEMORY DEVICE
WEWORT DEVICE
[X] said application being attached hereto;
[] said application having been filed in the United States Patent and Trademark Office on, as Application Serial No, and was amended
, as Application Serial No. , and was amended (if applicable):
on(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 hynix Inc.
hereinafter 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 assignee's 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 renewals, 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 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 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 said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made. 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 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): Signature: Date: November 07,2014
Date, November 07/2014
Printed or Typed Name: KIM, Jae-II

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PATENT REEL: 034177 FRAME: 0905

RECORDED: 11/14/2014