505606007 08/05/2019 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5652808

SUBMISSION TYPE:	NEW ASSIGNMENT							
NATURE OF CONVEYANCE:	ASSIGNMENT	ASSIGNMENT						
CONVEYING PARTY DATA								
	Execution Date							
JEEN PARK		07/13/2019						
JUNG-AE KIM		07/13/2019						
DUK-RAE LEE		07/19/2019						

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:	16531700

CORRESPONDENCE DATA

Fax Number:(571)327-5452Correspondence 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:	5713275450
Email:	ipntlaw@ipntlaw.com
Correspondent Name:	IP & T GROUP LLP
Address Line 1:	8230 LEESBURG PIKE
Address Line 2:	SUITE 650
Address Line 4:	VIENNA, VIRGINIA 22182

ATTORNEY DOCKET NUMBER:	P18H0234/US
NAME OF SUBMITTER:	MYUNG SOO KIM
SIGNATURE:	/Myung Soo KIM/
DATE SIGNED:	08/05/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

source=IVX000141966_P18H0234US_ASSIGNMENT&DECLARATION#page1.tif source=IVX000141966_P18H0234US_ASSIGNMENT&DECLARATION#page2.tif source=IVX000141966_P18H0234US_ASSIGNMENT&DECLARATION#page3.tif

SHINSUNG: IVX000141966(P18H0234/US)

REEL³/049959 FRAME: 0630

hereinafter

Attorney Docket No .:

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS PARK, Jeen referred to collectively as the assignor and inventor, has invented a certain improvement relating to APPARATUS AND METHOD FOR RETAINING FIRMWARE IN MEMORY SYSTEM

[X] said application being attached hereto;				
[] said application having been filed in the United States Patent and Trademark Office on				
, as Application Serial No.	 , B	nd	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. of 2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do, Republic of Korea, 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 anthorized 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: PARK. JEEN	Date:	2 =1p. 7.13
Printed or Typed Name: <u>PARK, Jeen</u>	Page 1 of 1	
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SHINSUNG: IVX000141966(P18H0234/US)

. hereinafter

Attorney Docket No.: _

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

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Signature:

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2019. 1.13

Printed or Typed Name: KIM. Jung-Ae

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Date:

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SHINSUNG: IVX000141966(P18H0234/US)

Attorney Docket No.:

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS LEE, Duk-Ra	10			, her	einafter
referred to collectively as the as APPARATUS AND METHOE			g to		
[X] said application being attac [] said application having bee		mark Office on	, and	was a	- amended
on					

Serial No. _____, the United States of America being designated.

AND WHEREAS <u>SK hynix Inc. of 2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do, Republic of</u> <u>Korea</u>, 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;

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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1091 by fine or imprisonment of not more than five (5) years, or both.

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ASSIGNOR (INVENTOR):					
Signature: LEL Duk RAS	Dai	te:	27	18.	7.19
Printed or Typed Name: <u>LEE, Duk-Rae</u>	Page 1of 1				

^S RECORDED: 08/05/2019

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