06/19/2017 504418870

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEONG-SEOK HA	06/12/2017
DAE-SUNG KIM	04/25/2017

RECEIVING PARTY DATA

Name:	SK HYNIX INC.
Street Address:	2091, GYEONGCHUNG-DAERO, BUBAL-EUB, ICHEON-SI
City:	GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Name:	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY
Name: Street Address:	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY KAIST 291 DAEHAK-RO, YUSEONG-GU

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15626230

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

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Address Line 4: VIENNA, VIRGINIA 22182

ATTORNEY DOCKET NUMBER:	P16H0215/US
NAME OF SUBMITTER:	JUN JEONG PARK
SIGNATURE:	/Jun Jeong PARK/
DATE SIGNED:	06/19/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachmentar 2	

Total Attachments: 2

PATENT REEL: 042742 FRAME: 0021 $source=IVX000138705_P16H0215US_ASSIGNMENT\&DECLARATION\#page1.tif\\ source=IVX000138705_P16H0215US_ASSIGNMENT\&DECLARATION\#page2.tif\\$

PATENT REEL: 042742 FRAME: 0022

				16110215	

Attorney Docket No.:

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT
WHEREAS HA, Jeong-Scok hereinafter
referred to collectively as the assignor and inventor, has invented a certain improvement relating to
CONTROLLER AND OPERATING METHOD THEREOF ,
[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
on(if applicable); [] the specification of which was filed under the Patent Cooperation Treaty on,
[] 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. and Korea Advanced Institute of Science and Technology .
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:

Page 1 of 1

Printed or Typed Name: HA, Jeong-Seok

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Attorney	seket No	
snoney	sekel No.,	

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

E 2017 27:28 E E E E	TATES LETTERS PATENT
WHEREAS KIM, Dre-Sung	, hereinsfler
referred to collectively as the assignor and inventor, has	invented a cortain improvement relating to
CONTROLLER AND OPERATING METHOD THERE	EOF
[X] said application being attached hereto;	S. S
[] said application having been filed in the United State	es Parera and Trademark Office on
as Application Ser (if a	risi No. , and was amended conficulties
the specification of which was filed under the Patent	Cooperation Treaty on .
Serial No, the United States of An	aeries being designated.
hereinafter referred to as the assigned or applicant, is de-	ivanced institute of Science and Technology. strong of acquiring the entire right, title and interest in and to said utions thereof, and in and to said invention and any and all patents newals, reissues and prolongations thereof;
consideration paid by said assignee to said assignor, to assigns, sells and transfers to said assignee, and said assignee, and said assignee, and to said application, including any and all any and all patents which may be granted therefor, including and said assignee, and said assignee's successors and assigns, to have all divisions and continuations thereof, and the said including any and all renewals, reissues and prolonger anywise arising from or appertaining thereto, for and a including any and all renewals, reissues and prolonger and prolonger and all renewals.	consideration of One Dullar (\$1.00), and other good and valuable the receipt of which is hereby acknowledged, said assignor hereby signee's successors and assigns, the full and exclusive right, fitic and divisions and continuations thereof, and in and to said invention and buding any and all renewals, reissues and prolongations thereof, said have, hold, exercise and enjoy the said application, including any and invention and any and all patents which may be granted therefor, one thereof, with all the rights, powers, privileges and advantages in during the term or terms of any and all such patents when granted, attigits thereof, for the use and benefit of said assignee, and said efficial a manner as the said assigner might or could have held and
AND said assigner hereby agrees to perform, assigns, any and all acts relating to the obtaining or to t and prolongations thereof.	upon the request of said assignee, or said assignee's successors or the asserting of said patents, including any and all renewals, reissues
AND said assignor authorizes and requests the said application, and on any and all divisions and conti- assigns, in accordance herewith.	Commissioner of Patents and Trademarks to issue Letters Patent on martions thereof, to said assignee, and said assignee's successors and
As an above-maned inventor, I benefit declare made by me, and that I am the original inventor or an ori	that the above-identified application was made or authorized to be ignal joint inventor of a claimed invention in the application.
I hereby acknowledge that any willful false sta by fine or imprisonment of not more than five (5) years,	dement made in this declaration is punishable under 18 U.S.C. 1001 or both.
ASSIGNOR (INVENTOR):	
Signature: /##	Date: 2019/04/25
Same of March	2.5886
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į.	
Printed or Typed Name: KIM, Dae-Sung	
Printed or Typed Name: <u>KIM, Dao-Sung</u>	

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RECORDED: 06/19/2017

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