505242368 12/18/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5289147

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY DA	ATA	•			
		Name		Execution Date	
HYUN-WOO LEE				12/06/2018	
RECEIVING PARTY DA	ТА				
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:	16	6223656			
CORRESPONDENCE D		71)007 5450			
Hay Number	(5	71)327-5452			
	•	he e-mail address first• if t	that is unsurcessfu	l it will he sent	
Correspondence will be	e sent to t	he e-mail address first; if t if that is unsuccessful, it v			
Correspondence will be	e sent to t provided;				
Correspondence will be using a fax number, if p	e sent to t provided; 57	if that is unsuccessful, it v			
Correspondence will be using a fax number, if p Phone:	e sent to t provided; 57 ip	if that is unsuccessful, it v 713275450			
Correspondence will be using a fax number, if p Phone: Email:	e sent to t provided; 57 ip IP	if that is unsuccessful, it v 713275450 ntlaw@ipntlaw.com			
Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	e sent to t provided; 57 ip IP 82	if that is unsuccessful, it v 713275450 ntlaw@ipntlaw.com ' & T GROUP LLP			
Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	e sent to t provided; 57 ip IP 82 SI	if that is unsuccessful, it v 713275450 ntlaw@ipntlaw.com 2 & T GROUP LLP 230 LEESBURG PIKE			
Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	e sent to t provided; 57 ip IP 82 SI VI	if that is unsuccessful, it v 713275450 ntlaw@ipntlaw.com % T GROUP LLP 230 LEESBURG PIKE JITE 650			
Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	e sent to t provided; 57 ip IP 82 SI VI	<i>if that is unsuccessful, it v</i> 713275450 ntlaw@ipntlaw.com & T GROUP LLP 230 LEESBURG PIKE JITE 650 ENNA, VIRGINIA 22182			
Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER:	e sent to t provided; 57 ip IP 82 SI VI	if that is unsuccessful, it v 713275450 ntlaw@ipntlaw.com & T GROUP LLP 230 LEESBURG PIKE JITE 650 ENNA, VIRGINIA 22182			
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SHINSUNG: IVX000141129(P18H0122/US)

Attomey Docket No.:

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS LEE, Hyun-Woo

, hereinafter

referred to collectively as the assignor and inventor, has invented a certain improvement relating to

MEMORY DEVICE AND OPERATION 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 ______ Serial No. , the United States of America being designated.

AND WHEREAS _____SK hynix Inc.____

AND WHEREAS <u>SK hynix Inc.</u> hereinafter referred to as the assignce 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 assignor, 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 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 assignce'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):	LEE, Hyum-	4000	
Signature:	Lee, 1	tyun-Woo	Dat	e: Pec06, 2

Printed or Typed Name: LEE, Hyun-Woo-

Page 1 of 1

RECORDED: 12/18/2018

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