

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5265489

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SUNG-LAE OH	11/20/2018
DONG-HYUK KIM	11/20/2018
SOO-NAM JUNG	11/20/2018
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:	16209174
CORRESPONDENCE DATA	
Fax Number:	(571)327-5452
<i>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.</i>	
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:	FP18-1569/HNX/US
NAME OF SUBMITTER:	KEON WOO PARK
SIGNATURE:	/Keon Woo PARK/
DATE SIGNED:	12/04/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 3	
source=FP18-1569HNXUS_Assignment&Declaration#page1.tif	
source=FP18-1569HNXUS_Assignment&Declaration#page2.tif	
source=FP18-1569HNXUS_Assignment&Declaration#page3.tif	

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

IVX000141995

Attorney Docket No.: HFP18-1569/HNX/US

ASSIGNMENT OF AND DECLARATION FOR APPLICATION
FOR UNITED STATES LETTERS PATENT

WHEREAS Sung-Lae OH, hereinafter referred to collectively as the assignor and inventor, has
invented a certain improvement relating to
MEMORY DEVICE,

☒ 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.
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 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 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.

ASSIGNORS (INVENTORS):

Signature: Sung-Lae OH Date: 11/20/2018

Printed or Typed Name: Sung-Lae OH

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

IVX000141995

Attorney Docket No.: FP18-1569/HNX/US

ASSIGNMENT OF AND DECLARATION FOR APPLICATION
FOR UNITED STATES LETTERS PATENT

WHEREAS Dong-Hyuk KIM, hereinafter referred to collectively as the assignor and inventor, has
invented a certain improvement relating to
MEMORY 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
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 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 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.

ASSIGNORS (INVENTORS):

Signature: Dong Hyuk KIM Date: 11/20/2018

Printed or Typed Name: Dong-Hyuk KIM

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

IVX000141995

Attorney Docket No.: FP18-1569/HNX/US

ASSIGNMENT OF AND DECLARATION FOR APPLICATION
FOR UNITED STATES LETTERS PATENT

WHEREAS Soo-Nam JUNG, hereinafter referred to collectively as the assignor and inventor, has
invented a certain improvement relating to

MEMORY DEVICE,

☒ 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.
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 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 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.

ASSIGNORS (INVENTORS):

Signature: Soo Nam Jung Date: 11/20/2018

Printed or Typed Name: Soo-Nam JUNG