505155080 10/23/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5201847

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the EXECUTION DATE OF ASSIGNORS previously recorded on Reel 044781 Frame 0161. Assignor(s) hereby confirms the EXECUTION DATE NEEDS TO BE CHANGED FROM 1/16/2017 TO 1/16/2018.

#### **CONVEYING PARTY DATA**

Name	Execution Date
HONG LU	01/16/2018
GONG LUO	01/16/2018

#### **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:	14817117

## 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:** 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:	SKHYP036
NAME OF SUBMITTER:	MYUNG SOO KIM
SIGNATURE:	/Myung Soo Kim/
DATE SIGNED:	10/23/2018

## **Total Attachments: 3**

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PATENT REEL: 047292 FRAME: 0238

505155080

Attorney Docket No.: SKHYP036

# ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

W	HEREAS	Hong Lu			
hereina	ifter referred to co	llectively as the assignor ar	nd inventor, has invented	d a certain improvement relating to	
A		ACCELERATED DATA	COPYBACK		
$egin{array}{c} igl( \dot{X} igr) & sa \ & \underline{A} \ & (if app) \ & & & & & & & & & & & & & & & & & & $	ugust 3, 2015_, a licable); specification of w	ring been filed in the United	14/817,117  Itent Cooperation Treaty	on, and was amended	or
here ins applica	tion, including an	the assignee or applicant, i	inuations thereof, and in	the entire right, title and interest in and to said in and to said invention and any and all patent prolongations thereof,	đ s
assigns interes any an assigne all div includi anywis includi assigne	eration paid by see, sells and transfet in and to said apid all patents which ee, and said assign isions and continuing any and all rerearising from oring any and all resets successors and	aid assignee to said assign rs to said assignee, and sai plication, including any an- h may be granted therefor, see's successors and assigns uations thereof, and the s newals, reissues and prolor appertaining thereto, for a enewals, reissues and pro-	or, the receipt of which dissignee's successors distributed all divisions and continuous and all representations, to have, hold, exercise aid invention and any agations thereof, with all and during the term or longations thereof, for beneficial a manner as	ne Dollar (\$1.00), and other good and value has hereby acknowledged, said assignor here and assigns, the full and exclusive right, title muations thereof, and in and to said invention renewals, reissues and prolongations thereof, and enjoy the said application, including any and all patents which may be granted then I the rights, powers, privileges and advantage terms of any and all such patents when grathe use and benefit of said assignee, and is the said assignor might or could have held	erebye and and said and and and and and and and and and an
		relating to the obtaining of		of said assignee, or said assignee's successor I patents, including any and all renewals, rei	
		any and all divisions and c		Patents and Trademarks to issue Letters Pate said assignee, and said assignee's successor	
January 16, 2018 ade b	As an above-na by me, and that I ar	med inventor, I hereby de m the original inventor or a	clare that the above-ide n original joint inventor	entified application was made or authorized of a claimed invention in the application.	to be
by fine		wledge that any willful fals of not more than five (5) ye		s declaration is punishable under 18 U.S.C.	1001
ASSIG	NOR (INVENTO	(R):		×	
Signati	ıre:	my	Date:	January 16, 2018	
Printed	l or Typed Name:	Hong Lu			

# ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS	Gong Luo
hereinafter referred to	collectively as the assignor and inventor, has invented a certain improvement relating to
	ACCELERATED DATA COPYBACK
August 3, 2015 (if applicable); [ ] the specification o	ring stracked hereto; having been filed in the United States Patent and Trademark Office on _, as Application Serial No14/817,117
AND WHEREAS	8 SK Hynix Inc.
hereinafter referred to application, including	as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said any and all divisions and continuations thereof, and in and to said invention and any and all patents therefor, including any and all renewals, reissues and prolongations thereof;
consideration paid by assigns, sells and tran interest in and to said any and all patents we assigned, and said assigned, and said assigned arising from including any and all assigned's successors.	WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable valid assignee to said assigner, the receipt of which is hereby acknowledged, said assigner hereby safers to said assignee, and said assigner's successors and assigns, the full and exclusive right, title and application, including any and all divisions and continuations thereof, and in and to said invention and high may be granted therefor, including any and all renewals, reissues and prolongations thereof; said ignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and atmostions thereof, and the said invention and any and all patents which may be granted therefor, renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in or appertaining thereto, for and during the term or terms of any and all such patents when granted. I renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said and assigns, in as ample and heneficial a manner as the said assigner might or could have held and his assignment had not been made.
	ssignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or the relating to the ribtaining or to the asserting of said patents, including any and all renewals, reissues reof.
AND said as said application, and assigns, in accordance	signor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on on any and all divisions and commutations thereof, to said assignee, and said assignee's successors and sherewith.
As an above made by me, and that	-named inventor, I hereby declare that the above-identified application was made or authorized to be I am the original inventor or an original joint inventor of a claimed invention in the application.
	nowledge that any writing talse statement made in this declaration is pumshable under 18 U.S.C. 1801 and more than five (5) years, or both.
ASSIGNOR (INVEN	TOR):
Signature:	Date: Jampary 16, 2618
Printed or Typed New	ne: Gong Luc

Page 3 of 3

## 504755282 01/31/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4802010

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
HONG LU	01/16/2017
GONG LUO	01/16/2017

## **RECEIVING PARTY DATA**

Name:	SK HYNIX INC.
Street Address:	2091, GYEONGCHUNG-DAERO, BUBAL-EUB, ICHEON-SI
City:	GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF

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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

Address Line 2: SUITE 650

Address Line 4: VIENNA, VIRGINIA 22182

ATTORNEY DOCKET NUMBER:	SKHYP036
NAME OF SUBMITTER:	MYUNG SOO KIM
SIGNATURE:	/Myung Soo KIM/
<b>DATE SIGNED:</b> 01/31/2018	
	This document serves as an Oath/Declaration (37 CFR 1.63).

## **Total Attachments: 2**

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PATENT
RECORDED: 10/23/2018 REEL: 047292 FRAME: 0241