505713447 10/08/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5760257

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
MYUNG JIN JO	09/24/2019	
DAE SUNG KIM	09/24/2019	
WAN JE SUNG	09/24/2019	

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16596550	

CORRESPONDENCE DATA

Fax Number:

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.

Email: mbright@perkinscoie.com

Correspondent Name: BABAK TEHRANCHI
Address Line 1: PERKINS COIE LLP
Address Line 2: PO BOX 1247

Address Line 4: SEATTLE, WASHINGTON 98111-1247

ATTORNEY DOCKET NUMBER:	088453-8234.US00	
NAME OF SUBMITTER:	MEGHAN BRIGHT	
SIGNATURE:	/Meghan Bright/	
DATE SIGNED:	10/08/2019	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 4

source=Po190235HD_Assignment Declaration#page1.tif source=Po190235HD_Assignment Declaration#page2.tif source=Po190235HD_Assignment Declaration#page3.tif

PATENT 505713447 REEL: 050658 FRAME: 0291

source=Po190235HD_Assignment Declaration#page4.tif

PATENT REEL: 050658 FRAME: 0292

Docket No.: 088453-8234,US00 [세종, PTPUS201900246]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Myung Jin JO et al.

Application No.: Not Yet Assigned

Filed: Herewith

For: ERROR CORRECTION DECODER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION AND ASSIGNMENT BY THE INVENTOR UNDER RULE 37 C.F.R. § 1.63 EFFECTIVE ON STEPTEMBER 16, 2012

As a below named inventor, I hereby declare that:

I believe I am the sole original inventor or an original joint inventor of a claimed invention in a patent application entitled:

ERROR CORRECTION DECODER

the specification of which is attached hereto and identified as Attorney Docket No. <u>088453-</u>8234.US00.

I believe the following persons are inventors of the above-identified patent application: Myung Jin JO of Seongnam-si, Gyeonggi-do, Republic of Korea; and Dae Sung KIM of Icheon-si, Gyeonggi-do, Republic of Korea; and Wan Je SUNG of Seongnam-si, Gyeonggi-do, Republic of Korea.

I made, authorized to make, or hereby make or authorize to make the above-identified patent application at the U.S. Patent and Trademark Office.

Inventor: Myung Jin JO et al. Docket No.: 088453-8234.US00

Appl. No.: Not Yet Assigned Filed: Herewith

Filed: Herewi Page: 2 of 4

I have reviewed and understand the contents of the above-identified patent application including the claims.

I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge that any willful false statement made in the above declaration is punishable under 18 USC §1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT ***

I hereby assign to <u>SK hynix Inc.</u>, a corporation of Republic of Korea, having a place of business at 2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do, Republic of Korea, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in any and all inventions and improvements which are described in an application for United States Patent filed by me, entitled *ERROR CORRECTION DECODER*, filed on 10/08/2019, and assigned U.S. Application

Number 16/596,550. I authorize and request an attorney appointed in said application to hereafter insert above the filing date and application number of said application when known.

This assignment includes the entire right, title and interest in said application, all legal equivalents thereof in any country, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions and improvements, including, but not limited to, all divisions, continuations, reissues, reexamination certificates, any and all certificates issued in any post-grant proceeding, and extensions of said applications and patents of the United States, foreign patents, utility models, and design registrations, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes, and the right to seek relief and recover all

Inventor: Myung Jin JO et al. Docket No.: 088453-8234.US00

Appl. No.: Not Yet Assigned

Filed: Herewith Page: 3 of 4

damages, including, but not limited to, a reasonable royalty, by reason of infringement or any other violation of patent or patent application rights. I authorize the Assignee to apply in all countries in my name or in the name of the Assignee for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements.

In addition, I hereby confirm the sale, assignment, and transfer to the Assignce of the entire right, title and interest throughout the world in said inventions and improvements that occurred by operation of an employment agreement between me and the Assignee existing at the time said inventions and improvements were made. Should I have any remaining interest, I hereby sell, assign, and transfer any right, title and interest I may have in said inventions and improvements anywhere in the world to the Assignee.

The foregoing assignments, sale and transfer have been made for good and valuable consideration, the receipt of which is hereby acknowledged:

I hereby represent and covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with the assignment of said inventions and improvements to the Assignee.

I further covenant for myself and my respective heirs, legal representatives and assigns, to assist the Assignee in handling various procedures, tasks and documentation in connection with this assignment, including, but not limited to, providing to the Assignee promptly upon the request of the Assignee all pertinent facts and documents relating to said invention and improvements, and said patents, said legal equivalents or other legal instrument as may be known and accessible to me and testifying as to the same in any interference, litigation, or proceeding relating thereto, and promptly executing and delivering to the Assignee or its legal representative any and all papers, documents, instruments or affidavits in connection with obtaining, maintaining, issuing or enforcing said application, said inventions and improvements, and said patents, said equivalents and other legal instrument which may be necessary or desirable to carry out the purposes thereof.

Inventor: Myung Jin JO et al. Appl. No.: Not Yet Assigned

Filed : Herewith : 4 of 4 Page

I hereby authorize and request the Commissioner of Patents and Trademarks to issue one or more patents in the United States for said inventions and improvements to SK hynix Inc. as assignee of the entire interest, for the sole use and benefit of Assignee, its successors and assigns.

I am competent to execute the above declaration and assignment. I hereby have duly executed the declaration and assignment below with my name.

Full name of inventor: Myung Jin JO			
Inventor's signature: Myung Jin Jo			
Date: 209/09/29			
Full name of inventor: Dae Sung KIM			
Inventor's signature: <u>Dae surg</u> Klim			· .
Date: 2019/09/24			
Full name of inventor: Wan Je SUNG			
Inventor's signature: WANJE SUNG			
Date: 2019/9/24	: 	A-L	

김대성/선행 A&A

Perkins Coie LLP P.O. Box 1247 Seattle, Washington 98111-1247 Telephone: (858) 720-5700 Facsimile: (206) 359-7198

SK hvnix **RECORDED: 10/08/2019** REEL: 050658 FRAME: 0296

Docket No.: 088453-8234.US00