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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5820122

SUBMISSION TYPE:		1	NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		/	ASSIGNMENT				
CONVEYING PARTY	DATA						
		N	Name			Execution Date	
JONG-HOON KIM						10/29/2019	
RECEIVING PARTY	DATA						
Name:	SK HY	SK HYNIX INC.					
Street Address:	2091, 0	2091, GYEONGCHUNG-DAERO, BUBAL-EUP, GYEONGGI-DO					
City:	ICHEC	ICHEON					
State/Country:	KORE	KOREA, REPUBLIC OF					
Postal Code:	17336	17336					
Application Number: 1		16683	16683132				
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Fax Number: <i>Correspondence wil using a fax number,</i> Email:	l be sent to if provided	<i>d; if tha</i> docket	it is unsuccessful, it will ing@ampacc.com				
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Client Reference No.: SHINSUNG : IV X000143326(P19H0142/US) ASSIGNMENT OF PATENT APPLICATION

WHEREAS, the below named individual(s), hereinafter referred to as "Assignors," are the inventor(s) of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

VERTICAL SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

Attorney Docket No.:

Filing Date:

Application No.:

WHEREAS, SK hynix Inc. of 2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do, Republic of Korea, hereinafter referred to as "ASSIGNEE," is desirous of acquiring ASSIGNORS' interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignces, and Assignces' successors and assigns, all their right, title and interest in and to the said invention and application including any corresponding foreign application, and in and to any Letters Patent which may hereafter be granted on the same in the United States and any corresponding foreign application, the said interest to be held and enjoyed by said Assignees as fully and exclusively as it would have been held and enjoyed by said Assignors had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignce's expense, cooperate with Assignce in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in Assignce, or Assignce's successors and assigns.

Assignors hereby authorize and request AMPACC Law Group, PLLC, 6100 219th Street SW, Suite 580, Mountlake Terrace, WA 98043, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates

2019 - 10 - 29Date:

indicated.

KIM Jong Hoon

SKhynix

刻墨意/La Defense Photo

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PATENT REEL: 051007 FRAME: 0145

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