## 504197481 01/26/2017 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4244157

SUBMISSION TYPE:		NEW	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASS	ASSIGNMENT			
CONVEYING PARTY	DATA					
		Name	 9		Execution Date	
DAE SUK KIM					01/16/2017	
RECEIVING PARTY D	ΑΤΑ					
Name:	SK HY	NIX INC.				
Street Address:	2091, 0	2091, GYEONGCHUNG-DAERO, BUBAL-EUB				
City:	ICHEO	ICHEON-SI GYEONGGI-DO				
State/Country:	KORE	A, REPUBL	IC OF			
Property Type			Number			
Application Number: 15		15416130	5416130			
CORRESPONDENCE	DATA					
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Correspondence will using a fax number, i			l address first; if that is unsuccessful, it will be			
using a fax number, i	if provided	<b>d; if that is</b> uspto.actio	<i>unsuccessful, it will be</i> ons@wpapat.com			
<i>using a fax number, i</i> Email: Correspondent Name	if provided :	<b>d; if that is</b> uspto.actio WILLIAM F	<i>unsuccessful, it will be</i> ons@wpapat.com PARK & ASSOCIATE			
<i>using a fax number, i</i> Email: Correspondent Name Address Line 1:	if providec e:	<i>d; if that is</i> uspto.actio WILLIAM F 930 N. YOI	<i>unsuccessful, it will be</i> ons@wpapat.com PARK & ASSOCIATE RK ROAD, SUITE 201			
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using a fax number, i Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER	if provided : NUMBER:	d; if that is uspto.actio WILLIAM F 930 N. YOI HINSDALE PA2 WOO /Woo	unsuccessful, it will be ons@wpapat.com PARK & ASSOCIATE RK ROAD, SUITE 201 E, ILLINOIS 60521 101-1D DCHOON W. PARK			

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	INPUT CIRCUIT OF THREE-DIMENSIONAL SEMICONDUCTOR APPARATUS CAPABLE OF ENABLING TESTING AND DIRECT ACCESS				
Declaration	PCT/KR####################################	or or PCT international application number			
Assignment	or both. NOW, THEREFORE, in consideration of the sum of one dollar (\$1), the receipt whereof is acknowledge, and other good and valuable consideration. I, by these presents do sell, assign and transfer unto said assignee(s) SK hynix Inc. 2091, Gyeongchung-daero, Bubal-eub, Icheon-si, Gyeonggi-do, Republic of Korea and the heirs, successors, assigns and legal representatives of the assignee(s) the full and exclusive right to the said invention in the United States and in its territorial possessions and in any and all foreign countries any and all improvements thereof, the entire rights, title and interest in and to any and all Patents which may be granted therefore in the United States. I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue said United States Patent to said assignee(s), of the entire right, title, and interest in and to the same, for his sole use and for the use of his legal representatives to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made. I agree promptly upon request of the assignee(s), its heirs, successors, assigns and legal representatives of the assignee(s) to communicate any facts known to it respecting the patent and the invention set forth therein, and to execute and deliver without further compensation any power of attorney, Assignment, application, whether original, continuation, divisional or reissue, or other papers that may be necessary. I hereby covenant that assignee(s) will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said. Letters Patent and legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.				
Legal Name Of Inventor	Inventor Name (First Middle LAST):	Dae Suk KIM			
	Inventor Signature:	pae suk KZM			
	Date:	January 16, 2017			

Page 1

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문자 PATENT 일대석/Computing Core Design REEL:041091 FRAME: 0784