504266151 03/10/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4312831 Stylesheet Version v1.2

SUBMISSION TYPE:NEW ASSIGNMENTNATURE OF CONVEYANCE:ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RUILONG XIE	03/08/2017
LAERTIS ECONOMIKOS	03/08/2017
CHANRO PARK	03/08/2017
MIN GYU SUNG	03/08/2017

RECEIVING PARTY DATA

Name:	GLOBALFOUNDRIES INC.
Street Address:	PO BOX 309
Internal Address:	UGLAND HOUSE
City:	GRAND CAYMAN
State/Country:	CAYMAN ISLANDS
Postal Code:	KY1-1104

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15455203

CORRESPONDENCE DATA

Fax Number: (410)630-1656

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: 410-705-6401

Email:gunther@gibbiplaw.comCorrespondent Name:GIBB & RILEY, LLCAddress Line 1:844 WEST STREET

Address Line 2: SUITE 200

Address Line 4: ANNAPOLIS, MARYLAND 21401

ATTORNEY DOCKET NUMBER:	JALB004-US-NP
NAME OF SUBMITTER:	PAMELA M. RILEY
SIGNATURE:	/PAMELA M. RILEY/
DATE SIGNED:	03/10/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT 504266151 REEL: 041535 FRAME: 0358

Total Attachments: 4

source=JALB004USNP_DECLARATIONASSIGNMENT_03-09-2017#page1.tif source=JALB004USNP_DECLARATIONASSIGNMENT_03-09-2017#page2.tif source=JALB004USNP_DECLARATIONASSIGNMENT_03-09-2017#page3.tif source=JALB004USNP_DECLARATIONASSIGNMENT_03-09-2017#page4.tif

APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) FIN-TYPE FIELD EFFECT TRANSISTORS (FINFETS) WITH REPLACEMENT Title of Invention METAL GATES AND METHODS DECLARATION As the below named inventor, I hereby declare that: The attached application, or This declaration is directed to: United States application or PCT international application number _______filed on The above-identified application was made or authorized to be made by me. I believe 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. I have reviewed and understand the contents of the application and am aware of the duty to disclose to the US Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR § 1.56. ASSIGNMENT For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby sell, assign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House. Grand Cayman KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to the invention listed above, together with the Application, any and all Patents that may issue in the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents and Applications, for the United States and all foreign countries, and all the rights and privileges relating thereto including but not limited to the priority rights arising from said Applications, the right to recover and take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, present and future infringement, and the right to apply for, take and maintain patents on said inventions. If any portion of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof shall nevertheless remain in full force and effect. LEGAL NAME OF INVENTOR Date: 3/8/20/7 Ruilong Xie Inventor: Signature: Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional form for each additional inventor.

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) FIN-TYPE FIELD EFFECT TRANSISTORS (FINFETS) WITH REPLACEMENT Title of METAL GATES AND METHODS Invention DECLARATION As the below named inventor, I hereby declare that: This declaration The attached application, or is directed to: United States application or PCT international application number _____ filed on The above-identified application was made or authorized to be made by me. I believe 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. I have reviewed and understand the contents of the application and am aware of the duty to disclose to the US Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR § 1.56. ASSIGNMENT For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby sell, assign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, Grand Cayman KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to the invention listed above, together with the Application, any and all Patents that may issue in the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents and Applications, for the United States and all foreign countries, and all the rights and privileges relating thereto including but not limited to the priority rights arising from said Applications, the right to recover and take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, present and future infringement, and the right to apply for, take and maintain patents on said inventions. If any portion of this Combined Declaration or Assignment is held unenforceable, then remaining portions bereof shall nevertheless remain in full force and effect. LEGAL NAME OF INVENTOR Date: 03-08-2017 Inventor: Laertis Economikos Signature: Note: An application data sheet (PTO/SR/14 or equivalent), including naming the entire inventive entity, must accompany this form.

> PATENT REEL: 041535 FRAME: 0361

Use an additional form for each additional inventor.

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) FIN-TYPE FIELD EFFECT TRANSISTORS (FINFETS) WITH REPLACEMENT Title of METAL GATES AND METHODS Invention DECLARATION As the below named inventor, I hereby declare that: This declaration The attached application, or is directed to: United States application or PCT international application number filed on The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I bereby 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. I have reviewed and understand the contents of the application and am aware of the duty to disclose to the US Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR § 1.56. ASSIGNMENT For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby sell, assign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, Grand Cayman KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to the invention listed above, together with the Application, any and all Patents that may issue in the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents and Applications, for the United States and all foreign countries, and all the rights and privileges relating thereto including but not limited to the priority rights arising from said Applications, the right to recover and take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, present and future infringement, and the right to apply for, take and maintain patents on said inventions. If any portion of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof shall nevertheless remain in full force and effect. LEGAL NAME OF INVENTOR Date: 3/8/2017 Inventor: Chanro Park Signature: Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional form for each additional inventor.

COMBINI APPLICA	ED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN TION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
27004.00	FIN-TYPE FIELD EFFECT TRANSISTORS (FINFETS) WITH REPLACEMENT	
Title of Invention	METAL GATES AND METHODS	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati	(Sec.)	
	United States application or PCT international application number filed on	
The above-ide	entified application was made or authorized to be made by me.	
I believe that:	I am the original inventor or an original joint inventor of a claimed invention in the application.	
I hereby acknotimprisonment	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or of not more than five (5) years, or both.	
I have reviewe Trademark Of	ed and understand the contents of the application and am aware of the duty to disclose to the US Patent and fice all information known to me to be material to patentability as defined in 37 CFR § 1.56.	
	ASSIGNMENT	
For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby sell, assign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, Grand Cayman KYI-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to the invention listed above, together with the Application, any and all Patents that may issue in the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents and Applications, for the United States and all foreign countries, and all the rights and privileges relating thereto including but not limited to the priority rights arising from said Applications, the right to recover and take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, present and future infringement, and the right to apply for, take and maintain patents on said inventions.		
If any portion shall neverthe	of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof cless remain in full force and effect.	
LEGAL NAM	E OF INVENTOR	
Inventor:	Min Gyu Sung Date : 3/8/20/7	
Signature:	<u> </u>	
Note: An applic an additional for	ation data sheet (PTO/SB/14 ar equivalent), including naming the entire inventive entity, must accompany this form. Use im for each additional inventor.	

RECORDED: 03/10/2017