PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4508269

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ALEXANDER REZNICEK	03/08/2016
DOMINIC J. SCHEPIS	03/04/2016
KANGGUO CHENG	03/18/2016
BRUCE B. DORIS	03/14/2016
POUYA HASHEMI	03/08/2016

RECEIVING PARTY DATA

Name:	GLOBALFOUNDRIES INC.
Street Address:	P.O. 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:	15652413

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: dcole@hoffmanwarnick.com,

ptocommunications@hoffmanwarnick.com

Correspondent Name: HOFFMAN WARNICK LLC

Address Line 1: 540 BROADWAY

Address Line 4: ALBANY, NEW YORK 12207

ATTORNEY DOCKET NUMBER:	1876759-US-DIV
NAME OF SUBMITTER:	AMANDA J. SMITH
SIGNATURE:	/Amanda J. Smith/
DATE SIGNED:	07/18/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 043033 FRAME: 0029

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Total Attachments: 5

source=1876759-US-DIV_CombinedDeclarationAssignment_Executed_07-17-17#page1.tif source=1876759-US-DIV_CombinedDeclarationAssignment_Executed_07-17-17#page2.tif source=1876759-US-DIV_CombinedDeclarationAssignment_Executed_07-17-17#page3.tif source=1876759-US-DIV_CombinedDeclarationAssignment_Executed_07-17-17#page4.tif source=1876759-US-DIV_CombinedDeclarationAssignment_Executed_07-17-17#page5.tif

PATENT REEL: 043033 FRAME: 0030

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

Title of Invention	SEMICONDUCTOR STRUCTURE HAVING INSULATOR PILLARS AND SEMICONDUCTOR MATERIAL ON SUBSTRATE
	DECLARATION
As the below	named inventor, I hereby declare that:
This declaration is directed to:	[7] and anti-mater approximation, or
	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	I am the original inventor or an original joint inventor of a claimed invention in the application.
I hereby acknowing fine or impriso	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by onment 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 ffice all information known to me to be material to patentability as defined in 37 CFR § 1.56.
	ASSIGNMENT
Grand Cayman the invention liany foreign corextensions ther and Application including but no proceedings as infringement, a	and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I sign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, in KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to disted above, together with the Application, any and all Patents that may issue in the United States and/or pountries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or reof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents ons, for the United States and all foreign countries, and all the rights and privileges relating thereto not limited to the priority rights arising from said Applications, the right to recover and take all such as may be necessary for the recovery of damages or otherwise in respect of past, present and future and the right to apply for, take and maintain patents on said inventions. In of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect.
	E OF INVENTOR 1 Alexander Reznicek Date: March 08, 2016
Signature:	Alexander Reznicek Date: 1 Caron 00, 28(6)
lote: An applica	ation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

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

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As the below	named inventor, I hereby declare that:
This declaration is directed to:	
	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 ackno fine or impriso	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by onment 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 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 shall neverthel	of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof less remain in full force and effect.
LEGAL NAME	E OF INVENTOR 2
Inventor: <u>E</u>	Dominic J. Schepis Date: 3/04/16
Signature:	Dominic J Schepis
Note: An applicat	tion data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. form for each additional inventor.

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

Title of Invention	SEMICONDUCTOR STRUCTURE HAVING INSULATOR PILLARS AND SEMICONDUCTOR MATERIAL ON SUBSTRATE
	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-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 ackno fine or impriso	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by comment 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 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 NAMI	E OF INVENTOR 3
Inventor:	Kangguo Cheng Date: 3/18/20/6
Signature:	
Note: An ap plica Use an additional	ation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

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

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This declaration is directed to:		
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The above-ide	entified application was made or authorized to be made by me.	
I believe that I	I am the original inventor or an original joint inventor of a claimed invention in the application.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by onment of not more than five (5) years, or both.	
	ed and understand the contents of the application and am aware of the duty to disclose to the US Patent and ffice all information known to me to be material to patentability as defined in 37 CFR § 1.56.	
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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 shall neverthe	of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect.	
	E OF INVENTOR 4 Bruce B. Doris Date: 3/14/2016	
Inventor:	Bruce B. Doris Date: 3/14/2016	
Signature:	5 ()	
	ation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

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

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This declaration is directed to:	1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1
	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 acknotine or impriso	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by onment 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 NAMI	E OF INVENTOR 5
Inventor: 1	Pouya Hashemi Date: 3/8/2016
Signature:	Pohlati
Note: An application dath sheet (PTO/SB/14 or equivalent) including naming the entire inventive entity, must accompany this form.	

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RECORDED: 07/18/2017

PATENT REEL: 043033 FRAME: 0035