505890621 01/30/2020 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5937322

SUBMISSION TYPE: NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	ATA			
		Name	Execution D	
HENG YANG			01/10/2020	
DAVID PRITCHARD			01/10/2020	
KAI SUN			01/14/2020	
HONGRU REN			01/16/2020	
NEHA NAYYAR			01/21/2020	
MANJUNATHA PRABHL	J		01/15/2020	
ELIZABETH STREHLOW	V		01/09/2020	
SALVATORE CIMINO			01/29/2020	
Street Address: Internal Address: City: State/Country: Postal Code:	GRAN	ND HOUSE D CAYMAN AN ISLANDS		
PROPERTY NUMBERS	Total: 1			
Property Type		Number		
Application Number:		16776711		
CORRESPONDENCE D	ΑΤΑ	(713)434-6671		
		o the e-mail address first; if that d; if that is unsuccessful, it will b		
Phone:		7134346677		
Email:		mpaul@amersoniplaw.com J. MIKE AMERSON		
Correspondent Name:				

Address Line 1: 2450 FONDREN ROAD, SUITE 260

Address Line 4: HOUSTON, TEXAS 77063

ATTORNEY DOCKET NUMBER:	2162.295500/LMLT230B
NAME OF SUBMITTER:	J. MIKE AMERSON

SIGNATURE:	/J. Mike Amerson/		
DATE SIGNED:	01/30/2020		
	This document serves as an Oath/Declaration (37 CFR 1.63).		
Total Attachments: 8	·		
source=Declaration_and_Assignmen	t#page1.tif		
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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

is directed to:

VERTICAL TRANSISTOR DEVICE WITH SOURCE/DRAIN REGIONS COMPRISING A TWO-DIMENSIONAL (2D) MATERIAL AND METHODS OF MAKING SUCH VERTICALTRANSISTOR DEVICES

DECLARATION

As the below named inventor, I hereby declare that:

This declaration The attached application, or

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 NAM	E OF INVENTOR							***********
Inventor	HENG YANG		******	Date :	<u>/10/1</u>	2020		
Signature:		1-2		<u></u>	>			
Note: An applic Use an addition	ration data sheet (PPI), al form for each additi	SB/14 or equivalent), is	nluding naming	the entire inv	entive easis	y, 111468 2 0120	mpany this	form,

COMBINEI	D DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)
Title of Invention	VERTICAL TRANSISTOR DEVICE WITH SOURCE/DRAIN REGIONS COMPRISING A TWO- DIMENSIONAL (2D) MATERIAL AND METHODS OF MAKING SUCH VERTICAL TRANSISTOR DEVICES
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	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
hereby sell, as Grand Cayma the invention any foreign co extensions the and Application including but proceedings a	and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I ssign, 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 listed above, together with the Application, any and all Patents that may issue in the United States and/or puntries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or ereof 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 s 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.
If any portion shall neverth	n of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect.
LEGAL NAM	IE OF INVENTOR
Inventor:	DAVID PRITCHARD Date: 14 JAN 2020
Signature	
	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. al 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)
Title of InventionVERTICAL TRANSISTOR DEVICE WITH SOURCE/DRAIN REGIONS COMPRISING A TWO- DIMENSIONAL (2D) MATERIAL AND METHODS OF MAKING SUCH VERTICALTRANSISTOR DEVICES
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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
Inventor: KAI SUN Date : 01/14/2020
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.

COMBINEI	D 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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hereby sell, as Grand Cayma the invention any foreign co extensions the and Applicati including but proceedings a	and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I asign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, an KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to listed 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 ereof 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.
	n of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect.
LEGAL NAN	1E OF INVENTOR
Inventor:	HONGRUREN Date: Jan. 16. 2020
Signature:	$) = 2 \forall$
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This declarati	named inventor, I hereby declare that:
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For good	ASSIGNMENT and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, 1
hereby sell, as Grand Cayma	ssign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309. Ugland House, in m KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to in
any foreign cc	listed above, together with the Application, any and all Patents that may issue in the United States and/or nuntries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or
and Application	reof that may be issued or granted, and all right, title and interest to the inventions countined in said Patents ons, for the United States and all foreign countries, and all the rights and privileges relating thereto
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LEGAL NAM	IE OF INVENTOR
Invenior:	NELLA NAVYAR Date 01-21-2020
Signature	Veha Naryai
	ration data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entire "PATENT" on pany this form, at form for each additional inventor.

REEL: 051869 FRAME: 0423

Title of Invention	VERTICAL TRANSISTOR DEVICE WITH SOURCE/DRAIN REGIONS COMPRISING A TWO- DIMENSIONAL (2D) MATERIAL AND METHODS OF MAKING SUCH VERTICALTRANSISTO DEVICES			
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have marine				
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For good For good hereby sell, a Grand Cayma the invention any foreign c extensions th and Applicati ncluding but proceedings a	office all info d and valuabl assign, transf an KY1-110 a listed above countries, and hereof that mains, for the t not limited as may be ne	rmation known to me to be material to patentability as defined in 37 CFR § 1.56.		
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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)
Invention	VERTICAL TRANSISTOR DEVICE WITH SOURCE/DRAIN REGIONS COMPRISING A TWO- DIMENSIONAL (2D) MATERIAL AND METHODS OF MAKING SUCH VERTICALTRANSISTOR DEVICES
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As the below n	amed inventor. I hereby declare that:
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LEGAL NAME	OF INVENTOR
Inventor:	ELIZABETH STREHLOW Date: 1/9/20
Signature:	Elizeth Frehler
Note: An applica Use as additional	ation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. I 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)					
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LEGAL NAME OF INVENTOR					
Inventor: SALVATORE CIMINO Date : 01/29/2020					
Signature: Salutora Control					
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.					

RECORDED: 01/30/2020