#### 504883559 04/24/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4930300

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
VIBHOR JAIN	04/20/2018
PERNELL DONGMO	04/20/2018
CAMERON LUCE	04/24/2018
JAMES W. ADKISSON	04/20/2018
QIZHI LIU	04/20/2018

## 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:	15961364

## **CORRESPONDENCE DATA**

Fax Number: (937)443-6635

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: 937-443-6600

ipdocket@thompsonhine.com Email:

THOMPSON HINE LLP **Correspondent Name:** 10050 INNOVATION DRIVE Address Line 1:

Address Line 2: SUITE 400

Address Line 4: DAYTON, OHIO 45342-4934

ATTORNEY DOCKET NUMBER:	JBUR062-US-NP
NAME OF SUBMITTER:	WILLIAM R. ALLEN
SIGNATURE:	/William R. Allen/
DATE SIGNED:	04/24/2018

# Total Attachments: 5 source=JBUR062-US-NP\_Dec#page1.tif source=JBUR062-US-NP\_Dec#page2.tif source=JBUR062-US-NP\_Dec#page3.tif source=JBUR062-US-NP\_Dec#page4.tif source=JBUR062-US-NP\_Dec#page5.tif

## 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	HETEROJUNCTION BIPOLAR TRANSISTORS WITH AN INVERTED CRYSTALLINE BOUNDARY IN THE BASE LAYER
DECLARATION As the below named inventor, I hereby declare that:	
This declarati	KA
	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 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	Vibhor Jain Date: 04/20/2018
Signature:	Just Li
Note: An applic	eation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

# 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	HETEROJUNCTION BIPOLAR TRANSISTORS WITH AN INVERTED CRYSTALLINE BOUNDARY IN THE BASE LAYER
	DECLARATION
As the below	named inventor, I hereby declare that:
This declaration is directed to:	on The attached application, 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	am the original inventor or an original joint inventor of a claimed invention in the application.
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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 fice all information known to me to be material to patentability as defined in 37 CFR § 1.56.
	ASSIGNMENT
hereby sell, as Grand Caymar the invention I any foreign co extensions the and Application including but a proceedings as	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 isted above, together with the Application, any and all Patents that may issue in the United States and/or untries, 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 a 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 of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof shall nevertheless remain in full force and effect.	
	Pernell Dongmo  Date: 4/20/18
Note: An applic Use an addition:	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

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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.	
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LEGAL NAM Inventor: Signature:	Cameron Luce Date: 4/24/18
Note: An appli	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, wast accompany this form.

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LEGAL NA Inventor Signatur	
	<del></del>
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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.
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hereby sell, as Grand Cayma the invention any foreign co extensions the and Application including but proceedings as infringement,	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 proof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents and, 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.
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LEGAL NAM Inventor:	OE OF INVENTOR  Oizhi Liu  Date: 4/20/2018
Signature:	an In
Note: An appli	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

**RECORDED: 04/24/2018** 

PATENT

REEL: 045624 FRAME: 0842