504135910 12/20/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4192196

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIN QIU LIU	12/13/2016
FAN ZHANG	12/13/2016
LAI QIANG LUO	12/13/2016
XIN SHU CAI	12/13/2016
EUGENE KONG	12/13/2016
ZHIQIANG TEO	12/13/2016
FANGXIN DENG	12/13/2016

RECEIVING PARTY DATA

Name:	GLOBALFOUNDRIES SINGAPORE PTE. LTD.
Street Address:	60 WOODLANDS INDUSTRIAL PARK D STREET 2
City:	SINGAPORE
State/Country:	SINGAPORE
Postal Code:	738406

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15286592

CORRESPONDENCE DATA

Fax Number: (656)846-2005

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: 6568549880

Email: oa.notification@horizonip.com.sg

Correspondent Name: HORIZON IP PTE. LTD.

Address Line 1: 7500A BEACH ROAD, #04-306/308

Address Line 2: THE PLAZA

Address Line 4: SINGAPORE, SINGAPORE 199591

ATTORNEY DOCKET NUMBER:	GFSP2016NAT57US0
NAME OF SUBMITTER:	CARMEN S. NG
SIGNATURE:	/Carmen S. Ng/
DATE SIGNED:	12/20/2016

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

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

Title of Invention	RELIABLE NON-VOLATILE MEMORY DEVICE	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati	and the contract and th	
	United States application or PCT international application number 15/286,592 filed on 10/06/2016	
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.		
	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.	
ASSIGNMENT For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby self, assign, transfer, to GLOBALFOUNDRIES Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D Street 2. Singapore 738406 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-inparts, 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 parties of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof shall nevertheless remain in full force and effect.		
LEGAL NA!	ME OF INVENTOR	
Inventor	Jin Qiu LIU Date: 13/Dec/2016	
Signature	<u>a La Ingramera de la compaña de la comp</u>	
	ication data sheet (FTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, nal 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	RELIABLE NON-VOLATILE MEMORY DEVICE	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati	The state of the s	
	United States application or PCT international application number 15/286,392 filed on 10/06/2016	
and the second second		
The above-idi	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.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by nument 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.	
	ASSIGNMENT	
For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby sell, assign, transfer, to GLOBALFOUNDRIES Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D Street 2, Singapore 738406 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.		
	n of this Cambined Declaration or Assignment is held unenforceable, then remaining portions hereof seless remain in full force and effect.	
LEGAL NAM	AE OF INVENTOR	
Inventor	Pan ZHANG Date: 13 Day - 38/7	
Signature;		
	Cation data sheet (PTO/8B/14 or equivalent), including naming the entire inventive entity, must accompany this form. ust 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	RELIABLE NON-VOLATILE MEMORY DEVICE	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declaration is directed to: The attached application, or United States application or PCT-international application number 15/286,592 file 10/06/2016		
		The above-id
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.		
	red 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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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 NAI	ME OF INVENTOR	
Inventor:	Lai Qiang LUO Date: 13 12 2015	
Signature	<u> </u>	
	lication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. nal 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)

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	DECLARATION
As the below	named inventor, I hereby declare that:
This declarati	
arrocted to:	United States application or PCT international application number 15/286,592 filed on 10/06/2016
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 review Trademark O	yed and understand the contents of the application and am aware of the duty to disclose to the US Patent and 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 Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D Street 2, Singapore 738406 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-inparts, 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.	
<u> </u>	
LEGAL NA?	ME OF INVENTOR
Inventor:	Xin Shu CA Date: 2016 · 12 · 13
Signature	
	lication 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 declarati		
The above-id	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 Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D Street 2, Singapore 738406 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-inparts, 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 NAI	ME OF INVENTOR	
Inventor:	Eugene KONG Date: 13 Dec 2016	
Signature	<u>*</u>	
	lication 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)

Title of Invention	RELIABLE NON-VOLATILE MEMORY DEVICE	
: :	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati		
	United States application or PCT-international appl 10/06/2016	leation number <u>15/286,592</u> filed on
The above-id	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 claime	d invention in the application.
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	n of this Combined Declaration or Assignment is held unenfor teless remain in full force and effect.	ceable, then remaining partions hereof
1, 15 1, 15		
LEGAL NAM	ME OF INVENTOR	
Inventor	Zhiqiang TEO Date:	0/12/2016
Signature:		
	ication data sheet (PTO/SB/14 or equivalent), including naming the entire and form for each additional inventor.	e inventive entity, must accompany this form.

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

Title of Invention	RELIABLE NON-VOLATILE MEMORY DEVICE		
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The above id	entified application was made or authorized to be made by me.		
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	If any portion of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof shall nevertheless remain in full force and effect.		
LEGAU NA!	ME OF INVENTOR		
Inventor:	Fangxin DENG Date: 13/Pec/24/6		
Signature			
	ication data sheet (FTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, nal form for each additional inventor.		

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RECORDED: 12/20/2016