#### 504603688 10/20/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

**SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT** 

EPAS ID: PAT4650400

#### **CONVEYING PARTY DATA**

Name	Execution Date
DANNY PAKCHUM SHUM	10/19/2017
FRANCIS YONGWEE POH	10/19/2017
JINGSHENG CHEN	10/19/2017
SHAOHAI CHEN	10/19/2017

### **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:	15789158

## **CORRESPONDENCE DATA**

Fax Number: (480)385-5061

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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**Correspondent Name:** LKGLOBAL (GF)

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Address Line 4: SCOTTSDALE, ARIZONA 85253

ATTORNEY DOCKET NUMBER: 126.0161 (JSG075) NAME OF SUBMITTER: JAMES P. DELANEY **SIGNATURE:** /James P. Delaney/ **DATE SIGNED:** 10/20/2017

# **Total Attachments: 4**

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> **PATENT** REEL: 043912 FRAME: 0162 504603688

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PATENT REEL: 043912 FRAME: 0163

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	MTJ STRUCTURES, STT MRAM STRUCTURES, AND METHODS FOR FABRICATING INTEGRATED CIRCUITS INCLUDING THE SAME	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati	IZ N ++ /	
	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.	
	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.	
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 NAM	DE OF INVENTOR	
Inventor:	<u>Danny PakChum Shum</u> Date: 2017.10.19	
Signature.	Days him	
	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)

Title of Invention	MTI STRUCTURES, STT MRAM STRUCTURES, AND METHODS FOR FABRICATING INTEGRATED CIRCUITS INCLUDING THE SAME
	DECLARATION
As the below	named inventor, I hereby declare that:
This declarati	
	United States application or PCT international application numberfiled on
The above-ide	entified application was made or authorized to be made by me.
I believe that	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 fice all information known to me to be material to patentability as defined in 37 CFR § 1.56.
	ASSIGNMENT
sell, assign, Industrial Parl interest in an United States parts, division contained in privileges related	valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged. I hereby ransfer, to GLOBALFOUNDRIES Singapore Pte. Ltd. having a business address of 60 Woodlands D Street 2, Singapore 738406 its successors and assigns, absolutely and forever, my entire right, title and I to the invention listed above, together with the Application, any and all Patents that may issue in the and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-als or extensions thereof that may be issued or granted, and all right, title and interest to the inventions said Patents and Applications, for the United States and all foreign countries, and all the rights and ting thereto including but not limited to the priority rights arising from said Applications, the right to ke all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, tere infringement, and the right to apply for, take and maintain patents on said inventions.
	of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof dess remain in full force and effect.
LEGAL NAM	E OF INVENTOR
Inventor:	Erancis Yong Wee Poh Date: /9/0//~
Signature:	
	ation data skeet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. If form for each additional inventur.

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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)

	MTJ STRUCTURES, STT MRAM STRUCTURES, AND METHODS FOR	
Title of Invention	FABRICATING INTEGRATED CIRCUITS INCLUDING THE SAME	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati		
	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 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.		
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 NAN	Æ OF INVENTOR	
Inventor:	<u>Jingsheng Chen</u> Date : 19/10/2017	
Signature:	Tizolog den	

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 APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	MTJ STRUCTURES, STT MRAM STRUCTURES, AND METHODS FOR FABRICATING INTEGRATED CIRCUITS INCLUDING THE SAME	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati		
	United States application or PCT international application number 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 claimed invention in the application.		
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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 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, continuations, contained in said Patents and Applications, for the United States 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 NAN	1E OF INVENTOR	
Inventor:	Shaohai Chen Date: 2017./0.19	
Signature:	- Then Shoohai	
• •	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

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PATENT REEL: 043912 FRAME: 0167

**RECORDED: 10/20/2017**