504558810 09/21/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4605521

Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DANNY PAK-CHUM SHUM	09/18/2017
DESMOND JIA JUN LOY	09/18/2017
WEN SIANG LEW	09/18/2017

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:	15711370

CORRESPONDENCE DATA

Fax Number: (480)385-5061

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: 480-385-5060

Email: docketing@LKGlobal.com

LKGLOBAL (GF) **Correspondent Name:** Address Line 1: 7010 E. COCHISE RD.

Address Line 4: SCOTTSDALE, ARIZONA 85253

ATTORNEY DOCKET NUMBER:	126.0159 (JSG026)
NAME OF SUBMITTER:	JAMES P. DELANEY
SIGNATURE:	/James P. Delaney/
DATE SIGNED:	09/21/2017

Total Attachments: 3

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> **PATENT REEL: 043654 FRAME: 0979** 504558810

GF SG Ref. No.: JSG026

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	NON-VOLATILE MEMORY DEVICES, RRAM DEVICES AND METHODS FOR FABRICATING RRAM DEVICES WITH MAGNESIUM OXIDE INSULATOR LAYERS
	DECLARATION
As the below	named inventor, I hereby declare that:
This declaration	
	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 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.	
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LEGAL NAN	4E OF INVENTOR
Inventor: Danny Pak-Chum Shum Date: 9/18/2017	
Signature: Lay Ehr.	
	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, all form for each additional inventor.
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GF SG Ref. No.: JSG026

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This declarati	ν v
podelogicon	United States application or PCT international application number filed on
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I believe that	I am the original inventor or an original joint inventor of a claimed invention in the application.
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Bondosbandenen	
A	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 NAME OF INVENTOR	
Inventor:	Desmond Jia Jun Loy Date: 9/18/2017
Signature: LecL	
	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

PATENT REEL: 043654 FRAME: 0981

GF SG Ref. No.: JSG026

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	NON-VOLATILE MEMORY DEVICES, RRAM DEVICES AND METHODS FOR FABRICATING RRAM DEVICES WITH MAGNESIUM OXIDE INSULATOR LAYERS	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
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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.		
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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 NAME OF INVENTOR		
Inventor:	Wen Siang Lew Date: 9/18/2017	
Signature: WW		
	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. al form for each additional inventor.	

8452546RECORDED: 09/21/2017

REEL: 043654 FRAME: 0982

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