# 505169342 10/31/2018

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5216110

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYAN	CE:	ASSIGNMENT	
CONVEYING PARTY DA	ТА		
		Name	Execution Date
WANBING YI			05/11/2017
NEHA NAYYAR			05/10/2017
CURTIS CHUN-I HSIEH			05/11/2017
MAHESH BHATKAR			05/11/2017
WENJUN LIU			05/11/2017
JUAN BOON TAN			05/11/2017
RECEIVING PARTY DAT	A		
Name:	GLOBAL	LFOUNDRIES SINGAPORE PTE. LTD.	
Street Address:	60 WOC	DDLANDS INDUSTRIAL PARK D STRE	ET 2
City:	SINGAP	PORE	
State/Country:	SINGAPORE		
	738406		
Postal Code: PROPERTY NUMBERS		Number	
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# **Total Attachments: 6**

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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	TWO PASS MRAM DUMMY SOLUTION
	DECLARATION
As the below	named inventor, I hereby declare that:
This declarati	ion The attached application, or
is directed to:	
	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.
	cowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by conment 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.
	ASSIGNMENT
hereby sell, a Industrial Par and interest i United States parts, divisio contained in privileges rel recover and t	and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I assign, transfer, to GLOBALFOUNDRIES Singapore Pte. Ltd. having a business address of 60 Woodlands rk D Street 2, Singapore, 738406, its successors and assigns, absolutely and forever, my entire right, title n and to the invention listed above, together with the Application, any and all Patents that may issue in the s and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in- nals 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 lating thereto including but not limited to the priority rights arising from said Applications, the right to ake all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, atture in fringement, 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 neless remain in full force and effect.
LEGAL NAM	ME OF INVENTOR
Inventor:	Wanbing YI Date : 11-May - 2017
Signature:	
	ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. nal form for each additional inventor.

# PATENT REEL: 047372 FRAME: 0827

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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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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.		
<b>T</b>	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 in fringement, and the right to apply for, take and maintain patents on said inventions.		
If any portio 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	Æ OF INVENTOR	
Inventor:	Neha NAYYAR   Date :   05 10 2017	
Signature: Nelha Nayyan		
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

### TWO PASS MRAM DUMMY SOLUTION

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The attached application, or

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United States application or PCT international application number \_\_\_\_\_\_ filed on

The above-identified application was made or authorized to be made by me.

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#### ASSIGNMENT

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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 NAME OF INVENTOR

Signature:

Inventor: Curtis Chun-I HSIEH

Date: 11/May/2019

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the ontire inventive entity, must accompany this form. Use an additional form for each additional inventor.

GF Ref.	No.:	ISG159

PATENT REEL: 047372 FRAME: 0830

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Title of Invention	TWO PASS MRAM DUMMY SOI	UTION	3
	DECI	ARATION	
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NI 302 BROOM A	United States application or F	CT international application of the second s	ation number filed on
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	AS81	GNMENT	
heroby sell, a Industrial Pa and interest i United State: parts, divisio contained in privileges re- recover and t	I and valuable consideration, the receipt, su assign, transfer, to GLOBALFOUNDRIES S rk D Street 2, Singapore, 738406, its succe in and to the invention listed above, together s and/or any foreign countries, and any reiss mals or extensions thereof that may be issu- said Patents and Applications, for the Ua lating thereto including but not limited to take all such proceedings as may be necessa- uture in fringement, and the right to apply for	lingapore Pte. Ltd. having scors and assigns, absolu- with the Application, a area, re-examinations, re- ed or granted, and all ri- nited States and all fur- the priority rights arising ry for the recovery of d	ng a business address of 60 Woodlands lutely and forever, my entire right, title ny and all Patents that may issue in the mewals, continuations, continuation-in- ight, title and interest to the inventions eign countries, and all the rights and ig from said Applications, the right to amages or otherwise in respect of past
	on of this Combined Declaration or Assign heless remain in full force and effect.	ment is held unenforce	able, then remaining partians hereof
LEGAL NAX	ME OF INVENTOR		
Inventor:	Mahesh BHATKAR	Date :	11HAY'14

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APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN
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LEGAL NAN	AE OF INVENTOR		
Inventor	Wenjun LIU Date: ((May Ux))		
Signature:	Lõu Wajun		
	ication fista sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form, ral form for each additional inventor.		

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LEGAL NAME OF INVENTOR

Inventor: Juan Boon TAN

Date: 11 Mary 201

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:

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# **RECORDED: 10/31/2018**

Signature: