505750235 10/31/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5797048

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAMASAMY CHOCKALINGAM	10/30/2019
JUAN BOON TAN	10/31/2019
CHEE KONG LEONG	10/29/2019
RANJAN RAJOO	10/25/2019
XUESONG RAO	10/29/2019
XIAODONG LI	10/31/2019

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:	16669531

CORRESPONDENCE DATA

Fax Number:

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: 518-305-9166

Email: ippg.prosecution@globalfoundries.com

Correspondent Name: GLOBALFOUNDRIES, INC.
Address Line 1: SANTA CLARA GATEWAY
Address Line 2: 2600 GREAT AMERICA WAY

Address Line 4: SANTA CLARA, CALIFORNIA 95054

ATTORNEY DOCKET NUMBER:	LSG034-US-NP
NAME OF SUBMITTER:	DAVID CAIN
SIGNATURE:	/David Cain/
DATE SIGNED:	10/31/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT

505750235 REEL: 050870 FRAME: 0799

Total Attachments: 6 source=LSG034-US-NP_FiledAssignDoc#page1.tif source=LSG034-US-NP_FiledAssignDoc#page2.tif source=LSG034-US-NP_FiledAssignDoc#page3.tif source=LSG034-US-NP_FiledAssignDoc#page4.tif source=LSG034-US-NP_FiledAssignDoc#page5.tif

source=LSG034-US-NP_FiledAssignDoc#page6.tif

PATENT REEL: 050870 FRAME: 0800

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
BOND PADS OF SEMICONDUCTOR DEVICES	
Title of Invention	
DECLARATION	
As the below named inventor, I hereby declare that:	
This declaration	
United States application or PCT international application numberfiled on	
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.	
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 NAME OF INVENTOR	
Inventor: CHOCKALINGAM, RAMASAMY Date 30-0 t-2019	
Signature: C. Rowa Jany	
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.	

PATENT

REEL: 050870 FRAME: 0801

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	BOND PADS OF SEMICONDUCTOR DEVICES	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarate 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.	
	nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine tent 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	
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.		
IECAI NIAN	LEGAL NAME OF INVENTOR	
Inventor:	TAN, JUAN BOON Date:	
Signature: Signature:		

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	BOND PADS OF SEMICONDUCTOR DEVICES
	DECLARATION
As the below n	amed inventor, I hereby declare that:
This declaration is directed to:	n The attached application, or
	United States application or PCT international application numberfiled on
The above-ide	ntified 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.
	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine nt of not more than five (5) years, or both.
	d 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, tra Park D Street 2 and to the inve and/or any fore or extensions t Patents and Ap including but proceedings as	valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby inster, to GLOBALFOUNDRIES Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial 2, Singapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in ention listed above, together with the Application, any and all Patents that may issue in the United States sign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals thereof that may be issued or granted, and all right, title and interest to the inventions contained in said opplications, 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 and the right to apply for, take and maintain patents on said inventions.
If any portion shall neverthe	of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof less remain in full force and effect.
	E OF INVENTOR I. LONG, CHEE KONG Date: 3700700
Note: An applic	ation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

PATENT REEL: 050870 FRAME: 0803

COMBINE	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	BOND PADS OF SEMICONDUCTOR DEVICES	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati	······· · · · · · · · · · · · · · · ·	
	United States application or PCT international application numberfiled 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.	
	towledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine tent 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	
sell, assign, in Park D Street and to the im- and/or any fo or extensions Patents and A including but proceedings	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 Industrial 2, Singapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in vention listed above, together with the Application, any and all Patents that may issue in the United States reign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals thereof that may be issued or granted, and all right, title and interest to the inventions contained in said applications, 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.	
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	ME OF INVENTOR RAJOO, RANJAN Date: 25/10/2019	
Signature	RAJOO, RANJAN Date: 25/10/2019	
Note: An appli	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

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	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	BOND PADS OF SEMICONDUCTOR DEVICES	
	DECLARATION	
As the below n	amed inventor, I hereby declare that:	
This declaration is directed to:	The attached application, or	
	United States application or PCT international application number filed on	
The above-iden	tified 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 acknow or imprisonmen	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine it of not more than five (5) years, or both.	
I have reviewed Trademark Offi	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: R	AO, XUESONG Date: 29/10/2019	
Signature:	fyd -	
Note: An applicat	tion data/sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.	

PATENT REEL: 050870 FRAME: 0805

COMBIN	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	BOND PADS OF SEMICONDUCTOR DEVICES	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarat is directed to	17 1 11 massive application, or	
	United States application or PCT international application numberfiled on	
The above-id	lentified 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 acknor imprisonm	nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by finement of not more than five (5) years, or both.	
Have review Trademark O	red 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	
Park D Street and to the im- and/or any for or extensions Patents and A including but proceedings a	I 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 Industria 2, Singapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in vention listed above, together with the Application, any and all Patents that may issue in the United States reign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals thereof that may be issued or granted, and all right, title and interest to the inventions contained in said applications, 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.	
If any portion 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	ME OF INVENTOR	
Inventor:	LI, XIAODONG Date: 21-Oct 19	
Signature:	— <u>/i</u>	
Note: An applic Use an addition	cation data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. al form for each additional inventor,	

PATENT

REEL: 050870 FRAME: 0806