504735294 01/18/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4782020

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LIANG CAO	01/13/2018
JED H. RANKIN	01/12/2018
JIE ZHANG	01/18/2018
YULU CHEN	01/11/2018

RECEIVING PARTY DATA

Name:	GLOBALFOUNDRIES INC.	
Street Address:	P.O. BOX 309	
Internal Address:	UGLAND HOUSE	
City:	GRAND CAYMAN	
State/Country:	CAYMAN ISLANDS	
Postal Code:	KY1-1104	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15874039

CORRESPONDENCE DATA

Fax Number: (518)449-0047

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: 518-449-0044

Email: ptocommunications@hoffmanwarnick.com,

sadonnino@hoffmanwarnick.com

Correspondent Name: HOFFMAN WARNICK LLC

Address Line 1: 540 BROADWAY Address Line 2: 4TH FLOOR

Address Line 4: ALBANY, NEW YORK 12207

ATTORNEY DOCKET NUMBER:	JMLT498-US-NP
NAME OF SUBMITTER:	MATTHEW J. KINNIER
SIGNATURE:	/Matthew J. Kinnier/
DATE SIGNED:	01/18/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 044656 FRAME: 0787 504735294

Total Attachments: 4

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PATENT REEL: 044656 FRAME: 0788

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	SY	YSTEM AND ME LITHOGRAPHY				
			DECLARATIO	N		,
As the below:	named inven	tor, I hereby declare th	hat:			
This declaration is directed to:	on 🖂	The attached applica		tional application	ı number	filed on
	لـــــا					
The above-ide	ntified appli	cation was made or au	nthorized to be made	by me.		
I believe that I	am the orig	inal inventor or an ori	ginal joint inventor	of a claimed inver	ition in the applica	tion.
		any willful false state of more than five (5) ye		eclaration is punis	hable under 18 U.	S.C. 1001 by
I have reviewe Trademark Of	ed and under fice all infor	stand the contents of the mation known to me to	he application and a to be material to pate	m aware of the du intability as define	ity to disclose to the	ne US Patent and
		•	· .			
		•	ASSIGNMENT		•	
hereby sell, as Grand Cayma the invention any foreign oc extensions the and Application including but proceedings a	sign, transfe n KY1-1104 listed above, cuntries, and creof that ma ons, for the U not limited to s may be nec	e consideration, the rec r, to GLOBALFOUNI its successors and ass together with the App any reissues, re-exam y be issued or granted, Juited States and all fo to the priority rights ari essary for the recover to apply for, take and	DRIES Inc. having a signs, absolutely and plication, any and all inations, renewals, c, and all right, title a preign countries, and ising from said Apply of damages or other states.	business address forever, my entir Patents that may continuations, cond interest to the ideal the rights and ications, the right erwise in respect of	of PO Box 309, Ue right, title and in issue in the United tinuation-in-parts, inventions contain privileges relating to recover and tak	Igland House, terest in and to il States and/or divisionals or ed in said Patents g thereto ee all such
If any portion shall neverth	n of this Cor eless remain	mbined Declaration on in full force and effo	or Assignment is he ect.	ld unenforceable	, then remaining	portions hereof
				2		
LEGAL NAM	Æ OF INVE	NTOR 1				
Inventor:	Liang Cao	1, 2		Date:	13/201	<u>\$</u>
Signature:		A A				
		eet (PTO/SB/14 or equivach additional inventor.	valent), including nami	ing the entire invent	ive entity, must acco	mpany this form.

84625460v1

COMBINED DECLARATION and ASSIGNMENT (37 CFR L63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Fitle of Invention	SYSTEM AND METHOD FOR ANALYZING PRINTED MASKS FOR LITHOGRAPHY BASED ON REPRESENTATIVE CONTOURS
,	DECLARATION
As the below	named inventor, I hereby declare that:
This declaration is directed to:	on 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.
l believe that l	am the original inventor or an original joint inventor of a claimed invention in the application.
I hereby ackno fine or impriso	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by nment of not more than five (5) years, or both.
l have reviewe Trademark Off	d and understand the contents of the application and am aware of the duty to disclose to the US Patent and ice all information known to me to be material to patentability as defined in 37 CFR § 1.56.
	ASSIGNMENT
hereby sell, ass Grand Cayman the invention li any foreign cot extensions ther and Application including but n proceedings as	ign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to sted above, together with the Application, any and all Patents that may issue in the United States and/or intries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or eof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents as, for the United States and all foreign countries, and all the rights and privileges relating thereto ot limited to the priority rights arising from said Applications, the right to recover and take all such 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 neverthe	of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof ess remain in full force and effect.
LEGAL NAME	SOF INVENTOR 2
Inventor: J	ed H. Rankin Date: 1/2/18
Note: An applica Use an additional	tion data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

84625460v1

PATENT

REEL: 044656 FRAME: 0790

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	SYSTEM AND METHOD FOR ANALYZING PRINTED MASKS FOR LITHOGRAPHY BASED ON REPRESENTATIVE CONTOURS			
	DECLARATION			
As the below	named inventor, I hereby declare that:			
This declarati	V V **			
	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 review Trademark O	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 Inc. having a business address of PO Box 309, Ugland House, Grand Cayman KY1-1104 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 Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect.			
LEGAL NAN	ME OF INVENTOR 3			
Inventor:	Jie Zhang Date: 1/18/2018			
Signature:	-5kpli			
Note: An appl Use an addition	ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.			

84625460v1

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	SYSTEM AND METHOD FOR ANALYZING PRINTED MASKS FOR LITHOGRAPHY BASED ON REPRESENTATIVE CONTOURS				
	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.				
	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.				
I have review Trademark O	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 Inc. having a business address of PO Box 309, Ugland House, Grand Cayman KY1-1104 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 Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect.				
LEGAL NAN	ME OF INVENTOR 4				
Inventor:	Yulu Chen Date: Jan. 11, 2018				
Signature:	Chen Yulu				
	ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany thisform. nal form for each additional inventor.				

PATENT REEL: 044656 FRAME: 0792

RECORDED: 01/18/2018