PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
YEN-CHENG LU	02/27/2014
SHINN-SHENG YU	02/27/2014
JENG-HORNG CHEN	03/03/2014
ANTHONY YEN	03/07/2014

RECEIVING PARTY DATA

Name:	Taiwan Semiconductor Manufacturing Company, Ltd.		
Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park		
City:	Hsin-Chu		
State/Country:	TAIWAN		
Postal Code:	300-77		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14221555

CORRESPONDENCE DATA

Fax Number: (214)200-0853

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via

US Mail.

Phone: 214-651-5000

Email: ipdocketing@haynesboone.com

Correspondent Name: HAYNES AND BOONE, LLP IP SECTION

Address Line 1: 2323 VICTORY AVENUE

Address Line 2: SUITE 700

Address Line 4: DALLAS, TEXAS 75219

ATTORNEY DOCKET NUMBER: 24061.2743	
NAME OF SUBMITTER:	LINDA INGRAM
SIGNATURE:	/Linda Ingram/
DATE SIGNED:	03/21/2014

Total Attachments: 2

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> PATENT REEL: 032497 FRAME: 0967

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Docket No.: 2013-0426/24061.2743

Customer No.: 42717

ASSIGNMENT

WHEREAS, we,

(1)	Yen-Cheng Lu	of	2F., No.12, Lane 31, Section 1 Sanmin Road, Banqiao District New Taipei City 220, Taiwan, R.O.C.
(2)	Shinn-Sheng Yu	of	4F-2, No. 16, Lane 634, Nanda Road Hsinchu, Taiwan, R.O.C.
(3)	Jeng-Horng Chen	of	1, Alley 2, Lane 45, Fu-Chyun Street Hsin-Chu, Taiwan, R.O.C.
(4)	Anthony Yen	of	20F-9, 188 Guanxin Road, Hsinchu 300 Taiwan, R.O. C.

have invented certain improvements in

AN EXTREME ULTRAVIOLET LITHOGRAPHY PROCESS AND MASK WITH REDUCED SHADOW EFFECT AND ENHANCED INTENSITY

for which we have executed an application for Letters Patent of the United States of America,

of even date filed herewith; and

filed on March 21, 2014, and assigned application number 14/221,555; and

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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PATENT REEL: 032497 FRAME: 0968

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AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name:	Yen-Cheng Lu				
Residence Address:	2F., No.12, Lane 31, Section 1, Sanmin Road, Banqiao District New Taipei City 220, Taiwan, R.O.C.				
Dated: 0ン/ン기/	<u> 2014</u>	Ī	Yen-Ohen nventor Signature	g Lu	
Inventor Name:	Shinn-Sheng Yu				
Residence Address:	4F-2, No. 16, Lane 6	34, Nanda R	oad, Hsinchu, Taiv	van, R.O.C.	
Dated: 02/27/2014	4		Shinn-Shong 2	Ju	
Dated.		Ī	nventor Signature		
Inventor Name:	Jeng-Horng Chen				
Residence Address:	1, Alley 2, Lane 45,	Fu-Chyun St	reet, Hsin-Chu, Ta	iwan, R.O.C.	
Dated:	¹ > 14	0	hventor Signature	ry Ro	
Inventor Name:	Anthony Yen				
Residence Address:	20F-9, 188 Guanxin	Road, Hsinc	hu 300, Taiwan, <u>R</u>	.O. C.	
Dated: 3/1/2	2014	•	05		
			Inventor Signature		

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RECORDED: 03/21/2014