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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHIA-CHING HUANG	03/27/2014
TSUNG-YU CHEN	03/27/2014
CHIA-HAO HSU	03/27/2014
SHINN-SHENG YU	03/27/2014
CHIA-CHEN CHEN	03/31/2014

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	NO. 8, LI-HSIN ROAD 6,	
Internal Address:	SCIENCE-BASED INDUSTRIAL PARK	
City:	HSIN-CHU	
State/Country:	TAIWAN	
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	15194118		

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	24061.2764US02
NAME OF SUBMITTER:	LADONNA JOHNSON
SIGNATURE:	/LADONNA JOHNSON/
DATE SIGNED:	06/27/2016

Total Attachments: 3 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif

Docket No.: 2013-1847/24061.2764

Customer No.: 42717

ASSIGNMENT

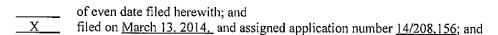
WHEREAS, we,

	(1)	Chia-Ching Huang	of	No. 13, Pinglin Road, Su-ao Township Yilan County 270, Taiwan, R.O.C.
	(2)	Tsung-Yu Chen	of	6F3, No. 113, Zhiping Road, East District Hsinchu City 300, Taiwan, R.O.C.
	(3)	Chia-Hao Hsu	of	3F., No. 42, Yuanhou Street Hsinchu City 300, Taiwan, R.O.C.
٠-,	(4)	Shinn-Sheng Yu	of	4F-2, No. 16, Lane 634, Nanda Road Hsinchu, Taiwan, R.O.C.
	(5)	Chia-Chen Chen	of	6F, No 180, Guanxin W. Street Hsinchu City 30072, Taiwan. R.O.C.

have invented certain improvements in

COLLECTOR IN AN EXTREME ULTRAVIOLET LITHOGRAPHY SYSTEM WITH OPTIMAL AIR CURTAIN PROTECTION

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



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

-1-

R-2764 - Updated Assignment

Docket No.: 2013-1847/24061.2764

Customer No.: 42717

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.

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:	Chia-Ching Huang	
Residence Address:	No. 13, Pinglin Road, Su-ao To Yilan County 270, Taiwan, R.O	O.C.
Dated: 2014 / 3/	/27	Chia-Ching Huan Inventor Signature
Inventor Name:	Tsung-Yu Chen	
Residence Address:	6F3, No. 113, Zhiping Road, Hsinchu City 300, Taiwan, R.O	
Dated: 2014/	3/29	TSWN9 - Yn Chem Inventor Signature
Inventor Name:	Chia-Hao Hsu	
Residence Address:	3F., No. 42, Yuanhou Street Hsinchu City 300, Taiwan, R.O	D.C.
Dated: % (4 / 	3/27	Chra-Haw Hau Inventor Signature
		niventor dignature
Inventor Name:	Shinn-Sheng Yu	
Residence Address:	4F-2, No. 16, Lane 634, Nanda Hsinchu, Taiwan, R.O.C.	a Road
Dated: 3/27/2014	<u>. </u>	Shinn-Sheng Yu Inventor Signature
		Inventor Signature

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Docket No.: 2013-1847/24061.2764

Customer No.: 42717

Inventor Name:

Chia-Chen Chen

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6F, No 180, Guanxin W. Street Hsinchu City 30072, Taiwan, R.O.C.

Dated: 3/87/2014

Inventor Signature

R-2764 - Updated Assignment

RECORDED: 06/27/2016

- 3 -