

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3059972

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CHUN-KUANG CHEN	06/10/2014
HSIAO-WEI YEH	10/02/2014
CHIH-AN LIN	07/01/2014
CHIEN-WEI WANG	06/12/2014
FENG-CHENG HSU	06/05/2014
RECEIVING PARTY DATA	
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-HSIN RD. 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:	14294315
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
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:	24061.2904
NAME OF SUBMITTER:	DENISE WILSON
SIGNATURE:	/Denise Wilson/
DATE SIGNED:	10/09/2014
Total Attachments: 4	

PATENT

source=2904-assign#page1.tif

source=2904-assign#page2.tif

source=2904-assign#page3.tif

source=2904-assign#page4.tif

A S S I G N M E N T

WHEREAS, we,

- | | | | |
|-----|-----------------|----|--|
| (1) | Chun-Kuang Chen | of | No. 122, Yu-Hsien St., Guan-Shi Jeng
Hsin-Chu Hsien, Taiwan, R.O.C. |
| (2) | Hsiao-Wei Yeh | of | No. 6, Alley 8, Lane 520, Syuefu Rd.
Jhudong Township, Hsinchu County 310
Taiwan, R.O.C. |
| (3) | Chih-An Lin | of | 2F, No. 7, Lane 493, Ching-Ping Road
Chong-He City, Taipei County, Taiwan, R.O.C. |
| (4) | Chien-Wei Wang | of | 13F.-5, No. 26, Fuxing Rd., Zhubei City
Hsinchu County 302, Taiwan, R.O.C. |
| (5) | Feng-Cheng Hsu | of | 3F, 26-2, Dagan Rd., Sanxia, New Taipei,
Taiwan 237-41, R.O.C. |

have invented certain improvements in

**DOUBLE PATTERNING STRATEGY FOR CONTACT HOLE AND TRENCH IN
PHOTOLITHOGRAPHY**

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

_____ of even date filed herewith; and
 X filed on June 3, 2014 and assigned application number 14/294,315 ; 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.

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: Chun-Kuang Chen

Residence Address: No. 122, Yu-Hsien St., Guan-Shi Jeng, Hsin-Chu Hsien, Taiwan, R.O.C.

✓ Dated: June 10, 2014

✓ Chun-Kuang Chen
Inventor Signature

Inventor Name: Hsiao-Wei Yeh

Residence Address: No. 6, Alley 8, Lane 520, Syuefu Rd., Jhudong Township, Hsinchu County 310, Taiwan, R.O.C.

✓ Dated: _____

✓ _____
Inventor Signature

Inventor Name: Chih-An Lin

Residence Address: 2F, No. 7, Lane 493, Ching-Ping Road, Chong-He City, Taipei County Taiwan, R.O.C.

✓ Dated: July 1st 2014

✓ Chih An Lin
Inventor Signature

Inventor Name: Chien-Wei Wang

Residence Address: 13F.-5, No. 26, Fuxing Rd., Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

✓ Dated: 2014. 6. 12

✓ Chien Wei Wang
Inventor Signature

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: Chun-Kuang Chen

Residence Address: No. 122, Yu-Hsien St., Guan-Shi Jeng, Hsin-Chu Hsien, Taiwan, R.O.C.

Dated: _____

Inventor Signature

Inventor Name: Hsiao-Wei Yeh

Residence Address: No. 6, Alley 8, Lane 520, Syuefu Rd., Jhudong Township, Hsinchu County 310, Taiwan, R.O.C.

✓ Dated: 2014.10.2 .

✓ Hsiao-Wei Yeh

Inventor Signature

Inventor Name: Chih-An Lin

Residence Address: 2F, No. 7, Lane 493, Ching-Ping Road, Chong-He City, Taipei County Taiwan, R.O.C.

Dated: _____

Inventor Signature

Inventor Name: Chien-Wei Wang

Residence Address: 13F.-5, No. 26, Fuxing Rd., Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: _____

Inventor Signature

Inventor Name: Feng-Cheng Hsu

Residence Address: 3F, 26-2, Daguan Rd., Sanxia, New Taipei, Taiwan 237-41, R.O.C.

✓ Dated: 2014, 6, 5

✓ Feng-Cheng Hsu
Inventor Signature
