

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3877822

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the NAME OF THE ASSIGNEE previously recorded on Reel 034803 Frame 0818. Assignor(s) hereby confirms the CORRECTION OF THE WORD "MANUFACTURING" TO "MANUFACTURING" IN ASSIGNEE'S NAME.
CONVEYING PARTY DATA	
Name	Execution Date
MING-ZHANG KUO	05/29/2013
PING-LIN YANG	05/29/2013
CHENG-CHUNG LIN	05/29/2013
OSAMU TAKAHASHI	05/28/2013
SANG HOO DHONG	05/29/2013
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:	14604488
CORRESPONDENCE DATA	
Fax Number:	(214)200-0853
<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:	20130094/24061.2518US02
NAME OF SUBMITTER:	JANIE MARTINEZ-HOLM
SIGNATURE:	/Janie Martinez-Holm/

PATENT

DATE SIGNED:	05/18/2016
Total Attachments: 6 source=24061.2518US02_Corrective Assignment#page1.tif source=24061.2518US02_Corrective Assignment#page2.tif source=24061.2518US02_Corrective Assignment#page3.tif source=24061.2518US02_Corrective Assignment#page4.tif source=24061.2518US02_Corrective Assignment#page5.tif source=24061.2518US02_Corrective Assignment#page6.tif	

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3196326

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MING-ZHANG KUO	05/29/2013
PING-LIN YANG	05/29/2013
CHENG-CHUNG LIN	05/29/2013
OSAMU TAKAHASHI	05/28/2013
SANG HOO DHONG	05/29/2013
RECEIVING PARTY DATA	
<u>Manufacturing</u>	
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:	14604488
CORRESPONDENCE DATA	
Fax Number:	(214)200-0853
<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:	20130094 / 24061.2518US02
NAME OF SUBMITTER:	JANIE MARTINEZ-HOLM
SIGNATURE:	/Janie Martinez-Holm/
DATE SIGNED:	01/23/2015

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|-----------------|----|--|
| (1) | Ming-Zhang Kuo | of | 8F., No. 1, Lane 131, Wenshan Road
Qionglin Township, Hsinchu County 307, Taiwan R.O.C. |
| (2) | Ping-Lin Yang | of | No. 551, Xinggong Road
Tianzhong Township, Changhua County, 52048, Taiwan R.O.C. |
| (3) | Cheng-Chung Lin | of | 6F., No.7, Lane 28, Section 1, Tiedao Road
East District, Hsinchu City 300, Taiwan R.O.C. |
| (4) | Osamu Takahashi | of | 2506 Field Lark Drive
Round Rock, Texas 78681-2725 |
| (5) | Sang Hoo Dhong | of | JinSan North 1st Street #7 Room 606
Hsin-Chu City, Taiwan R.O.C. |

have invented certain improvements in

**ELECTRON BEAM LITHOGRAPHY SYSTEMS AND METHODS INCLUDING
TIME DIVISION MULTIPLEX LOADING**

for which we have executed an application for Letters Patent of the United States of America, filed on June 10, 2013 and assigned application number 13/914,118; and

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: Ming-Zhang Kuo

Residence Address: 8F., No. 1, Lane 131, Wenshan Road
Qionglin Township, Hsinchu County 307, Taiwan R.O.C.

Dated: ✓ 2013. 5. 29

✓ Ming-Zhang Kuo
Inventor Signature

Inventor Name: Ping-Lin Yang

Residence Address: No. 551, Xinggong Road
Tianzhong Township, Changhua County, 52048, Taiwan R.O.C.

Dated: ✓ 2013. 5. 29

✓ [Signature]
Inventor Signature

Inventor Name: Cheng-Chung Lin

Residence Address: 6F., No.7, Lane 28, Section 1, Tiedao Road
East District, Hsinchu City 300, Taiwan R.O.C.

Dated: ✓ 2013. 5. 29

✓ Cheng-Chung Lin
Inventor Signature

Docket No.: 2013-0094 / 24061.2518
Customer No.: 42717

Inventor Name: Osamu Takahashi

Residence Address: 2506 Field Lark Drive
Round Rock, Texas 78681-2725

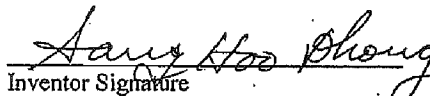
Dated: May 28, 2013


Inventor Signature

Inventor Name: Sang Hoo Dhong

Residence Address: JinSan North 1st Street #7 Room 606
Hsin-Chu City, Taiwan R.O.C.

Dated: May 29 2013


Inventor Signature