

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3724230

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the NAME OF THE ASSIGNEE previously recorded on Reel 036678 Frame 0449. Assignor(s) hereby confirms the CORRECTION OF THE WORD "MANUFACTURING" TO "MANUFACTURING" IN ASSIGNEE'S NAME.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHIEH-HAN WU	12/04/2013
CHUNG-JU LEE	12/04/2013
CHENG-HSIUNG TSAI	12/04/2013
MING-FENG SHIEH	12/06/2013
RU-GUN LIU	12/11/2013
TIEN-I BAO	12/04/2013
SHAU-LIN SHUE	12/04/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
<b>Street Address:</b>	NO. 8, LI-HSIN RD. 6
<b>Internal Address:</b>	SCIENCE-BASED INDUSTRIAL PARK
<b>City:</b>	HSIN-CHU
<b>State/Country:</b>	TAIWAN
<b>Postal Code:</b>	300-77
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14853857
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(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>	
<b>Phone:</b>	214-651-5000
<b>Email:</b>	ipdocketing@haynesboone.com
<b>Correspondent Name:</b>	HAYNES AND BOONE, LLP IP SECTION
<b>Address Line 1:</b>	2323 VICTORY AVENUE
<b>Address Line 2:</b>	SUITE 700
<b>Address Line 4:</b>	DALLAS, TEXAS 75219
<b>ATTORNEY DOCKET NUMBER:</b>	20130978/24061.2640US02

PATENT

<b>NAME OF SUBMITTER:</b>	JANIE MARTINEZ-HOLM
<b>SIGNATURE:</b>	/Janie Martinez-Holm/
<b>DATE SIGNED:</b>	02/03/2016
<b>Total Attachments: 6</b> source=24061-2640US02_Corrective_Recordation_Notice#page1.tif source=24061-2640US02_Corrective_Recordation_Notice#page2.tif source=24061-2640US02_Corrective_Recordation_Notice#page3.tif source=24061-2640US02_Assignment_Parent#page1.tif source=24061-2640US02_Assignment_Parent#page2.tif source=24061-2640US02_Assignment_Parent#page3.tif	

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## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3546836

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHIEH-HAN WU	12/04/2013
CHUNG-JU LEE	12/04/2013
CHENG-HSIUNG TSAI	12/04/2013
MING-FENG SHIEH	12/06/2013
RU-GUN LIU	12/11/2013
TIEN-I BAO	12/04/2013
SHAU-LIN SHUE	12/04/2013
<b>RECEIVING PARTY DATA</b>	
<b>MANUFACTURING</b>	
<b>Name:</b>	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
<b>Street Address:</b>	NO. 8, LI-HSIN RD. 6
<b>Internal Address:</b>	SCIENCE-BASED INDUSTRIAL PARK
<b>City:</b>	HSIN-CHU
<b>State/Country:</b>	TAIWAN
<b>Postal Code:</b>	300-77
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14853857
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(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>	
<b>Phone:</b>	214-651-5000
<b>Email:</b>	ipdocketing@haynesboone.com
<b>Correspondent Name:</b>	HAYNES AND BOONE, LLP IP SECTION
<b>Address Line 1:</b>	2323 VICTORY AVENUE
<b>Address Line 2:</b>	SUITE 700
<b>Address Line 4:</b>	DALLAS, TEXAS 75219
<b>ATTORNEY DOCKET NUMBER:</b>	20130978 / 24061.2640US02
<b>NAME OF SUBMITTER:</b>	JANIE MARTINEZ-HOLM
<b>SIGNATURE:</b>	/Janie Martinez-Holm/

### ASSIGNMENT

WHEREAS, we,

- |     |                   |    |  |
|-----|-------------------|----|--|
| (1) | Chieh-Han Wu      | of | 80655 No. 308, Guangxi Road<br>Qianzhen District, Kaohsiung City 806<br>Taiwan, R.O.C.             |
| (2) | Chung-Ju Lee      | of | 6F, No. 65, Lane 19, Quan-Xin Road<br>Xin-Zhuang Settlement, Hsinchu City<br>Taiwan, R.O.C.        |
| (3) | Cheng-Hsiung Tsai | of | No. 11, Lane 103, Huaxing Street<br>Zhunan Township, Miaoli County 350<br>Taiwan, R.O.C.           |
| (4) | Ming-Feng Shieh   | of | No. 68, Lane 186, Shenglong Street<br>Yongkang City, Tainan County 71089<br>Taiwan, R.O.C.         |
| (5) | Ru-Gun Liu        | of | No. 90, Chenggong 5th Street<br>Zhubei City, Hsinchu County 302<br>Taiwan, R.O.C.                  |
| (6) | Tien-I Bao        | of | 6F., No. 366, Section 4, Linghang N. Road<br>Dayuan Township, Taoyuan County 337<br>Taiwan, R.O.C. |
| (7) | Shau-Lin Shue     | of | 5F, No. 25, Alley 6, Lane 485, Kwung-Fu Road I<br>Hsinchu, Taiwan, R.O.C.                          |

have invented certain improvements in

### METHOD FOR INTEGRATED CIRCUIT PATTERNING

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

  X   of even date filed herewith; and  
       filed on                      and assigned application number                     ; 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.

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Inventor Name: Chieh-Han Wu

Residence Address: 80655 No. 308, Guangxi Road,  
Qianzhen District, Kaohsiung City 806 Taiwan, R.O.C.

✓ Dated: 12/04/2013

✓ Chieh-Han Wu  
Inventor Signature

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Inventor Name: Chung-Ju Lee

Residence Address: 6F, No. 65, Lane 19, Quan-Xin Road, Xin-Zhuang Settlement  
Hsinchu City Taiwan, R.O.C.

✓ Dated: 12/04/2013

✓ Chung-Ju Lee  
Inventor Signature

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Inventor Name: Cheng-Hsiung Tsai

Residence Address: No. 11, Lane 103, Huaxing Street, Zhunan Township  
Miaoli County 350 Taiwan, R.O.C.

✓ Dated: 12/4/2013  
Cheng-Hsiung Tsai

✓ 12/4/2013 Cheng-Hsiung Tsai  
Inventor Signature

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Inventor Name: Ming-Feng Shieh

Residence Address: No. 68, Lane 186, Shenglong Street  
Yongkang City, Tainan County 71089 Taiwan, R.O.C.

✓ Dated: 2013. 12/6

✓ Ming-Feng Shieh  
Inventor Signature

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Inventor Name: Ru-Gun Liu

Residence Address: No. 90, Chenggong 5th Street  
Zhubei City, Hsinchu County 302 Taiwan, R.O.C.

✓ Dated: 12/11. 2013

✓ Ru-Gun Liu  
Inventor Signature

---

Inventor Name: Tien-I Bao

Residence Address: 6F., No. 366, Section 4, Linghang N. Road  
Dayuan Township, Taoyuan County 337, Taiwan, R.O.C.

✓ Dated: 12/04/2013

✓ Tien-I Bao  
Inventor Signature

---

Inventor Name: Shau-Lin Shue

Residence Address: 5F, No. 25, Alley 6, Lane 485, Kwung-Fu Road I  
Hsinchu Taiwan, R.O.C.

✓ Dated: 12-04-2013  
Shau-Lin Shue

✓ Shau-Lin Shue  
Inventor Signature

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