

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																				
NATURE OF CONVEYANCE:	ASSIGNMENT																				
CONVEYING PARTY DATA																					
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Tzu-Chun LO</td> <td>03/20/2013</td> </tr> <tr> <td>Min-Hung CHENG</td> <td>03/15/2013</td> </tr> <tr> <td>Hsiao-Wei SU</td> <td>03/15/2013</td> </tr> <tr> <td>Jeng-Shiun HO</td> <td>03/15/2013</td> </tr> <tr> <td>Ching-Che TSAI</td> <td>03/15/2013</td> </tr> <tr> <td>Cheng-Cheng KUO</td> <td>03/15/2013</td> </tr> <tr> <td>Hua-Tai LIN</td> <td>03/20/2013</td> </tr> <tr> <td>Chia-Chu LIU</td> <td>03/15/2013</td> </tr> <tr> <td>Kuei-Shun CHEN</td> <td>03/20/2013</td> </tr> </tbody> </table>		Name	Execution Date	Tzu-Chun LO	03/20/2013	Min-Hung CHENG	03/15/2013	Hsiao-Wei SU	03/15/2013	Jeng-Shiun HO	03/15/2013	Ching-Che TSAI	03/15/2013	Cheng-Cheng KUO	03/15/2013	Hua-Tai LIN	03/20/2013	Chia-Chu LIU	03/15/2013	Kuei-Shun CHEN	03/20/2013
Name	Execution Date																				
Tzu-Chun LO	03/20/2013																				
Min-Hung CHENG	03/15/2013																				
Hsiao-Wei SU	03/15/2013																				
Jeng-Shiun HO	03/15/2013																				
Ching-Che TSAI	03/15/2013																				
Cheng-Cheng KUO	03/15/2013																				
Hua-Tai LIN	03/20/2013																				
Chia-Chu LIU	03/15/2013																				
Kuei-Shun CHEN	03/20/2013																				
RECEIVING PARTY DATA																					
<table border="1"> <tr> <td>Name:</td> <td>Taiwan Semiconductor Manufacturing Co., Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>No. 8, Li-Hsin Road 6</td> </tr> <tr> <td>Internal Address:</td> <td>Hsinchu Science Park</td> </tr> <tr> <td>City:</td> <td>Hsin-Chu</td> </tr> <tr> <td>State/Country:</td> <td>TAIWAN</td> </tr> <tr> <td>Postal Code:</td> <td>300-77</td> </tr> </table>		Name:	Taiwan Semiconductor Manufacturing Co., Ltd.	Street Address:	No. 8, Li-Hsin Road 6	Internal Address:	Hsinchu Science Park	City:	Hsin-Chu	State/Country:	TAIWAN	Postal Code:	300-77								
Name:	Taiwan Semiconductor Manufacturing Co., Ltd.																				
Street Address:	No. 8, Li-Hsin Road 6																				
Internal Address:	Hsinchu Science Park																				
City:	Hsin-Chu																				
State/Country:	TAIWAN																				
Postal Code:	300-77																				
PROPERTY NUMBERS Total: 1																					
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13792923</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13792923																
Property Type	Number																				
Application Number:	13792923																				
CORRESPONDENCE DATA																					
Fax Number:	2156894905																				
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																					
Phone:	215-979-1000																				
Email:	jsjiulianti@duanemorris.com																				
Correspondent Name:	DUANE MORRIS LLP (TSMC) IP DEPARTMENT																				
Address Line 1:	30 SOUTH 17TH STREET																				

CH \$40.00 13792923

Address Line 4: PHILADELPHIA, PENNSYLVANIA 19103-4196	
ATTORNEY DOCKET NUMBER:	2012.0750/1085.01063
NAME OF SUBMITTER:	Mark J. Marcelli
Signature:	/Mark J. Marcelli/
Date:	04/24/2013
<b>Total Attachments: 4</b> source=ExecutedAssign#page1.tif source=ExecutedAssign#page2.tif source=ExecutedAssign#page3.tif source=ExecutedAssign#page4.tif	

Serial No. 13/792,923  
filed March 11, 2013

ATTORNEY DOCKET NO.: 2012.0750/1085.01063

# ASSIGNMENT AND AGREEMENT

For value received, we, Tzu-Chun LO, Min-Hung CHENG, Hsiao-Wei SU, Jeng-Shiun HO, Ching-Che TSAI, Cheng-Cheng KUO, Hua-Tai LIN, Chia-Chu LIU and Kuei-Shun CHEN, hereby transfer to Taiwan Semiconductor Manufacturing Co., Ltd., with its principal place of business located at No. 8, Li-Hsin Road 6, Hsinchu Science Park, Hsin-Chu, Taiwan 300-77, Republic of China, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **SEMICONDUCTOR FIN FORMATION METHOD AND MASK SET**, described in a non-provisional application and under any and all Letters Patent and any divisions, continuations, continuations-in-part, reexamination certificates, reissues, and extensions thereof, or claiming priority therefrom that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Taiwan Semiconductor Manufacturing Co., Ltd. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Taiwan Semiconductor Manufacturing Co., Ltd. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Taiwan Semiconductor Manufacturing Co., Ltd. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Taiwan Semiconductor Manufacturing Co., Ltd. in the United States and in all countries foreign to the United States, or to such nominees as Taiwan Semiconductor Manufacturing Co., Ltd. may designate.

ATTORNEY DOCKET NO.: 2012.0750/1085.01063

We agree that, when requested, we shall, without charge to Taiwan Semiconductor Manufacturing Co., Ltd. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Inventor No. 1

Dated: 2013.03.20

Tzu-Chun LO  
Tzu-Chun LO

Residence:

4F.-2, No. 90, Gongjian Road, Xizhi District, New Taipei City 221, Taiwan, R.O.C.

Inventor No. 2

Dated: 2013.03.15.

Min-Hung CHENG  
Min-Hung CHENG

Residence:

3F., No. 9-5, Lane 143, Section 1, Xincheng S. Road, Da-an District, Taipei City 106, Taiwan, R.O.C.

Inventor No. 3

Dated: 2013.03.15

Hsiao-Wei SU  
Hsiao-Wei SU

Residence:

No. 14, Lane 153, Section 1, Zhongzheng S. Road, Guiren District, Tainan City 711, Taiwan, R.O.C.

ATTORNEY DOCKET NO.: 2012.0750/1085.01063

Inventor No. 4

Dated: 2013.3.15

Jeng-Shiun Ho  
Jeng-Shiun HO

Residence:

No. 343, Shiu-Fu Road, Hsin-Chu, Taiwan, R.O.C.

Inventor No. 5

Dated: 2013.3.15

Ching-Che Tsai  
Ching-Che TSAI

Residence:

15F., No. 93, Shengli 1<sup>st</sup> Road, Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Inventor No. 6

Dated: 2013/3/15

Cheng-Cheng Kuo  
Cheng-Cheng KUO

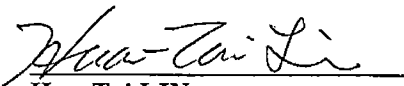
Residence:

7F., No.127, Puding 3<sup>rd</sup> Road, East District, Hsinchu City 300, Taiwan, R.O.C.

ATTORNEY DOCKET NO.: 2012.0750/1085.01063

Inventor No. 7

Dated: 2013.03.20


  
Hua-Tai LIN

Residence:

No. 26, Alley 10, Lane 194, Gaofeng Road, Hsinchu City 300, Taiwan, R.O.C.

Inventor No. 8

Dated: 2013.5.15

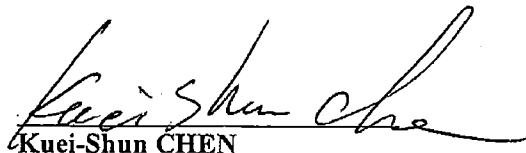
  
Chia-Chu LIU

Residence:

8F., No. 177, Ba-der Road, Shin-Chu City, Taiwan, R.O.C.

Inventor No. 9

Dated: 2013.3.20

  
Kuei-Shun CHEN

Residence:

No. 27, Lane 393, Min-Hu Road, Hsin-Chu 300, Taiwan, R.O.C.