PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ATA			
		Name	Execution Date	
Ming-Feng Shieh			02/04/2013	
Ken-Hsien Hsieh			02/04/2013	
Shih-Ming Chang			02/04/2013	
Chih-Ming Lai			02/04/2013	
Ru-Gun Liu			02/04/2013	
RECEIVING PARTY DA	 \TA			
Name:	TAIWAN SEMICO	NDUCTOR MANUFACTURING CO	MPANY, LTD.	
Street Address:	No. 8, Lin-Hsin Rd	l. 6		
Internal Address:	Science-Based Inc	dustrial Park		
City:	Hsin-Chu			
State/Country:	TAIWAN			
Postal Code:	300-77			
PROPERTY NUMBERS Total: 1 Property Type		Number		
Property Typ Application Number:		57137		
	1375			
Application Number:	1375 DATA			
Application Number: CORRESPONDENCE I Fax Number:	1375 DATA 2142000853			
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Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will be</i>	DATA 2142000853 e sent via US Mail 214-651-5000 eppsl@hayne	57137 when the fax attempt is unsuccessfu 0 esboone.com		
Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will be</i> Phone: Email: Correspondent Name:	2142000853 2142000853 e sent via US Mail 214-651-5000 eppsl@hayne HAYNES AN	57137 when the fax attempt is unsuccessfu 0 esboone.com D BOONE, LLP IP Section		
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Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will be</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	2142000853 2142000853 e sent via US Mail 214-651-5000 eppsl@hayne HAYNES AN 2323 Victory Suite 700	<i>when the fax attempt is unsuccessfu</i> o esboone.com D BOONE, LLP IP Section Avenue		
Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will be</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	DATA 2142000853 e sent via US Mail 214-651-5000 eppsl@hayne HAYNES AN 2323 Victory Suite 700 Dallas, TEXA	<i>when the fax attempt is unsuccessfu</i> o esboone.com D BOONE, LLP IP Section Avenue		
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Total Attachments: 3

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ASSIGNMENT

WHEREAS, we,

(1)	Ming-Feng Shieh	of	No. 68, Lane 186, Shenglong Street Yongkang City, Tainan County 71089 Taiwan (R.O.C.)
(2)	Ken-Hsien Hsieh	of	5F., No. 49, Sec. 2, Roosevelt Road Da-an District Taipei City 106, Taiwan (R.O.C.)
(3)	Shih-Ming Chang	of	11F., No. 7, Jiazheng 5th Street Zhubei City, Hsinchu County 302 Taiwan (R.O.C.)
(4)	Chih-Ming Lai	of	3F., No. 2, Lane 15, Peiying Street Hsinchu City 300, Taiwan (R.O.C.)
(5)	Ru-Gun Liu	of	No. 90, Chenggong 5th Street Zhubei City, Hsinchu County 302 Taiwan (R.O.C.)

have invented certain improvements in

SELF ALIGNED PATTERNING WITH MULTIPLE RESIST LAYERS

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

<u>X</u> of even date filed herewith; and

X_____ filed on <u>02-01-2013</u> and assigned application number <u>13/575,137</u>; 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

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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-Feng Shieh	
Residence Address:	No. 68, Lane 186, Shenglong Street, Yongkang City Tainan County 71089 Taiwan (R.O.C.)	
Dated: <u> >D13, ></u>	.,4 <u>Ming Feng Shieh</u> Inventor-Signature	(
Inventor Name:	Ken-Hsien Hsieh	
Residence Address:	5F., No. 49, Sec. 2, Roosevelt Road, Da-an District Taipei City 106, Taiwan (R.O.C.)	
Dated: 2013. 2.	4 Ken-Hsien Hsieh	
	Inventor Signature	

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Inventor Name:	Shih-Ming Chang			
Residence Address:	11F., No. 7, Jiazheng 5th Street, Zhubei City, Hsinchu County 302 Taiwan (R.O.C.)			
Dated: <u>70/3-0</u>	204 And Min hours			
Inventor Name:	Chih-Ming Lai			
Residence Address: 3F., No. 2, Lane 15, Peiying Street, Hsinchu City 300, Taiwan (R.O.C.)				
Dated: 2013,02	<u>Lething</u> <u>Lai</u> Inventor Signature			
Inventor Name:	Ru-Gun Liu			
Inventor Name: Residence Address:	Ru-Gun Liu No. 90, Chenggong 5th Street, Zhubei City Hsinchu County 302, Taiwan (R.O.C.)			

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RECORDED: 03/18/2013