

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Kuan-Yu Chen</td> <td>08/14/2009</td> </tr> <tr> <td>Hsien-Hsin Lin</td> <td>08/14/2009</td> </tr> <tr> <td>Chun-Feng Nieh</td> <td>08/19/2009</td> </tr> <tr> <td>Hsueh-Chang Sung</td> <td>08/18/2009</td> </tr> <tr> <td>Chien-Chang Su</td> <td>08/14/2009</td> </tr> <tr> <td>Tsz-Mei Kwok</td> <td>08/14/2009</td> </tr> </tbody> </table>		Name	Execution Date	Kuan-Yu Chen	08/14/2009	Hsien-Hsin Lin	08/14/2009	Chun-Feng Nieh	08/19/2009	Hsueh-Chang Sung	08/18/2009	Chien-Chang Su	08/14/2009	Tsz-Mei Kwok	08/14/2009
Name	Execution Date														
Kuan-Yu Chen	08/14/2009														
Hsien-Hsin Lin	08/14/2009														
Chun-Feng Nieh	08/19/2009														
Hsueh-Chang Sung	08/18/2009														
Chien-Chang Su	08/14/2009														
Tsz-Mei Kwok	08/14/2009														
RECEIVING PARTY DATA															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Taiwan Semiconductor Manufacturing Company, Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>No. 8, Li-Hsin Rd. 6, Science-Based Industrial 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 Company, Ltd.	Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park	City:	Hsin-Chu	State/Country:	TAIWAN	Postal Code:	300-77				
Name:	Taiwan Semiconductor Manufacturing Company, Ltd.														
Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park														
City:	Hsin-Chu														
State/Country:	TAIWAN														
Postal Code:	300-77														
PROPERTY NUMBERS Total: 1															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12545705</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12545705										
Property Type	Number														
Application Number:	12545705														
CORRESPONDENCE DATA															
<p>Fax Number: (214)200-0853</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 9727398643</p> <p>Email: linda.ingram@haynesboone.com</p> <p>Correspondent Name: HAYNES AND BOONE, LLP IP Section</p> <p>Address Line 1: 2323 Victory Avenue</p> <p>Address Line 2: Suite 700</p> <p>Address Line 4: Dallas, TEXAS 75219</p>															
ATTORNEY DOCKET NUMBER:	24061.1313														

CH \$40.00 12545705

500943391

PATENT
REEL: 023131 FRAME: 0976

NAME OF SUBMITTER:

Liem T. Do

Total Attachments: 4

source=1313Assignment#page1.tif

source=1313Assignment#page2.tif

source=1313Assignment#page3.tif

source=1313Assignment#page4.tif

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|------------------|----|---|
| (1) | Kuan-Yu Chen | of | 1F, No. 5, Alley 3, Lane 91, Sec. 4, Bade Rd.
Songshan District, Taipei City 105, Taiwan, R.O.C. |
| (2) | Hsien-Hsin Lin | of | 11F-2, No. 21, 23 Lane, Guan-Dong Rd.
Hsin-Chu City, Taiwan, R.O.C. |
| (3) | Chun-Feng Nieh | of | No. 103, Nankeng Rd. Baoshan Township
Hsinchu County 308, Taiwan, R.O.C. |
| (4) | Hsueh-Chang Sung | of | 3F., No. 208, Wencai St.
Zhubei City, Hsinchu County 302, Taiwan, R.O.C. |
| (5) | Chien-Chang Su | of | No. 45, Rehe 1 st St., Sanmin District
Kaohsiung City 807, Taiwan, R.O.C. |
| (6) | Tsz-Mei Kwok | of | Apt 9D, 128 Jin Shan Street
Hsin-Chu, Taiwan, R.O.C. |

have invented certain improvements in

METHOD FOR IMPROVING SELECTIVITY OF EPI PROCESS

for which we have executed an application for Letters Patent of the United States of America on August 21, 2009, as U.S. Serial No. 12/545,705; 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, R.O.C. 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 One Dollar (\$1.00) and other 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: Kuan-Yu Chen

Residence Address: 1F, No. 5, Alley 3, Lane 91, Sec. 4, Bade Rd.
Songshan District, Taipei City 105, Taiwan, R.O.C.

Dated: ✓ Kuan-Yu Chen

✓ 8/14 2009
Inventor Signature

Inventor Name: Hsien-Hsin Lin

Residence Address: 11F-2, No. 21, 23 Lane, Guan-Dong Rd.
Hsin-Chu City, Taiwan, R.O.C.

Dated: ✓ Hsien-Hsin Lin

✓ 8.14. 2009
Inventor Signature

Docket No.: 2009-0294 / 24061.1313

Customer No.: 42717

Inventor Name: Chun-Feng Nieh

Residence Address: No. 103, Nankeng Rd. Baoshan Township
Hsinchu County 308, Taiwan, R.O.C.

Dated: ✓ Chun-Feng Nieh ✓ 8/19/2009
Inventor Signature

Inventor Name: Hsueh-Chang Sung

Residence Address: 3F., No. 208, Wencai St.
Zhubei City, Hsinchu County 302, Taiwan, R.O.C.

Dated: ✓ Hsueh-Chang Sung ✓ 8/18/2009
Inventor Signature

Inventor Name: Chien-Chang Su

Residence Address: No. 45, Rehe 1st St., Sanmin District
Kaohsiung City 807, Taiwan, R.O.C.

Dated: ✓ 8/14/2009

✓ Chien-Chang Su
Inventor Signature

Inventor Name: Tsz-Mei Kwok

Residence Address: No. 8, Li-Hsin Rd., 6, Science-Based Industrial Park
Hsin-Chu, Taiwan 300-77, R.O.C.

Dated: ✓ 8/14/2009

✓ Tsz-Mei Kwok
Inventor Signature