

## PATENT ASSIGNMENT

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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>Chung-Hsing Wang</td> <td>02/07/2012</td> </tr> <tr> <td>King-Ho Tam</td> <td>02/07/2012</td> </tr> <tr> <td>Huang-Yu Chen</td> <td>02/07/2012</td> </tr> </tbody> </table>		Name	Execution Date	Chung-Hsing Wang	02/07/2012	King-Ho Tam	02/07/2012	Huang-Yu Chen	02/07/2012
Name	Execution Date								
Chung-Hsing Wang	02/07/2012								
King-Ho Tam	02/07/2012								
Huang-Yu Chen	02/07/2012								
RECEIVING PARTY DATA									
Name:	Taiwan Semiconductor Manufacturing Co., Ltd.								
Street Address:	No. 8, Li-Hsin Rd. 6								
Internal Address:	Hsin-Chu 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>13331329</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13331329				
Property Type	Number								
Application Number:	13331329								
CORRESPONDENCE DATA									
Fax Number:	(216)502-0601								
Phone:	216-502-0600								
Email:	Docketing@eschweilerlaw.com								
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	ESCHWEILER & ASSOCIATES								
Address Line 1:	629 EUCLID AVE., SUITE 1000								
Address Line 4:	CLEVELAND, OHIO 44114								
ATTORNEY DOCKET NUMBER:	TSMCP119US								
NAME OF SUBMITTER:	Thomas G. Eschweiler								
Total Attachments: 5									

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U.S. Patent Appln. No.

Docket No. TSMCP119US

Filing Date

Client Docket No. TSMC2011-1270

**PATENT ASSIGNMENT**

**PARTIES TO THE ASSIGNMENT**

Assignor(s):

Chung-Hsing Wang  
4F., No. 85, Shuangfong Road  
Baoshan Township  
Hsinchu County  
308, Taiwan (R.O.C.)

Assignor(s):

King-Ho Tam  
14/F, No. 125, Lane 19  
Guanxin Road  
Hsinchu City  
Taiwan (R.O.C.)

Assignor(s):

Huang-Yu Chen  
No. 403, Xuefu E. Rd.  
Zhudong Township  
Hsinchu County  
310, Taiwan (R.O.C.)

Assignee:

Taiwan Semiconductor Manufacturing Co., Ltd.  
No. 8, Li-Hsin Rd. 6, Hsin-Chu Science Park  
Hsin-Chu, Taiwan 300-77  
Republic of China

**AGREEMENT**

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled  
**“AUTOMATIC PLACE AND ROUTE METHOD FOR ELECTROMIGRATION  
TOLERANT POWER DISTRIBUTION”** for which:

a non-provisional application for United States Letters Patent:

was executed on even date preparatory to filing (each inventor should sign this  
Assignment on the same day as he/she signs the Declaration and Power of  
Attorney); or

U.S. Patent Appln. No.

Docket No. TSMCP119US

Filing Date

Client Docket No. TSMC2011-1270

- was filed on \_\_\_\_\_ and accorded U.S. Serial No. \_\_\_\_\_; or
- will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, the attorneys associated with Customer No. \_\_\_\_\_, to insert below in this document this APPLICATION's U.S. Serial Number and filing date, when known:

U.S. Serial No. \_\_\_\_\_,

filed on \_\_\_\_\_.

WHEREAS, ASSIGNEE (listed above), a corporation of the Republic of China is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said invention and improvements, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S)

U.S. Patent Appln. No.

Docket No. TSMCP119US

Filing Date

Client Docket No. TSMC2011-1270

hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

2/7/2012  
\_\_\_\_\_  
Date

*Chung Hsing Wang*  
\_\_\_\_\_  
Name 1<sup>st</sup> Inventor Chung-Hsing Wang

U.S. Patent Appln. No.

Docket No. TSMCP119US

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Client Docket No. TSMC2011-1270

02/07/2012  
Date

King Ho Tam  
Name 2<sup>nd</sup> Inventor King-Ho Tam

U.S. Patent Appln. No.

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2012/2/7

Date

Huang-Yu Chen

Name 3<sup>rd</sup> Inventor Huang-Yu Chen