

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>Chyi-Tsong NI</td> <td>03/14/2011</td> </tr> <tr> <td>I-Shi WANG</td> <td>03/14/2011</td> </tr> <tr> <td>Hsin-Kuei LEE</td> <td>03/14/2011</td> </tr> <tr> <td>Ching-Hou SU</td> <td>03/14/2011</td> </tr> </tbody> </table>		Name	Execution Date	Chyi-Tsong NI	03/14/2011	I-Shi WANG	03/14/2011	Hsin-Kuei LEE	03/14/2011	Ching-Hou SU	03/14/2011
Name	Execution Date										
Chyi-Tsong NI	03/14/2011										
I-Shi WANG	03/14/2011										
Hsin-Kuei LEE	03/14/2011										
Ching-Hou SU	03/14/2011										
RECEIVING PARTY DATA											
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.										
Street Address:	No. 8, Li-Hsin Rd. VI, Hsinchu Science Park										
City:	Hsinchu										
State/Country:	TAIWAN										
Postal Code:	300										
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>13048127</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13048127						
Property Type	Number										
Application Number:	13048127										
CORRESPONDENCE DATA											
Fax Number:	(703)518-5499										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	7036841111										
Email:	sramunto@ipfirm.com										
Correspondent Name:	Lowe Hauptman Ham & Berner, LLP (TSMC)										
Address Line 1:	1700 Diagonal Road, Suite 300										
Address Line 4:	Alexandria, VIRGINIA 22314										
ATTORNEY DOCKET NUMBER:	T5057-Y435										
NAME OF SUBMITTER:	Yoon S. Ham										
Total Attachments: 1 source=efiledassgn#page1.tif											

OP \$40.00 13048127

PATENT

501467020

REEL: 025955 FRAME: 0950

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- 1) Chyi-Tsong NI
- 2) I-Shi WANG
- 3) Hsin-Kuei LEE
- 4) Ching-Hou SU

who has made a certain new and useful invention, hereby sells, assigns and transfers unto

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD. having a place of business at **No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C.**

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

SEMICONDUCTOR APPARATUS

(a) for which an application for United States Letters Patent was filed on 3-15-2011, and identified by United States Patent Application No. 13/048,127; or

(b) for which an application for United States Letters Patent was executed on _____,

and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the date indicated beside my signature:

1) Chyi-Tsong NI
Name: Chyi-Tsong NI

2011.3.14
Date:

2) I-Shi WANG
Name: I-Shi WANG

2011.3.14
Date:

3) Hsin-Kuei Lee
Name: Hsin-Kuei LEE

2011.03.14
Date:

4) Ching-hou SU
Name: Ching-Hou SU

2011.3.14
Date: