

# 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>Chien-Shao Tang</td> <td>05/22/2008</td> </tr> <tr> <td>Dah-Chuen Ho</td> <td>05/22/2008</td> </tr> <tr> <td>Yu-Chang Jong</td> <td>05/22/2008</td> </tr> <tr> <td>Zhe-Yi Wang</td> <td>05/22/2008</td> </tr> <tr> <td>Yuh-Hwa Chang</td> <td>05/22/2008</td> </tr> <tr> <td>Yogendra Yadav</td> <td>05/25/2008</td> </tr> </tbody> </table>			Name	Execution Date	Chien-Shao Tang	05/22/2008	Dah-Chuen Ho	05/22/2008	Yu-Chang Jong	05/22/2008	Zhe-Yi Wang	05/22/2008	Yuh-Hwa Chang	05/22/2008	Yogendra Yadav	05/25/2008
Name	Execution Date															
Chien-Shao Tang	05/22/2008															
Dah-Chuen Ho	05/22/2008															
Yu-Chang Jong	05/22/2008															
Zhe-Yi Wang	05/22/2008															
Yuh-Hwa Chang	05/22/2008															
Yogendra Yadav	05/25/2008															
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</td> </tr> <tr> <td>Internal Address:</td> <td>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 R.O.C.</td> </tr> </table>			Name:	Taiwan Semiconductor Manufacturing Company, Ltd.	Street Address:	No. 8, Li-Hsin Rd. 6	Internal Address:	Science-Based Industrial Park	City:	Hsin-Chu	State/Country:	TAIWAN	Postal Code:	300-77 R.O.C.		
Name:	Taiwan Semiconductor Manufacturing Company, Ltd.															
Street Address:	No. 8, Li-Hsin Rd. 6															
Internal Address:	Science-Based Industrial Park															
City:	Hsin-Chu															
State/Country:	TAIWAN															
Postal Code:	300-77 R.O.C.															
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>12127629</td> </tr> </tbody> </table>			Property Type	Number	Application Number:	12127629										
Property Type	Number															
Application Number:	12127629															
CORRESPONDENCE DATA																
<p>Fax Number: (972)732-9218</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 972-732-1001</p> <p>Email: sanderson@slater-matsil.com</p> <p>Correspondent Name: Slater &amp; Matsil, L.L.P.</p> <p>Address Line 1: 17950 Preston Road</p> <p>Address Line 2: Suite 1000</p> <p>Address Line 4: Dallas, TEXAS 75252</p>																
ATTORNEY DOCKET NUMBER:	TSM07-0836															

CH \$40.00 12127629

**500550536**

**PATENT**  
**REEL: 021007 FRAME: 0988**

NAME OF SUBMITTER:

Michelle B. Sanderson

Total Attachments: 2

source=TSM07-0836\_Assignment#page1.tif

source=TSM07-0836\_Assignment#page2.tif

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TSMC, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TSMC, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to TSMC, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TSMC, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TSMC, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year:

TITLE OF INVENTION	<i>Schottky Diodes Having Low-Voltage and High-Concentration Rings</i>			
SIGNATURE OF INVENTOR AND NAME	<i>Chien-Shao Tang</i> Chien-Shao Tang	<i>Dah-Chuen Ho</i> Dah-Chuen Ho	<i>Yu-Chang Jong</i> Yu-Chang Jong	<i>Zhe-Yi Wang</i> Zhe-Yi Wang
DATE	<i>May 22 / 2008</i>	<i>5/22 - 2008</i>	<i>5/22 2008</i>	<i>5/22 '08</i>
RESIDENCE (City, County, State)	Hsin-Chu, Taiwan	Taichung, Taiwan	Hsin-Chu, Taiwan	Hsin-Chu, Taiwan

ATTORNEY DOCKET NO.  
TSM07-0836

**ASSIGNMENT**

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), a corporation organized and existing under the laws of Taiwan, the Republic of China, with its principal office at No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C., is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TSMC, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TSMC, as assignee of my entire right, title and interest. I declare that I have not executed and will not execute any agreement in conflict herewith.

I also hereby sell and assign to TSMC, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TSMC, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TSMC, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	<b>Schottky Diodes Having Low-Voltage and High-Concentration Rings</b>			
SIGNATURE OF INVENTOR AND NAME	Yuh-Hwa Chang <i>Yuh-Hwa Chang</i>	Yogendra Yadav <i>Yogendra Yadav</i> 28/05/08		
DATE	5/22 '08	28/05/08		
RESIDENCE (City, County, State)	Shulin, Taiwan	Hsin-Chu, Taiwan		

TSM07-0836

Page 2 of 2

Assignment

RECORDED: 05/28/2008

PATENT  
26-MAY-2008 12:00 PM FROM  
REEL: 021007 FRAME: 0991