

05-12-2005



TSM04-0464

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To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):

Chi-Hsuen Chang  
Jun Xiu Liu  
Tsung-Yi Huang  
Chung-I Chen  
Tzu-Chiang Sung  
Chih Po Huang  
Rann Shyan Yeh

Execution Date(s) April 29, 2005

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Taiwan Semiconductor Manufacturing Company, Ltd.

Internal Address: \_\_\_\_\_

Street Address: No. 8, Li-Hsin Rd. 6

Science-Based Industrial Park

City: Hsin-Chu

State: \_\_\_\_\_

Country: Taiwan, ROC Zip: 300-77

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

4. Application or patent number(s):

A. Patent Application No.(s)



This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Mark E. Courtney

Slater & Matsil, L.L.P.

Internal Address: \_\_\_\_\_

Street Address: 17950 Preston Rd.

Suite 1000

City: Dallas

State: Texas Zip: 75252-5793

Phone Number: 972-732-1001

Fax Number: 972-732-9218

Email Address: courtney@slater-matsil.com

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card  
☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 50-1065

Authorized User Name Mark E. Courtney

9. Signature:

*Mark E. Courtney*  
Signature

May 5, 2005

Date

Mark E. Courtney, Reg. No. 36,491

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

3

## 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	Method and Apparatus for a Semiconductor Device having Low and High Voltage Transistors			
SIGNATURE OF INVENTOR AND NAME	<i>Chi-Hsuen Chang</i> Chi-Hsuen Chang	<i>Jun Xiu Liu</i> Jun Xiu Liu	<i>Tsung-Yi Huang</i> Tsung-Yi Huang	<i>Chung-I Chen</i> Chung-I Chen
DATE	<i>4/29 '05</i>	<i>4/29 '05</i>	<i>4/29 '05</i>	<i>4/29 '05</i>
RESIDENCE (City, County, State)	Hsin-Chu, Taiwan, R.O.C.	Hsin-Chu, Taiwan, R.O.C.	Hsin-Chu, Taiwan, R.O.C.	Hsin-Chu, Taiwan, R.O.C.

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>Method for Controlling High Voltage Device Id-Vg Curve Characteristic by Controlling the STI Transition Angle and Circuit Constructed Thereby</i>			
SIGNATURE OF INVENTOR AND NAME	<i>Tzu-Chiang Sung</i> Tzu-Chiang Sung	<i>Chih Po Huang</i> Chih Po Huang	<i>Rann Shyan Yeh</i> Rann Shyan Yeh	
DATE	<i>4/29 '2005</i>	<i>4/29 '2005</i>	<i>4/29 '2005</i>	
RESIDENCE (City, County, State)	Jhubel City, Taiwan, R.O.C.	Hsin-Chu, Taiwan, R.O.C.	Hsin-Chu, Taiwan, R.O.C.	