# PATENT ASSIGNMENT

Electronic Version v1.1
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|---|---|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---|---|
| Cheng-Tung Lin | 04/10/2013 |
| Teng-Chun Tsai | 04/10/2013 |
| Li-Ting Wang | 04/10/2013 |
| Chi-Yuan Chen | 04/10/2013 |
| Kuo-Yin Lin | 04/10/2013 |
| Wan-Chun Pan | 04/10/2013 |
| Ming-Liang Yen | 04/10/2013 |
| Ching-Wei Tsai | 04/10/2013 |
| Kuo-Cheng Ching | 04/10/2013 |
| Huicheng Chang | 04/10/2013 |
| Chih-Hao Wang | 04/10/2013 |

RECEIVING PARTY DATA

| | |
|---|---|
| Name: | Taiwan Semiconductor Manufacturing Company |
| Street Address: | No. 8, Li-Hsin Rd. 6 |
| Internal Address: | Science-Based Industrial Park |
| City: | Hsin-Chu |
| State/Country: | TAIWAN |
| Postal Code: | 300-77 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---|---|
| Application Number: | 13861247 |

CORRESPONDENCE DATA

Fax Number: 9727329218
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*
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OP $40.00 13861247

Correspondent Name: Slater & Matsil, L.L.P.
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| | |
|---|---|
| ATTORNEY DOCKET NUMBER: | TSM13-0143 |
| NAME OF SUBMITTER: | Donna Turner |
| Signature: | /Donna Turner/ |
| Date: | 04/12/2013 |

Total Attachments: 3
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ATTORNEY DOCKET NO.
TSM13-0143

# 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 | ***Semiconductor Devices and Methods of Manufacture Thereof*** | | | |
| SIGNATURE OF INVENTOR AND NAME | Cheng-Tung Lin<br>Cheng-Tung Lin | Teng-Chun Tsai<br>Teng-Chun Tsai | Li-Ting Wang | CHI-YUAN CHEN<br>Chi-Yuan Chen |
| DATE | 4/10/2013 | 4/10/2013 | 04/10/2013 | 04/10/2013 |
| RESIDENCE (City, County, State) | Jhudong Township, Taiwan<br>~~4/10/20~~ | Hsin-Chu, Taiwan | Tainan, Taiwan | Hsin-Chu, Taiwan |

林正東修正

ATTORNEY DOCKET NO.
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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

| | | | | |
|---|---|---|---|---|
| TITLE OF INVENTION | ***Semiconductor Devices and Methods of Manufacture Thereof*** | | | |
| SIGNATURE OF INVENTOR AND NAME | Kuo-Yin Lin<br>Kuo-Yin Lin | Wan-Chun Pan<br>Wan-Chun Pan | Ming-Liang Yen<br>Ming-Liang Yen | Ching Wei Tsai<br>Ching-Wei Tsai |
| DATE | 2013/4/10 | 2013/4/10 | 2013/4/10 | 2013/4/10 |
| RESIDENCE (City, County, State) | Jhubei City, Taiwan | Hsin-Chu, Taiwan | New Taipei City, Taiwan | Taoyuan City, Taiwan |

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

| | | | | |
|---|---|---|---|---|
| TITLE OF INVENTION | ***Semiconductor Devices and Methods of Manufacture Thereof*** | | | |
| SIGNATURE OF INVENTOR AND NAME | Kuo-Cheng Ching<br>Kuo-Cheng Ching | Huicheng Chang<br>Huicheng Chang | Chih-Hao Wang<br>Chih-Hao Wang | |
| DATE | 4/10/13 | 4/10/13 | 4/10/13 | |
| RESIDENCE (City, County, State) | Zhubei City, Taiwan | Tainan City, Taiwan | Hsin-Chu, Taiwan | |