PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------|----------------|
| Mark van Dal | 10/08/2010 |

RECEIVING PARTY DATA

| Name: | Taiwan Semiconductor Manufacturing Company, Ltd. | |
|-----------------|--|--|
| Street Address: | No. 8, Li-Hsin Road 6 | |
| City: | Hsin-Chu | |
| State/Country: | ate/Country: TAIWAN | |
| Postal Code: | 300-77 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12900895 |

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 24061.1567

NAME OF SUBMITTER: Kelly G. Lyle

Total Attachments: 2

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OF \$40.00 129008

PATENT REEL: 025113 FRAME: 0916

Docket No.: 2010-0648 / 24061.1567 Customer No. 42717

ASSIGNMENT

WHEREAS, I

Mark van Dal of

IJzerenmolenstraat 126 3001 Heverlee, Belgium

has invented certain improvements in

METHOD OF FABRICATING A SEMICONDUCTOR DEVICE HAVING AN EPITAXY REGION

for which I filed an application for Letters Patent of the United States of America on October 08, 2010, as U.S. Serial No. 12/900, 895; and

WHEREAS, I authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and I hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

R-262104

PATENT REEL: 025113 FRAME: 0917

Docket No.: 2010-0648 / 24061.1567

Customer No.: 42717

FULL NAME OF INVENTOR: Mark van Dal.

INVENTOR'S SIGNATURE:

DATED: <u>08-10-20</u>10

RESIDENCE:

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CITIZENSHIP: NL

R-262105

RECORDED: 10/08/2010

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PATENT REEL: 025113 FRAME: 0918