

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2592100

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>WEI-JEN CHEN</td> <td>10/01/2013</td> </tr> <tr> <td>YEN-YU CHEN</td> <td>10/01/2013</td> </tr> <tr> <td>CHANG-SHENG LEE</td> <td>10/01/2013</td> </tr> <tr> <td>WEI ZHANG</td> <td>10/01/2013</td> </tr> </tbody> </table>		Name	Execution Date	WEI-JEN CHEN	10/01/2013	YEN-YU CHEN	10/01/2013	CHANG-SHENG LEE	10/01/2013	WEI ZHANG	10/01/2013
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WEI ZHANG	10/01/2013										
RECEIVING PARTY DATA											
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.										
Street Address:	NO. 8, LI-HSIN ROAD.										
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City:	HSIN-CHU										
State/Country:	TAIWAN										
Postal Code:	300-77										
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>14049657</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14049657						
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Application Number:	14049657										
CORRESPONDENCE DATA											
Fax Number:	(703)205-8050										
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Correspondent Name:	BIRCH, STEWART, KOLASCH, & BIRCH, LLP.										
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ATTORNEY DOCKET NUMBER:	0941-2827PUS1										
NAME OF SUBMITTER:	MUSSIÉ B. BEYENE										

Signature:	/Mussié B. Beyene/
Date:	10/23/2013
Total Attachments: 2 source=2013-10-23 - Assignment - 0941-2827PUS1#page1.tif source=2013-10-23 - Assignment - 0941-2827PUS1#page2.tif	

ASSIGNMENT

WHEREAS, Wei-Jen CHEN, Yen-Yu CHEN, Chang-Sheng LEE, and Wei ZHANG hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

Title: MECHANISMS FOR MONITORING IMPURITY IN HIGH-K DIELECTRIC FILM

Filed: October 9, 2013 Serial No. 14/049,657
Executed on: October 1, 2013

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd. of No.8, Li-Hsin Road. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C. hereinafter referred to as ASSIGNEES, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.

ASSIGNMENT

2013.10.1 wei-jen Chen
 Date Name: Wei-Jen CHEN (Last name: CHEN)

2013.10.1 Yen-Yu Chen
 Date Name: Yen-Yu CHEN (Last name: CHEN)

2013.10.1 Chang-sheng Lee
 Date Name: Chang Sheng LEE (Last name: LEE)

2013.10.1 Wei Zhang
 Date Name: Wei ZHANG (Last name: ZHANG)