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# PATENT ASSIGNMENT COVER SHEET

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WEN-TING CHU	11/26/2013
KUO-CHI TU	11/26/2013
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CHIN-CHIEH YANG	11/26/2013
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Property Type	Number
Application Number:	15262703

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SIGNATURE:	/David W. Potashnik/
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PATENT REEL: 039703 FRAME: 0822 U.S. Patent Appln. No. Filing Date:

## PATENT ASSIGNMENT

#### PARTIES TO THE ASSIGNMENT

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TSMC Docket No. TSMC2013-0756
Docket No.TSMCP347US

U.S. Patent Appln. No. Filing Date: Assignor(s): Sheng-Hung Shih 7F., No.123-9, Ln. 89, Sec. 1, Guangfu Rd. East Dist., Hsinchu City 300, Taiwan (R.O.C.) Assignee: Taiwan Semiconductor Manufacturing Co., Ltd. No. 8, Li-Hsin Rd. 6, Hsin-Chu Science Park Hsin-Chu, Taiwan 300-77 Republic of China AGREEMENT WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "TOP ELECTRODE BLOCKING LAYER FOR RRAM DEVICE" for which: a non-provisional application for United States Letters Patent: was executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney); or was filed on \_\_\_\_\_ and accorded U.S. Serial No. \_\_\_\_; or will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, the attorneys associated with Customer No. \_\_\_\_\_, to insert below in this document this APPLICATION's U.S. Serial Number and filing date, when known: U.S. Serial No.

WHEREAS, ASSIGNEE (listed above), a corporation of the Republic of China is desirous of acquiring the entire right, title and interest in and to the invention and in and to

filed on

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any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and itransfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said invention and improvements, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise. said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date

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Filing Date:

1 1/26 2013

Date

/ When - Timy Chi

Name 2<sup>nd</sup> Inventor Wen-Ting Chu

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Filing Date:

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Date

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20|3,11,26 Date

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7013 / 1/ 26 Date

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