PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YU-WEI TING	07/31/2014
CHI-WEN LIU	08/01/2014
CHUN-YANG TSAI	07/31/2014
KUO-CHING HUANG	07/31/2014

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14450809

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NAME OF SUBMITTER:	THOMAS G. ESCHWEILER
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DATE SIGNED:	08/04/2014

Total Attachments: 6

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PATENT REEL: 033456 FRAME: 0735

U.S. Patent Appln. No. Filing Date:

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

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AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "AN INNOVATIVE APPROACH OF 4F² DRIVER FORMATION FOR HIGH-DENSITY RRAM AND MRAM" for which:

a non-provisional application for United States Letters Patent:

PATENT REEL: 033456 FRAME: 0736

Page 1 of 6

U.S. Patent Appln. No. Filing Date:

	\boxtimes	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.
		filed on

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 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 transfer 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

PATENT REEL: 033456 FRAME: 0737

Page 2 of 6

TSMC Docket No. TSMC2012-0729CIP

Docket No. TSMCP196USA

Filing Date:

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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.

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PATENT REEL: 033456 FRAME: 0738

Page 3 of 6

U.S. Patent Appln. No.

Filing Date:

108/01/2014

Date

Name 2nd Inventor Chi-V

PATENT REEL: 033456 FRAME: 0739

Page 4 of 6

U.S. Patent Appln. No.

Filing Date:

PATENT REEL: 033456 FRAME: 0740

Page 5 of 6

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2004/01/31

Date

Name 4th Inventor Kuo-Ching Huang

PATENT REEL: 033456 FRAME: 0741

Page 6 of 6

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