

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MING CHYI LIU	03/03/2014
YUAN-TAI TSENG	03/03/2014
CHERN-YOW HSU	03/03/2014
SHIH-CHANG LIU	03/03/2014
CHIA-SHIUNG TSAI	03/03/2014
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Property Type	Number
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DATE SIGNED:	09/21/2019

Total Attachments: 7

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PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

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Republic of China

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled
"RRAM CELL STRUCTURE WITH CONDUCTIVE ETCH-STOP LAYER" 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); or

was filed on _____ and accorded U.S. Serial No. _____; or

I hereby authorize and request my attorney associated with Customer No.
107476, to insert on the designated lines below the filing date and application
number of said application 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

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Docket No. TSMCP379US

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.

2014/3/3
Date

Ming Chyi Liu
Name 1st Inventor Ming Chyi Liu

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2/14/13
Date

Yuan-Tai Tseng
Name 2nd Inventor Yuan-Tai Tseng

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Docket No. TSMCP379US

2014/3/3
Date

Chen Ym, Hsin
Name 3rd Inventor Chen-Yow Hsu

TSMC Docket No. TSMC2013-1590
Docket No. TSMCP379US

2014/03/03
Date

Shih-Chang Liu
Name 4th Inventor Shih-Chang Liu

TSMC Docket No. TSMC2013-1590
Docket No. TSMCP379US

03/03/2014
Date

Chia-Shiung Tsai
Name 5th Inventor Chia-Shiung Tsai