## 505452088 04/30/2019

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date	
KUO-AN LIU	04/15/2019	
CHUNG-CHENG WU	04/15/2019	
HARRY-HAK-LAY CHUANG	04/16/2019	
GWAN-SIN CHANG	04/15/2019	
TIEN-WEI CHIANG	04/16/2019	
ZHIQIANG WU	04/15/2019	
CHIA-HSIANG CHEN	04/22/2019	

### **RECEIVING PARTY DATA**

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#### **PROPERTY NUMBERS Total: 1**

Property Type	Number			
Application Number:	16379901			

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NAME OF SUBMITTER: DAVID W. POTASHNIK

SIGNATURE: /David W. Potashnik/

505452088 PATENT REEL: 049030 FRAME: 0724

DATE SIGNED:	04/30/2019
Total Attachments: 9	
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PATENT REEL: 049030 FRAME: 0725

# PATENT ASSIGNMENT

## **PARTIES TO THE ASSIGNMENT**

	Assignor(s): Kuo-An Liu
	Assignor(s): Chung-Cheng Wu
	Assignor(s): Harry-Hak-Lay Chuang
	Assignor(s): Gwan-Sin Chang
	Assignor(s): Tien-Wei Chiang
	Assignor(s): Zhiqiang Wu
	Assignor(s): Chia-Hsiang Chen
	Assignee: Taiwan Semiconductor Manufacturing Co., Ltd. No. 8, Li-Hsin Rd. 6, Hsin-Chu Science Park Hsin-Chu, Taiwan 300-77 Republic of China
Δ	GREEMENT
	WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled
66	PROTECTION OF MRAM FROM EXTERNAL MAGNETIC FIELD USING MAGNETIC-
F	IELD-SHIELDING STRUCTURE" for which:
	a non-provisional application for United States Letters Patent:
	$oxed{\boxtimes}$ was executed on even date preparatory to filing (each inventor should sign this
	Assignment on the same day as he/she signs the Declaration); or
	was filed on and accorded U.S. Serial No; or

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I hereby author	ize and r	equest m	y attorney	associated	with Cu	stomer	No
<u>107476</u> , to inser	t on the d	designated	lines belo	w the filing	date and	applica	itior
number of said application when known:							
U.S. Serial No.				,			
filed on	<del></del>						

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 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

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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.

/ o f · / / Date

Name 1st Inventor Kuo-An Liu

Kuo-An Liu

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4/15/19

Date

Name 2nd Invertor Chung-Oheng Wu

Name

3rd Inventor Harry-Hak-Lay Chuang

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 $\frac{\text{Nolf } /04/ 16}{\text{Date}}$ 

Name 5<sup>th</sup> Inventor Tien-Wei Chiang

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Name 6<sup>th</sup> Inventor Zhiqiang Wu

<u>γρος (, ψ.νν</u> Date

Name 7<sup>th</sup> Inventor Chia-Hsiang Chen

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