

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZONG-YOU LUO	09/16/2019
YA-JUI TSOU	09/09/2019
CHEE-WEE LIU	09/04/2019
SHAO-YU LIN	09/10/2019
LIANG-CHOR CHUNG	09/10/2019
CHIH-LIN WANG	09/10/2019

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
Street Address:	8, LI-HSIN RD. 6
Internal Address:	HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300-78
Name:	NATIONAL TAIWAN UNIVERSITY
Street Address:	NO.1, SEC. 4, ROOSEVELT ROAD
City:	TAIPEI
State/Country:	TAIWAN
Postal Code:	10617

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17871983

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name: R. BURNS ISRAELSEN

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Address Line 4: PARK CITY, UTAH 84098	
ATTORNEY DOCKET NUMBER:	T1516.10610US02
NAME OF SUBMITTER:	R. BURNS ISRAELSEN
SIGNATURE:	/R. Burns Israelsen, Reg. No. 42685/
DATE SIGNED:	07/28/2022
Total Attachments: 3 source=T1516-10610US02_Assignment#page1.tif source=T1516-10610US02_Assignment#page2.tif source=T1516-10610US02_Assignment#page3.tif	

ASSIGNMENT

This assignment agreement is applicable to an invention entitled (Invention Title) _____
MAGNETORESISTIVE MEMORY DEVICE AND MANUFACTURING METHOD
THEREOF

The PATENT RIGHTS referred to in this agreement are:

(check one) ☐ a patent application for this invention, executed by the ASSIGNOR(S)
 concurrently with this assignment.

☒ U.S. patent application Serial No. 16/572,329, filed September 16, 2019

☐ a U.S. patent application based on PCT International Application

No. _____ filed on (date) _____ (U.S. patent application
 Serial No. _____, if known).

☐ U.S. patent No. _____, issued _____.

The PATENT RIGHTS also include all divisions, reissues, continuations and extensions of
 the patents and patent applications identified above.

The PATENT RIGHTS assigned under this agreement are:

☒ U.S. patent rights only.

The ASSIGNOR(S) referred to in this agreement is (or are) the inventor(s) whose signatures
 appear on page 2 of this Assignment and any Supplemental Sheet(s).

The ASSIGNEE referred to in this agreement is:

(Name of Assignee) 1.TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.

2.NATIONAL TAIWAN UNIVERSITY

(Address) 1.NO.8, LI-HSIN RD.6, SCIENCE-BASED INDUSTRIAL PARK, HSINCHU,
TAIWAN 300, R.O.C.

2.NO.1, SEC. 4, ROOSEVELT ROAD, TAIPEI 10617, TAIWAN, R.O.C.

The ASSIGNEEs are:

(check one) ☐ An individual.

☐ A Partnership.

☒ A Corporation of 1.TAIWAN, R.O.C.

☒ A University of 2.TAIWAN, R.O.C. (specify state or country)

☐ (other) _____

The ASSIGNOR(S), in consideration of \$10.00 paid by the ASSIGNEE, and other good and
 valuable consideration, receipt of which is acknowledged, hereby assign(s) the following
 rights to the ASSIGNEE, its successors and assigns:

the full and exclusive right to the invention;

the entire right, title and interest in and to the PATENT RIGHTS;

the right to sue and recover for any past infringement; and

the right to claim priority under 35 USC 119, 35 USC 120, or any other applicable
 provisions, based on any earlier patent applications for this invention.

THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO
ASSIGNEE: 1.TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.
2.NATIONAL TAIWAN UNIVERSITY
INVENTION TITLE: MAGNETORESISTIVE MEMORY DEVICE AND
MANUFACTURING METHOD THEREOF

As to all U.S. patent applications assigned under this agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademark to issue all Letters Patent to the ASSIGNEE as the assignee of the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE, its successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE, or its representatives, any fact known to the ASSIGNOR(S) with respect to said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause and all Letter Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention.

The ASSIGNOR(S) authorize(s) the attorneys and agents who have the power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

Zong-You LUO

Name of sole or first inventor

Zong-You Luo

Signature

2019.09.16

Date

Ya-Jui TSOU

Name of second inventor, if any

Ya-Jui Tsou

Signature

2019.09.09

Date

Chee-Wee LIU

Name of third inventor, if any

Chee-Wee Liu

Signature

2019.09.09

Date

Shao-Yu LIN

Name of fourth inventor, if any

Signature

Date

Liang-Chor CHUNG

Name of fifth inventor, if any

Signature

Date

Chih-Lin WANG

Name of sixth inventor, if any

Signature

Date

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Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE, or its representatives, any fact known to the ASSIGNOR(S) with respect to said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause and all Letter Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention.

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Zong-You LUO

Name of sole or first inventor

Signature

Date

Ya-Jui TSOU

Name of second inventor, if any

Signature

Date

Chee-Wee LIU

Name of third inventor, if any

Signature

Date

Shao-Yu LIN

Name of fourth inventor, if any

Signature

Date

Liang-Chor CHUNG

Name of fifth inventor, if any

Signature

Date

Chih-Lin WANG

Name of sixth inventor, if any

Signature

Date

PATENT

RECORDED: 07/28/2022

REEL: 060659 FRAME: 0644