505612313 08/08/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GAURAV GUPTA	08/07/2019
WILLIAM J. GALLAGHER	07/12/2019

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	
Street Address:	NO. 8, LI-HSIN RD. 6	
Internal Address:	HSIN-CHU SCIENCE PARK	
City:	HSIN-CHU	
State/Country:	TAIWAN	
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16506083

CORRESPONDENCE DATA

Fax Number: (216)502-0601

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.

Phone: 216-502-0600

Email: docketing@eschweilerlaw.com ESCHWEILER & POTASHNIK, LLC **Correspondent Name:**

Address Line 1: **ROSETTA CENTER**

Address Line 2: 629 EUCLID AVE., SUITE 1000 Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	TSMCP874US	
NAME OF SUBMITTER:	JAMES R. POTASHNIK	
SIGNATURE:	/James R. Potashnik/	
DATE SIGNED:	08/08/2019	

Total Attachments: 4

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> **PATENT** REEL: 049999 FRAME: 0205 505612313

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PATENT REEL: 049999 FRAME: 0206

TSMC Docket No. P20173962US00
Docket No. TSMCP874US

NY- 23-764-0-VS-63

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s): Gaurav Gupta

<u>Assignor(s):</u> William J. Gallagher

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

"MEMORY DEVICE WITH SUPERPARAMAGNETIC 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 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.

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07-August-2019

Date

Name 1st Inventor Gaurav Gupta

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TSMC Docket No. P20173962US00 Docket No. TSMCP874US

July 12, 2019

Date

ame 2nd Inventor William J.

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PATENT REEL: 049999 FRAME: 0210

RECORDED: 08/08/2019