

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5349531

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Hui-Lin Wang	01/24/2019
Yi-Wei Tseng	01/24/2019
Meng-Jun Wang	01/24/2019
Chen-Yi Weng	01/24/2019
Chin-Yang Hsieh	01/24/2019
Jing-Yin Jhang	01/24/2019
Yu-Ping Wang	01/24/2019
Chien-Ting Lin	01/24/2019
Ying-Cheng Liu	01/24/2019
Yi-An Shih	01/24/2019
Yi-Hui Lee	01/24/2019
I-Ming Tseng	01/24/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	UNITED MICROELECTRONICS CORP.
<b>Street Address:</b>	No.3, Li-Hsin Road 2, Science-Based Industrial Park
<b>City:</b>	Hsin-Chu City
<b>State/Country:</b>	TAIWAN
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16261524
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)997-4517
<i>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.</i>	
<b>Phone:</b>	3027291562
<b>Email:</b>	Patent.admin.uspto.cr@naipo.com
<b>Correspondent Name:</b>	WINSTON HSU
<b>Address Line 1:</b>	5F., NO.389, FUHE RD., YONGHE DIST.,
<b>Address Line 4:</b>	NEW TAIPEI CITY, TAIWAN

<b>ATTORNEY DOCKET NUMBER:</b>	NAUP3417USA
<b>NAME OF SUBMITTER:</b>	KATE YEH
<b>SIGNATURE:</b>	/KATE YEH/
<b>DATE SIGNED:</b>	01/29/2019

**Total Attachments: 24**

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**COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT**

**Title of Invention:**

**MAGNETORESISTIVE RANDOM ACCESS MEMORY CELL**

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Docket No NAUP3417USA

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Hui-Lin Wang**

Date: **JAN 24 2019**

Signature:



NPO#NAU-P3417-USA:0  
CUST#UMCD-2018-0574

Page 2 of 24

F#NPO-P0002E-US1201  
DSB0-107U039005

**PATENT**  
**REEL: 048181 FRAME: 0764**

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LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Yi-Wei Tseng**

Date:

JAN 24 2019

Signature:

Yi Wei Tseng

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LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Meng-Jun Wang**

Date: **JAN 24 2019**

Signature: Meng-Jun Wang



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Docket No NAUP3417USA

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Chen-Yi Weng**

Date: **JAN 24 2019**

Signature: Chen Yi Weng.

NPO#NAU-P3417-USA:0  
CUST#UMCD-2018-0574

Page 8 of 24

F#NPO-P0002E-US1201  
DSB0-107U039005

**PATENT**  
**REEL: 048181 FRAME: 0770**

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LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Chin-Yang Hsieh**

Date: JAN 24 2019

Signature:

Chin-Yang Hsieh

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LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Jing-Yin Jhang**

Date:

**JAN 24 2019**

Signature:

*Jing-Yin Jhang*

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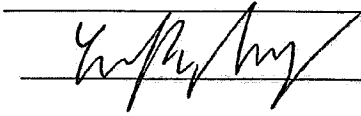
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LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Yu-Ping Wang**

Date: **JAN 24 2019**

Signature:





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Inventor: **Ying-Cheng Liu**

Date:

JAN 24 2019

Signature:

Ying-Cheng Liu

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(referred to as "ASSIGNEE" below) to I of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration.

I hereby sell, assign and transfer to ASSIGNEE and the successors and assignees of the ASSIGNEE the entire right, title and interest in and to any and all improvements which are disclosed in the invention as above-identified application and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuations, continuation-in-part, divisions, renewals, substitutes, or extensions thereof, and as to Letters Patent any reissue or re-examination thereof.

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

I further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to I and will testify as to the same in any interference, litigation proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal

representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I have hereunto set hand and seal this on the date(s) indicated.

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use this form for each additional inventor.

Docket No NAUP3417USA

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **Yi-An Shih**

Date: **JAN 24 2019**

Signature: Yi-An Shih

NPO#NAU-P3417-USA:0  
CUST#UMCD-2018-0574

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F#NPO-P0002E-US1201  
DSB0-107U039005

**PATENT**  
**REEL: 048181 FRAME: 0782**

**COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT**

**Title of Invention:**

**MAGNETORESISTIVE RANDOM ACCESS MEMORY CELL**

As the below named inventor, I hereby declare that:  
This declaration is directed to:

- ☒ The attached application, or
- ☐ United States application number \_\_\_\_\_ filed on \_\_\_\_\_, or
- ☐ PCT international application number \_\_\_\_\_ filed on \_\_\_\_\_

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

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Docket No NAUP3417USA

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: Yi-Hui Lee

Date: JAN 24 2019

Signature: Yi-Hui Lee

NPO#NAU-P3417-USA:0  
CUST#UMCD-2018-0574

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F#NPO-P0002E-US1201  
DSB0-107U039005

**PATENT**  
**REEL: 048181 FRAME: 0784**



**COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
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LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: **I-Ming Tseng**

Date: **JAN 24 2019**

Signature: I-Ming Tseng