### 503527714 10/19/2015

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT3574341

Stylesheet Version v1.2

| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

#### **CONVEYING PARTY DATA**

| Name         | Execution Date |
|--------------|----------------|
| ZHIBIAO ZHOU | 09/17/2015     |
| Chen-Bin Lin | 09/21/2015     |
| Chi-Fa Ku    | 09/18/2015     |
| Shao-Hui Wu  | 09/18/2015     |

#### **RECEIVING PARTY DATA**

| Name:           | UNITED MICROELECTRONICS CORP.                       |
|-----------------|---|
| Street Address: | No.3, Li-Hsin Road 2, Science-Based Industrial Park |
| City:           | Hsin-Chu City                                       |
| State/Country:  | TAIWAN  |

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

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 14886116 |

### **CORRESPONDENCE DATA**

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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**Correspondent Name:** WINSTON HSU **Address Line 1:** P.O.BOX 506

Address Line 4: MERRIFIELD, VIRGINIA 22116

| ATTORNEY DOCKET NUMBER: | NAUP2600USA |
|-------------------------|-------------|
| NAME OF SUBMITTER:      | KATE YEH    |
| SIGNATURE:              | /KATE YEH/  |
| DATE SIGNED:            | 10/19/2015  |

**Total Attachments: 8** 

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PATENT REEL: 036816 FRAME: 0310

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| source=2382131#page8.tif |  |  |

PATENT REEL: 036816 FRAME: 0311

### Title of Invention:

### SEMICONDUCTOR MEMORY DEVICE HAVING INTEGRATED DOSRAM AND NOSRAM AND FABRICATION METHOD THEREOF

| As the below named inventor, I here This declaration is directed to:  | eby declare that:   |   |   |   |
|---|---|---|---|---|
| ☑ The attached application, or  | •   |   |   |   |
| ☐ United States application nu  | ımber   | filed on  |   | , or                                    |
| ☐ PCT international application   | n number  | filed   | on  | •                                       |
| The above-identified application was  | s made or authorized to be  | made by me.   |   | *************************************** |
| I believe that I am the original inventapplication.   | tor or an original joint inven  | itor of a claimed i   | nvention in the                                     |   |
| I hereby acknowledge that any willfu<br>under18 U.S.C. 1001 by fine or impr   | al false statement made in t<br>risonment of not more than                                    | this declaration is<br>five (5) years, or                       | punishable<br>both.                                 |   |
| In consideration of the payment by  | UNITED MICROELEC  | TRONICS h   | aving a postal ad                                   | ldress of                               |
| No.3, Li-Hsin Road 2, Science   | e-Based Industrial Par  | k, Hsin-Chu C   | ity 300, Taiwa                                      | n, <b>R.O.C</b> .                       |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good ar  | o I of the sum of One Dolla<br>nd valuable consideration.                                     | r (\$ 1.00), the rec  | ceipt of which is h                                 | ereby                                   |
| I hereby sell, assign and transfer to a<br>the entire right, title and interest in a<br>invention as above-identified applica<br>invention by the above application o<br>substitutes, or extensions thereof, an | nd to any and all improvem<br>ation and, in and to, all Letto<br>r any continuations, continu | nents which are di<br>ers Patent to be d<br>uation-in-part, div | isclosed in the obtained for said isions, renewals. |   |
| l hereby covenant that no assignment<br>entered into which would conflict wit   | nt, sale, agreement or encu<br>h this assignment;   | ımbrance has be   | en or will be mad                                   | e or                                    |
| I further covenant that ASSIGNEE wand documents relating to said inver<br>known and accessible to I and will te<br>related thereto and will promptly exe  | ntion and said Letters Pater<br>estify as to the same in any                                  | nt and legal equivinterference, litig                           | alents as may be                                    | 9                                       |
| representatives any and all papers, i<br>maintain, issue and enforce said app<br>equivalents thereof which may be no<br>IN WINTNESS WHEREOF, I have h   | olication, said invention and   | d said Letters Paterry out the propos                           | ent and said  | of signing)                             |
| Note: An application data sheet (PTG<br>inventive entity, must accompany thi  | O/SB/14 or equivalent), inc<br>is form. Use this form for ea                                  | luding naming the   | e entire<br>entor.                                  |   |

Page 1 of 8

NPO#NAU-P2600-USA:0 CUST#UMCD-2015-0492

F#NPO-P0002E-US1201 DSC0-104U010918

| LEGAL NAME OF INVENTOR(ASSIGNOR) |              |       |    |          |
|----------------------------------|--------------|-------|----|----------|
| Inventor:                        | ZHIBIAO ZHOU | Date: | 17 | Sep 2015 |
| Signature:                       | ZHON ZMIBIAO |       |    |          |

Page 2 of 8

### Title of Invention:

### SEMICONDUCTOR MEMORY DEVICE HAVING INTEGRATED DOSRAM AND NOSRAM AND FABRICATION METHOD THEREOF

| As the below named inventor, I here This declaration is directed to:   | by declare that:  |   |                    |
|--|---|---|--------------------|
| ☑ The attached application, or   |   |   |                    |
| ☐ United States application nu   | mber  | filed on  | , or               |
| ☐ PCT international application  | n number  | filed on  |                    |
| The above-identified application was   | s made or authorized to be made   | by me.  |                    |
| I believe that I am the original invent application.   | or or an original joint inventor of a   | a claimed invention in t  | he                 |
| I hereby acknowledge that any willfu<br>under18 U.S.C. 1001 by fine or impr  | l false statement made in this decisionment of not more than five (5  | claration is punishable<br>) years, or both.                                  |                    |
| In consideration of the payment by   | UNITED MICROELECTRON CORP.  | NICS having a post  | tal address of     |
| No.3, Li-Hsin Road 2, Science  | -Based Industrial Park, Hsi   | in-Chu City 300, Ta   | aiwan, R.O.C.      |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good an   | o I of the sum of One Dollar (\$ 1.0<br>ad valuable consideration.  | 00), the receipt of which   | า is hereby        |
| I hereby sell, assign and transfer to A<br>the entire right, title and interest in an<br>invention as above-identified applica-<br>invention by the above application or<br>substitutes, or extensions thereof, an | nd to any and all improvements w<br>tion and, in and to, all Letters Pat<br>any continuations, continuation-i | hich are disclosed in the ent to be obtained for single-part divisions, renew | ne<br>said<br>wals |
| I hereby covenant that no assignment entered into which would conflict with  | nt, sale, agreement or encumbran<br>n this assignment;  | ice has been or will be   | made or            |
| I further covenant that ASSIGNEE wi<br>and documents relating to said inven<br>known and accessible to I and will te<br>related thereto and will promptly exec   | ition and said Letters Patent and l<br>stify as to the same in any interfe                                    | legal equivalents as ma<br>rence, litigation procee                           | av be              |
| representatives any and all papers, in<br>maintain, issue and enforce said app<br>equivalents thereof which may be ne<br>IN WINTNESS WHEREOF, I have he  | lication, said invention and said L<br>cessary or desirable to carry out                                      | etters Patent and said the proposes thereof.                                  | Date of signing)   |
| Note: An application data sheet (PTC inventive entity, must accompany this   | D/SB/14 or equivalent), including is form. Use this form for <u>each</u> add                                  | naming the entire<br>ditional inventor.                                       |                    |

Page 3 of 8

| LEGAL NA   | ME OF INVENTOR(ASSIGNOR) |       |    |     |      |
|------------|--------------------------|-------|----|-----|------|
| Inventor:  | Chen-Bin Lin             | Date: | 21 | Sep | 2015 |
| Signature: | Child.                   |       |    |     | 2013 |

NPO#NAU-P2600-USA:0 CUST#UMCD-2015-0492 Page 4 of 8

F#NPO-P0002E-US1201 DSC0-104U010918

### Title of Invention:

### SEMICONDUCTOR MEMORY DEVICE HAVING INTEGRATED DOSRAM AND NOSRAM AND FABRICATION METHOD THEREOF

| As the below named inventor, I here This declaration is directed to:  | by declare that:  |  |  |   |
|---|---|--|--|---|
| ☑ The attached application, or  |   |  |  |   |
| ☐ United States application nu  | mber  | filed  | on   | , or                                    |
| ☐ PCT international application   | number  | file   | ed on  | *************************************** |
| The above-identified application was  | s made or authorized to be r  | nade by me.  |  | *************************************** |
| I believe that I am the original invent application.  | or or an original joint invent  | or of a claime                                     | ed invention in                                      | the                                     |
| I hereby acknowledge that any willfu<br>under18 U.S.C. 1001 by fine or impr   | l false statement made in th<br>isonment of not more than f                                   | is declaration<br>ive (5) years,                   | n is punishable<br>, or both.                        | Э                                       |
| In consideration of the payment by  | UNITED MICROELECT   | <b>FRONICS</b>                                     | having a pos   | stal address of                         |
| No.3, Li-Hsin Road 2, Science   | -Based Industrial Park  | ., Hsin-Chu  | <br>ı City 300, T                                    | aiwan, R.O.C                            |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good an  | o I of the sum of One Dollar<br>d valuable consideration.                                     | (\$ 1.00), the                                     | receipt of which                                     | ch is hereby                            |
| I hereby sell, assign and transfer to a<br>the entire right, title and interest in ar<br>invention as above-identified applica<br>invention by the above application or<br>substitutes, or extensions thereof, ar | nd to any and all improveme<br>tion and, in and to, all Letter<br>any continuations, continua | ents which are<br>rs Patent to b<br>ation-in-part. | e disclosed in<br>be obtained for<br>divisions, rene | the<br>r said<br>ewals                  |
| I hereby covenant that no assignmer entered into which would conflict with  | nt, sale, agreement or encur<br>n this assignment;  | nbrance has  | been or will be                                      | e made or                               |
| I further covenant that ASSIGNEE w<br>and documents relating to said inven<br>known and accessible to I and will te<br>related thereto and will promptly exec   | tion and said Letters Patent<br>stify as to the same in any i                                 | t and legal eq<br>nterference, l                   | quivalents as n<br>litigation proce                  | nav be                                  |
| representatives any and all papers, in<br>maintain, issue and enforce said app<br>equivalents thereof which may be ne<br>IN WINTNESS WHEREOF, I have he   | lication, said invention and a<br>cessary or desirable to carr                                | said Letters F<br>y out the prop                   | Patent and sai<br>poses thereof.                     | id<br>(Date of signing)                 |
| Note: An application data sheet (PTC inventive entity, must accompany this  | D/SB/14 or equivalent), inclus form. Use this form for each                                   | ding naming  | the entire inventor.                                 |   |

Page 5 of 8

| LEGAL NA   | WE OF INVENTOR (ASSIGNOR | <b>(</b> ) |    |     |   |
|------------|--------------------------|------------|----|-----|---|
| Inventor:  | Chi-Fa Ku                | Date:      | 18 | Sep | 2015                                    |
| Signature: | Chit = Ku                |            |    |     | *************************************** |

Page 6 of 8

### Title of Invention:

### SEMICONDUCTOR MEMORY DEVICE HAVING INTEGRATED DOSRAM AND NOSRAM AND FABRICATION METHOD THEREOF

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| ☐ United States application number   |  | filed on  |  | , or               |
| □ PCT international application number   |  | filed on  |  | <del></del>        |
| The above-identified application was   | made or authorized to b  | e made by me.   |  |                    |
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| I hereby acknowledge that any willfu<br>under18 U.S.C. 1001 by fine or impr  | I false statement made ir<br>isonment of not more tha                                | n this declaration<br>n five (5) years,                 | n is punishable<br>or both.  |                    |
| In consideration of the payment by   | UNITED MICROELE CORP.  | CTRONICS  | having a pos   | tal address of     |
| No.3, Li-Hsin Road 2, Science-Based Industrial Park, Hsin-Chu City 300, Taiwan, R.O.C  |  |   |  |                    |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good an   | ol of the sum of One Dol<br>d valuable consideration                                 | lar (\$ 1.00), the                                      | receipt of which   | h is hereby        |
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| I hereby covenant that no assignment entered into which would conflict with  | it, sale, agreement or end<br>i this assignment;                                     | cumbrance has   | been or will be  | made or            |
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| representatives any and all papers, in<br>maintain, issue and enforce said app<br>equivalents thereof which may be ne-<br>IN WINTNESS WHEREOF, I have he               | lication, said invention ar<br>cessary or desirable to c                             | nd said Letters F<br>arry out the prop                  | Patent and said<br>poses thereof.  | Date of signing)   |
| Note: An application data sheet (PTC inventive entity, must accompany this   | D/SB/14 or equivalent), in<br>s form. Use this form for g                            | cluding naming<br>each additional i                     | the entire   |                    |

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NPO#NAU-P2600-USA:0 CUST#UMCD-2015-0492

F#NPO-P0002E-US1201 DSC0-104U010918

| LEGAL NA   | ME OF INVENTOR(ASSIGNOR) |       |             |
|------------|--------------------------|-------|-------------|
| Inventor:  | Shao-Hui Wu              | Date: | 18 Sep 2015 |
| Signature: | Wu Shao aui              |       |             |

NPO#NAU-P2600-USA:0 CUST#UMCD-2015-0492

**RECORDED: 10/19/2015** 

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F#NPO-P0002E-US1201 DSC0-104U010918

PATENT REEL: 036816 FRAME: 0319