PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3312846

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Chia-Ching Lin | 04/14/2015 |
| En-Chiuan Liou | 04/14/2015 |
| Chia-Hung Wang | 04/14/2015 |
| Sho-Shen Lee | 04/14/2015 |

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: | 14687912 |

CORRESPONDENCE DATA

Fax Number: (703)997-4517

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: 3027291562

Email: Patent.admin.uspto.cr@naipo.com

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

Address Line 4: MERRIFIELD, VIRGINIA 22116

| ATTORNEY DOCKET NUMBER: | NAUP2450USA |
|-------------------------|-------------|
| NAME OF SUBMITTER: | SIBYL YU |
| SIGNATURE: | /SIBYL YU/ |
| DATE SIGNED: | 04/15/2015 |

Total Attachments: 8

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REEL: 035420 FRAME: 0131

PATENT



PATENT REEL: 035420 FRAME: 0132

Title of Invention:

OVERLAY MARKS AND SEMICONDUCTOR PROCESS USING THE OVERLAY MARKS

| As the below named inventor, I hereb This declaration is directed to: | y declare that: | | | |
|--|---|---|--|------------------------------|
| ☑ The attached application, or | | | | |
| ☐ United States application num | nber | filed o | n | , or |
| ☐ PCT international application | number | filed | d on | |
| The above-identified application was i | made or authorized to | be made by me. | | |
| I believe that I am the original inventor application. | r or an original joint in | ventor of a claimed | l invention in | the |
| I hereby acknowledge that any willful under18 U.S.C. 1001 by fine or impris | false statement made onment of not more th | in this declaration nan five (5) years, | is punishable or both. | е |
| | JNITED MICROEL CORP. | ECTRONICS | having a po | stal address of |
| No.3, Li-Hsin Road 2, Science- | Based Industrial F | Park, Hsin-Chu | - City 300, 1 | Taiwan, R.O.C |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good and | l of the sum of One Do valuable consideration | ollar (\$ 1.00), the n n. | eceipt of whi | ch is hereby |
| I hereby sell, assign and transfer to Asthe entire right, title and interest in and invention as above-identified application or a substitutes, or extensions thereof, and | I to any and all improvon and, in and to, all Lany continuations, con | ements which are etters Patent to be tinuation-in-part, d | disclosed in obtained for ivisions, rene | the r said ewals. |
| I hereby covenant that no assignment entered into which would conflict with | , sale, agreement or e this assignment; | ncumbrance has b | een or will b | e made or |
| I further covenant that ASSIGNEE will and documents relating to said inventi known and accessible to I and will test related thereto and will promptly exect | on and said Letters Pa tify as to the same in a | atent and legal equ any interference, lit | iivalents as r igation proce | mav be |
| representatives any and all papers, ins maintain, issue and enforce said appli equivalents thereof which may be nec IN WINTNESS WHEREOF, I have her | cation, said invention essary or desirable to | and said Letters P carry out the prop | atent and sai | id (Date of signing) - |
| Note: An application data sheet (PTO/ inventive entity, must accompany this | SB/14 or equivalent), form. Use this form fo | including naming t r <u>each additional ir</u> | he entire nventor. | |

Page 1 of 8

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: Chia-Ching Lin Date: APR 1 4 2015

Signature: CHIA - CHING LIN

Page 2 of 8

NPO#NAU-P2450-USA:0 CUST#UMCD-2015-0024

Title of Invention:

OVERLAY MARKS AND SEMICONDUCTOR PROCESS USING THE OVERLAY MARKS

| As the below named inventor, I here This declaration is directed to: | by declare that: | | | |
|---|--|--|--|--------------------------------------|
| ☑ The attached application, or | | | | |
| ☐ United States application nu | mber | file | ed on | , or |
| ☐ PCT international application | number | | filed on | |
| The above-identified application was | s made or authoriz | ed to be made by n | ne. | |
| I believe that I am the original inventapplication. | or or an original jo | int inventor of a cla | imed invention ir | ı the |
| I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr | l false statement r isonment of not m | nade in this declara ore than five (5) yea | ition is punishab ars, or both. | le |
| In consideration of the payment by | UNITED MICR CORP. | OELECTRONIC | S having a po | ostal address of |
| No.3, Li-Hsin Road 2, Science | -Based Indust | rial Park, Hsin-C | Chu City 300, | Taiwan, R.O.C. |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good ar | o I of the sum of O nd valuable consid | ne Dollar (\$ 1.00), teration. | the receipt of wh | ich is hereby |
| I hereby sell, assign and transfer to a the entire right, title and interest in an invention as above-identified applica invention by the above application of substitutes, or extensions thereof, ar | nd to any and all ir tion and, in and to r any continuations | nprovements which , all Letters Patent t s. continuation-in-pa | are disclosed in to be obtained fo art, divisions, ren | n the or said newals |
| I hereby covenant that no assignmer entered into which would conflict with | nt, sale, agreemen n this assignment; | t or encumbrance h | as been or will t | e made or |
| I further covenant that ASSIGNEE w and documents relating to said inver known and accessible to I and will te related thereto and will promptly exe | ition and said Lette stify as to the sam | ers Patent and lega le in anv interferend | l equivalents as ce. litigation proc | may be |
| representatives any and all papers, i maintain, issue and enforce said app equivalents thereof which may be ne IN WINTNESS WHEREOF, I have h | olication, said inver scessary or desirat | ntion and said Lette ble to carry out the p | rs Patent and sa | aid f. _(Date of signing) _ |
| Note: An application data sheet (PTC inventive entity, must accompany this | | | | |

Page 3 of 8

Docket No NAUP2450USA

Inventor: En-Chiuan Liou Date: APR 1 4 2015

Signature: Un Chiuan Liou

Page 4 of 8

NPO#NAU-P2450-USA:0 CUST#UMCD-2015-0024

Title of Invention:

OVERLAY MARKS AND SEMICONDUCTOR PROCESS USING THE OVERLAY MARKS

| As the below named inventor, I here This declaration is directed to: | by declare that: | | |
|--|---|--|----------------|
| ☑ The attached application, or | | | |
| ☐ United States application nur | mber | _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 inventorapplication. | or or an original joint inventor of a | claimed invention in the | |
| I hereby acknowledge that any willful under18 U.S.C. 1001 by fine or impri | I false statement made in this decisionment of not more than five (5) | slaration is punishable) years, or both. | |
| In consideration of the payment by | UNITED MICROELECTRON | NICS having a postal | address of |
| No.3, Li-Hsin Road 2, Science | -Based Industrial Park, Hsi | n-Chu City 300, Taiw | van, R.O.C. |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good an | o I of the sum of One Dollar (\$ 1.0 d valuable consideration. | 0), the receipt of which is | s hereby |
| I hereby sell, assign and transfer to A the entire right, title and interest in an invention as above-identified application or substitutes, or extensions thereof, an | nd to any and all improvements w tion and, in and to, all Letters Pat any continuations, continuation-i | hich are disclosed in the ent to be obtained for said n-part, divisions, renewal | d S |
| I hereby covenant that no assignmen entered into which would conflict with | it, sale, agreement or encumbran i this assignment; | ce has been or will be ma | ade or |
| I further covenant that ASSIGNEE wi and documents relating to said inven- known and accessible to I and will tes related thereto and will promptly exec | tion and said Letters Patent and I stify as to the same in any interfe | legal equivalents as may life rence. litigation proceeding | be |
| representatives any and all papers, ir maintain, issue and enforce said app equivalents thereof which may be ned IN WINTNESS WHEREOF, I have he | lication, said invention and said L cessary or desirable to carry out t | etters Patent and said the proposes thereof. | te of signing) |
| Note: An application data sheet (PTC inventive entity, must accompany this | 0/SB/14 or equivalent), including.r s form. Use this form for <u>each ado</u> | naming the entire litional inventor. | |

Page 5 of 8

Docket No NAUP2450USA

| LEGAL NAME OF INVENTOR(ASSIGNOR) | | | | | |
|----------------------------------|----------------|-------|---------------|--|--|
| Inventor: | Chia-Hung Wang | Date: | _APR 1 4 2015 | | |
| Signature: | Chia-Hung Wang | | | | |

Page 6 of 8

Title of Invention:

OVERLAY MARKS AND SEMICONDUCTOR PROCESS USING THE OVERLAY MARKS

| As the below named inventor, I here This declaration is directed to: | by declare that: | | |
|---|--|---|-------------|
| ☑ The attached application, or | | | |
| ☐ United States application nur | mber | 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 invente application. | or or an original joint inventor of a | claimed invention in the | |
| I hereby acknowledge that any willful under18 U.S.C. 1001 by fine or impri | false statement made in this dec sonment of not more than five (5) | plaration is punishable years, or both. | |
| In consideration of the payment by | UNITED MICROELECTRON | VICS having a postal add | lress of |
| No.3, Li-Hsin Road 2, Science | -Based Industrial Park, Hsi | n-Chu City 300, Taiwan | , R.O.C. |
| (referred to as "ASSIGNEE"below) to acknowledged, andfor other good and | I of the sum of One Dollar (\$ 1.0 d valuable consideration. | 0), the receipt of which is he | reby |
| I hereby sell, assign and transfer to A the entire right, title and interest in an invention as above-identified application or substitutes, or extensions thereof, and | d to any and all improvements w ion and, in and to, all Letters Pat- any continuations, continuation-i | hich are disclosed in the ent to be obtained for said n-part, divisions, renewals | ΈE |
| I hereby covenant that no assignmen entered into which would conflict with | t, sale, agreement or encumbran this assignment; | ce has been or will be made | or |
| I further covenant that ASSIGNEE wi and documents relating to said invent known and accessible to I and will tes related thereto and will promptly exec | tion and said Letters Patent and I stify as to the same in any interfe | egal equivalents as may be rence. litigation proceeding | ts |
| representatives any and all papers, ir maintain, issue and enforce said appl equivalents thereof which may be ned IN WINTNESS WHEREOF, I have he | ication, said invention and said L cessary or desirable to carry out t | etters Patent and said the proposes thereof. | of signing) |
| Note: An application data sheet (PTO inventive entity, must accompany this | /SB/14 or equivalent), including r form. Use this form for <u>each add</u> | naming the entire litional inventor. | |

Page 7 of 8

Docket No NAUP2450USA

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: Sho-Shen Lee Date: APR 1 4 2015

Signature: 李旭 sho shen lee

Page 8 of 8

NPO#NAU-P2450-USA:0 CUST#UMCD-2015-0024

RECORDED: 04/15/2015

F#NPO-P0002E-US1201 DSC0-104U001200

PATENT REEL: 035420 FRAME: 0140