10/30/2014 503042586

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3089185

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Ching-Ling Lin	08/04/2014
Chih-Sen Huang	08/04/2014
Ching-Wen Hung	08/04/2014
Jia-Rong Wu	08/04/2014
Tsung-Hung Chang	08/04/2014
Yi-Hui Lee	08/04/2014
Yi-Wei Chen	08/04/2014

#### 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:	14529129

#### **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

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

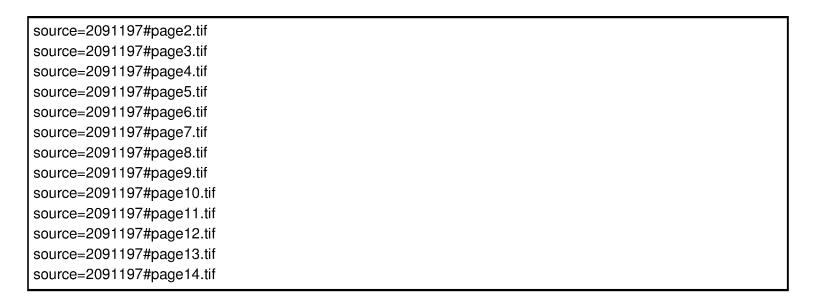
WINSTON HSU **Correspondent Name:** Address Line 1: P.O.BOX 506

Address Line 4: MERRIFIELD, VIRGINIA 22116

ATTORNEY DOCKET NUMBER:	NAUP2316USA
NAME OF SUBMITTER:	KATE YEH
SIGNATURE:	/KATE YEH/
DATE SIGNED:	10/30/2014

**Total Attachments: 14** source=2091197#page1.tif

> PATENT -REEL: 034076 FRAME: 0746 503042586



PATENT REEL: 034076 FRAME: 0747

### Title of Invention:

### SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

As the below named inventor, I here This declaration is directed to:	by declare that:		
☑ The attached application, or			
☐ United States application nu	_filed on	, or	
☐ PCT international application	filed on		
The above-identified application was	made or authorized to be made	by me.	
I believe that I am the original inventagplication.	or or an original joint inventor of a	claimed invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	I false statement made in this decisonment of not more than five (5)	elaration is punishable years, or both.	
In consideration of the payment by	UNITED MICROELECTRON CORP.	IICS having a postal a	ddress of
No.3, Li-Hsin Road 2, Science	-Based Industrial Park, Hsi	n-Chu City 300, Taiwa	an, R.O.C
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an		0), the receipt of which is t	hereby
I hereby sell, assign and transfer to A the entire right, title and interest in ar invention as above-identified application or substitutes, or extensions thereof, and	nd to any and all improvements wi tion and, in and to, all Letters Pate any continuations, continuation-i	hich are disclosed in the ent to be obtained for said n-part, divisions, renewals.	
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreement or encumbran n this assignment;	ce has been or will be mad	de or
I further covenant that ASSIGNEE wi and documents relating to said inven known and accessible to I and will te 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	e
representatives any and all papers, in maintain, issue and enforce said app equivalents thereof which may be ne 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.	e of signing)
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivalent), including r s form. Use this form for <u>each add</u>	naming the entire litional inventor.	

Page 1 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

LEGAL NAME OF INVENTOR(ASSIGNOR)						
Inventor:	Ching-Ling Lin	Date:	AUG 0 4 2014			
Signature:	Ching-ling Lin					

Page 2 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

### Title of Invention:

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☐ United States application nu	mber	file	d on	, or
☐ PCT international application	number		filed on	
The above-identified application was	made or authorized	to be made by m	e.	
I believe that I am the original inventapplication.	or or an original joint	inventor of a clair	ned invention in	n the
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	I false statement mad isonment of not more	le in this declarat than five (5) yea	ion is punishab rs, or both.	le
In consideration of the payment by	UNITED MICROE CORP.	LECTRONICS	; having a po	ostal address of
No.3, Li-Hsin Road 2, Science	-Based Industrial	Park, Hsin-Cl	hu City 300,	Taiwan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the sum of One d valuable considera	Dollar (\$ 1.00), th tion.	ne receipt of wh	ich is hereby
I hereby sell, assign and transfer to A the entire right, title and interest in ar invention as above-identified application or substitutes, or extensions thereof, an	nd to any and all impr tion and, in and to, al any continuations, c	overnents which a Letters Patent to ontinuation-in-par	are disclosed in to be obtained for t. divisions, ren	n the or said newals
I hereby covenant that no assignment entered into which would conflict with	it, sale, agreement or i this assignment;	encumbrance ha	as been or will b	oe made or
I further covenant that ASSIGNEE wi and documents relating to said inven known and accessible to I and will te related thereto and will promptly exec	tion and said Letters stify as to the same ir	Patent and legal any interference	equivalents as  itigation proc	may be
representatives any and all papers, in maintain, issue and enforce said app equivalents thereof which may be ne IN WINTNESS WHEREOF, I have he	lication, said inventio cessary or desirable	n and said Letter to carry out the p	s Patent and sa roposes thereo	aid f. _(Date of signing) 
Note: An application data sheet (PTC inventive entity, must accompany this	0/SB/14 or equivalent s form. Use this form	), including namin for <u>each addition</u>	ng the entire al inventor.	

Page 3 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

LEGAL NA	ME OF HAVEN LOW/VOOROHOL	<b>'</b>			
Inventor:	Chih-Sen Huang		Date:	AUG 04	2014
Signature:	Chih - Sen H	wana			
		J			

LEGAL MANUE OF INVENTOR/ACCIONION

Page 4 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

### Title of Invention:

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☐ PCT international application	number	file	ed on	
The above-identified application was	made or authorized to	be made by me.		***************************************
I believe that I am the original inventionapplication.	or or an original joint in	ventor of a claime	ed invention in th	ıe
I hereby acknowledge that any willful under18 U.S.C. 1001 by fine or impri	I false statement made isonment of not more th	in this declaration nan five (5) years,	n is punishable or both.	
In consideration of the payment by	UNITED MICROEL CORP.	ECTRONICS	having a post	al address of
No.3, Li-Hsin Road 2, Science	-Based Industrial F	ark, Hsin-Chu	 ı City 300, Та	iwan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	ol of the sum of One Do d valuable consideration	ollar (\$ 1.00), the n.	receipt of which	is hereby
I hereby sell, assign and transfer to A the entire right, title and interest in ar invention as above-identified application or substitutes, or extensions thereof, an	nd to any and all improvition and, in and to, all L any continuations, con	rements which are etters Patent to b tinuation-in-part.	e disclosed in the obtained for some divisions, renew	ie said vals
I hereby covenant that no assignmen entered into which would conflict with	nt, sale, agreement or e n this assignment;	ncumbrance has	been or will be i	made or
I further covenant that ASSIGNEE wi and documents relating to said inven known and accessible to I and will te related thereto and will promptly exec	tion and said Letters Pa stify as to the same in a	atent and legal ed any interference, l	uivalents as ma	av be
representatives any and all papers, in maintain, issue and enforce said app equivalents thereof which may be ned IN WINTNESS WHEREOF, I have he	lication, said invention a cessary or desirable to	and said Letters F carry out the pro	Patent and said poses thereof.	Date of signing)
Note: An application data sheet (PTC inventive entity, must accompany this	0/SB/14 or equivalent), s form. Use this form fo	including naming r <u>each additional</u>	the entire inventor.	

Page 5 of 14

LEGAL NAME OF INVENTOR(ASSIGNOR)							
inventor:	Ching-Wen Hung		Date:	AUG	04	2014	
Signature:	China -Wen	Hung_					
		8					

Page 6 of 14

### Title of Invention:

## SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

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☑ The attached application, or					
☐ United States application nu	mber	filed o	n,	or	
☐ PCT international application	number	file			
The above-identified application was	made or authorized to be made l	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 willfu under18 U.S.C. 1001 by fine or impri	false statement made in this decisionment of not more than five (5)	claration years,	is punishable or both.		
In consideration of the payment by	UNITED MICROELECTRON CORP.	NICS	having a postal add	ess 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, and for other good an I hereby sell, assign and transfer to A	d valuable consideration. ASSIGNEE and the successors ar	nd assig	nees of the ASSIGNI	•	
the entire right, title and interest in ar invention as above-identified applica- invention by the above application or substitutes, or extensions thereof, an	id to any and all improvements wi tion and, in and to, all Letters Pate any continuations, continuation-i	hich are ent to be n-part. d	disclosed in the obtained for said ivisions, renewals.		
I hereby covenant that no assignment entered into which would conflict with	t, sale, agreement or encumbrant this assignment;	ce has b	een or will be made	or	
I further covenant that ASSIGNEE wi and documents relating to said inven known and accessible to I and will te related thereto and will promptly exec	tion and said Letters Patent and I stify as to the same in any interfe	egal equ rence, lit	ivalents as may be	s	
representatives any and all papers, in maintain, issue and enforce said app equivalents thereof which may be ne IN WINTNESS WHEREOF, I have he	lication, said invention and said L cessary or desirable to carry out t	etters P	atent and said oses thereof.	signing)	
Note: An application data sheet (PTC inventive entity, must accompany this	o/SB/14 or equivalent), including r s form. Use this form for <u>each add</u>	naming t litional ir	he entire oventor.		

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283 Page 7 of 14

LEGAL NAME OF INVENTOR(ASSIGNOR)					
Inventor:	Jia-Rong Wu		Date:	AUG 04	2014
Signature:	Jia Rong	Wu			

Page 8 of 14

### Title of Invention:

### SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

As the below named inventor, I hereby declare that: This declaration is directed to:		
☑ The attached application, or		
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☐ PCT international application number	filed on	
The above-identified application was made or authorize	d to be made by me.	
I believe that I am the original inventor or an original joir application.	nt inventor of a claimed invention in	the
I hereby acknowledge that any willful false statement munder18 U.S.C. 1001 by fine or imprisonment of not mo	ade in this declaration is punishable re than five (5) years, or both.	<del>)</del>
In consideration of the payment by UNITED MICRO CORP.	DELECTRONICS having a pos	stal address of
No.3, Li-Hsin Road 2, Science-Based Industri	al Park, Hsin-Chu City 300, T	aiwan, R.O.C.
(referred to as "ASSIGNEE"below) to I of the sum of On acknowledged, andfor other good and valuable conside	e Dollar (\$ 1.00), the receipt of whice ration.	ch is hereby
I hereby sell, assign and transfer to ASSIGNEE and the the entire right, title and interest in and to any and all im invention as above-identified application and, in and to, invention by the above application or any continuations, substitutes, or extensions thereof, and as to Letters Pate	provements which are disclosed in all Letters Patent to be obtained for continuation-in-part, divisions, rene	the said wals
I hereby covenant that no assignment, sale, agreement entered into which would conflict with this assignment;	or encumbrance has been or will be	e made or
I further covenant that ASSIGNEE will, upon its request, and documents relating to said invention and said Letter known and accessible to I and will testify as to the same related thereto and will promptly execute and deliver to a	rs Patent and legal equivalents as n e in any interference, litigation proce	nav be
representatives any and all papers, instruments or affida maintain, issue and enforce said application, said invent equivalents thereof which may be necessary or desirabl IN WINTNESS WHEREOF, I have hereunto set hand ar	tion and said Letters Patent and said e to carry out the proposes thereof.	d (Date of signing)
Note: An application data sheet (PTO/SB/14 or equivale inventive entity, must accompany this form. Use this form	ent), including naming the entire m for each additional inventor	

Page 9 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

LEGAL NAME OF INVENTOR(ASSIGNOR)					
Inventor:	Tsung-Hung Chang	Date:	AUG 0 4 2014		
Signature:	Trung-Huy	Chang			

Page 10 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

### Title of Invention:

### SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

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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 wi and documents relating to said inven known and accessible to I and will te related thereto and will promptly exec	tion and said Letters Patent and stify as to the same in any interfe	legal equivalents as may be erence, litigation proceeding	ts	
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 proposes thereof.  IN WINTNESS WHEREOF, I have hereunto set hand and seal thisAUG0_4_2014(Date of signing)				
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.				

Page 11 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

LEGAL NAME OF INVENTOR(ASSIGNOR)					
Inventor:	Yi-Hui Lee	Date:	AUG 0 4 2014		
Signature:	Ti-Hui Lee				

Page 12 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283 F#NPO-P0002E-US1201 DSC0-103U006539

PATENT REEL: 034076 FRAME: 0759

## Title of Invention: SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

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	filed on	
The above-identified application was	made or authorized to be ma	de by me.	
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representatives any and all papers, ir maintain, issue and enforce said appl equivalents thereof which may be ned IN WINTNESS WHEREOF, I have he	lication, said invention and sai	d Letters Patent and sa ut the proposes thereof	id : (Date of signing) -
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Page 13 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

LEGAL NAME OF INVENTOR(ASSIGNOR)				
Inventor:	Yi-Wei Chen	Date:	AUG 0 4 2014	
Signature:	Vi-Wei ohen			

Page 14 of 14

NPO#NAU-P2316-USA:0 CUST#UMCD-2014-0283

**RECORDED: 10/30/2014** 

F#NPO-P0002E-US1201 DSC0-103U006539

PATENT REEL: 034076 FRAME: 0761