504436634 06/28/2017

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT4483335

Electronic Version v1.1
Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
Shao-Ping Chen	06/23/2017	
Huan-Chi Ma	06/23/2017	
Chien-Wen Yu	06/23/2017	
Kuo-Chin Hung	06/23/2017	

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:	15636632

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.

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Correspondent Name: WINSTON HSU

Address Line 1: 5F., NO.389, FUHE RD., YONGHE DIST.,

Address Line 4: NEW TAIPEI CITY, TAIWAN

ATTORNEY DOCKET NUMBER: NAUP3027USA

NAME OF SUBMITTER: KATE YEH

SIGNATURE: /KATE YEH/

DATE SIGNED: 06/28/2017

Total Attachments: 8

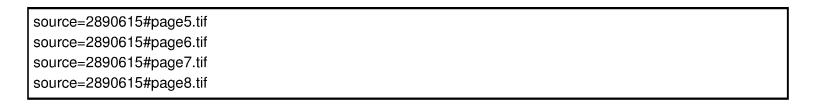
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PATENT 504436634 REEL: 042855 FRAME: 0399



PATENT REEL: 042855 FRAME: 0400

Title of Invention:

SEMICONDUCTOR DEVICE AND METHOD of FORMING THE SAME

As the below named inventor, I here This declaration is directed to:	by declare that:	
☑ The attached application, or	r	
☐ United States application nu	umber	_filed on, or
☐ PCT international applicatio	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 the
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	Il false statement made in this ded isonment of not more than five (5	claration is punishable) years, or both.
In consideration of the payment by	UNITED MICROELECTRON CORP.	NICS having a postal address of
No.3, Li-Hsin Road 2, Science	e-Based Industrial Park, Hsi	in-Chu City 300, Taiwan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good ar	o I of the sum of One Dollar (\$ 1.0 nd valuable consideration.	00), the receipt of which is hereby
I hereby sell, assign and transfer to a the entire right, title and interest in a invention as above-identified applica invention by the above application of substitutes, or extensions thereof, ar	nd to any and all improvements w ition and, in and to, all Letters Pat r any continuations, continuation-i	hich are disclosed in the tent to be obtained for said in-part, divisions, renewals.
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreement or encumbran h this assignment;	nce has been or will be made or
I further covenant that ASSIGNEE wand documents relating to said inver known and accessible to I and will te related thereto and will promptly exe	ntion and said Letters Patent and estify as to the same in any interfe	legal equivalents as may be erence, litigation proceeding
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 invention and said Lecessary or desirable to carry out	_etters Patent and said
Note: An application data sheet (PT0 inventive entity, must accompany thi	O/SB/14 or equivalent), including a s form. Use this form for <u>each add</u>	naming the entire ditional inventor.

Page 1 of 8

NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083

LEGAL NA	ME OF INVENTOR (ASSIGNOR)		
Inventor:	Shao-Ping Chen	Date:	JUN 2 3 2017/
Signature:	Shao-Ping (hen.	
	<i>(</i>)		

Page

Page 2 of 8

Title of Invention:

SEMICONDUCTOR DEVICE AND METHOD of FORMING THE SAME

As the below named inventor, I hereb 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 invento application.	or or an original joint inventor of a	a claimed invention in the	
I hereby acknowledge that any willful under18 U.S.C. 1001 by fine or impris	false statement made in this dec sonment of not more than five (5	claration is punishable i) years, or both.	
	UNITED MICROELECTRON	NICS having a postal ad	ddress of
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(referred to as "ASSIGNEE"below) to acknowledged, and for other good and	I of the sum of One Dollar (\$ 1.0 d valuable consideration.	00), the receipt of which is h	nereby
I hereby sell, assign and transfer to At the entire right, title and interest in and invention as above-identified application invention by the above application or a substitutes, or extensions thereof, and	d to any and all improvements w on and, in and to, all Letters Pat any continuations, continuation-i	which are disclosed in the tent to be obtained for said in-part, divisions, renewals.	
I hereby covenant that no assignment entered into which would conflict with	, sale, agreement or encumbran this assignment;	nce has been or will be mad	e or
I further covenant that ASSIGNEE will and documents relating to said inventi known and accessible to I and will tes related thereto and will promptly exect	ion and said Letters Patent and tify as to the same in any interfe	legal equivalents as may be erence, litigation proceeding	3
representatives any and all papers, in: maintain, issue and enforce said appli equivalents thereof which may be nec IN WINTNESS WHEREOF, I have he	ication, said invention and said Lessary or desirable to carry out	Letters Patent and said the proposes thereof.	of signing)
Note: An application data sheet (PTO/ inventive entity, must accompany this	/SB/14 or equivalent), including form. Use this form for <u>each add</u>	naming the entire ditional inventor.	

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NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083

LEGAL NAME OF INVENTOR(ASSIGNOR)				
Inventor:	Huan-Chi Ma	Date:	JUN 2 3 2017	
Signature:	Huan Chi	Men		

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NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083

Title of Invention:

SEMICONDUCTOR DEVICE AND METHOD of FORMING THE SAME

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I hereby sell, assign and transfer to a the entire right, title and interest in a invention as above-identified applica invention by the above application or substitutes, or extensions thereof, ar	nd to any and all improvements w ition and, in and to, all Letters Pat r any continuations, continuation-i	hich are disclosed in the ent to be obtained for said in-part, divisions, renewals.	IEE
I hereby covenant that no assignmer entered into which would conflict with	nt, sale, agreement or encumbran h this assignment;	ce has been or will be made	or
I further covenant that ASSIGNEE wand documents relating to said inver known and accessible to I and will te related thereto and will promptly exe	ntion and said Letters Patent and lestify as to the same in any interfe	legal equivalents as may be rence, litigation proceeding	ots
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 invention and said Lecessary or desirable to carry out	etters Patent and said the proposes thereof.	of signing)
Note: An application data sheet (PTC inventive entity, must accompany thi	D/SB/14 or equivalent), including of some some states of the sound in the sound int	naming the entire ditional inventor.	

Page 5 of 8

NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083

LEGAL NAME OF INVENTOR(ASSIGNOR)				
Inventor:	Chien-Wen Yu	Date:	JUN 2 3 2017	
Signature:	Ohien-Wen Yu			

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NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083

Title of Invention:

SEMICONDUCTOR DEVICE AND METHOD of FORMING THE SAME

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 under18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
In consideration of the payment by UNITED MICROELECTRONICS having a postal address of CORP.
No.3, Li-Hsin Road 2, Science-Based Industrial Park, Hsin-Chu City 300, Taiwan, R.O.C
(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 proposes thereof. IN WINTNESS WHEREOF, I have hereunto set hand and seal this
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.

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NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083

LEGAL NAI	ME OF INVENTOR(ASSIGNOR)				
Inventor:	Kuo-Chin Hung	Date:	JUN	23	2017
Signature:	Kuo-Chim	Hung			

NPO#NAU-P3027-USA:0 CUST#UMCD-2017-0083 Page 8 of 8

F#NPO-P0002E-US1201 DSB0-106U009483

PATENT REEL: 042855 FRAME: 0408

RECORDED: 06/28/2017