504210945 02/02/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4257622

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
En-Chiuan Liou	01/26/2017	
Hon-Huei Liu	01/26/2017	
Chia-Hung Lin	01/26/2017	
Yu-Cheng Tung	01/26/2017	

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:	15423544

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:** P.O.BOX 506

Address Line 4: MERRIFIELD, VIRGINIA 22116

ATTORNEY DOCKET NUMBER:	NAUP2949USA
NAME OF SUBMITTER:	SIBYL YU
SIGNATURE:	/SIBYL YU/
DATE SIGNED:	02/02/2017

Total Attachments: 8

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PATENT REEL: 041163 FRAME: 0202

504210945



Title of Invention: METHOD OF PATTERNING SEMICONDUCTOR DEVICE

As the below named inventor, I hereb This declaration is directed to:	y declare that:				
☑ The attached application, or					
☐ United States application nur	mber	file	ed on		, or
☐ PCT international application	number	The state of the s	_filed on _		
The above-identified application was	made or authorize	ed to be made by	me.		
I believe that I am the original invento application.	or or an original joi	int inventor of a cla	aimed inver	ntion in the	е
I hereby acknowledge that any willful under18 U.S.C. 1001 by fine or impri	false statement n sonment of not me	nade in this declar ore than five (5) ye	ation is pun ears, or botl	nishable h.	
In consideration of the payment by	UNITED MICRO	OELECTRONIC	S havin	ng a posta	al address of
No.3, Li-Hsin Road 2, Science	-Based Indust	rial Park, Hsin-	Chu City	300, Tai	wan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the sum of O d valuable consid	ne Dollar (\$ 1.00), eration.	, the receipt	t 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 in tion and, in and to rany continuations	mprovements whic , all Letters Paten s, continuation-in-;	ch are disclo t to be obta part, division	osed in th ined for s ns, renew	e aid ⁄als,
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreemer n this assignment;	nt or encumbrance	has been o	or will be	made or
I further covenant that ASSIGNEE wand documents relating to said inverknown and accessible to I and will to related thereto and will promptly exercise.	ntion and said Lett estify as to the san	ers Patent and leg ne in any interfere	gal equivale nce, litigatio	ints as ma	ay be
representatives any and all papers, maintain, issue and enforce said appequivalents thereof which may be no IN WINTNESS WHEREOF, I have h	olication, said inve ecessary or desira	ention and said Let ble to carry out the	tters Patent	and said thereof.	Date of signing)
Note: An application data sheet (PT inventive entity, must accompany the	O/SB/14 or equiva	alent), including na orm for <u>each addit</u>	ıming the ei ional invent	ntire tor.	

Page 1 of 8

F#NPO-P0002E-US1201 DSB0-105U035134

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: En-Chiuan Liou

Date:

JAN 2 6 2017

Signature:

Page 2 of 8

F#NPO-P0002E-US1201

Title of Invention: METHOD OF PATTERNING SEMICONDUCTOR DEVICE

As the below named inventor, I here This declaration is directed to:	by declare that:			
☑ The attached application, or				
☐ United States application number		f	iled on	, or
☐ PCT international application	number			
The above-identified application was	made or authorize	ed to be made by	/ me.	
I believe that I am the original inventapplication.	or or an original joi	int inventor of a c	slaimed invention in	the
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr				;
In consideration of the payment by	UNITED MICRO	OELECTRONI	CS having a pos	stal address of
No.3, Li-Hsin Road 2, Science	-Based Industi	rial Park, Hsin	-Chu City 300, T	aiwan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good ar), the receipt of whic	ch 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, an	nd to any and all ir tion and, in and to r any continuations	nprovements whi , all Letters Paters, continuation-in-	ich are disclosed in nt to be obtained for -part, divisions, rene	the r said ewals,
I hereby covenant that no assignmentered into which would conflict with		t or encumbranc	e has been or will be	e made or
I further covenant that ASSIGNEE wand documents relating to said inverknown and accessible to I and will to related thereto and will promptly exercise.	ntion and said Lette estify as to the sam	ers Patent and le ne in any interfere	gal equivalents as r ence, litigation proce	may be
representatives any and all papers, maintain, issue and enforce said appequivalents thereof which may be no IN WINTNESS WHEREOF, I have h	olication, said inver ecessary or desiral	ntion and said Le ble to carry out th	tters Patent and sai	id (Date of signing) -
Note: An application data sheet (PTo inventive entity, must accompany the				

Page 3 of 8

DSB0-105U035134

Docket No NAUP2949USA

LEGAL NAME OF INVENTOR(ASSIGNOR)						
Inventor:	Hon-Huei Liu	Date: JAN 2 6 2017				
Signature:	外别	lotor Huisin				

Page 4 of 8

NPO#NAU-P2949-USA:0 CUST#UMCD-2016-0684

Title of Invention: METHOD OF PATTERNING SEMICONDUCTOR DEVICE

As the below named inventor, I here This declaration is directed to:	by declare that:			
☑ The attached application, or				
☐ United States application number			on	, or
☐ PCT international application	n number	file	d on	
The above-identified application was	made or authorized	to be made by me.		
I believe that I am the original invent application.	or or an original joint	nventor of a claime	d invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	I false statement mad isonment of not more	e in this declaration than five (5) years,	is punishable or both.	
In consideration of the payment by	UNITED MICROE CORP.	LECTRONICS	having a postal ad	ldress of
No.3, Li-Hsin Road 2, Science	-Based Industrial	Park, Hsin-Chu	City 300, Taiwa	n, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	o I of the sum of One ad valuable considera	Dollar (\$ 1.00), the tion.	receipt of which is h	ereby
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 or substitutes, or extensions thereof, an	nd to any and all impr tion and, in and to, al any continuations, c	ovements which are Letters Patent to b ontinuation-in-part. (e disclosed in the e obtained for said divisions, renewals	
I hereby covenant that no assignmer entered into which would conflict with	nt, sale, agreement or n this assignment;	encumbrance has	been or will be mad	e or
I further covenant that ASSIGNEE w and documents relating to said inven known and accessible to I and will te related thereto and will promptly exe	ition and said Letters stify as to the same in	Patent and legal eq ı any interference. li	uivalents as may be	9
representatives any and all papers, in maintain, issue and enforce said app equivalents thereof which may be no IN WINTNESS WHEREOF, I have he	olication, said invention cessary or desirable	n and said Letters F to carry out the prop	Patent and said poses thereof.	of signing)
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivalent s form. Use this form), including naming for_each_additional i	the entire	

Page 5 of 8

NPO#NAU-P2949-USA:0 CUST#UMCD-2016-0684

Docket No NAUP2949USA

LEGAL NAI	ME OF INVENTOR(ASSIGNOR)			
Inventor:	Chia-Hung Lin	Date:	JAN 2 6 2017	
Signature:	chia- Hung Lon			

Page 6 of 8

NPO#NAU-P2949-USA:0 CUST#UMCD-2016-0684

Title of Invention: METHOD OF PATTERNING SEMICONDUCTOR DEVICE

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	d on	, or
☐ PCT international application	n number	f	iled on	***************************************
The above-identified application was	made or authorize	d to be made by m	e.	
I believe that I am the original inventapplication.	or or an original joi	nt inventor of a clair	ned invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	l false statement m isonment of not mo	ade in this declarat re than five (5) yea	ion is punishable rs, or both.	
In consideration of the payment by	UNITED MICRO	ELECTRONICS	having a postal a	ddress of
No.3, Li-Hsin Road 2, Science	-Based Industr	al Park, Hsin-Cl	 าน City 300, Taiwa	ın, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the sum of Or d valuable conside	e Dollar (\$ 1.00), th ration.	e receipt of which is t	nereby
I hereby sell, assign and transfer to A the entire right, title and interest in ar invention as above-identified applica- invention by the above application or substitutes, or extensions thereof, an	nd to any and all im tion and, in and to, rany continuations,	provements which a all Letters Patent to continuation-in-par	are disclosed in the be obtained for said t, divisions, renewals.	
I hereby covenant that no assignmer entered into which would conflict with	nt, sale, agreement n this assignment;	or encumbrance ha	as 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 Lette stify as to the same	rs Patent and legal	equivalents as may be e. litigation proceeding	е
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 inven- cessary or desirabl	tion and said Letter e to carry out the p	s Patent and said roposes thereof.	e of signing)
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivale s form. Use this for	nt), including naming for each addition	ng the entire	

Page 7 of 8

NPO#NAU-P2949-USA:0 CUST#UMCD-2016-0684

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor: Yu-Ch

Yu-Cheng Tung

Date:

JAN 26 2017

Signature:

Page 8 of 8

F#NPO-P0002E-US1201 DSB0-105U035134

NPO#NAU-P2949-USA:0 CUST#UMCD-2016-0684

RECORDED: 02/02/2017