#### 504967855 06/20/2018

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5014601

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Jen-Chieh Lin	06/08/2018
Wen-Chin Lin	06/08/2018
Chi-Lune Huang	06/08/2018
Pi-Hung Chuang	06/08/2018
Tai-Lin Chen	06/08/2018
Sun-Hong Chen	06/08/2018

### **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
Name:	FUJIAN JINHUA INTEGRATED CIRCUIT CO., LTD.
Street Address:	NO.88, LIANHUA AVENUE, INTEGRATED CIRCUIT SCIENCE PARK, JINJIANG CITY
City:	QUANZHOU CITY, FUJIAN PROVINCE
State/Country:	CHINA

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

Property Type	Number
Application Number:	15904405

### **CORRESPONDENCE DATA**

(703)997-4517 Fax Number:

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: 5F., NO.389, FUHE RD., YONGHE DIST.,

Address Line 4: **NEW TAIPEI CITY, TAIWAN** 

ATTORNEY DOCKET NUMBER:	NAUP2974USA
NAME OF SUBMITTER:	KATE YEH

**PATENT REEL: 046135 FRAME: 0178** 504967855

SIGNATURE:	/KATE YEH/
DATE SIGNED:	06/20/2018
Total Attachments: 14	
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PATENT REEL: 046135 FRAME: 0179

PLANARIZATION METHOD			
As the below named inventor, I hereby This declaration is directed to:	ι declare that:		
$\square$ The attached application, or			
☑ United States application num	ber 15/904,405	_filed on <u>02/25/2018</u> , or	
☐ PCT international application r	number	filed on	
The above-identified application was n	nade or authorized to be made	by me.	
I believe that I am the original inventor application.	or an original joint inventor of	a claimed invention in the	
I hereby acknowledge that any willful founder18 U.S.C. 1001 by fine or impriso			
In consideration of the payment by	JNITED MICROELECTRO	NICS having a postal address of	
No.3, Li-Hsin Road 2, Science-E	Based Industrial Park, Hs	in-Chu City 300, Taiwan, R.O.C	
(referred to as "ASSIGNEE"below) to I acknowledged, andfor other good and	of the sum of One Dollar (\$ 1. valuable consideration.	00), the receipt of which is hereby	
	Fujian Jinhua Integrated C Co., Ltd.	Circuit having a postal address of	
No.88, Lianhua Avenue, Integra Fujian Province 362200, P.R.C.		, Jinjiang City, Quanzhou City,	
(referred to as "ASSIGNEE"below) to I acknowledged, andfor other good and	of the sum of One Dollar (\$ 1. valuable consideration.	00), the receipt of which is hereby	
I hereby sell, assign and transfer to AS 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	I to any and all improvements won and, in and to, all Letters Pa any continuations, continuation- as to Letters Patent any reissu	which are disclosed in the tent to be obtained for said in-part, divisions, renewals, se 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;			

Page 1 of 14

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

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

Title of Invention:

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 WITNESS WHEREOF, I have hereunto set hand and seal this JUN 0 8 2018 (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 <u>each additional inventor</u>.

LEGAL NA	ME OF INVENTOR(ASSIGNOR)			
Inventor:	Jen-Chieh Lin	Date:	JUN 08 2018	
Signature:	In which she	-		

Page 2 of 14

PLANARIZATION METHOD					
As the below named inventor, I here This declaration is directed to:	by decl	are that:			
☐ The attached application, or					
☑ United States application nu	mber	15/904,405	filed o	n <u>02/25/2018</u> , or	
☐ PCT international application	n numl	ber	file	d 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 ar	n original joint inven	tor of a claime	d invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	ıl false s isonme	statement made in t ent of not more than	this declaration five (5) years,	is punishable or both.	
In consideration of the payment by	UNIT	ED MICROELEC P.	TRONICS	having a postal 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 ar			r (\$ 1.00), the	receipt of which is hereby	
In consideration of the payment by	Fujia Co I	n Jinhua Integra _td.	ated Circuit	having a postal address of	

(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.

No.88, Lianhua Avenue, Integrated Circuit Science Park, Jinjiang City, Quanzhou City,

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

Page 3 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

Fujian Province 362200, P.R.C.

Title of Invention:

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 WITNESS WHEREOF, I have hereunto set hand and seal this on the date(s) indicated.

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use this form for <u>each additional inventor</u>.

LEGAL NAM	ME OF INVENTOR(ASSIGNOR)			
Inventor:	Lee-Yuan Chen	Date:		
Signature:				

Page 4 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

PLANARIZATION METHOD				
As the below named inventor, I here This declaration is directed to:	by declare that:			
☐ The attached application, or				
☑ United States application nu	mber 15/904,405	filed o	n 02/25/2018	. or
☐ PCT international application			d on	
The above-identified application was				
I believe that I am the original invent application.	or or an original joint in	ventor of a claimed	l invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	l false statement made sonment of not more t	in this declaration nan five (5) years, o	is punishable or both.	
In consideration of the payment by	UNITED MICROEL CORP.	ECTRONICS	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 D d valuable consideration	ollar (\$ 1.00), the roon.	eceipt of which is h	ereby
In consideration of the payment by	Fujian Jinhua Inte Co., Ltd.	grated Circuit	having a postal ad	ldress of
No.88, Lianhua Avenue, Integ Fujian Province 362200, P.R.O	rated Circuit Scien	ce Park, Jinjian	g City, Quanzh	ou City,
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	ol of the sum of One D d valuable consideration	ollar (\$ 1.00), the roon.	eceipt of which is h	ereby
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 thereby application or substitutes.	nd to any and all impro- tion and, in and to, all l any continuations, cor ad as to Letters Patent	vements which are Letters Patent to be ntinuation-in-part, d any reissue or re-e	disclosed in the obtained for said ivisions, renewals, xamination 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;				

Page 5 of 14

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

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Title of Invention:

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 WITNESS WHEREOF, I have hereunto set hand and seal this 100 0 8 2016 (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 <u>each additional inventor.</u>

Inventor: Wen-Chin Lin

Signature: Ven - Chin | 1 in

Page 6 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

Title	of	Invent	ion:	
PLA	NΑ	RIZAT	ION M	ETHOD

As the below named inventor, I here This declaration is directed to:	by decl	are that:			
$\Box$ The attached application, or					
☑ United States application nu	mber	15/904,405	filed c	on 02/25/2018	, or
☐ PCT international application	numl	oer	file	d on	_
The above-identified application was	made	or authorized to be	e made by me.		
I believe that I am the original invent application.	or or ar	n original joint inve	ntor of a claime	d invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	l false s isonme	statement made in nt of not more thai	this declaration n five (5) years,	is punishable or both.	
In consideration of the payment by	UNIT	ED MICROELE	CTRONICS	having a postal a	ıddress of
No.3, Li-Hsin Road 2, Science	-Base	d Industrial Pa	rk, Hsin-Chu	City 300, Taiw	an, R.O.C
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the	e sum of One Dolla able consideration.	ar (\$ 1.00), the	receipt of which is	hereby
In consideration of the payment by	Fujiaı Co., L	n Jinhua Integr .td.	ated Circuit	having a postal a	ddress of
No.88, Lianhua Avenue, Integ Fujian Province 362200, P.R.C	rated	Circuit Science	Park, Jinjia	ng City, Quanz	hou City,
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the	e sum of One Dolla able consideration.	ar (\$ 1.00), the i	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 invention by the above application or substitutes, or extensions thereof, an	nd to an tion and any co	ny and all improver d, in and to, all Let entinuations, contin	ments which are ters Patent to be nuation-in-part. o	e disclosed in the e obtained for said divisions, renewals	] 
I hereby covenant that no assignmen entered into which would conflict with	it, sale, this as	agreement or end ssignment;	cumbrance has l	been or will be ma	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 stify as	d said Letters Pate to the same in an	ent and legal eq v interference. li	uivalents as may t tigation proceedin	ne e

Page 7 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

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.

Inventor: Chi-Lune Huang

Signature: Chi-Lune Huang

Date: JUN 0 8 2018

Page 8 of 14

Title of Invention:	
<b>PLANARIZATION</b>	<b>METHOD</b>

As the below named inventor, I hereby declare that: This declaration is directed to:
☐ The attached application, or
☑ United States application number 15/904,405 filed on 02/25/2018 , or
□ PCT international application numberfiled 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, andfor other good and valuable consideration.
In consideration of the payment by Fujian Jinhua Integrated Circuit having a postal address of Co., Ltd.
No.88, Lianhua Avenue, Integrated Circuit Science Park, Jinjiang City, Quanzhou City, Fujian Province 362200, P.R.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

Page 9 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

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 WITNESS WHEREOF, I have hereunto set hand and seal this JUN 0 8 2018 (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 <u>each additional inventor.</u>

LEGAL NAME OF INVENTOR(ASSIGNOR)							
Inventor:	Pi-Hung Chuang	Date:	JUN 08 2018				
Signature:	9 Pi - Hung Chuang						

Page 10 of 14

PLANARIZATION METHOD					
As the below named inventor, I here This declaration is directed to:	by decl	are that:			
☐ The attached application, or	•				
☑ United States application nu	ımber	15/904,405	filed o	n 02/25/2018	, or
☐ PCT international application	n numb	oer	file	d on	
The above-identified application was	s made (	or authorized to be			
I believe that I am the original invent application.	tor or an	original joint inver	ntor of a claime	d invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	ıl false s isonmer	tatement made in nt of not more than	this declaration five (5) years,	is punishable or both.	
In consideration of the payment by	UNITE	ED MICROELEC P.	CTRONICS	having a postal a	ddress of
No.3, Li-Hsin Road 2, Science	-Base	d Industrial Par	rk, Hsin-Chu	– City 300, Taiwa	an, R.O.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	o I of the	sum of One Dolla			
In consideration of the payment by	Fujiar Co., L		ated Circuit	having a postal a	ddress of
No.88, Lianhua Avenue, Integ Fujian Province 362200, P.R.C	rated ( C.	Circuit Science	Park, Jinjiai	ng City, Quanzh	ou City
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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 I hereby covenant that no assignment	nd to an tion and r any con nd as to	y and all improvem I, in and to, all Lett ntinuations, continu Letters Patent any	nents which are ers Patent to be uation-in-part, o reissue or re-e	disclosed in the obtained for said divisions, renewals examination thereo	, f.
entered into which would conflict with	n this as	signment;	ambiance nas i	Scott or will be Hig(	16 OI

Page 11 of 14

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

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NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

Title of Invention:

maintain is	ives any and all p sue and enforce thereof which ma S WHEREOF, I I	said application	n said inventio	n and said	il etters P	atent a	ind said	e 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.								
LEGAL NAI	ME OF INVENTO	R(ASSIGNOR	₹)					
Inventor:	Tai-Lin Cher	1		Date:	JUN	108	2018	
Signature:	Tai - Lin	Chen	in the second of					

Page 12 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181

Title of Invention:	
<b>PLANARIZATION</b>	<b>METHOD</b>

As the below named inventor, I here This declaration is directed to:	by decl	are that:			
☐ The attached application, or					
☑ United States application nu	ımber	15/904,405	filed on	02/25/2018	, or
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No.3, Li-Hsin Road 2, Science	-Base	d Industrial Pa	rk, Hsin-Chu C	ity 300, Taiwa	an. R.O.0
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In consideration of the payment by	Fujiar Co., L		ated Circuit h	aving a postal a	ddress of
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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 of substitutes, or extensions thereof, ar	nd to an tion and any col	y and all improver I, in and to, all Let ntinuations. contir	ments which are di ters Patent to be o nuation-in-part, divi	sclosed in the btained for said sions, renewals	
I hereby covenant that no assignmer entered into which would conflict with	nt, sale, n this as	agreement or end signment;	cumbrance has bee	en or will be mad	de 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	ition and stify as	d said Letters Pate to the same in an	ent and legal equiv v interference, litiga	alents as may b	e
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Page 13 of 14

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representatives any and all papers, instruments of ani- maintain, issue and enforce said application, said inve equivalents thereof which may be necessary or desira IN WITNESS WHEREOF, I have hereunto set hand al	ention and said able to carry ou	Letters Patent and s	of.
Note: An application data sheet (PTO/SB/14 or equiva inventive entity, must accompany this form. Use this fo	alent), including orm for <u>each ac</u>	naming the entire	
LEGAL NAME OF INVENTOR(ASSIGNOR)			
Inventor: Sun-Hong Chen	Date:	JUN 0 8 201	8
signature: Sun - Hong Chen			-

Page 14 of 14

NPO#NAU-P2974-USA:0 CUST#UMCF-2016-0181 F#NPO-P0002E-US1201 DSB0-106U036473

PATENT REEL: 046135 FRAME: 0193