504820223 03/15/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4866958

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Li-Chiang Chen	03/14/2018
Fu-Che Lee	03/14/2018
Ming-Feng Kuo	03/14/2018
Chieh-Te Chen	03/14/2018
Hsien-Shih Chu	03/14/2018

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:	15876220

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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ATTORNEY DOCKET NUMBER:	NAUP2855USA
NAME OF SUBMITTER:	SIBYL YU
SIGNATURE:	/SIBYL YU/

PATENT 504820223 REEL: 045215 FRAME: 0505

DATE SIGNED:	03/15/2018
Total Attachments: 10	
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PATENT REEL: 045215 FRAME: 0506

Title of Invention: METHOD FOR FORMING BURIED WORD LINES

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	15/876,220	filed o	n 01/22/2018	_, or
☐ PCT international applicatio	n numl	ber	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 inven	tor of a claimed	l invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	l false s isonme	tatement made in t nt of not more than	this declaration five (5) years,	is punishable or both.	
In consideration of the payment by	UNITE	ED MICROELEC).	TRONICS	having a postal ad	ddress of
No.3, Li-Hsin Road 2, Science	-Base	d Industrial Par	k, Hsin-Chu	City 300, Taiwa	n, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the	e sum of One Dolla ble consideration.	r (\$ 1.00), the r	eceipt of which is h	nereby
In consideration of the payment by	Fujiar Co., L	n Jinhua Integra td.	ted Circuit	having a postal ac	ldress of
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 w 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 Pater to the same in any	nt and legal equ interference, lit	uivalents as may be tigation proceeding	2

Page 1 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

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 __MAR__1_4__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 NAI	ME OF INVENTOR(ASSIG	NOR)			
Inventor:	Li-Chiang Chen		Date:	MAR 1 4 2018	
Signature:	LT-chrang	<u>Chen</u>			
	/1				

Page 2 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

Title of Invention: METHOD FOR FORMING BURIED WORD LINES

As the below named inventor, I hereby declare that: This declaration is directed to:
☐ The attached application, or
☑ United States application number 15/876,220 filed on 01/22/2018 , 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, and for 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.
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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 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 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

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 __MAR__1_4_2010_ (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 NAI	ME OF INVENTOR(ASSIGNOR)		
Inventor:	Fu-Che Lee	Date:	MAR 1 4 2018
Signature:	Fu-Che Lee		

Page 4 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

Title of Invention:

METHOD FOR FORMING BURIED WORD LINES

As the below named inventor, I here This declaration is directed to:		are that:			
☐ The attached application, or					
United States application numbers	mber	15/876,220	filed or	n <u>01/22/2018</u> , e	or
☐ PCT international application	n numb	oer	filed	on	
The above-identified application was	made o	or authorized to be	made by me.		
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I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	false s sonmer	tatement made in nt of not more than	this declaration i five (5) years, c	s punishable or both.	
In consideration of the payment by UNITED MICROELECTRONICS having a postal address of CORP.				ss of	
No.3, Li-Hsin Road 2, Science	-Base	d Industrial Pai	rk, Hsin-Chu (City 300, Taiwan, I	R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	I of the	e sum of One Dolla ble consideration.	ar (\$ 1.00), the re	eceipt of which is here	by
	Fujian Co., L		ated Circuit	having a postal addre	ss of
No.88, Lianhua Avenue, Integ Fujian Province 362200, P.R.C	rated (Circuit Science	Park, Jinjian	g City, Quanzhou	City,
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the	e sum of One Dolla ble consideration.	ar (\$ 1.00), the re	eceipt of which is here	by
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	id to ang ion and any coi	y and all improven l, in and to, all Lett ntinuations. contin	nents which are e ers Patent to be uation-in-part, di	disclosed in the obtained for said visions, renewals	Ē
I hereby covenant that no assignmen entered into which would conflict with	t, sale, this as	agreement or enci signment;	umbrance has b	een or will be made o	r
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 t	d said Letters Pate to the same in any	nt and legal equ interference. liti	ivalents as may be	

Page 5 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

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LEGAL NAME OF INVENTOR(ASSIGNOR)						
Inventor:	Ming-Feng Kuo	Date:	MAR 1 4 2010			
Signature:	Ming-Feng Kuo					

Page 6 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

Title of Invention: METHOD FOR FORMING BURIED WORD LINES

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Page 7 of 10

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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 NAI	ME OF INVENTOR(AS	SIGNOR)			
Inventor:	ntor: Chieh-Te Chen		Date:	MAR 1 4 2018	
Signature:	Chieh-Te	Chen			

Page 8 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

Title of Invention: METHOD FOR FORMING BURIED WORD LINES

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☐ The attached application, or					
☑ United States application nu	mber	15/876,220	filed o	on <u>01/22/2018</u>	, or
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No.3, Li-Hsin Road 2, Science	-Base	ed Industrial P	ark, Hsin-Chu	City 300, Taiwa	an, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	l of the	e sum of One Do able consideration	llar (\$ 1.00), the n.	receipt of which is	hereby
In consideration of the payment by	Fujiaı Co., L		rated Circuit	having a postal a	ddress of
No.88, Lianhua Avenue, Integ Fujian Province 362200, P.R.C	rated	Circuit Scienc	e Park, Jinjia	– ng City, Quanzh	າou 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 applica invention by the above application or substitutes, or extensions thereof, an	id to ar tion and any co	ny and all improve d, in and to, all Le ontinuations, cont	ements which are etters Patent to b inuation-in-part,	e disclosed in the e obtained for said divisions, renewals	
I hereby covenant that no assignmer entered into which would conflict with	it, sale, i this as	, agreement or en ssignment;	cumbrance has	been or will be mad	de or
I further covenant that ASSIGNEE was and documents relating to said inven known and accessible to I and will te related thereto and will promptly executed.	tion an stify as	d said Letters Pa to the same in a	tent and legal eq ny interference. I	uivalents as may b	e

Page 9 of 10

NPO#NAU-P2855-USA:0 CUST#UMCF-2016-0035

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IN WITNESS WHEREOF, I have hereunto set hand and seal this MAR 1 4 2018 (Date of signing)

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LEGAL NAI	ME OF INVENTOR(ASSIGNOR)			
Inventor:	Hsien-Shih Chu	Date:	MAR 1 4 2018	
Signature:	Hsien-Shih Chy			

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F#NPO-P0002E-US1201 DSB0-106U036690

PATENT REEL: 045215 FRAME: 0516

RECORDED: 03/15/2018