504001800 09/12/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4048456

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chia-Lin Lu	07/22/2014
Chun-Lung Chen	07/22/2014
Kun-Yuan Liao	07/22/2014
Feng-Yi Chang	07/22/2014

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:	15263349

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

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

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

Address Line 4: MERRIFIELD, VIRGINIA 22116

ATTORNEY DOCKET NUMBER:	NAUP2325USA1
NAME OF SUBMITTER:	KATE YEH
SIGNATURE:	/KATE YEH/
DATE SIGNED:	09/12/2016

Total Attachments: 8

source=2659002#page1.tif

source=2659002#page2.tif

source=2659002#page3.tif

source=2659002#page4.tif

PATENT REEL: 039706 FRAME: 0862

504001800



PATENT REEL: 039706 FRAME: 0863

COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention: SEMICONDUCTOR DEVICE HAVING METAL GATE AND MANUFACTURING METHOD THEREOF

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 o	n		
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 inventor of a	ı claimed in	vention in	the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	I false statement made in this decisionment of not more than five (5	claration is p) years, or b	ounishable ooth	e	
In consideration of the payment by	UNITED MICROELECTRON CORP.	NICS ha	ving a po	stal address o	of
No.3, Li-Hsin Road 2, Science	-Based Industrial Park, Hsi	n-Chu Cit	ty 300, T	aiwan, R.O	.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	o I of the sum of One Dollar (\$ 1.0 d valuable consideration.	00), the rece	ipt of which	ch is hereby	
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 improvements w tion and, in and to, all Letters Pat any continuations, continuation-i	hich are dis ent to be ob n-part, divis	closed in tained for ions, rene	the r said ewals.	
l hereby covenant that no assignmer entered into which would conflict with	nt, sale, agreement or encumbran n this assignment;	ce has bee	n or will be	e 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 l stify as to the same in any interfe	legal equiva rence. litiga	ilents as r	nav 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 invention and said L cessary or desirable to carry out	etters Pate the propose	nt and sai s thereof.	d , (Date of signi	ng)
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivalent), including i s form. Use this form for <u>each add</u>	naming the ditional inve	entire ntor.		

Page 1 of 8

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331

ME OF INVENTOR(ASSIGNOR)			
Chia-Lin Lu	Date:	JUL 22 2014	
Chia-Lin Lu			
	Chia-Lin Lu	Chia-Lin Lu Date:	Chia-Lin Lu Date: JUL 2 2 2014

Page 2 of 8

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331 F#NPO-P0002E-US1201 DSC0-103U006961

PATENT REEL: 039706 FRAME: 0865

COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention: SEMICONDUCTOR DEVICE HAVING METAL GATE AND MANUFACTURING METHOD THEREOF

As the below named inventor, I here This declaration is directed to:	by declare that:	\$17 花 点。	Series Services (Services)	
☑ The attached application, or				
☐ United States application nu	mber	filed	on	, or
☐ PCT international application	number	fil	ed on	
The above-identified application was	made or authorized to be	made by me	•	
I believe that I am the original inventapplication.	or or an original joint inver	ntor of a claim	ed invention ir	ı the
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	l false statement made in isonment of not more than	this declaration if the thick the th	on is punishabl s, or both.	е
In consideration of the payment by	UNITED MICROELEC	CTRONICS	having a po	stal address of
No.3, Li-Hsin Road 2, Science	-Based Industrial Par	rk, Hsin-Ch	u City 300,	Гаiwan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	ol of the sum of One Dolla d valuable consideration.	nr (\$ 1.00), the	receipt of whi	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 invention by the above application or substitutes, or extensions thereof, an	nd to any and all improven tion and, in and to, all Lett any continuations, contin	nents which a ers Patent to uation-in-part	re disclosed in be obtained fo divisions, ren	the r said ewals
I hereby covenant that no assignmen entered into which would conflict with	t, sale, agreement or enco this assignment;	umbrance has	s been or will b	e 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 Pate stifv as to the same in anv	nt and legal e interference	quivalents as l	may be
representatives any and all papers, ir maintain, issue and enforce said app equivalents thereof which may be ne IN WINTNESS WHEREOF, I have he	lication, said invention and cessary or desirable to ca	d said Letters	Patent and sa	id (Date of signing) -
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivalent), inc s form. Use this form for <u>e</u>	luding naming ach additional	the entire inventor.	

Page 3 of 8

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331

LEGAL NA	ME OF INVENTOR(ASSIGNOR)			
Inventor:	Chun-Lung Chen	Date:	JUL 22 2014	
Signature:	Churt-lung hen			

Page 4 of 8

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331

generalise

Andrews Andrews

COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

SEMICONDUCTOR DEVICE H METHOD THEREOF	HAVING METAL GAT	E AND MANUFACTURING	
As the below named inventor, I here This declaration is directed to:	eby declare that:	i servici di servici d Servici di servici di s	
☑ The attached application, or			
☐ United States application nu	ımber	filed on	, or
☐ PCT international application	n number	filed on	
The above-identified application was	s made or authorized to b	pe made by me.	
I believe that I am the original invent application.	tor or an original joint invo	entor of a claimed invention in the	e
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	al false statement made in risonment of not more that	n this declaration is punishable an five (5) years, or both.	
In consideration of the payment by	UNITED MICROELE CORP.	CTRONICS having a posta	l address of
No.3, Li-Hsin Road 2, Science	e-Based Industrial Pa	ark, Hsin-Chu City 300, Tai	wan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good ar	o I of the sum of One Dol nd valuable consideration	lar (\$ 1.00), 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 improve ation and, in and to, all Le r any continuations, conti nd as to Letters Patent ar	ements which are disclosed in the atters Patent to be obtained for sa nuation-in-part, divisions, renewa ny reissue or re-examination ther	e aid als, eof.
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreement or en h this assignment;	cumbrance has been or will be n	nade or
I further covenant that ASSIGNEE w and documents relating to said inver known and accessible to I and will te related thereto and will promptly exe	ntion and said Letters Pat estify as to the same in ar	ent and legal equivalents as may	/ be
representatives any and all papers, i maintain, issue and enforce said app equivalents thereof which may be no IN WINTNESS WHEREOF, I have he	olication, said invention a ecessary or desirable to c	nd said Letters Patent and said arry out the proposes thereof.	ate 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 5 of 8

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331

Title of Invention:

F#NPO-P0002E-US1201 DSC0-103U006961

LEGAL NAME OF INVENTOR(ASSIGNOR)					
Inventor:	Kun-Yuan Liao	Date:	JUL	22 2014	
•					
Signature:	Kun Then Liao				

Page 6 of 8

F#NPO-P0002E-US1201 DSC0-103U006961

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331

and the second of the second o

PATENT REEL: 039706 FRAME: 0869

COMBINE DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

SEMICONDUCTOR DEVICE HAVING METAL GATE AND MANUFACTURING **METHOD THEREOF** As the below named inventor, I hereby declare that: This declaration is directed to: ☑ The attached application, or ☐ United States application number ☐ PCT international application number 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. 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; in the second of the second 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

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>.

equivalents thereof which may be necessary or desirable to carry out the proposes thereof.

Page 7 of 8

IN WINTNESS WHEREOF, I have hereunto set hand and seal this JUL 2 2 2014 (Date of signing)

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331

Title of Invention:

LEGAL NAME OF INVENTOR(ASSIGNOR)

and the second second

Inventor: Feng-Yi Chang Date: JUL 2.2 2014

Signature: Feng- (; Chang

NPO#NAU-P2325-USA:0 CUST#UMCD-2014-0331 Page 8 of 8

F#NPO-P0002E-US1201 DSC0-103U006961

PATENT REEL: 039706 FRAME: 0871

RECORDED: 09/12/2016