502825831 05/28/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2872427

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Duan Quan Liao	03/24/2014
Wei Cheng	03/24/2014
Yikun Chen	03/24/2014
CHING HWA TEY	03/24/2014
Xiao Zhong Zhu	03/24/2014

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:	14288399

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:	NAUP2265USA
NAME OF SUBMITTER:	KATE YEH
SIGNATURE:	/KATE YEH/
DATE SIGNED:	05/28/2014

Total Attachments: 10 source=1962918#page1.tif source=1962918#page2.tif source=1962918#page3.tif

PATENT 502825831 REEL: 032970 FRAME: 0591

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ource=1962918#page9.tif	
ource=1962918#page10.tif	

PATENT REEL: 032970 FRAME: 0592

Title of Invention: SEMICONDUCTOR PROCESS

As the below named inventor, I here This declaration is directed to:	by declare that:			
☑ The attached application, or		4 s		
☐ United States application number		filed (filed on	
☐ PCT international application	n number	file	ed on	
The above-identified application was	s made or authorized t	o be made by me.		, , , , , , , , , , , , , , , , , , ,
I believe that I am the original invent application.	or or an original joint i	nventor of a claime	ed invention in	n 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,	า is punishab , or both.	le
In consideration of the payment by	UNITED MICROE CORP.	LECTRONICS	having a po	ostal address of
No.3, Li-Hsin Road 2, Science	-Based Industrial	Park, Hsin-Chu	ı City 300,	Taiwan, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good ar	o I of the sum of One I nd valuable consideral	Dollar (\$ 1.00), the ion.	receipt of wh	ich 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 impr ition and, in and to, all r any continuations, co	ovements which an Letters Patent to b ontinuation-in-part,	e disclosed in be obtained fo divisions, rer	n the or said newals,
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreement or h this assignment;	encumbrance has	been or will l	be made 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 estify as to the same in	Patent and legal ed any interference, l	quivalents as litigation prod	may be
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 ecessary or desirable t	n and said Letters i to carry out the pro	Patent and sa	aid f. (Date of signing)
Note: An application data sheet (PTC				

Page 1 of 10

NPO#NAU-P2265-USA:0 CUST#UMCD-2014-0049

LEGAL NA	ME OF INVENTOR(ASS	iignuk)	
Inventor:	Duan Quan Liao	Date:	29/03/2019
Signature:	Duan Quan	lia	

Page 2 of 10

Title of Invention:
SEMICONDUCTOR PROCESS

As the below named inventor, I here This declaration is directed to:	by declare that:				
☑ The attached application, or					
☐ United States application number file			, or		
☐ PCT international application	n number	filed on			
The above-identified application was	made or authorized to be m	ade by me.			
I believe that I am the original invent application.	or or an original joint inventor	of a claimed inver	ntion in the		
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	I false statement made in this isonment of not more than fiv	declaration is punge (5) years, or both	nishable h.		
In consideration of the payment by	UNITED MICROELECTI	RONICS havin	ng 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 an	o I of the sum of One Dollar (d valuable consideration.	\$ 1.00), the 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 applica invention by the above application or substitutes, or extensions thereof, an	nd to any and all improvemen tion and, in and to, all Letters any continuations, continuat	its which are disclo Patent to be obtai ion-in-part, division	osed in the ined for said as, renewals		
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreement or encum n this assignment;	brance has been o	r will be made or		
I further covenant that ASSIGNEE wand documents relating to said invented known and accessible to I and will the related thereto and will promptly executed.	tion and said Letters Patent a stify as to the same in any int	and legal equivaler terference, litigation	nts as mav be		
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 thisMAR 2 4 2014(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 each additional inventor.					

Page 3 of 10

NPO#NAU-P2265-USA:0 CUST#UMCD-2014-0049

Inventor: Wei Cheng Date: 24-03-2014

Signature: Wei Cheng

Page 4 of 10

Title of Invention:
SEMICONDUCTOR PROCESS

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 o	led on,		
☐ PCT international application	number	file	d on		
The above-identified application was	made or authorized to be m	nade by me.			
I believe that I am the original invente application.	or or an original joint invento	or of a claimed	d invention in the	B	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	I false statement made in thi sonment of not more than fi	s declaration ve (5) years,	is punishable or both.		
In consideration of the payment by	UNITED MICROELECT CORP.	RONICS	having a posta	l address of	
No.3, Li-Hsin Road 2, Science	-Based Industrial 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 One Dollar (d valuable consideration.	(\$ 1. 00) , the r	eceipt of which	is hereby	
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	nd to any and all improvemention and, in and to, all Letters any continuations, continua	nts which are s Patent to be tion-in-part. d	disclosed in the obtained for salivisions, renewa	e aid als	
I hereby covenant that no assignment entered into which would conflict with	t, sale, agreement or encum this assignment;	nbrance has t	peen or will be m	nade or	
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, in maintain, issue and enforce said app equivalents thereof which may be ne IN WINTNESS WHEREOF, I have he	lication, said invention and s cessary or desirable to carry	aid Letters P	atent and said oses thereof.	ate of signing)	
Note: An application data sheet (PTC inventive entity, must accompany this	o/SB/14 or equivalent), includ s form. Use this form for <u>eac</u>	ding naming t h additional ir	he entire oventor.		

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F#NPO-P0002E-US1201 DSC0-103U002659

REEL: 032970 FRAME: 0597

LEGAL NAME OF INVENTOR(ASSIGNOR)					
Inventor:	Yikun Chen		Date:	24/03/2014	
Signature:	YIKUN	CHEN			

Page 6 of 10

Title of Invention:
SEMICONDUCTOR PROCESS

As the below named inventor, I here This declaration is directed to:	•			
☑ The attached application, or				
☐ United States application nu	mber	filed	on	, or
□ PCT international application	number	file	ed on	***************************************
The above-identified application was	s made or authorized t	o be made by me.		
I believe that I am the original invent application.	or or an original joint i	nventor of a claime	ed invention in the	
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impri	I false statement mad isonment of not more	e in this declaration than five (5) years	n is punishable , or both.	
In consideration of the payment by	UNITED MICROE CORP.	LECTRONICS	having a postal	address of
No.3, Li-Hsin Road 2, Science	-Based Industrial	Park, Hsin-Chւ	ı City 300, Taiv	van, R.O.C.
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an			receipt of which is	s hereby
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, an	nd to any and all impro tion and, in and to, all rany continuations, co	vements which ar Letters Patent to t ntinuation-in-part.	e disclosed in the be obtained for sai divisions, renewa	id Is.
I hereby covenant that no assignment entered into which would conflict with	nt, sale, agreement or n this assignment;	encumbrance has	been or will be m	ade 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	ition and said Letters I stify as to the same in	Patent and legal ed anv interference.	quivalents as may litigation proceedi	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 cessary or desirable t	and said Letters I carry out the pro	Patent and said poses thereof.	ite of signing)
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivalent) s form. Use this form f	, including naming or <u>each a</u> dditional	the entire inventor.	

Page 7 of 10

NPO#NAU-P2265-USA:0 CUST#UMCD-2014-0049

LEGAL NAME OF INVENTOR(ASSIGNOR)									
Inventor:	CHING HWA TEY	Date:	24	Mar	2014				
Signature:	CHONA HWA TEY			******************************	•				

Page 8 of 10

Title of Invention: SEMICONDUCTOR PROCESS

As the below named inventor, I hereby declare the This declaration is directed to:	at:	
☑ The attached application, or		
☐ United States application number	filed on	, or
☐ PCT international application number _	filed on	
The above-identified application was made or auth	norized to be made by me.	
I believe that I am the original inventor or an original application.	nal joint inventor of a claimed invention in	n the
I hereby acknowledge that any willful false statem under18 U.S.C. 1001 by fine or imprisonment of n	ent made in this declaration is punishabl ot more than five (5) years, or both.	le
In consideration of the payment by UNITED M CORP.	ICROELECTRONICS having a po	ostal address of
No.3, Li-Hsin Road 2, Science-Based Ind	ustrial Park, Hsin-Chu City 300,	Taiwan, R.O.C.
(referred to as "ASSIGNEE"below) to I of the sum acknowledged, andfor other good and valuable co	of One Dollar (\$ 1.00), the receipt of whnsideration.	ich is hereby
I hereby sell, assign and transfer to ASSIGNEE ar the entire right, title and interest in and to any and invention as above-identified application and, in ar invention by the above application or any continua substitutes, or extensions thereof, and as to Letter	all improvements which are disclosed in nd to, all Letters Patent to be obtained fo tions, continuation-in-part, divisions, ren	the r said ewals.
I hereby covenant that no assignment, sale, agree entered into which would conflict with this assignm	ment or encumbrance has been or will been;	e made or
I further covenant that ASSIGNEE will, upon its re- and documents relating to said invention and said known and accessible to I and will testify as to the related thereto and will promptly execute and deliv	Letters Patent and legal equivalents as same in any interference, litigation proc	mav be
representatives any and all papers, instruments or maintain, issue and enforce said application, said equivalents thereof which may be necessary or de IN WINTNESS WHEREOF, I have hereunto set ha	invention and said Letters Patent and sa sirable to carry out the proposes thereof	iid f. _(Date of signing) _
Note: An application data sheet (PTO/SB/14 or eq inventive entity, must accompany this form. Use th	uivalent), including naming the entire is form for each additional inventor.	

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F#NPO-P0002E-US1201 DSC0-103U002659

REEL: 032970 FRAME: 0601

LEGAL NAME OF INVENTOR(ASSIGNOR)									
Inventor:	Xiao Zhong Zhu		Date:	24.	٥3.	2014			
Signature:	Xiao	Zhong	Zhu						

NPO#NAU-P2265-USA:0 CUST#UMCD-2014-0049

RECORDED: 05/28/2014

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F#NPO-P0002E-US1201 DSC0-103U002659

PATENT REEL: 032970 FRAME: 0602