504618716 10/31/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Sung-Han Wu	10/27/2017
Wooi Kip LIM	02/28/2017
Kei Tee TIEW	02/28/2017
KEEN-HUN LEONG	02/28/2017

RECEIVING PARTY DATA

Name:	PixArt Imaging Inc.
Street Address:	5F, No. 5, Innovation Road I, Science-Based Industrial Park
City:	Hsin-Chu City
State/Country:	TAIWAN

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15798405

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

Address Line 4: NEW TAIPEI CITY, TAIWAN

ATTORNEY DOCKET NUMBER:	PIIP0384USA
NAME OF SUBMITTER:	SIBYL YU
SIGNATURE:	/SIBYL YU/
DATE SIGNED:	10/31/2017

Total Attachments: 8

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REEL: 043986 FRAME: 0730 504618716

PATENT

EPAS ID: PAT4665431



Title of Invention:

CAPACITIVE SENSING DEVICE AND CORRESPONDING SHORT CIRCUIT TESTING 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	filed on	, or
□ PCT international application	number	filed on	- NO
The above-identified application was	made or authorized to be mad	e by me.	
I believe that I am the original invent application.	or or an original joint inventor of	a claimed invention in	the
I hereby acknowledge that any willfu under18 U.S.C. 1001 by fine or impr	I false statement made in this d isonment of not more than five (eclaration is punishable 5) years, or both.	•
In consideration of the payment by	PixArt Imaging Inc.	having a po	stal address of
5F, No. 5, Innovation Road I, SR.O.C.	Science-Based Industrial	Park, Hsin-Chu Cit	y 30 0, Taiwan,
(referred to as "ASSIGNEE"below) to acknowledged, andfor other good an	o I of the sum of One Dollar (\$ 1 ad valuable consideration.	.00), the receipt of whi	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 or substitutes, or extensions thereof, ar	nd to any and all improvements tion and, in and to, all Letters P any continuations, continuation	which are disclosed in atent to be obtained for nin-part, divisions, rene	the said
I hereby covenant that no assignmer entered into which would conflict with	nt, sale, agreement or encumbra n this assignment;	ance has been or will b	e made 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 Patent and stify as to the same in any inter	d legal equivalents as r ference, litigation proce	nav he
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 cessary or desirable to carry οι	Letters Patent and sai	id (Date of signing)
Note: An application data sheet (PTC inventive entity, must accompany this	D/SB/14 or equivalent), including s form. Use this form for <u>each a</u>	g naming the entire dditional inventor.	

Page 1 of 8

NPO#PII-P0384-USA:0 CUST#PIX-US-1308

F#NPO-P0002E-US1201 DSB0-106U004737

Inventor:	Sung-Han Wu		Date:	OCT 2 7 2017.
Signature:	Sung-Han	Wu		

Page 2 of 8

Title of Invention:

CAPACITIVE SENSING DEVICE AND CORRESPONDING SHORT CIRCUIT TESTING METHOD

As the below named inventor, I her This declaration is directed to:	eby declare that:			
☑ The attached application, or	K .			
☐ United States application nu	ımber		filed on	, or
□ PCT international applicatio	n number		filed on:	
The above-identified application wa	s made or authori	zed to be	made by me.	
I believe that I am the original liven application,	ntor or an original j	oint invent	or of a claimed inver	ntion in the
I hereby acknowledge that any willing under 18 U.S.C. 1001 by fine or imp	ul false statement risonment of not n	made in th nore than	nis declaration is pur live (5) years, or bot	ishable a.
In consideration of the payment by	PixArt Imagir	ng Inc.	havir	ig a postal address of
5F, No. 5, Innovation Road I, R.O.C.	Science-Based	d Industi	ial Park, Hsin-Cl	nu City 300, Talwan,
(referred to as "ASSIGNEE"below) acknowledged, and for other good a	to I of the sum of C and valuable consi	One Dollar deration.	(\$ 1.00), the receipt	of which is hereby
I hereby sell, assign and transfer to the entire right, title and interest in a invention as above-identified applic invention by the above application of substitutes, or extensions thereof, a	and to any and all i ation and, in and to or any continuation	improvem o, all Lette is, continu	ents which are disclors rs Patent to be obta atlon-in-part, division	osed in the ned for said ns, renewals,
I hereby covenant that no assignment of the conflict will be conflict with the conflict will be conflict with the conflict will be conflict with the conflict will be conflict.	ent, sale, agreeme ith this assignment	nt or encu l:	mbrance has been o	r will be made or
I further covenant that ASSIGNEE of and documents relating to said inve- known and accessible to I and will to related thereto and will promptly ex-	ention and said Let estify as to the sai	ters Pater me in anv	t and legal equivale interference, litigatio	nts as may be
representatives any and all papers, maintain, issue and enforce said ap equivalents thereof which may be n IN WINTNESS WHEREOF, I have	oplication, said inve secessary or desire	ention and able to car	said Letters Patent ry out the proposes	and said hereof.
Note: An application data sheet (PT inventive entity, must accompany the				
NPO#PII-P0384-USA:0	Page	3 of	8	F#NPO-P0002E-US1201
CUST#PIX-US-1308				DSB0-106U004737

LEGAL NAME OF INVENTOR(ASSIGNOR)

Inventor:

Wool Kip LIM

Date:

28 Feb 2017

Signature:

Page

F#NPO-P0002E-US1201 DSB0-106U004737

Title of Invention:

CAPACITIVE SENSING DEVICE AND CORRESPONDING SHORT CIRCUIT TESTING METHOD

As the below named inventor, I hereby This declaration is directed to:	y declare that:		
☑ The attached application, or			
☐ United States application num	ber	filed on	, or
PCT international application i	number	filed on	 *.
The above-identified application was r	nade or authorized to be made	by me.	
I believe that I am the original inventor application.	r or an original joint inventor of a	a claimed invention in the	
I hereby acknowledge that any willful funder18 U.S.C. 1001 by fine or impris-	alse statement made in this de conment of not more than five (5	claration is punishable) years, or both.	
In consideration of the payment by	PixArt Imaging Inc.	having a postal a	ddress of
5F, No. 5, Innovation Road I, So R.O.C.	clence-Based Industrial P	ark, Hsin-Chu City 30	0, Taiwan
acknowledged, andfor other good and thereby sell, assign and transfer to AS the entire right, title and interest in and invention as above-identified application or a substitutes, or extensions thereof, and I hereby covenant that no assignment, entered into which would conflict with the further covenant that ASSIGNEE will, and documents relating to said inventions and accessible to I and will test related thereto and will promptly executed.	SSIGNEE and the successors a to any and all improvements work and, in and to, all Letters Palany continuations, continuational as to Letters Patent any reissurable, agreement or encumbrarithis assignment; upon its request, be provided join and said Letters Patent and life as to the same in any interter.	which are disclosed in the lent to be obtained for said in-part, divisions, renewals to or re-examination thereonce has been or will be made promptly with all pertinent filegal equivalents as may be trence dilibration proceeding.	f. de or acts
representatives any and all papers, ins maintain, issue and enforce said applic equivalents thereof which may be nece IN WINTNESS WHEREOF, I have her	cation, said invention and said t	etters Patent and said	of signing)
Note: An application data sheet (PTO/sinventive entity, must accompany this i	SB/14 or equivalent), including form. Use this form for <u>each ad</u>	naming the entire ditional inventor.	

NPO#PIL-P0384-USA:0 CUST#PIX-US-1308 Page 5 of 8

F#NPO-P0002E-US1201 DSB0-106U004737

LEGAL NAM	ME OF INVENTOR(ASSIGNOR)						
Inventor:	Kei Tee TIEW	,	Date:	38	Feb	2017	
Signature:	Wr.						

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NPO#PII-P0384-USA:0 CUST#PIX-US-1308

F#NPO-P0002E-US1201 DSB0-106U004737

PATENT

REEL: 043986 FRAME: 0737

Title of Invention:

CAPACITIVE SENSING DEVICE AND CORRESPONDING SHORT CIRCUIT TESTING METHOD

☑ The attached application, or		
□ United States application number	filed	on or
□ PCT international application number		led on
The above-identified application was made or auth	orized to be made by me	
I believe that I am the original inventor or an original application.	al joint inventor of a claim	ned invention in the
I hereby acknowledge that any willful false stateme under18 U.S.C. 1001 by fine or imprisonment of no	nt made in this declarati t more than five (5) year	on is punishable s, or both.
In consideration of the payment by PixArt Imag	jing inc.	having a postal address of
5F, No. 5, Innovation Road I, Science-Bas R.O.C.	ed Industrial Park, I	Isin-Chu City 300, Taiwa
	I the checkeene and ac-	ignore of the APRICHEE
the entire right, title and interest in and to any and a invention as above-identified application and, in an invention by the above application or any continuat substitutes, or extensions thereof, and as to Letters thereby coverant that no asslonment, sale, agrees	ill improvements which a d to, all Letters Patent to ions, continuation-in-part Patent any reissue or re	be obtained for said , divisions, renewals, -examination thereof,
the entire right, title and interest in and to any and a invention as above-identified application and, in an invention by the above application or any continuat substitutes, or extensions thereof, and as to Letters I hereby covenant that no assignment, sale, agreer entered into which would conflict with this assignment in the covenant that ASSIGNEE will, upon its requand documents relating to said invention and said I known and accessible to I and will testify as to the related thereto and will promptly execute and delivered.	ill improvements which a do, all Letters Patent to ons, continuation-in-part Patent any reissue or rement or encumbrance haint; uest, be provided prompetters Patent and legal came in any interference	re disclosed in the be obtained for said , divisions, renewals,examination thereof. s been or will be made or the will be the control of
the entire right, title and interest in and to any and a invention as above-identified application and, in an invention by the above application or any continuat substitutes, or extensions thereof, and as to Letters I hereby covenant that no assignment, sale, agreer entered into which would conflict with this assignment in the world conflict with this assignment in the covenant that ASSIGNEE will, upon its requand documents relating to said invention and said I known and accessible to I and will testify as to the precessary and all papers, instruments or maintain, issue and enforce said application, said in equivalents thereof which may be necessary or descessary or	ill improvements which a d to, all Letters Patent to ons, continuation in-part Patent any reissue or re ment or encumbrance ha ent; uest, be provided promp etters Patent and legal e same in any interference or to ASSIGNEE or its legal affidavits required to app evention and said Letters itable to carry out the said	re disclosed in the be obtained for said , divisions, renewals, -examination thereof. s been or will be made or the with all pertinent facts a guivalents as may be litigation proceeding jal
the entire right, title and interest in and to any and a invention as above-identified application and, in an invention by the above application or any continuat substitutes, or extensions thereof, and as to Letters I hereby covenant that no assignment, sale, agreer entered into which would conflict with this assignment into which would conflict with this assignment in the covenant that ASSIGNEE will, upon its requand documents relating to said invention and said I known and accessible to I and will testify as to the	ill improvements which a d to, all Letters Patent to ions, continuation-in-part Patent any reissue or rement or encumbrance has ent; uest, be provided prompetters Patent and legal esame in any interference or to ASSIGNEE or its legal did a power to and said Letters irable to carry out the product and seal this to power to and seal this to power to a	re disclosed in the be obtained for said , divisions, renewals, e-examination thereof, seen or will be made or the with all pertinent facts equivalents as may be , litigation proceeding jal ly for, obtain, Patent and said oposes thereof. (b > 0 () (Date of signing the entire

LEGAL NA	ME OF INVENTOR(ASSIGNOR)					
Inventor:	KEEN-HUN LEONG	Date:	28	Feb	2017	
Signature:	/h ·					

NPO#PII-P0384-USA:0 CUST#PIX-US-1308 Page 8 of 8

F#NPO-P0002E-US1201 DSB0-106U004737

PATENT REEL: 043986 FRAME: 0739

RECORDED: 10/31/2017