502150175 12/04/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jia XIE	11/14/2012
Ruigai CHEN	11/14/2012
Lei NIU	11/14/2012
Xiaoping SUN	11/14/2012
Hui HUANG	11/14/2012

RECEIVING PARTY DATA

Name:	TIANMA MICRO-ELECTRONIC CO., LTD.		
Street Address:	22F, Hangdu Building, Catic Zone, Shennan Road		
City:	Shenzhen		
State/Country:	CHINA		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13643445

CORRESPONDENCE DATA

Fax Number: 2024293902

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

(202) 429-3000 Phone: Email: tcoates@steptoe.com

Correspondent Name: Harold H. Fox, Steptoe & Johnson 1330 Connecticut Avenue, NW Address Line 1:

19373.0001 Address Line 2:

Washington, DISTRICT OF COLUMBIA 20036 Address Line 4:

ATTORNEY DOCKET NUMBER: 19373.0001 NAME OF SUBMITTER: Terri L. Coates

Total Attachments: 6

PATENT REEL: 029403 FRAME: 0185

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> PATENT REEL: 029403 FRAME: 0186

ASSIGNMENT

For valuable consideration, we, Jia XIE, Ruigai CHEN, Lei NIU, Xiaoping SUN, and Hui HUANG, all of Shenzhen, China, hereby assign to: TIANMA MICRO-ELECTRONIC CO., LTD, having a place of business at 22F, Hangdu Building, Catic Zone, Shennan Road, Shenzhen, China, its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled LIQUID CRYSTAL GRATING MODULE AND TWO DIMENSION-THREE DIMENSION SWITCHABLE LIQUID CRYSTAL DISPLAY DEVICE USING THE SAME, filed October 25, 2012, and assigned U.S. Application Number 13/643,445, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and application number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Page 1 of 6

In Witness Whereof, I hereto s	et my hand an	d seal at Shenzhen, China	
this14th day of November	, 2012_		L.S
Signature witnessed by: Nov. 16, 2012 Date	WITNESS: Printed Nam Address:	Xiuzhen FENG e: Xiuzhen FENG Shenzhen,China	
Signature witnessed by:		χίρο μ΄ ζον ζ e:Xiaoli SONG Shenzhen,China	

Page 2 of 6

IN WITNESS WHEREOF, I hereto s	et my hand and	l seal at Shenzhen, China	
this14th day ofNovembe	er,	20_12	
Ruigai CHEN Ruigai CHEN			L.S
Ruigai CHEN			
Signature witnessed by:			
Nov. 16,2012	WITNESS:	Xiuzhen FENG	
Date	Printed Name: Xiuzhen FENG		·
	Address:	Shenzhen, China	
Signature witnessed by:			
NOV. 16, 2012	WITNESS:	Xiauli SONG	
Date	Printed Name	e:Xiaoli SONG	·
	Address:	Shenzhen, China	

IN WITNESS WHEREOF, I hereto s	set my hand and	d seal at <u>Shenzhen,China</u> ,	
thisl4th day of _November_		20_12_	
Lei NIV			L.S
Lei NIU			
Signature witnessed by:			
NOV. 16, 2012	WITNESS:	Xiuzhen FENG	
Date	Printed Nam	e:Xiuzhen FENG	~
	Address:	Shenzhen,China	
Signature witnessed by:			
NOV. 16,2012	WITNESS:	Xiaoli CONG	
Date	Printed Name	e: Xiaoli SONG	***************************************
	Address:	Shenzhen, China	

REEL: 029403 FRAME: 0190

	IN WITNESS WHEREOF, I hereto	S WHEREOF, I hereto set my hand and seal at Shenzhen, China		
this	14th day of November XIQO PAR SU Xiaoping SUN	er(Y	, 20_12_	1.0
*	Xiaoping SUN			L.S
	Signature witnessed by:			
_Nov	1. 16,20/2	WITNESS:	Xiuzhen FENG	
Date		Printed Name: Xiuzhen FENG		
		Address:	Shenzhen,China	
	Signature witnessed by:	•		
NOV.	16,2012	WITNESS:	Xlaoli SONG	
Date	•	Printed Name: Xiaoli SONG		
		Address:	Shenzhen,China	

I	N WITNESS WHEREOF, I here	to set my hand an	d seal at <u>Shenzhen,China</u>		
thisl	4th day ofNove	ember	, 20 12		
****	Hui HUANG			L.S	
	Signature witnessed by	y:			
NOV.	16,20/2	WITNESS:	Xiuzhen FENG		
Date		Printed Nam	e:Xiuzhen FENG		
		Address:	Shenzhen, China		
				•	
ı	Signature witnessed by	::			
NOV.	16,2012	WITNESS:	Xiaoli SONG		
Date	•	Printed Name	Printed Name: Xiaoli SONG		
		Address:	Shenzhen, China		

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