



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**13.08.2014 Bulletin 2014/33**

(51) Int Cl.:  
**G09G 3/32 (2006.01)**

(43) Date of publication A2:  
**23.07.2014 Bulletin 2014/30**

(21) Application number: **14151419.0**

(22) Date of filing: **16.01.2014**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
 Designated Extension States:  
**BA ME**

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(30) Priority: **17.01.2013 KR 20130005453**  
**17.01.2013 KR 20130005454**  
**28.06.2013 KR 20130075336**

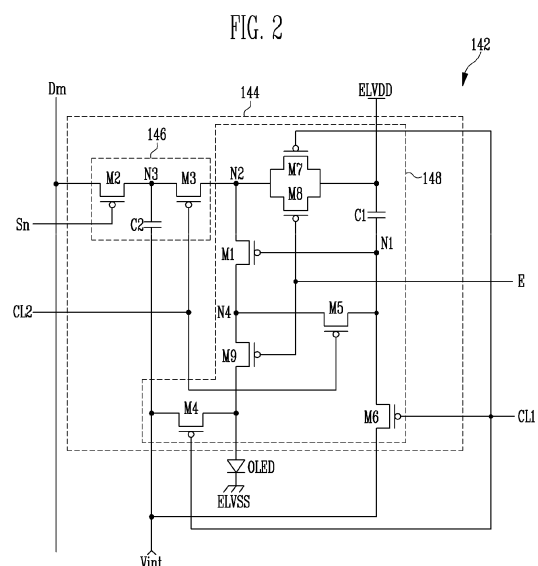
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(54) **Pixel and organic light emitting display using the same**

(57) A pixel (142) includes an organic light emitting diode (OLED), a first driver (146) and a second driver (148). The second driver (148) controls an amount of current supplied from a first power source (ELVDD) to the organic light emitting diode (OLED), corresponding to a previous data signal. The first driver (146) stores a current data signal supplied from a data line (Dm) and supplies the previous data signal to the second driver (148). In the pixel (142), the second driver (148) includes a sixth transistor (M6) coupled between an initialization power source (Vinit) and a first node (N1), the sixth transistor (M6) being configured to turn on when a first control signal is supplied to a first control line (Cl1); and a seventh transistor (M7) coupled between the first power source (ELVDD) and a second node (N2) commonly coupled to the first and second drivers (146, 148), the seventh transistor (M7) being configured to turn on when the first control signal is supplied.





EUROPEAN SEARCH REPORT

Application Number  
EP 14 15 1419

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	EP 2 463 849 A1 (SAMSUNG MOBILE DISPLAY CO LTD [KR]) 13 June 2012 (2012-06-13) * paragraphs [0097] - [0102]; figures 3,4 *	1-8, 10-12	
Y	EP 2 146 337 A1 (SAMSUNG MOBILE DISPLAY CO LTD [KR]) 20 January 2010 (2010-01-20) * paragraph [0050]; figure 2 *	3,6-8	
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Y	US 2009/243498 A1 (CHILDS MARK J [GB] ET AL) 1 October 2009 (2009-10-01) * paragraphs [0049], [0050]; figure 2 *	6-8	
Y	US 2011/090200 A1 (CHOI SANG-MOO [KR] ET AL) 21 April 2011 (2011-04-21) * paragraph [0057]; figure 4B *	13-15	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) G09G
Place of search	Date of completion of the search	Examiner	
Munich	2 July 2014	Giancane, Iacopo	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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EPO FORM 1503 03.82 (P04C01)

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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing claims for which payment was due.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-12

A pixel according to claim 1, wherein the second driver further comprises a fourth transistor coupled between the anode electrode of the organic light emitting diode and the initialization power source, the fourth transistor being configured to turn on when the first control signal is supplied.

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2. claims: 13-15

The organic light emitting display of claim 12 including a pixel according to claim 1, wherein the scan driver is configured to supply the scan signal concurrently to the scan lines during the third period.

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ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 14 15 1419

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-07-2014

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	使用其的像素和有机发光显示器		
公开(公告)号	<a href="#">EP2757548A3</a>	公开(公告)日	2014-08-13
申请号	EP2014151419	申请日	2014-01-16
[标]申请(专利权)人(译)	三星显示有限公司		
申请(专利权)人(译)	三星DISPLAY CO. , LTD.		
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IPC分类号	G09G3/32		
CPC分类号	G09G3/3241 G09G3/3233 G09G2300/0819 G09G2300/0852 G09G2300/0861 G09G2310/0245 G09G2310/0251 G09G2320/0233 G09G2320/043 G09G2320/045 G09G2360/148		
优先权	1020130005453 2013-01-17 KR 1020130005454 2013-01-17 KR 1020130075336 2013-06-28 KR		
其他公开文献	EP2757548A2 EP2757548B1		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

像素 ( 142 ) 包括有机发光二极管 ( OLED ) , 第一驱动器 ( 146 ) 和第二驱动器 ( 148 ) 。第二驱动器 ( 148 ) 控制从第一电源 ( ELVDD ) 提供给有机发光二极管 ( OLED ) 的电流, 对应于先前的数据信号。第一驱动器 ( 146 ) 存储从数据线 ( Dm ) 提供的当前数据信号, 并将先前数据信号提供给第二驱动器 ( 148 ) 。在像素 ( 142 ) 中, 第二驱动器 ( 148 ) 包括耦合在初始化电源 ( Vinit ) 和耦合到第一晶体管 ( M1 ) 的栅电极的第一节点 ( N1 ) 之间的第六晶体管 ( M6 ) , 第六晶体管 ( M6 ) 被配置为当第一控制信号被提供给第一控制线 ( C1 ) 时导通;第七晶体管 ( M7 ) 耦合在第一电源 ( ELVDD ) 和共同耦合到第一和第二驱动器 ( 146,148 ) 的第二节点 ( N2 ) 之间, 第七晶体管 ( M7 ) 被配置为当提供第一控制信号。

