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(54) **ORGANIC LIGHT EMITTING DISPLAY APPARATUS AND DRIVING METHOD THEREOF**

(57) An organic light emitting display apparatus comprises a thermal sensor configured to sense temperature and a controller including a first leakage current compensation unit configured to supply a first compensation signal to a plurality of sub-pixels based on the sensed temperature from the thermal sensor and a second leakage

current compensation unit configured to supply a second compensation signal, which is different from the first compensation signal, wherein an amount of leakage current of the plurality of sub-pixels is compensated according to the sensed temperature, by the controller.

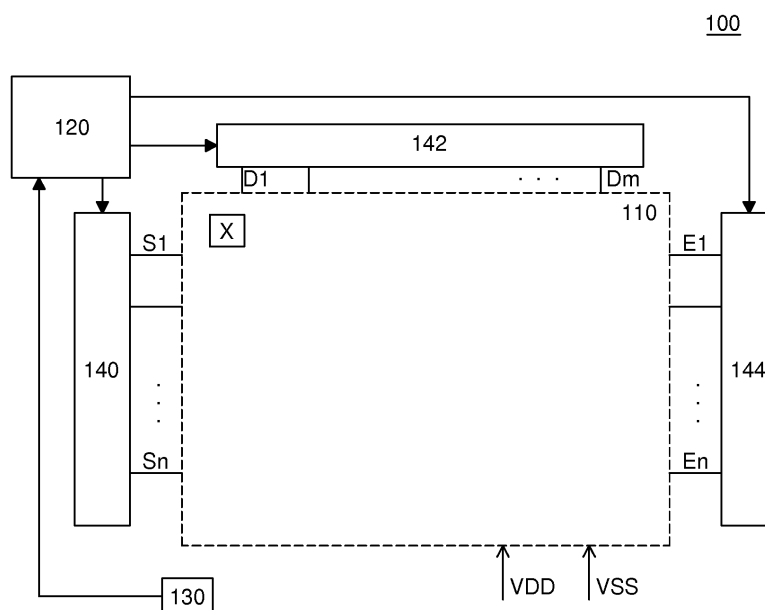


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
EP 16 17 6884

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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)
X A	US 2009/201231 A1 (TAKAHARA HIROSHI [JP] ET AL) 13 August 2009 (2009-08-13) * paragraph [0166] * * paragraph [0210] - paragraph [0257] * * paragraph [0274] * * paragraph [0312] * * paragraph [0889] - paragraph [0904]; figures 1,11,12,95,96A,98A,98B * * paragraph [0453] *	1-6, 11-13,15 8	INV. G09G3/3233
X A	US 2008/143656 A1 (HASEGAWA HIROSHI [JP] ET AL) 19 June 2008 (2008-06-19) * paragraph [0038] - paragraph [0068]; figures 1-10 *	1-3,5-7, 11-14 8	
X	US 2009/033685 A1 (PARK YOUNG-JONG [KR] ET AL) 5 February 2009 (2009-02-05) * paragraph [0029] - paragraph [0074]; figures 1-7 *	1-3,5,6, 9-11,13, 14	
			TECHNICAL FIELDS SEARCHED (IPC)
			G09G
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 January 2017	Examiner Harke, Michael
CATEGORY OF CITED DOCUMENTS 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 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			

EPO FORM 1503 03/02 (P04C01)



Application Number

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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: 1-8, 11-15

The first invention concerns an organic light emitting display apparatus as defined in claim 1, i. e. an organic light emitting display apparatus comprising: a sensor configured to sense temperature related to a plurality of sub-pixels; and a controller coupled to a first leakage current compensation unit configured to supply a first compensation signal to the plurality of sub-pixels based on the sensed temperature from the sensor and coupled to a second leakage current compensation unit configured to supply a second compensation signal which is different from the first compensation signal to the plurality of sub-pixels, wherein the controller is configured to compensate an amount of leakage current of the plurality of sub-pixels according to the sensed temperature, wherein, as claimed in claim 8, the controller is configured to control the voltage level of the first compensation signal and the duty of the second compensation signal in inverse proportion to each other.

2. claims: 9, 10

The second invention concerns an organic light emitting display apparatus as defined in claim 1 (see the first invention for further details), wherein, as claimed in claim 9, the plurality of sub-pixels further comprise an organic light emitting diode, a driving transistor (TRDR), a first compensation transistor (TRI), a second compensation transistor (TR2) and a storage capacitor (CST), the first compensation transistor (TRI) is configured to receive the first compensation signal, and the second compensation transistor (TR2) is configured to receive the second compensation signal.

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

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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
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10-01-2017

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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)	有机发光显示装置及其驱动方法		
公开(公告)号	EP3113164A3	公开(公告)日	2017-02-15
申请号	EP2016176884	申请日	2016-06-29
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG DISPLAY CO. , LTD.		
当前申请(专利权)人(译)	LG DISPLAY CO. , LTD.		
[标]发明人	HAN KYULL		
发明人	HAN, KYULL		
IPC分类号	G09G3/3233		
CPC分类号	G09G3/3208 G09G3/3233 G09G2300/0861 G09G2320/0214 G09G2320/041 G09G3/325 G09G3/3258 G09G2300/043 G09G2300/0842 G09G2320/0233 G09G2320/0242 H01L27/326		
审查员(译)	HARKE , 米迦勒		
优先权	1020150093839 2015-06-30 KR		
其他公开文献	EP3113164A2		
外部链接	Espacenet		

摘要(译)

一种有机发光显示装置包括：热传感器，被配置为感测温度；以及控制器，包括第一泄漏电流补偿单元，被配置为基于来自热传感器的感测温度向多个子像素提供第一补偿信号，漏电流补偿单元，被配置为通过所述控制器提供与所述第一补偿信号不同的第二补偿信号，其中所述多个子像素的漏电流根据所感测的温度而被补偿。

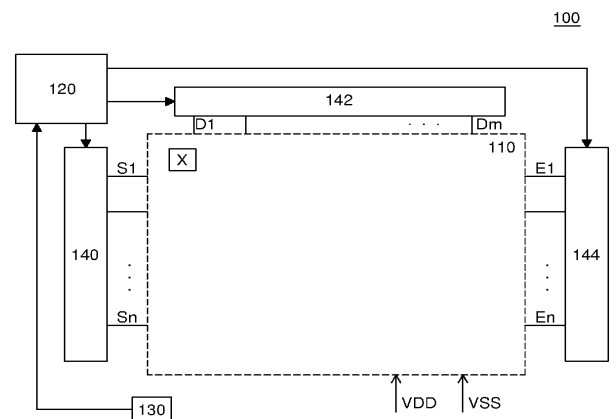


FIG. 1