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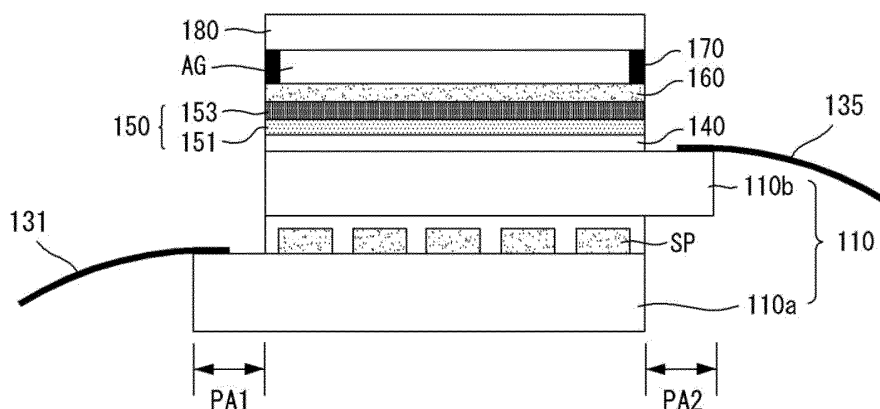
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(54) **Organic light emitting diode display**

(57) An organic light emitting diode (OLED) display is disclosed. The OLED display includes a plurality of subpixels (SP) on one surface of a first substrate (110a), a second substrate (110b) attached to the first substrate, a shield electrode (140) on one surface of the second substrate that is not opposite to the subpixels, the shield electrode being connected to a low potential voltage source, a touch screen panel (150) on the shield elec-

trode, a first printed circuit board (PCB) attached to the one surface of the first substrate, the first PCB receiving a driving signal driving the subpixels from a driving device, and a second PCB attached to the one surface of the second substrate, the second PCB transmitting a sensing signal generated by the touch screen panel to an external device.

**FIG. 10**



**EP 2 869 346 A3**



EUROPEAN SEARCH REPORT

Application Number  
EP 15 15 2613

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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)
Y	US 2008/211394 A1 (KOSHIHARA TAKESHI [JP] ET AL) 4 September 2008 (2008-09-04) * paragraph [0029] - paragraph [0031]; figures 1,2,5 * * paragraph [0033] * * paragraph [0047] - paragraph [0052] * * paragraph [0058] * * paragraph [0061] *	1,2,4,5,8,9	INV. H01L27/32 G06F3/044 G06F3/041
Y	US 2007/074914 A1 (GEAGHAN BERNARD O [US] ET AL) 5 April 2007 (2007-04-05) * paragraph [0048]; figure 3A *	1,2,4,5,8,9	
Y	US 2008/278070 A1 (KIM HYEONG-GWON [KR]) 13 November 2008 (2008-11-13) * paragraph [0042]; figure 1 * * paragraph [0053] *	1,2,4,5,8,9	
Y	US 6 501 528 B1 (HAMADA RYOHEI [JP]) 31 December 2002 (2002-12-31) * column 7, lines 41-57; figure 2B *	4,5,8,9	
			TECHNICAL FIELDS SEARCHED (IPC)
			H01L G06F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 23 September 2015	Examiner Beierlein, Udo
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	

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

EP 15 15 2613

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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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008211394 A1	04-09-2008	CN 101257746 A	03-09-2008
		JP 4910780 B2	04-04-2012
		JP 2008218142 A	18-09-2008
		KR 20080080912 A	05-09-2008
		TW 200847423 A	01-12-2008
		US 2008211394 A1	04-09-2008
-----			
US 2007074914 A1	05-04-2007	US 2007074914 A1	05-04-2007
		US 2011063251 A1	17-03-2011
		WO 2007044409 A1	19-04-2007
-----			
US 2008278070 A1	13-11-2008	KR 20080099684 A	13-11-2008
		US 2008278070 A1	13-11-2008
-----			
US 6501528 B1	31-12-2002	CN 1298114 A	06-06-2001
		JP 3986225 B2	03-10-2007
		JP 2001154178 A	08-06-2001
		KR 20010051880 A	25-06-2001
		TW 526368 B	01-04-2003
		US 6501528 B1	31-12-2002
-----			

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)	有机发光二极管显示器		
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[标]申请(专利权)人(译)	乐金显示有限公司		
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优先权	1020090050572 2009-06-08 KR		
其他公开文献	EP2869346A2		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

公开了一种有机发光二极管 ( OLED ) 显示器。 OLED显示器包括在第一基板 ( 110a ) 的一个表面上的多个子像素 ( SP ) ， 附接到第一基板的第二基板 ( 110b ) ， 在第二基板的一个表面上的屏蔽电极 ( 140 ) 与子像素相对，屏蔽电极连接到低电位电压源，屏蔽电极上的触摸屏面板 ( 150 ) ， 第一印刷电路板 ( PCB ) 连接到第一基板的一个表面，第一PCB接收从驱动装置驱动子像素的驱动信号，以及附接到第二基板的一个表面的第二PCB，第二PCB将由触摸屏面板产生的感测信号传输到外部装置。

FIG. 10

