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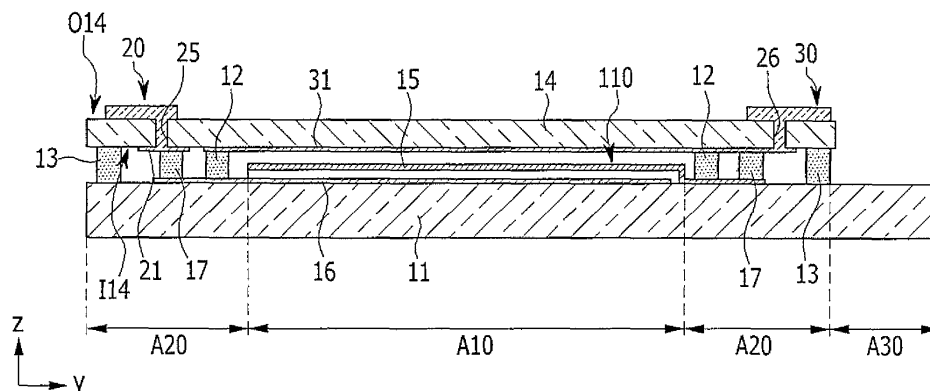
(54) **Display device and organic light emitting diode display device**

(57) An embodiment provides an organic light emitting diode display device that includes a substrate (11); a display unit (110) formed on the substrate and including a common power supply line (16) and a common electrode (15); a sealing substrate (14) attached to the substrate by a bonding layer (12,13) which surrounds the display unit, the sealing substrate including a resin base and a carbon fiber, and the sealing substrate including a

first through-hole and a second through-hole; a first conductive unit (20) formed on an inner surface and an outer surface of the sealing substrate through the first through-hole (25), and the first conductive unit supplying a first signal to the common power supply line; and a second conductive unit (30) formed on both the inner surface and the outer surface of the sealing substrate through the second through-hole (26), and the second conductive unit supplying a second signal to the common electrode.

FIG. 1

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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	EP 1 109 224 A2 (SEMICONDUCTOR ENERGY LAB [JP]) 20 June 2001 (2001-06-20)	1-18	INV.
A	* paragraphs [0013] - [0022], [0026] - [0032], [0039], [0043] *	19-34	H01L27/32 H01L51/52
Y	US 2009/095521 A1 (YOKOUCHI KISHIO [JP] ET AL) 16 April 2009 (2009-04-16)	1-18	
	* paragraphs [0016], [0019], [0337], [0047] - [0054], [0058]; figures 1,2 *		
A	US 2005/179374 A1 (KWAK WON-KYU [KR]) 18 August 2005 (2005-08-18)	16,17	
	* paragraphs [0021], [0028], [0029], [0103]; figure 9 *		
A	EP 2 081 180 A2 (SAMSUNG MOBILE DISPLAY CO LTD [KR]) 22 July 2009 (2009-07-22)	1-34	
	* paragraphs [0030] - [0035], [0045], [0047], [0049], [0055], [0059] - [0061]; figures 2,3 *		
A	WO 2010/005064 A1 (SEMICONDUCTOR ENERGY LAB [JP]; OIKAWA YOSHIKI [JP]; EGUCHI SHINGO; MA) 14 January 2010 (2010-01-14)	1-34	TECHNICAL FIELDS SEARCHED (IPC) H01L
	* paragraphs [0020], [0022], [0075], [0259] - [0261]; figure 18b *		
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 29 May 2013	Examiner Faou, Marylène
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
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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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29-05-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1109224 A2	20-06-2001	CN 1300104 A	20-06-2001
		CN 1662107 A	31-08-2005
		CN 1921138 A	28-02-2007
		EP 1109224 A2	20-06-2001
		JP 5094983 B2	12-12-2012
		JP 2011107734 A	02-06-2011
		JP 2012054250 A	15-03-2012
		JP 2013057958 A	28-03-2013
		KR 20010062339 A	07-07-2001
		TW 465122 B	21-11-2001
		US 2001015618 A1	23-08-2001
		US 2005156509 A1	21-07-2005
		US 2006250080 A1	09-11-2006
		US 2009189511 A1	30-07-2009
		US 2012043579 A1	23-02-2012
		US 2013092911 A1	18-04-2013
US 2009095521 A1	16-04-2009	JP 5085266 B2	28-11-2012
		JP 2009094416 A	30-04-2009
		US 2009095521 A1	16-04-2009
US 2005179374 A1	18-08-2005	CN 1658726 A	24-08-2005
		EP 1587154 A2	19-10-2005
		JP 4058440 B2	12-03-2008
		JP 2005227788 A	25-08-2005
		KR 20050081540 A	19-08-2005
		US 2005179374 A1	18-08-2005
		US 2008272992 A1	06-11-2008
EP 2081180 A2	22-07-2009	CN 101488517 A	22-07-2009
		EP 2081180 A2	22-07-2009
		JP 4744548 B2	10-08-2011
		JP 2009169376 A	30-07-2009
		KR 100907414 B1	10-07-2009
		US 2009184627 A1	23-07-2009
WO 2010005064 A1	14-01-2010	JP 2010040522 A	18-02-2010
		KR 20110038032 A	13-04-2011
		TW 201014442 A	01-04-2010
		US 2010013372 A1	21-01-2010
		US 2012326145 A1	27-12-2012
		WO 2010005064 A1	14-01-2010

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)	显示装置和有机发光二极管显示装置		
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[标]申请(专利权)人(译)	三星显示有限公司		
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其他公开文献	EP2413363A2 EP2413363B1		
外部链接	Espacenet		

摘要(译)

一个实施方案提供了一种有机发光二极管显示装置，其包括基板（11）；显示单元（110），形成在基板上，包括公共电源线（16）和公共电极（15）；密封基板（14），其通过包围显示单元的粘合层（12,13）附着到基板，密封基板包括树脂基底和碳纤维，密封基板包括第一通孔和第二通孔；第一导电单元（20），通过第一通孔（25）形成在密封基板的内表面和外表面上，第一导电单元将第一信号提供给公共电源线；第二导电单元（30）通过第二通孔（26）形成在密封基板的内表面和外表面上，第二导电单元向公共电极提供第二信号。

FIG. 1

