(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 608 032 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
16.05.2007 Bulletin 2007/20

(43) Date of publication A2:
21.12.2005 Bulletin 2005/51

(21) Application number: **05012738.0**

(22) Date of filing: **14.06.2005**

(51) Int Cl.:
H01L 51/20 *(0000.00)* ***H01L 27/00*** *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR LV MK YU

(30) Priority: **16.06.2004 KR 2004044331**

(71) Applicant: **LG ELECTRONICS INC.**
Seoul (KR)

(72) Inventor: **Park, Chong Hyun**
Daegu (KR)

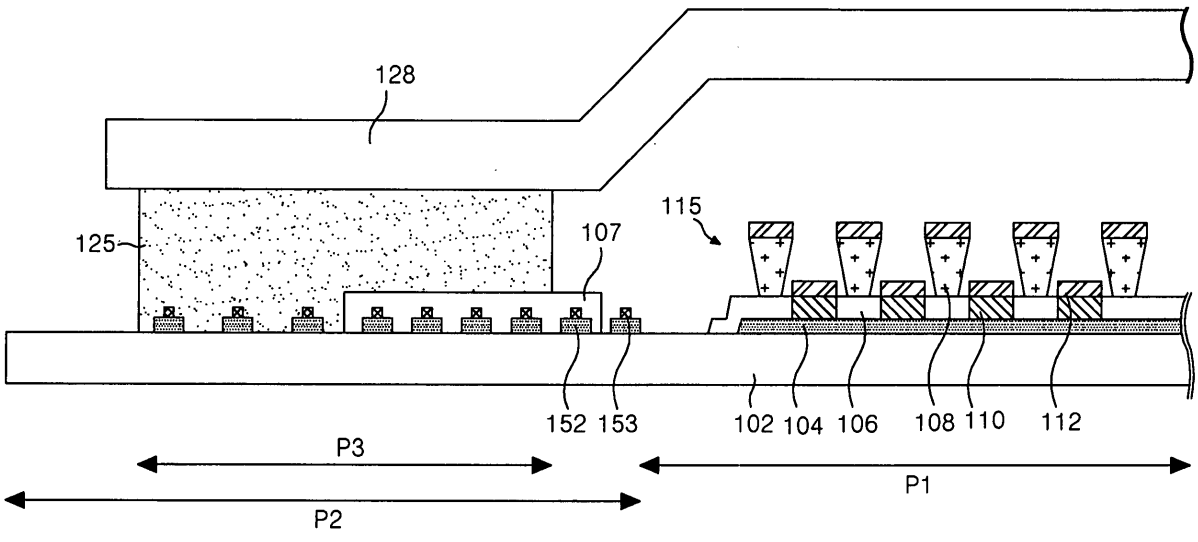
(74) Representative: **Zech, Stefan Markus et al**
Meissner, Bolte & Partner GbR
(Depotstrasse 5 1/2, 86199 Augsburg)
Postfach 10 26 05
86016 Augsburg (DE)

(54) Organic electro-luminescence display device and fabricating method thereof

(57) This invention relates to an organic electro-luminescence display device and a fabricating method thereof that are adaptive for improving an adhesion of a sealant used in an encapsulation process.

An organic electro-luminescence display device according to the present invention includes: a substrate (102) provided with an organic electro-luminescence array having first and second electrodes (104,112) crossing each other with having an organic light-emitting layer (110) therebetween; a cap (128) adhered via a sealant (125) to a seal line area (P3); a plurality of signal lines (152) connected to any one of the first and the second electrodes and located on the seal line area (P3); and a dummy insulating pattern (107) formed to cover any one of the signal lines, wherein a portion of the dummy insulating pattern is formed on the seal line area.

FIG.5



EP 1 608 032 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 01 2738

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 Y A	WO 03/096440 A2 (OSRAM OPTO SEMICONDUCTORS GMBH [DE]) 20 November 2003 (2003-11-20) * page 8, line 5 - page 11, line 17 * * page 16, lines 15-23 * * page 26, lines 11-13 * * figures 2-14 *	1-3,7 6,8 4,5	INV. H01L51/20 H01L27/00
X	US 2002/000560 A1 (ISHII IKUKO [JP] ET AL) 3 January 2002 (2002-01-03) * paragraphs [0008], [0019], [0020], [0026], [0044] * * figures 1A-1D *	1-3,7	
X A	US 6 590 337 B1 (NISHIKAWA RYUJI [JP] ET AL) 8 July 2003 (2003-07-08) * column 4, lines 17-48 * * column 6, lines 25-37 *	1-3,7 4-6,8	
Y	US 6 624 572 B1 (KIM CHANG NAM [KR] ET AL) 23 September 2003 (2003-09-23) * column 2, lines 10-32,38-54 * * column 3, line 31 - column 4, line 29 *	6,8	TECHNICAL FIELDS SEARCHED (IPC) H01L H05B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	13 March 2007	De Laere, Ann

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 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 01 2738

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.

13-03-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 03096440 A2	20-11-2003	CN 1653626 A	10-08-2005
		EP 1502311 A2	02-02-2005
		JP 2005524946 T	18-08-2005
		TW 231724 B	21-04-2005
US 2002000560 A1	03-01-2002	JP 2001345172 A	14-12-2001
		TW 587397 B	11-05-2004
US 6590337 B1	08-07-2003	JP 3423261 B2	07-07-2003
		JP 2001102166 A	13-04-2001
		KR 20010050683 A	15-06-2001
		TW 463529 B	11-11-2001
US 6624572 B1	23-09-2003	CN 1309429 A	22-08-2001

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)	有机电致发光显示装置及其制造方法		
公开(公告)号	EP1608032A3	公开(公告)日	2007-05-16
申请号	EP2005012738	申请日	2005-06-14
申请(专利权)人(译)	LG电子株式会社.		
当前申请(专利权)人(译)	LG电子株式会社.		
[标]发明人	PARK CHONG HYUN		
发明人	PARK, CHONG HYUN		
IPC分类号	H01L51/20 H01L27/00 H05B33/04 H01L27/32 H01L51/52		
CPC分类号	H01L51/5246 H01L27/3223 H01L27/3288		
优先权	1020040044331 2004-06-16 KR		
其他公开文献	EP1608032B1 EP1608032A2		
外部链接	Espacenet		

摘要(译)

有机电致发光显示装置及其制造方法本发明涉及一种有机电致发光显示装置及其制造方法，其适用于改善封装过程中使用的密封剂的粘附性。根据本发明的有机电致发光显示装置包括：基板（102），其设置有有机电致发光阵列，所述有机电致发光阵列具有彼此交叉的第一和第二电极（104,112），其间具有有机发光层（110）。;盖子（128）通过密封剂（125）粘附到密封线区域（P3）;多个信号线（152）连接到第一和第二电极中的任何一个并位于密封线区域（P3）上;形成覆盖任何一条信号线的虚设绝缘图案（107），其中虚设绝缘图案的一部分形成在密封线区域上。

FIG.5