



(11) **EP 1 811 590 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
31.08.2011 Bulletin 2011/35

(51) Int Cl.:
H01L 51/52 (2006.01)

(43) Date of publication A2:
25.07.2007 Bulletin 2007/30

(21) Application number: **07250288.3**

(22) Date of filing: **24.01.2007**

(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 LV MC NL PL PT RO SE SI SK TR

Designated Extension States:
AL BA HR MK RS

(30) Priority: **24.01.2006 KR 20060007354**
24.03.2006 KR 20060026816

(71) Applicant: **Samsung Mobile Display Co., Ltd.**
Suwon-si
Gyeonggi-do (KR)

(72) Inventors:
• **Choi, Dong-Soo,**
Samsung SDI Co., Ltd
Yongsin-si
Gyeonggi-do (KR)
• **Park, Jin-Woo,**
Samsung SDI Co., Ltd
Yongsin-si
Gyeonggi-do (KR)

- **Lim, Dae Ho,**
Samsung SDI Co., Ltd
Yongsin-si
Gyeonggi-do (KR)
- **Lee, Jong Woo,**
Samsung SDI Co., Ltd
Yongsin-si
Gyeonggi-do (KR)
- **Lee, Jae Sun,**
Samsung SDI Co., Ltd
Yongsin-si
Gyeonggi-do (KR)
- **Lee, Ung Soo,**
Samsung SDI Co., Ltd
Yongsin-si
Gyeonggi-do (KR)

(74) Representative: **Mouteney, Simon James**
Marks & Clerk LLP
90 Long Acre
London
WC2E 9RA (GB)

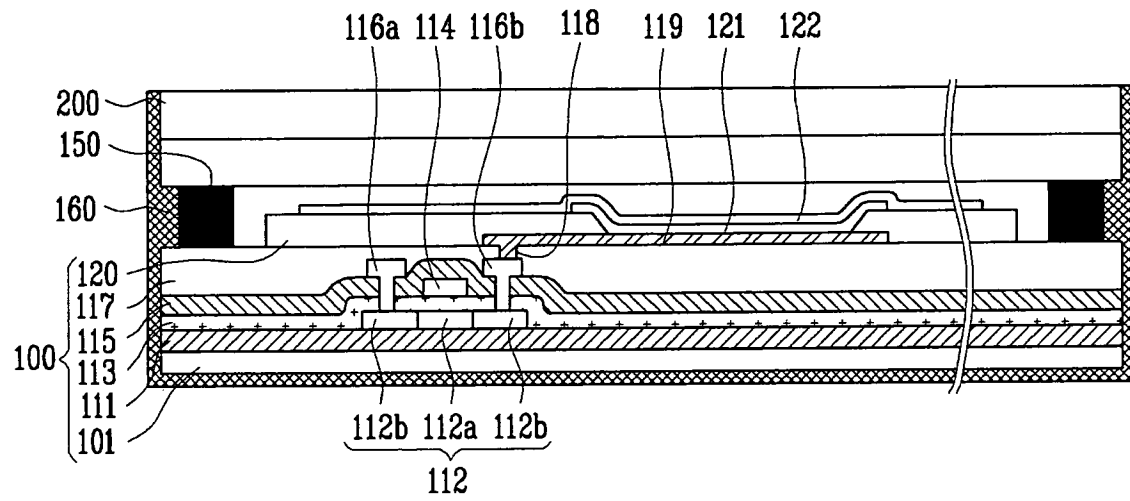
(54) **Organic light-emitting display and method of making the same**

(57) An organic light-emitting display device in which a substrate and an encapsulation substrate are completely sealed using a frit; and a method of preparing the same. The organic light-emitting display device includes a first substrate comprising a pixel region including an organic light-emitting diode and a non-pixel region formed in an outside of the pixel region; a second substrate combined with at least a pixel region of the first

substrate; a frit provided between the non-pixel region of the first substrate and the second substrate to attach the substrate and the encapsulation substrate to each other; and a supplement material composed of resin formed in at least one region of each outer surface of the first substrate, the second substrate and the frit.

EP 1 811 590 A3

FIG. 3





EUROPEAN SEARCH REPORT

Application Number
EP 07 25 0288

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	US 2002/068143 A1 (SILVERNAIL JEFFREY ALAN [US] ET AL) 6 June 2002 (2002-06-06)	1-10, 12-17, 19, 21	INV. H01L51/52
Y	* paragraph [0037] - paragraph [0043]; figures 3-4 *	11, 18, 20, 22, 23	
Y	US 2004/012747 A1 (YAMAZAKI SHUNPEI [JP] ET AL) 22 January 2004 (2004-01-22) * paragraph [0055] - paragraph [0067]; figures 1, 6, 7, 19, 20 *	1-23	
Y	US 2005/012445 A1 (YAMAZAKI SHUNPEI [JP] ET AL) 20 January 2005 (2005-01-20) * paragraph [0181]; figure 11 *	1-23	
X	WO 2005/104259 A2 (SIEMENS AG [DE]; BUCHHAUSER DIRK [DE]; HENSELER DEBORA [DE]; HEUSER KA) 3 November 2005 (2005-11-03) * page 4, line 6 - page 7, line 37; figure 1 *	1	
Y	JP 2000 058255 A (TDK CORP) 25 February 2000 (2000-02-25) * figure 1 *	11	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 22 July 2011	Examiner Bernabé Prieto, A
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	

1
EPO FORM 1503 03.92 (P04C01)

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

EP 07 25 0288

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.

22-07-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002068143 A1	06-06-2002	NONE	
US 2004012747 A1	22-01-2004	NONE	
US 2005012445 A1	20-01-2005	US 2006180826 A1 US 2007029548 A1	17-08-2006 08-02-2007
WO 2005104259 A2	03-11-2005	CN 1947278 A DE 112005000839 A5 JP 2007535144 A KR 20070015590 A US 2008057260 A1	11-04-2007 24-05-2007 29-11-2007 05-02-2007 06-03-2008
JP 2000058255 A	25-02-2000	NONE	

专利名称(译)	有机发光显示器及其制造方法		
公开(公告)号	EP1811590A3	公开(公告)日	2011-08-31
申请号	EP2007250288	申请日	2007-01-24
[标]申请(专利权)人(译)	三星斯笛爱股份有限公司		
申请(专利权)人(译)	三星SDI CO. , LTD.		
当前申请(专利权)人(译)	三星移动显示器有限公司.		
发明人	CHOI, DONG-SOO, SAMSUNG SDI CO., LTD PARK, JIN-WOO, SAMSUNG SDI CO., LTD LIM, DAE HO, SAMSUNG SDI CO., LTD LEE, JONG WOO, SAMSUNG SDI CO., LTD LEE, JAE SUN, SAMSUNG SDI CO., LTD LEE, UNG SOO, SAMSUNG SDI CO., LTD		
IPC分类号	H01L51/52		
CPC分类号	C03C27/06 C03C8/24 C03C17/40 C03C2217/252 C03C2217/253 C03C2218/34 H01L27/3244 H01L27/3281 H01L51/5246 H01L51/56		
优先权	1020060007354 2006-01-24 KR 1020060026816 2006-03-24 KR		
其他公开文献	EP1811590A2		
外部链接	Espacenet		

摘要(译)

一种有机发光显示装置，其中使用玻璃料完全密封基板和封装基板；以及制备它的方法。该有机发光显示装置包括：第一基板，包括：像素区域，包括有机发光二极管；以及非像素区域，形成在像素区域的外部；第二基板与第一基板的至少一个像素区域相结合；玻璃料设置在第一基板的非像素区域和第二基板之间，以将基板和封装基板彼此附着；和由在第一基板，第二基板和玻璃料的每个外表面的至少一个区域中形成的树脂组成的补充材料。

FIG. 3

