



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
19.12.2007 Bulletin 2007/51

(51) Int Cl.:
H01L 51/52 (2006.01) H01L 27/32 (2006.01)

(43) Date of publication A2:
19.09.2007 Bulletin 2007/38

(21) Application number: **07101708.1**

(22) Date of filing: **05.02.2007**

(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 YU

(30) Priority: **14.03.2006 KR 20060023692**
14.03.2006 KR 20060023693

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

(72) Inventor: **NAM, Wi Jin,**
Samsung SDI Co., Ltd.
Yongin-si,
Gyeonggi-do (KR)

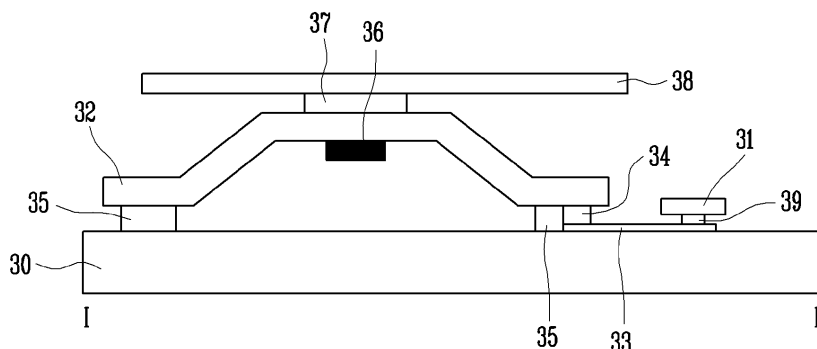
(74) Representative: **Hengelhaupt, Jürgen et al**
Anwaltskanzlei
Gulde Hengelhaupt Ziebig & Schneider
Wallstrasse 58/59
10179 Berlin (DE)

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

(57) The invention relates to Organic Light Emitting Display (OLED) comprising:
a substrate (30, 40) having defined pixel region and non-pixel regions and including an organic light emitting element arranged in the pixel region;
(i) a driver IC (31) arranged in the non-pixel region of the substrate, connected to signal wires of the organic light emitting element and adapted to supply a signal to the organic light emitting element; or
(ii) a driver IC (45) arranged on a Tape Carrier Package (43), connected via the Tape Carrier Package (43) to signal wires of the organic light emitting element and

adapted to supply a signal to the organic light emitting element;
a sealant (35, 49) arranged on the non-pixel region of the substrate (30, 40);
a metal cap (32, 41) spaced away from the substrate (30, 40) and affixed with the sealant (35, 49) to a position corresponding to the substrate (30, 40);
a ground wire (33, 46) electrically connecting the driver IC (31, 45) to the metal cap (32, 41); and
a printed circuit board (38, 52) electrically connected to and arranged on an outer surface side of the metal cap (32, 41).

FIG. 4





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 10 1708

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 2004/124768 A1 (SUZUKI GEN [JP] ET AL) 1 July 2004 (2004-07-01)	1,2	INV. H01L51/52 H01L27/32
Y	* paragraphs [0008], [0032] - [0038], [0043], [0048], [0049]; figures 6a, 6b *	3,4	
Y	JP 2003 167523 A (TOKYO SHIBAURA ELECTRIC CO) 13 June 2003 (2003-06-13) * abstract *	3,4	
A	US 2001/050663 A1 (PARK JAE YONG [KR]) 13 December 2001 (2001-12-13) * paragraph [0012] *	1	
			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		9 November 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			

1
EPO FORM 1503 03.82 (P04C01)

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

EP 07 10 1708

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.

09-11-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004124768 A1	01-07-2004	CN 1516526 A JP 2004200041 A	28-07-2004 15-07-2004
JP 2003167523 A	13-06-2003	JP 3803571 B2	02-08-2006
US 2001050663 A1	13-12-2001	JP 2002032032 A	31-01-2002

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)	有机发光显示器 (OLED)		
公开(公告)号	EP1835555A3	公开(公告)日	2007-12-19
申请号	EP2007101708	申请日	2007-02-05
[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DISPLAY CO. , LTD.		
[标]发明人	NAM WI JIN SAMSUNG SDI CO LTD		
发明人	NAM, WI JIN, SAMSUNG SDI CO., LTD.		
IPC分类号	H01L51/52 H01L27/32		
CPC分类号	H01L51/5243 H01L27/3276 H01L27/3288 H01L51/5259		
代理机构(译)	hengelhaupt , Jürgen		
优先权	1020060023693 2006-03-14 KR 1020060023692 2006-03-14 KR		
其他公开文献	EP1835555A2		
外部链接	Espacenet		

摘要(译)

本发明涉及有机发光显示器 (OLED) , 包括 : 基板 (30,40) , 其具有限定的像素区域和非像素区域 , 并且包括布置在像素区域中的有机发光元件 ; (i) 布置在基板的非像素区域中的驱动器IC (31) , 其连接到有机发光元件的信号线并适于向有机发光元件提供信号 ; 或 (ii) 布置在带载封装 (43) 上的驱动器1C (45) , 经由带载封装 (43) 连接到有机发光元件的信号线并适于向有机发光元件提供信号 ; 密封剂 (35,49) , 设置在基板 (30,40) 的非像素区域上 ; 金属盖 (32,41) , 与基板 (30,40) 间隔开 , 并与密封剂 (35,49) 固定在与基板 (30,40) 对应的位置 ; 接地线 (33,46) 将驱动器1C (31,45) 电连接到金属盖 (32,41) ; 印刷电路板 (38,52) 电连接并布置在金属盖 (32,41) 的外表面侧上。

