



(11) **EP 1 648 033 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
23.04.2008 Bulletin 2008/17

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

(43) Date of publication A2:
19.04.2006 Bulletin 2006/16

(21) Application number: **05022340.3**

(22) Date of filing: **13.10.2005**

(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: **14.10.2004 KR 2004082234**
14.10.2004 KR 2004082235
14.10.2004 KR 2004082236
14.10.2004 KR 2004082237

(71) Applicant: **LG Electronics Inc.**
Yongdungpo-gu
Seoul (KR)

(72) Inventor: **Bae, Hyo, Dae**
Daegu (KR)

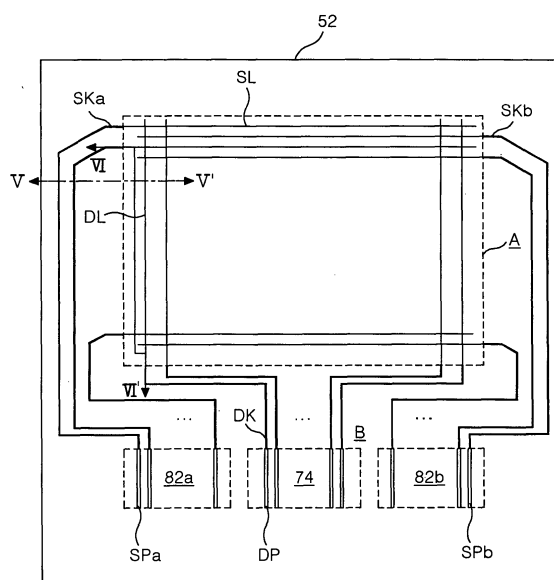
(74) Representative: **Zech, Stefan Markus et al**
Meissner, Bolte & Partner GbR
Postfach 10 26 05
86016 Augsburg (DE)

(54) **Organic Electro-Luminescence display device and method of fabricating the same**

(57) The present invention relates to an organic electro-luminescence display device and a method of fabricating the same capable of improving an emission efficiency and of reducing a deterioration of picture quality.

An organic electro-luminescence display device, including a display area and a non-display area, according to the present invention includes: a data line and a scan line, which are formed in a direction crossing each other, at the display area; a data link, extended from the data line, and a scan link, connected to the scan line, at the non-display area; and a data pad extended with a width wider than that of the data link and connected to the end of the data link formed at the non-display area, and a scan pad extended with a width wider than that of the scan link and connected to the end of the scan link formed at the non-display area, wherein at least any one of the data link, the data pad, the scan link, and the scan pad are formed in a multi conductive layer.

FIG. 4



EP 1 648 033 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 02 2340

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 6 531 815 B1 (OKUYAMA MASAHIRO [JP] ET AL) 11 March 2003 (2003-03-11)	1	INV. H01L27/32
Y	* column 5, line 56 - line 61 *	1-39	
	* column 6, line 51 - column 7, line 2 *		
	* column 9, line 41 - column 10, line 30 *		
	* figures 3,5,6 *		
X	WO 03/086022 A (OPTREX KK [JP]; NAKAMURA NOBUHIRO [JP]) 16 October 2003 (2003-10-16)	27-32	
Y	* the whole document *	1-39	
P,Y	& US 2004/245920 A1 (NAKAMURA NOBUHIRO [JP]) 9 December 2004 (2004-12-09)	1-39	
	* paragraphs [0011], [0028] - [0041], [0052] - [0080], [0093], [0094], [0097]		
	* figures 1-3 *		
Y	JP 2000 173779 A (SANYO ELECTRIC CO) 23 June 2000 (2000-06-23)	27-29	
	* abstract; figures 1-4 *		
P,Y	& US 6 911 960 B1 (YOKOYAMA RYOICHI [JP]) 28 June 2005 (2005-06-28)	27-29	TECHNICAL FIELDS SEARCHED (IPC)
	* column 5, line 24 - column 6, line 13; figures 5-8 *		H01L
Y	US 5 559 399 A (TANSKI WILLIAM J [US] ET AL) 24 September 1996 (1996-09-24)	4-6,9, 24,25,31	
	* abstract *		
	* column 3, line 10 - line 67 *		
	* figure 3 *		
Y	US 2004/108809 A1 (HEO SE JUN [KR] ET AL) 10 June 2004 (2004-06-10)	1	
	* paragraph [0057]; figures 6-9 *		
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 12 March 2008	Examiner Bernabé Prieto, A
CATEGORY OF CITED DOCUMENTS		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	
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			

2
EPO FORM 1503 03.82 (P04C01)

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

EP 05 02 2340

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.

12-03-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6531815 B1	11-03-2003	JP 2001102169 A	13-04-2001
		KR 20010050782 A	25-06-2001
		TW 506228 B	11-10-2002
-----	-----	-----	-----
WO 03086022 A	16-10-2003	AU 2003236109 A1	20-10-2003
		DE 10392168 B4	30-11-2006
		DE 10392168 T5	23-12-2004
		JP 2005108437 A	21-04-2005
		US 2004245920 A1	09-12-2004
-----	-----	-----	-----
US 2004245920 A1	09-12-2004	AU 2003236109 A1	20-10-2003
		DE 10392168 B4	30-11-2006
		DE 10392168 T5	23-12-2004
		WO 03086022 A1	16-10-2003
		JP 2005108437 A	21-04-2005
-----	-----	-----	-----
JP 2000173779 A	23-06-2000	JP 3423232 B2	07-07-2003
		KR 20000035710 A	26-06-2000
		TW 432894 B	01-05-2001
		US 6911960 B1	28-06-2005
-----	-----	-----	-----
US 6911960 B1	28-06-2005	JP 3423232 B2	07-07-2003
		JP 2000173779 A	23-06-2000
		KR 20000035710 A	26-06-2000
		TW 432894 B	01-05-2001
-----	-----	-----	-----
US 5559399 A	24-09-1996	AT 171036 T	15-09-1998
		CA 2137804 A1	23-12-1993
		DE 69320960 D1	15-10-1998
		DE 69320960 T2	27-05-1999
		EP 0645073 A1	29-03-1995
		JP 8505257 T	04-06-1996
		WO 9326139 A2	23-12-1993
		US 5445711 A	29-08-1995
-----	-----	-----	-----
US 2004108809 A1	10-06-2004	CN 1496200 A	12-05-2004
		KR 20040017705 A	27-02-2004
-----	-----	-----	-----

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	EP1648033A3	公开(公告)日	2008-04-23
申请号	EP2005022340	申请日	2005-10-13
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	BAE HYO DAE		
发明人	BAE, HYO, DAE		
IPC分类号	H01L27/32		
CPC分类号	H01L27/329 H01L51/5237		
优先权	1020040082235 2004-10-14 KR 1020040082234 2004-10-14 KR 1020040082237 2004-10-14 KR 1020040082236 2004-10-14 KR		
其他公开文献	EP1648033A2		
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，能够提高发光效率并降低图像质量的劣化。根据本发明的包括显示区域和非显示区域的有机电致发光显示装置包括：数据线和扫描线，在显示区域处形成在彼此交叉的方向上；从数据线延伸的数据链路和连接到扫描线的非显示区域的扫描链路；数据焊盘的宽度比数据链路的宽度宽，并连接到非显示区域形成的数据链路的末端，扫描板的宽度比扫描链路的宽度宽，并连接到在非显示区域形成的扫描链路的末端，其中数据链路，数据焊盘，扫描链路和扫描焊盘中的至少任何一个形成在多导电层中。

FIG. 4

