



(11) **EP 2 184 780 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
24.04.2013 Bulletin 2013/17

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

(43) Date of publication A2:
12.05.2010 Bulletin 2010/19

(21) Application number: **09175501.7**

(22) Date of filing: **10.11.2009**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL
PT RO SE SI SK SM TR**
Designated Extension States:
AL BA RS

(30) Priority: **10.11.2008 KR 20080110924**

(71) Applicant: **Samsung Display Co., Ltd.**
Yongin-City, Gyeonggi-Do, 446-711 (KR)

(72) Inventors:
• **Lhee, Zail**
Chungcheongnam-do (KR)
• **Hong, Sang-Mok**
Chungcheongnam-do (KR)

(74) Representative: **Walaski, Jan Filip et al**
Venner Shipley LLP
200 Aldersgate
London
EC1A 4HD (GB)

(54) **Organic light emitting display device and method of manufacturing the same**

(57) An organic light emitting display device and a method of manufacturing the same are disclosed. The organic light emitting display device includes a substrate on which first, second and third pixel units are arranged in row and column directions. To simplify manufacturing

and reduce defects, the first, second and third pixel units are arranged so that each column of the display is formed of only one of the first, second, and third pixel units.

EP 2 184 780 A3



EUROPEAN SEARCH REPORT

Application Number
EP 09 17 5501

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 2006/170339 A1 (KANNO HIROSHI [JP] ET AL) 3 August 2006 (2006-08-03)	1-6	INV. H01L27/32
Y	* paragraph [0038] - paragraph [0066]; figures 1-3 *	7-14	
X	US 2005/142975 A1 (LEE DONG-WON [KR] ET AL) 30 June 2005 (2005-06-30)	1-6	
Y	* paragraph [0059] - paragraph [0072]; figures 1,5,6 *	7-14	
X	US 2008/224607 A1 (MATSUO KEISUKE [JP] ET AL) 18 September 2008 (2008-09-18)	1-6	
Y	* paragraph [0043] - paragraph [0060]; figures 2-4 *	7-14	
Y	US 2003/006699 A1 (OGINO KIYOFUMI [JP] ET AL) 9 January 2003 (2003-01-09)	7-14	TECHNICAL FIELDS SEARCHED (IPC) H01L
Y	* paragraph 92 - sentence 115; figures 4-6 *	7-14	
Y	US 2006/246620 A1 (NAGAYAMA KENICHI [JP] ET AL) 2 November 2006 (2006-11-02)	7-14	
Y	* paragraph [0078] - paragraph [0080]; figure 9 *	11	
Y	US 2006/024855 A1 (SANO JUNICHI [JP]) 2 February 2006 (2006-02-02)	11	
	* abstract; figure 1 *		
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 March 2013	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 03.82 (F04C01)

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

EP 09 17 5501

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.

19-03-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006170339 A1	03-08-2006	CN 1501753 A	02-06-2004
		JP 2004119304 A	15-04-2004
		KR 20040027286 A	01-04-2004
		US 2006170339 A1	03-08-2006
US 2005142975 A1	30-06-2005	KR 20050062072 A	23-06-2005
		US 2005142975 A1	30-06-2005
		US 2008090484 A1	17-04-2008
US 2008224607 A1	18-09-2008	CN 101340751 A	07-01-2009
		JP 4396864 B2	13-01-2010
		JP 2008227230 A	25-09-2008
		KR 20080084618 A	19-09-2008
		TW 200901813 A	01-01-2009
		US 2008224607 A1	18-09-2008
		US 2012235185 A1	20-09-2012
US 2003006699 A1	09-01-2003	JP 4593019 B2	08-12-2010
		JP 2003007461 A	10-01-2003
		US 2003006699 A1	09-01-2003
		US 2005029935 A1	10-02-2005
US 2006246620 A1	02-11-2006	CN 1802877 A	12-07-2006
		JP 4566910 B2	20-10-2010
		KR 20060033724 A	19-04-2006
		TW 1238449 B	21-08-2005
		US 2006246620 A1	02-11-2006
		WO 2004110105 A1	16-12-2004
US 2006024855 A1	02-02-2006	CN 1728199 A	01-02-2006
		JP 4103865 B2	18-06-2008
		JP 2006040711 A	09-02-2006
		KR 20060047228 A	18-05-2006
		US 2006024855 A1	02-02-2006

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)	有机发光显示装置及其制造方法		
公开(公告)号	EP2184780A3	公开(公告)日	2013-04-24
申请号	EP2009175501	申请日	2009-11-10
[标]申请(专利权)人(译)	三星显示有限公司		
申请(专利权)人(译)	三星移动显示器有限公司.		
当前申请(专利权)人(译)	三星DISPLAY CO. , LTD.		
[标]发明人	LHEE ZAIL HONG SANG MOK		
发明人	LHEE, ZAIL HONG, SANG-MOK		
IPC分类号	H01L27/32		
CPC分类号	H01L27/3211 H01L27/3244 H01L51/0017 H01L2227/323		
优先权	1020080110924 2008-11-10 KR		
其他公开文献	EP2184780A2		
外部链接	Espacenet		

摘要(译)

公开了一种有机发光显示装置及其制造方法。有机发光显示装置包括基板，在基板上沿行和列方向布置第一，第二和第三像素单元。为了简化制造并减少缺陷，第一，第二和第三像素单元被布置成使得显示器的每列仅由第一，第二和第三像素单元中的一个形成。

DOCUMENTS CONSIDERED TO BE RELEVANT		Referent to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
X	US 2006/170339 A1 (KANNO HIROSHI [JP] ET AL) 3 August 2006 (2006-08-03) - paragraph [0038] - paragraph [0066]; figures 1-3	1-6 7-14	INV. H01L27/32	
Y	US 2005/142925 A1 (LEE DONG-WON [KR] ET AL) 30 June 2005 (2005-06-30) - paragraph [0059] - paragraph [0072]; figures 1,5,6	1-6 7-14		
X	US 2008/224607 A1 (MATSUO KEISUKE [JP] ET AL) 18 September 2008 (2008-09-18) - paragraph [0043] - paragraph [0060]; figures 2-4	1-6		
Y	US 2003/006699 A1 (OGINO KIYOFUMI [JP] ET AL) 9 January 2003 (2003-01-09) - paragraph 92 - sentence 115; figures 4-6	7-14		
Y	US 2006/246620 A1 (NAGAYAMA KENICHI [JP] ET AL) 2 November 2006 (2006-11-02) - paragraph [0078] - paragraph [0080]; figure 9	7-14		TECHNICAL FIELDS SEARCHED (IPC): H01L
Y	US 2006/024855 A1 (SANO JUNICHI [JP]) 2 February 2006 (2006-02-02) - abstract; figure 1	11		

The present search report has been drawn up for all claims.

Place of search: **Munich** Date of completion of the search: **19 March 2013** Examiner: **Bernabé Prieto, A**

CATEGORY OF CITED DOCUMENTS	
1: Internationally reported document	2: Unpublished document, not published on or after the filing date
3: Document cited in the application	4: Document cited for prior art
5: Document of the same category	6: Document of the same category
7: Document of the same category	8: Document of the same category
9: Document of the same category	10: Document of the same category
11: Document of the same category	12: Document of the same category
13: Document of the same category	14: Document of the same category
15: Document of the same category	16: Document of the same category
17: Document of the same category	18: Document of the same category
19: Document of the same category	20: Document of the same category