



(11) **EP 1 892 695 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
10.03.2010 Bulletin 2010/10

(51) Int Cl.:
G09G 3/30 (2006.01)

(43) Date of publication A2:
27.02.2008 Bulletin 2008/09

(21) Application number: **07253326.8**

(22) Date of filing: **23.08.2007**

(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 MT NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK RS

(72) Inventor: **Kwak, Won-Kyu**
Kyeonggi-do 449-577 (KR)

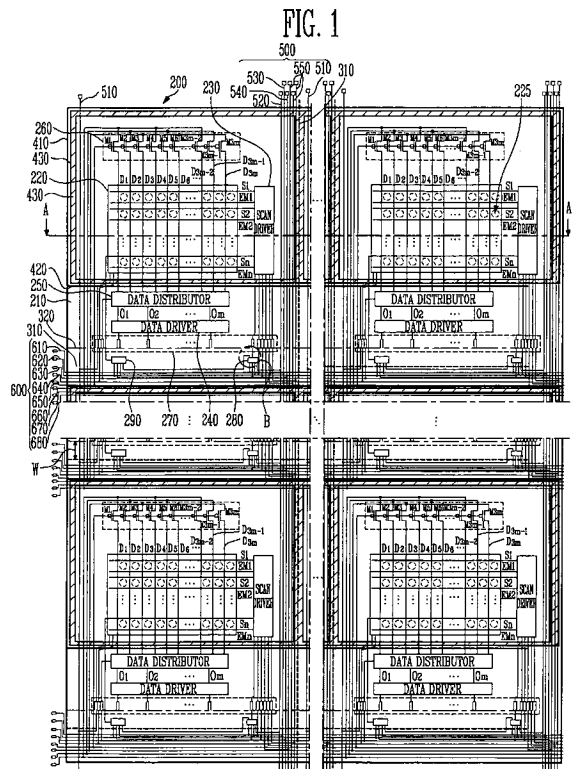
(74) Representative: **Mounteney, Simon James**
Marks & Clerk LLP
90 Long Acre
London
WC2E 9RA (GB)

(30) Priority: **23.08.2006 KR 20060079930**

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

(54) **Organic light emitting display device and mother substrate of the same**

(57) A light emitting display device may include a plurality of pixels, a plurality of scan lines for selectively applying a scan signal to the pixels, a plurality of data lines crossing the scan lines for applying a data signal to the respective pixels, a scan driver for applying a scan signal to the scan lines, and at least one first testing unit electrically connected to the scan driver, wherein at least one output line of the first testing unit is electrically connected to the scan driver, and at least one other output line of the first testing unit is electrically disconnected and in an electrically open state.



EP 1 892 695 A3



EUROPEAN SEARCH REPORT

Application Number
EP 07 25 3326

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 2005/057273 A1 (LIN HSIAO-YI [TW] ET AL) 17 March 2005 (2005-03-17) * paragraph [0031] - paragraph [0042]; figure 1a *	1-24	INV. G09G3/30
X	US 2004/100428 A1 (SATO SHINICHI [JP]) 27 May 2004 (2004-05-27) * figure 2 *	1-24	
A	US 2005/122297 A1 (IMAGAWA KENGO [JP] ET AL) 9 June 2005 (2005-06-09) * paragraph [0045]; figure 1 *	1,6-13	
E	EP 1 843 318 A (SAMSUNG SDI CO LTD [KR] SAMSUNG MOBILE DISPLAY CO LTD [KR]) 10 October 2007 (2007-10-10) * paragraph [0060] - paragraph [0085]; figures 3,4 *	25,28, 33-35	
X	US 2005/012518 A1 (LEE BACK-WON [KR]) 20 January 2005 (2005-01-20) * paragraphs [0033] - [0095]; figures 1,3,4,8 *	25-32	
			TECHNICAL FIELDS SEARCHED (IPC)
			G09G
9 The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 26 January 2010	Examiner Giancane, Iacopo
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)



Application Number

EP 07 25 3326

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 07 25 3326

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-24

directed to prevent an interference of a test circuitry connected to the scan driver on a normal display operation.

2. claims: 25-35

directed to test a plurality of display devices in a mother substrate.

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

EP 07 25 3326

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.

26-01-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005057273 A1	17-03-2005	TW 220696 B	01-09-2004
US 2004100428 A1	27-05-2004	JP 4211368 B2 JP 2004177514 A	21-01-2009 24-06-2004
US 2005122297 A1	09-06-2005	JP 2005189834 A	14-07-2005
EP 1843318 A	10-10-2007	CN 101051647 A JP 2007279655 A US 2007262929 A1	10-10-2007 25-10-2007 15-11-2007
US 2005012518 A1	20-01-2005	CN 1576965 A JP 2005037942 A KR 20050008043 A US 2009195745 A1 US 2007057689 A1	09-02-2005 10-02-2005 21-01-2005 06-08-2009 15-03-2007

专利名称(译)	有机发光显示装置及其母基板		
公开(公告)号	EP1892695A3	公开(公告)日	2010-03-10
申请号	EP2007253326	申请日	2007-08-23
[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	KWAK WON KYU		
发明人	KWAK, WON-KYU		
IPC分类号	G09G3/30		
CPC分类号	G09G3/3266 G09G3/006 G09G2300/0842 G09G2300/0861 G09G2310/0251 G09G2310/0262 G09G2310/0289 G09G2320/0693		
优先权	1020060079930 2006-08-23 KR		
其他公开文献	EP1892695A2 EP1892695B1		
外部链接	Espacenet		

摘要(译)

发光显示装置可包括多个像素，用于选择性地施加扫描信号到像素的多条扫描线，与用于将数据信号施加到各个像素的扫描线交叉的多条数据线，用于扫描驱动器的扫描驱动器将扫描信号施加到扫描线，并且至少一个第一测试单元电连接到扫描驱动器，其中第一测试单元的至少一个输出线电连接到扫描驱动器，以及至少一个其他输出线。第一测试单元电断开并处于电开路状态。

