



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
08.07.2009 Bulletin 2009/28

(51) Int Cl.:
G09G 3/32 ^(2006.01)

(43) Date of publication A2:
02.07.2008 Bulletin 2008/27

(21) Application number: **07254798.7**

(22) Date of filing: **12.12.2007**

(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

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(30) Priority: **27.12.2006 KR 20060135093**

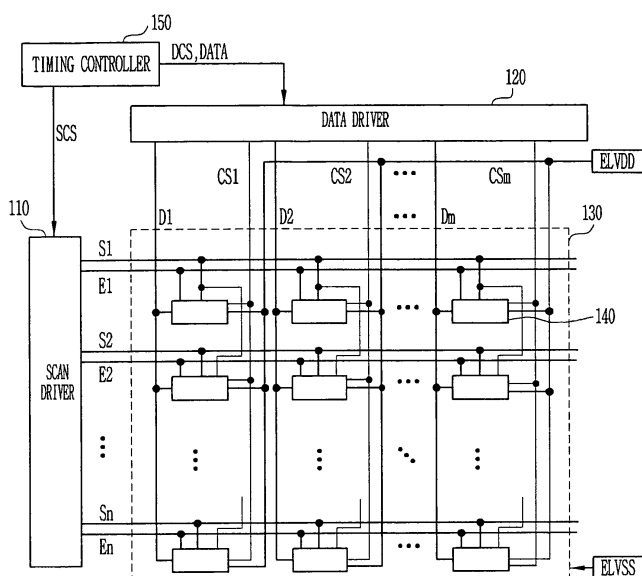
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(54) **Organic light emitting diode display device and method of driving the same**

(57) An electroluminescent display device includes pixels (140) each adapted to receive respective first and second scan signals via respective first and second lines; a scan driver (110) adapted to supply a respective scan signal to each of the scan lines and to supply a respective light emitting control signal to each of the light emitting control lines; and a data driver (120) adapted to primarily

charge the pixel by sinking a predetermined electric current through a respective electric current sink line when the first scan signal is supplied to the first scan line, and to secondarily charge the respective pixel by supplying a voltage data signal to a respective one of the data lines when the second scan signal is supplied to the second scan line associated with the pixel.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
EP 07 25 4798

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 2005/007357 A1 (YAMASHITA JUNICHI [JP] ET AL) 13 January 2005 (2005-01-13) * paragraphs [0002], [0018], [0027] - [0030], [0080] - [0096]; figures 5-12 *	1-3,5-7	INV. G09G3/32
A	US 2006/221009 A1 (MIWA KOICHI [JP]) 5 October 2006 (2006-10-05) * paragraphs [0001], [0005], [0030] - [0041]; figures 2,3 *	1-19	
A	EP 1 585 100 A (SAMSUNG SDI CO LTD [KR]) 12 October 2005 (2005-10-12) * paragraphs [0036] - [0065]; figures 6-9 *	1-19	
E	US 2008/150847 A1 (KIM HYUNG-SOO [KR] ET AL) 26 June 2008 (2008-06-26) * paragraphs [0056] - [0065], [0070] - [0076], [0080] - [0116]; figures 5,10 *	1-19	
			TECHNICAL FIELDS SEARCHED (IPC)
			G09G
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 May 2009	Examiner Taron, Laurent
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			

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EPO FORM 1503 03.82 (P04C01)

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

EP 07 25 4798

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
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20-05-2009

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005007357 A1	13-01-2005	CN 1551089 A	01-12-2004
		JP 4049018 B2	20-02-2008
		JP 2004341444 A	02-12-2004
		KR 20040100939 A	02-12-2004
		TW 243354 B	11-11-2005
US 2006221009 A1	05-10-2006	JP 2006285116 A	19-10-2006
EP 1585100 A	12-10-2005	CN 1677470 A	05-10-2005
		JP 2005258407 A	22-09-2005
		KR 20050090861 A	14-09-2005
		US 2005200575 A1	15-09-2005
US 2008150847 A1	26-06-2008	KR 100824854 B1	23-04-2008

专利名称(译)	有机发光二极管显示装置及其驱动方法		
公开(公告)号	EP1939848A3	公开(公告)日	2009-07-08
申请号	EP2007254798	申请日	2007-12-12
[标]申请(专利权)人(译)	三星斯笛爱股份有限公司		
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IPC分类号	G09G3/32		
CPC分类号	G09G3/3233 G09G3/3291 G09G2300/043 G09G2300/0819 G09G2300/0852 G09G2300/0861 G09G2310/0251 G09G2310/0262 G09G2320/0233		
优先权	1020060135093 2006-12-27 KR		
其他公开文献	EP1939848B1 EP1939848A2		
外部链接	Espacenet		

摘要(译)

一种电致发光显示装置，包括像素（140），每个像素适于通过相应的第一和第二线接收相应的第一和第二扫描信号。扫描驱动器（110），适于向每条扫描线提供相应的扫描信号，并向每条发光控制线提供相应的发光控制信号；数据驱动器（120），适于在第一扫描信号提供给第一扫描线时通过相应的电流吸收线吸收预定电流来对像素充电，并通过提供电压对相应像素进行二次充电当第二扫描信号被提供给与像素相关联的第二扫描线时，数据信号到相应的一条数据线。

FIG. 1

