(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 439 519 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
29.03.2006 Bulletin 2006/13

(43) Date of publication A2:
21.07.2004 Bulletin 2004/30

(21) Application number: **04000852.6**

(22) Date of filing: **16.01.2004**

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

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR
Designated Extension States:
AL LT LV MK

(30) Priority: **17.01.2003 KR 2003003310**

(71) Applicant: **LG ELECTRONICS INC.**
Seoul (KR)

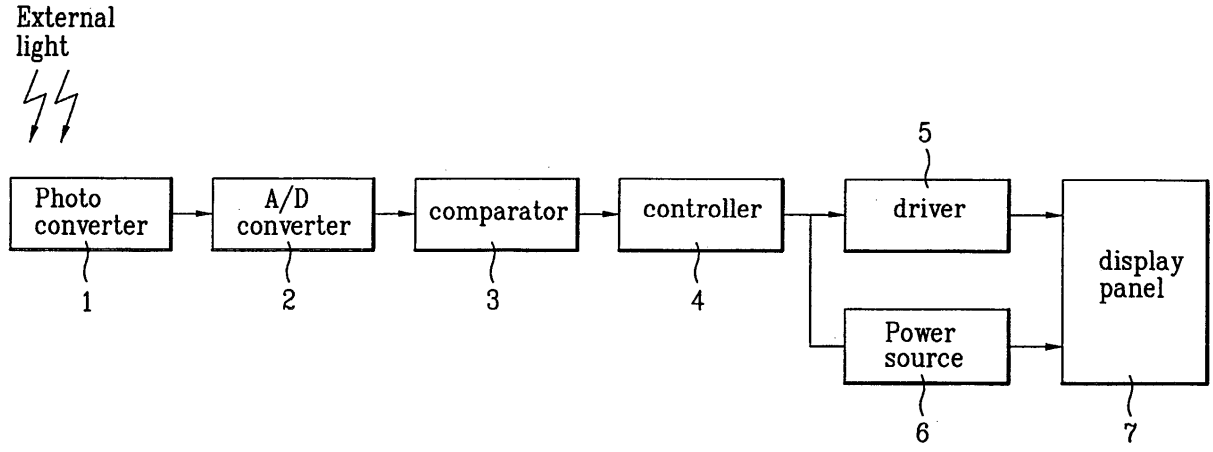
(72) Inventors:
- **Yoon, Jong Geun**
  Anyang-si, Gyeonggi-do (KR)
- **Kim, Hak Su**
  Gangbuk-gu, Seoul (KR)

(74) Representative: **Heinze, Ekkehard et al**
Meissner, Bolte & Partner GbR,
Depotstrasse 5 1/2
86199 Augsburg (DE)

(54) Device for and method of driving an organic electroluminescent display

(57) A device and method for driving an organic EL display is disclosed, in which the device includes a photo converter sensing an intensity of external light, and converting the sensed light to an electric signal; an A/D converter converting the electric signal of the photo converter from an analog signal to a digital signal; a comparator comparing the value of the electric signal converted to the digital signal with a preset reference value; a controller controlling at least any one of the driver and the power source according to comparison results; a driver controlling the amount of current applied to a display panel according to a control signal of the controller; and a power source controlling the intensity of voltage applied to the driver and the display panel according to the control signal of the controller.

FIG. 1



EP 1 439 519 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 00 0852

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	EP 1 164 641 A (SEMICONDUCTOR ENERGY LAB) 19 December 2001 (2001-12-19) * paragraphs [0015] - [0034]; figures 1A-3 *	1-6,8-10	G09G3/32
X	EP 1 194 013 A (EASTMAN KODAK CO) 3 April 2002 (2002-04-03) * paragraphs [0010] - [0032]; figures 1-11 *	1-10	
X	US 6 479 940 B1 (ISHIZUKA SHINICHI) 12 November 2002 (2002-11-12) * column 4, line 35 - column 8, line 28; figures 1-9 *	1-10	
X	US 6 265 833 B1 (LEE EUN YOUNG ET AL) 24 July 2001 (2001-07-24) * column 4, line 45 - column 9, line 63; claim 1; figures 1-4 *	1-10	
A	US 5 617 112 A (YOSHIDA TOSHIO ET AL) 1 April 1997 (1997-04-01) * column 3, line 28 - column 6, line 42; figures 1-7 *	1-10	TECHNICAL FIELDS SEARCHED (IPC) G09G
A	US 2002/011978 A1 (ARAI YASUYUKI ET AL) 31 January 2002 (2002-01-31) * paragraphs [0041] - [0066]; figures 1-3 *	1-10	
A	EP 1 187 086 A (VISTEON GLOBAL TECH INC) 13 March 2002 (2002-03-13) * paragraphs [0011] - [0026]; figures 1-6 *	1-10	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	6 February 2006	Harke, M

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)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 04 00 0852

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.

06-02-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1164641 A	19-12-2001	CN 1329369 A	02-01-2002
		TW 497274 B	01-08-2002
		US 2002027229 A1	07-03-2002
EP 1194013 A	03-04-2002	CN 1347074 A	01-05-2002
		DE 60100732 D1	16-10-2003
		DE 60100732 T2	05-08-2004
		JP 2002162934 A	07-06-2002
		US 2004032382 A1	19-02-2004
US 6479940 B1	12-11-2002	JP 2001092412 A	06-04-2001
US 6265833 B1	24-07-2001	CN 1256478 A	14-06-2000
		JP 2000163016 A	16-06-2000
		KR 2000033177 A	15-06-2000
US 5617112 A	01-04-1997	GB 2285329 A	05-07-1995
US 2002011978 A1	31-01-2002	NONE	
EP 1187086 A	13-03-2002	JP 2002175042 A	21-06-2002
		US 6483245 B1	19-11-2002

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)	用于驱动有机电致发光显示器的装置和方法		
公开(公告)号	EP1439519A3	公开(公告)日	2006-03-29
申请号	EP2004000852	申请日	2004-01-16
申请(专利权)人(译)	LG电子株式会社.		
当前申请(专利权)人(译)	LG DISPLAY CO.，LTD.		
[标]发明人	YOON JONG GEUN KIM HAK SU		
发明人	YOON, JONG GEUN KIM, HAK SU		
IPC分类号	G09G3/32 G09G3/30 G09G3/20 H01L51/50		
CPC分类号	G09G3/3216 G09G3/3225 G09G2320/0233 G09G2320/0626 G09G2330/022 G09G2360/144		
代理机构(译)	海因策，EKKEHARD		
优先权	1020030003310 2003-01-17 KR		
其他公开文献	EP1439519A2		
外部链接	Espacenet		

摘要(译)

公开了一种用于驱动有机EL显示器的装置和方法，其中该装置包括感测外部光强度的光电转换器，并将感测的光转换为电信号; A / D转换器，将光转换器的电信号从模拟信号转换为数字信号;比较器，将转换为数字信号的电信号的值与预设的参考值进行比较;控制器根据比较结果控制驱动器和电源中的至少任一个;驱动器根据控制器的控制信号控制施加到显示面板的电流量;以及控制根据控制器的控制信号施加到驱动器和显示面板的电压强度的电源。

FIG. 1