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17.10.2005 CA 2521986

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05819617.1 / 1 836 697

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(54) **Method and system for programming, calibrating and driving a light emitting device display**

(57) A system for a display array including a pixel circuit, the pixel circuit including a driving transistor, at least one switch transistor, a storage capacitor and a light emitting device. The system comprises a monitor for monitoring a current or voltage associated with the pixel circuit, a data process unit for controlling the operation of the display array, the data process unit being configured to extract information indicative of an aging of the pixel circuit, based on the monitored current or voltage and a driver controlled by the data process unit for providing programming and calibration data to the pixel circuit based on the extracted aging information.

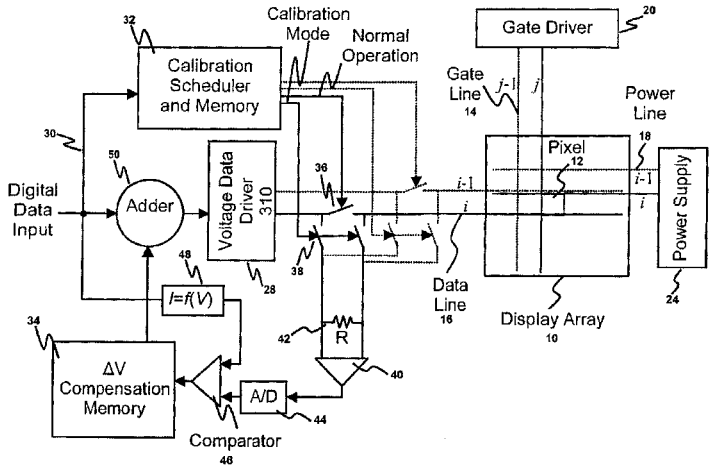

FIG.2

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EUROPEAN SEARCH REPORT

Application Number
EP 11 16 8677

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	KR 2004 0100887 A (SEIKO EPSON CORP) 2 December 2004 (2004-12-02) * the whole document * & US 2004/257353 A1 (IMAMURA YOICHI [JP] ET AL) 23 December 2004 (2004-12-23) * the whole document *	1,4-15	INV. G09G3/20 G09G3/32
X	WO 2004/047058 A2 (KONINKL PHILIPS ELECTRONICS NV [NL]; JOHNSON MARK THOMAS [DE]; KLEIN M) 3 June 2004 (2004-06-03) * the whole document *	1,8	
X	EP 1 450 341 A1 (MATSUSHITA ELECTRIC IND CO LTD [JP] PANASONIC CORP [JP]) 25 August 2004 (2004-08-25) * paragraphs [0411] - [0420]; figures 48-50 *	12,13	
			TECHNICAL FIELDS SEARCHED (IPC)
			G09G

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	20 November 2012	Bader, Arnaud

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)

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EP 11 16 8677

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).

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LACK OF UNITY OF INVENTION
SHEET B

Application Number
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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: 1-11, 14, 15

   Device for calibration system of a light emitting display, preventing non uniformity due to ageing.

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2. claims: 12, 13

   Device to prevent light emission in writing phase in a display during writing period

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 11 16 8677

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.

20-11-2012

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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)	用于编程，校准和驱动发光器件显示器的方法和系统		
公开(公告)号	EP2383720A3	公开(公告)日	2013-01-02
申请号	EP2011168677	申请日	2005-12-15
[标]申请(专利权)人(译)	伊格尼斯创新公司		
申请(专利权)人(译)	IGNIS创新INC.		
当前申请(专利权)人(译)	IGNIS创新INC.		
[标]发明人	NATHAN AROKIA CHAJI GHOLAMREZA REZA SERVATI PEYMAN		
发明人	NATHAN, AROKIA CHAJI, GHOLAMREZA REZA SERVATI, PEYMAN		
IPC分类号	G09G3/20 G09G3/32		
CPC分类号	G01R19/0092 G09G3/006 G09G3/3208 G09G3/3233 G09G3/3241 G09G3/3258 G09G3/3283 G09G3/3291 G09G2300/0819 G09G2300/0842 G09G2310/0262 G09G2310/027 G09G2320/0285 G09G2320/029 G09G2320/0295 G09G2320/043 G09G2320/045 G09G2320/0693		
代理机构(译)	GRÜNECKER，KINKELDEY，STOCKMAIR & SCHWANHÄUSSER		
优先权	2503237 2005-04-08 CA 2490860 2004-12-15 CA 2521986 2005-10-17 CA 2509201 2005-06-08 CA		
其他公开文献	EP2383720A2 EP2383720B1		
外部链接	Espacenet		

摘要(译)

一种用于显示器阵列的系统，包括像素电路，所述像素电路包括驱动晶体管，至少一个开关晶体管，存储电容器和发光器件。该系统包括用于监视与像素电路相关联的电流或电压的监视器，用于控制显示阵列的操作的数据处理单元，数据处理单元被配置为基于提取指示像素电路老化的信息。监视的电流或电压以及由数据处理单元控制的驱动器，用于基于提取的老化信息向像素电路提供编程和校准数据。

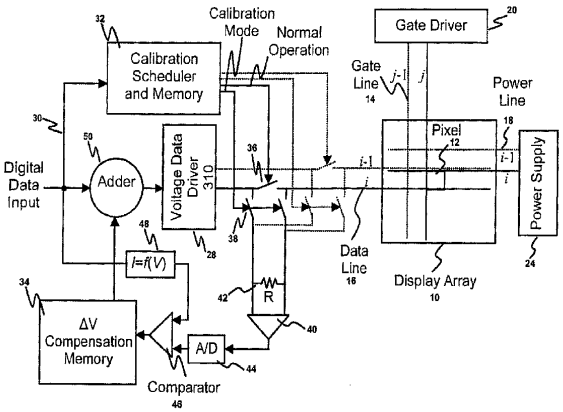

FIG.2