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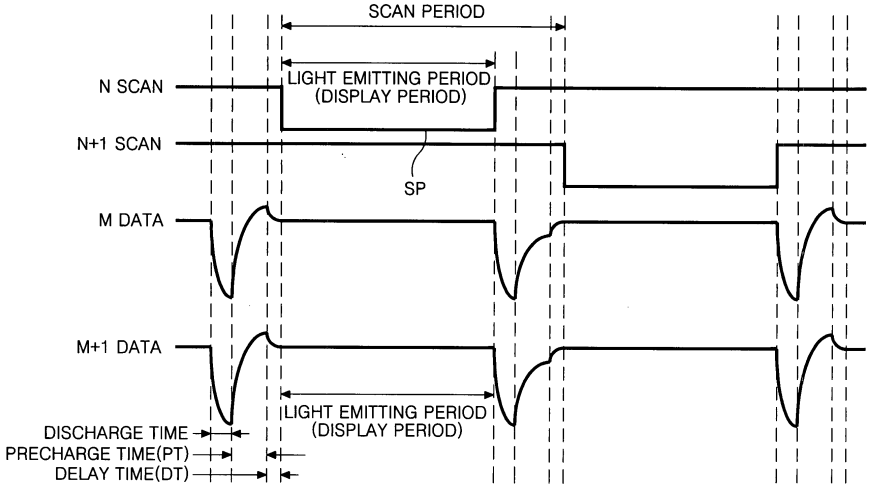
(54) Organic electro-luminescence display device and driving method thereof

(57) There is disclosed an organic EL display device using pre-charge which can improve display quality by preventing a cross talk generated by a brightness difference within the same picture realization area, and a driving method thereof.

An organic EL display device according to an embodiment of the present invention includes a display panel where a plurality of data lines cross a plurality of scan lines and electro luminescence cells are arranged in the crossing parts thereof; a pre-charge driver for supplying a pre-charge current to the data line in accordance with gray levels of data; and a data driver for charging a data current to the data line for a designated period which is set before a scan pulse is supplied to the electro luminescence cell and after the pre-charge current is supplied.

FIG.9



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EUROPEAN SEARCH REPORT

Application Number
EP 06 00 7906

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	WO 2004/047065 A (KONINKL PHILIPS ELECTRONICS NV [NL]; KLEIN MARKUS H [DE]; DE JONG DOUW) 3 June 2004 (2004-06-03) * page 5, line 27 - line 28; figure 1 * * page 8, line 8 - line 13 * * page 8, line 25 - line 28; figures 3a,5b,6b * -----	1-14	INV. G09G3/32

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	9 October 2007	Gundlach, Harald

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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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 00 7906

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09-10-2007

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	有机电致发光显示装置及其驱动方法		
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当前申请(专利权)人(译)	LG电子公司.		
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其他公开文献	EP1746565A2 EP1746565B1		
外部链接	Espacenet		

摘要(译)

公开了一种使用预充电的有机EL显示装置及其驱动方法，该有机EL显示装置可以通过防止由同一图片实现区域内的亮度差异产生的串扰来提高显示质量。根据本发明的实施例的有机EL显示装置包括：显示面板，其中多条数据线与多条扫描线交叉，并且电致发光单元布置在其交叉部分中;预充电驱动器，用于根据数据的灰度级向数据线提供预充电电流;以及数据驱动器，用于在向电致发光单元提供扫描脉冲之前和在提供预充电电流之后设置的指定时段向数据线充电数据电流。

FIG.9