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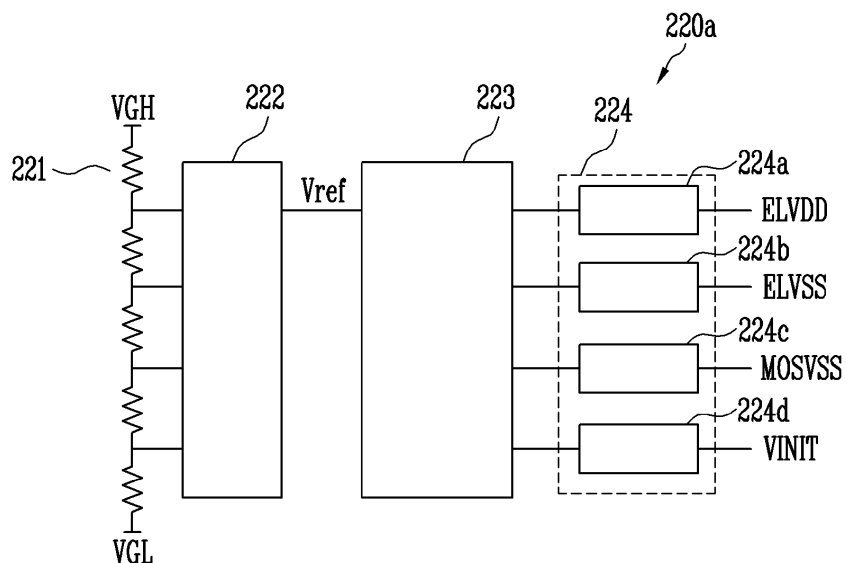
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(54) **Organic light emitting display device and power supply arrangement for the same**

(57) An organic light emitting display device including a power generator for sending a plurality of voltages to a display unit. The display unit receives a scan signal, a light emitting control signal, and a data signal, which enable a current corresponding to the data signal to flow from a first power supply to a second power supply. The display unit includes a pixel circuit that includes a storage

capacitor adapted to store the data signal and to stabilize the stored data signal utilizing a third power supply. A driver IC includes a signal generator for generating the data signal, the scan signal, and the light emitting control signal, and further includes a power generator for generating the first power, the second power, and the third power, wherein the second power and the third power are at a lower voltage than that of the first power.

FIG. 2





EUROPEAN SEARCH REPORT

Application Number
EP 09 16 7340

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | | |
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| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) | |
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| Y | * paragraphs [0057] - [0062]; figures 4, 5,6 * | 3,4 | | |
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| The present search report has been drawn up for all claims | | | | |
| Place of search Munich | | Date of completion of the search 18 August 2010 | Examiner Kunze, Holger | |
| 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 03.02 (P04C01)



Application Number

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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
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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, 2, 6, 7

An organic light emitting display device with a variable internal power source.

2. claim: 3

An organic light emitting display device with a specific power supply unit.

3. claims: 4, 5

An organic light emitting display device with a specific driver IC.

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

EP 09 16 7340

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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18-08-2010

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EPO FORM P/459

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

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| 专利名称(译) | 有机发光显示装置和用于其的电源装置 | | |
| 公开(公告)号 | EP2151816A3 | 公开(公告)日 | 2010-09-22 |
| 申请号 | EP2009167340 | 申请日 | 2009-08-06 |
| [标]申请(专利权)人(译) | 三星显示有限公司 | | |
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| 当前申请(专利权)人(译) | 三星移动显示器有限公司. | | |
| [标]发明人 | PARK SUNG CHEON | | |
| 发明人 | PARK, SUNG-CHEON | | |
| IPC分类号 | G09G3/32 | | |
| CPC分类号 | G09G3/3233 G09G2300/043 G09G2300/0819 G09G2300/0852 G09G2300/0861 G09G2320/043 G09G2330/02 G09G2330/028 | | |
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摘要(译)

一种有机发光显示装置，包括用于将多个电压发送到显示单元的发电机。显示单元接收扫描信号，发光控制信号和数据信号，其使得对应于数据信号的电流能够从第一电源流到第二电源。显示单元包括像素电路，该像素电路包括存储电容器，该存储电容器适于存储数据信号并利用第三电源稳定存储的数据信号。驱动器IC包括用于产生数据信号，扫描信号和发光控制信号的信号发生器，并且还包括用于产生第一功率，第二功率和第三功率的功率发生器，其中第二功率和第三电源的电压低于第一电源的电压。

