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## (54) Pixel unit circuit and oled display apparatus

(57) The present disclosure discloses a pixel unit circuit and an OLED display apparatus. The pixel unit circuit comprises a first sub-circuit module (11 and 12), a second sub-circuit module (21, 22, 23 and 24), a first capacitor (3) and OLED (4). An input of the first sub-circuit module is connected to a data line (Data); another input of the first sub-circuit module is connected to an output of the second sub-circuit module and a first terminal of the OLED; an output of the first sub-circuit module is connected to an input/output of the second sub-circuit module via the first capacitor; a voltage difference between positive power supply (ARVDD) and negative power supply (ARVSS) of a backboard is applied between an input of the second sub-circuit module and a second terminal of the OLED. The pixel unit circuit can compensate the aging of OLED devices, the non-uniformity of threshold voltage of TFT driving transistors, and a drop in the driving current IR Drop of the power supply of the backboard.

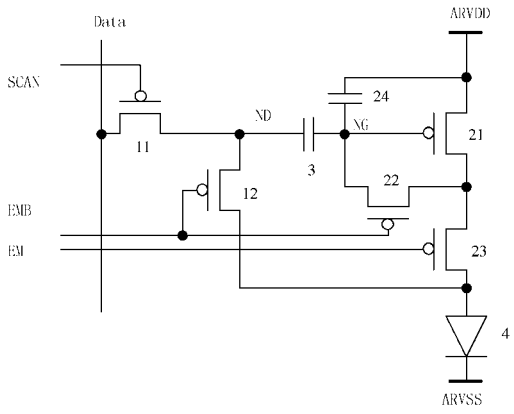


Fig. 6

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# EUROPEAN SEARCH REPORT

Application Number
EP 12 16 8486

## DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
|---|---|---|---|
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| | | | G09G |

The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| The Hague | 4 February 2013 | Ladiray, Olivier |

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 12 16 8486

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

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| 审查员(译) | LADIRAY，OLIVIER | | |
| 优先权 | 201110129681.8 2011-05-18 CN | | |
| 其他公开文献 | EP2525348A2 | | |
| 外部链接 | Espacenet | | |


摘要(译)

本公开公开了一种像素单元电路和OLED显示装置。像素单元电路包括第一子电路模块（11和12），第二子电路模块（21,22,23和24），第一电容器（3）和OLED（4）。第一子电路模块的输入连接到数据线（Data）;第一子电路模块的另一输入端连接到第二子电路模块的输出端和OLED的第一端子;第一子电路模块的输出端通过第一电容器连接到第二子电路模块的输入/输出端;在第二子电路模块的输入和OLED的第二端子之间施加背板的正电源（ARVDD）和负电源（ARVSS）之间的电压差。像素单元电路可以补偿OLED器件的老化，TFT驱动晶体管的阈值电压的不均匀性以及背板的电源的驱动电流IR Drop的下降。


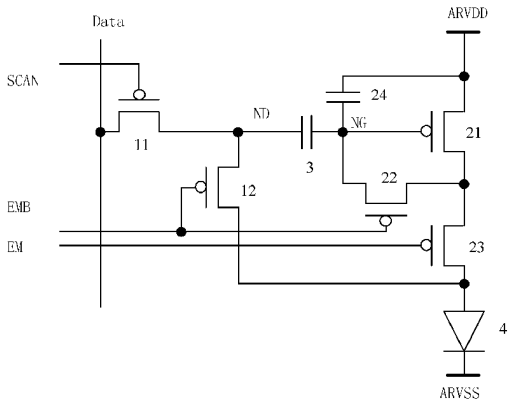


Fig. 6