



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**22.05.2002 Bulletin 2002/21**

(51) Int Cl.<sup>7</sup>: **G09G 3/32, G09G 5/02**

(43) Date of publication A2:  
**28.03.2001 Bulletin 2001/13**

(21) Application number: **00120759.6**

(22) Date of filing: **22.09.2000**

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

(30) Priority: **24.09.1999 JP 27136699**

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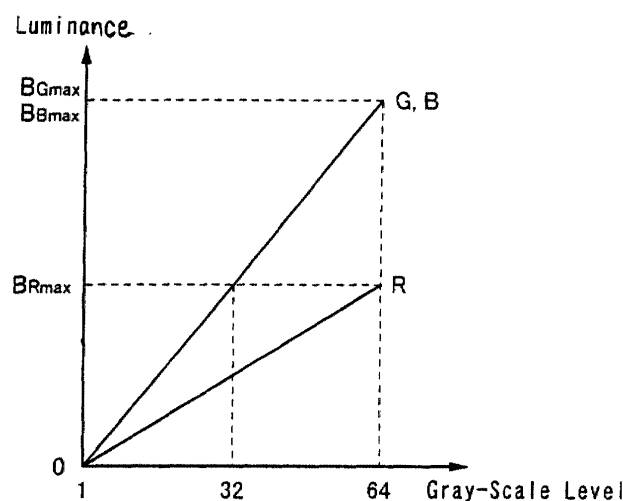
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(54) **El display device and driving method thereof**

(57) The present invention is characterized by adding a bit having the value of one below the least significant bit of n bit digital data having red image information inputted from the external, adding a bit having the value of zero above the most significant bit of n bit digital data having green image information inputted from the external,

and adding a bit having the value of zero above the most significant bit of n bit digital data having blue image information inputted from the external, whereby producing (n+1) bit digital data having red image information, (n+1) bit digital data having green image information, and (n+1) bit digital data having blue image information, respectively, for displaying an image.



**Fig. 1**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 12 0759

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                          |                                                   |                                                 |
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| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                          |                                                   |                                                 |
| Place of search<br>MUNICH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                          | Date of completion of the search<br>12 March 2002 | Examiner<br>Morris, D                           |
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EPO FORM 1503 03.82 (P04/C01)



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Application Number  
EP 00 12 0759

| 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 (Int.Cl.7) |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  | TECHNICAL FIELDS SEARCHED (Int.Cl.7)         |
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| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |                                              |
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| MUNICH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12 March 2002                    | Morris, D                                    |
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 12 0759

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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12-03-2002

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EPO FORM P0459

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|                |                                                                                                                                                                  |         |            |
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| 专利名称(译)        | EI显示装置及其驱动方法                                                                                                                                                     |         |            |
| 公开(公告)号        | <a href="#">EP1087365A3</a>                                                                                                                                      | 公开(公告)日 | 2002-05-22 |
| 申请号            | EP2000120759                                                                                                                                                     | 申请日     | 2000-09-22 |
| [标]申请(专利权)人(译) | 株式会社半导体能源研究所                                                                                                                                                     |         |            |
| 申请(专利权)人(译)    | SEL半导体能源研究所有限公司.                                                                                                                                                 |         |            |
| 当前申请(专利权)人(译)  | SEL半导体能源研究所有限公司.                                                                                                                                                 |         |            |
| 发明人            | KOYAMA, JUN, SEMICONDUCTOR ENERGY LAB. CO. LTD.                                                                                                                  |         |            |
| IPC分类号         | G09G3/30 G09G3/20 G09G5/02 G09G5/04 G09G3/32                                                                                                                     |         |            |
| CPC分类号         | G09G5/02 G09G3/20 G09G3/2018 G09G3/2022 G09G3/2037 G09G3/32 G09G3/3258 G09G3/3275 G09G5/04 G09G2300/0809 G09G2300/0842 G09G2320/0242 G09G2320/0666 G09G2320/0673 |         |            |
| 优先权            | 1999271366 1999-09-24 JP                                                                                                                                         |         |            |
| 其他公开文献         | EP1087365B1<br>EP1087365A2                                                                                                                                       |         |            |
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#### 摘要(译)

本发明的特征在于，在n位数字数据的最低有效位之下添加一个具有一个值的位，该位具有从外部输入的绿色图像信息，在n位数字的最高有效位之上添加一个具有零值的位。具有从外部输入的绿色图像信息的数据，并且在具有从外部输入的蓝色图像信息的n位数字数据的最高有效位之上添加具有零值的位，从而产生具有红色的 (n + 1) 位数字数据图像信息，具有绿色图像信息的 (n + 1) 位数字数据和分别具有蓝色图像信息的 (n + 1) 位数字数据，用于显示图像。

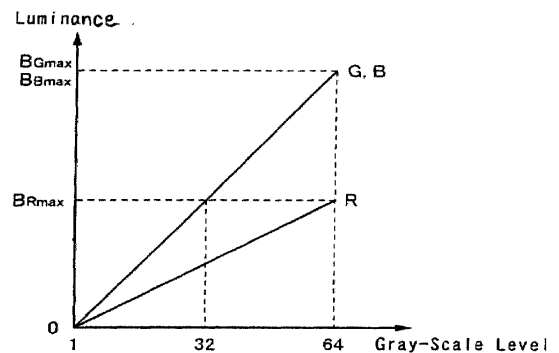


Fig. 1