



```
106 :      110 :
130 :      132 : CLC
134 :      136 :
138 :
```

(Thin film transistor array substrate)  
7%  
(ba  
가 가  
가 PDA(Personal Digital Assistant) 가  
가  
가  
가  
가  
가 CLC  
(contrast ratio)  
CLC (pitch)  
가  
650nm R,G,B 400 700nm 550nm 450nm  
CLC  
가  
1 CLC  
가 / (on/off)  
(AMLCD ; Active Matrix Liquid Crystal Display)  
(10, 30)  
(50)  
(10)  
(T)  
(1)  
(T)가  
(16)  
(T)

(Cholesteric Liquid Crystals)

(color filter substrate)

-liquid crystal display ; )가

(battery)

ack Matrix)가 (16) (1) QWP(18 ; Quarter Wave Plate) (14 ; BI (20)

Blue) (30) (1) , R( ; Red), G( ; Green), B( ; (32)가 (34) (36)

CLC (32) CLC 가

CLC , CLC 가

2 1 (11) (13) (matrix) (16)

(14)가 (16) (11) (13) (T)가 (16)

(16) (11) (13) (16) (13)

(cross-talk) (16) 가 (13)

(16) 80%

(aperture ratio) 가 가 가 가

(16)

가

CLC CLC

CLC

가 ; 1

(Cholesteric Liquid Crystal) ;

QWP(Quarter Wave Plate) (contact hole)  $\lambda / 4$

(nematic)

3 CLC

(130) (150) (110) (130) (110)

(150) 가 (nematic) (102

(110) (100) (160) 가  $\lambda / 4$

)  $\lambda / 4$  QWP(104)가 , QWP(104)

(106)  
 (130) (100) (T)가 (T)  
 R(Red), G(Green), B(Blue)  
 (132)가 (134) (T) CLC (132) CLC (132)  
 (136) (136) (132) CLC (134)  
 (T) (136) (T)  
 CLC (138) (132) (136) (138) (13)  
 4) CLC (132) (105) (134) (132)  
 (138) CLC (138)  
 4 3  
 (141) (147) (141) (147) (T)가 CLC (132)가 R,  
 G,B (141) (147) (138) (138)  
 CLC (132) (136) (138) (138)  
 (T) (138) (T) CLC (132)  
 3 (138) (140) (142)  
 CLC (132) (138) (138)  
 (140) (3 134) CLC (132) (138)  
 (138) 가 (138)  
 (T) 5 4 II-II CL  
 C (100) (140) (142) (144) (140)  
 (142) (144) (146, 148) (148) (136) 가 (150) (1)  
 46, 148) (150) (136) 가 (134) CLC (  
 132)가 (136) (148) (138)  
 (134) CLC (132) (T)  
 (138) (T)  
 90%  
 가  
 6 CLC  
 ST1, ST2 1  
 5  
 1 1 가  
 CLC  
 ST3 ST2 CLC  
 CLC  
 (black resin)  
 (acrylic)  
 ST4 CLC

The diagram illustrates a network structure with various nodes and connections. The nodes are labeled as follows:

- CLC**: Multiple instances, including 'CLC' at the top left, 'CLC' below it, 'CLC' to the right of 'R,G,B', 'CLC' below 'R,G,B', 'CLC' to the right of '가', 'CLC' below '가', 'CLC' to the right of '90%', 'CLC' below '90%', 'CLC' to the right of '80%', 'CLC' below '80%', 'CLC' to the right of '가' at the bottom, and 'CLC' below '가' at the bottom.
- R,G,B**: Located in the upper left quadrant.
- 가**: Multiple instances, including '가' to the right of 'R,G,B', '가' below '가', '가' to the right of '90%', '가' below '90%', and '가' at the bottom.
- ST5**: Located on the left side.
- ST6**: Located below 'ST5'.
- 2**: Multiple instances, including '2' below 'ST5', '2' below 'ST6', '2' to the right of '가', and '2' below '가'.
- 90%**: Located in the lower right quadrant.
- 80%**: Located on the far right.

The connections between these nodes are represented by lines and arrows, some of which are labeled with '가'.

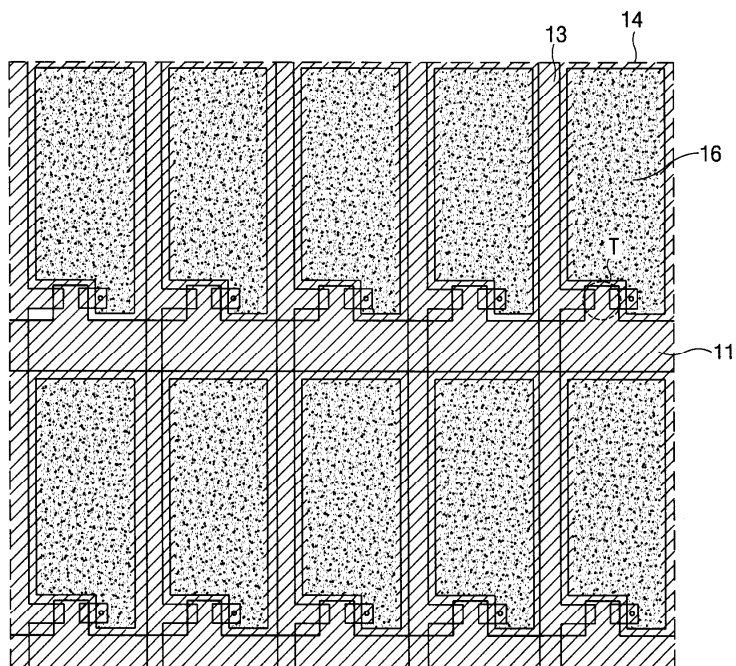
(57)

**1.**

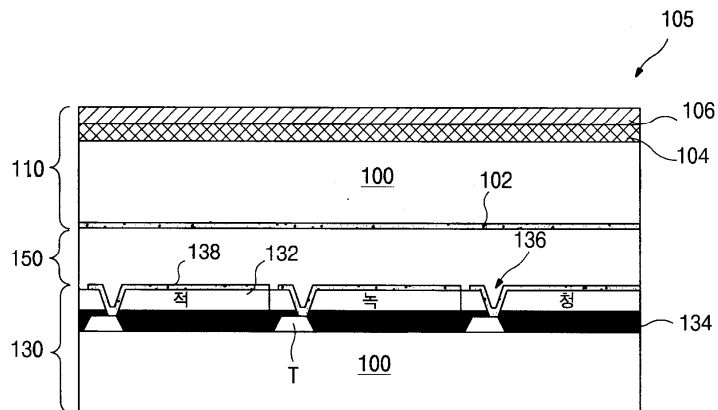
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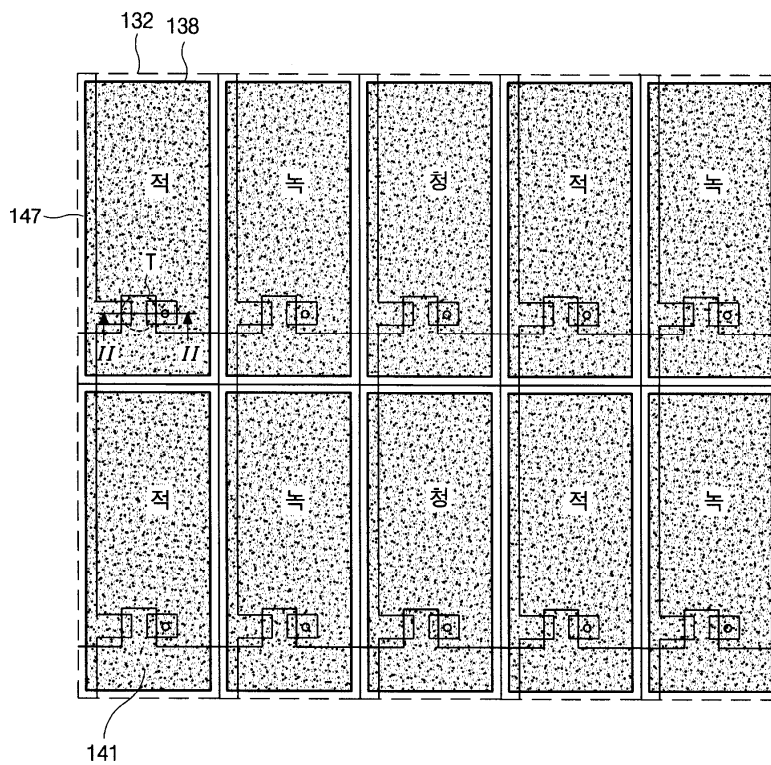
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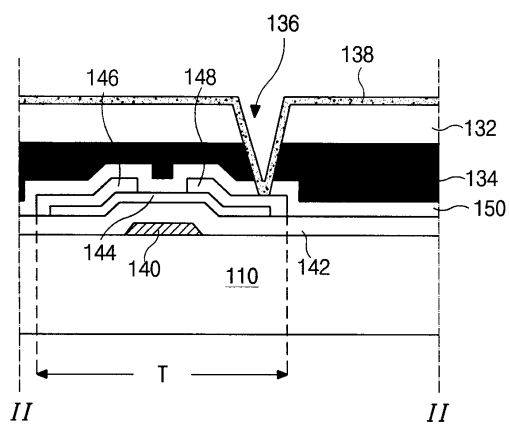
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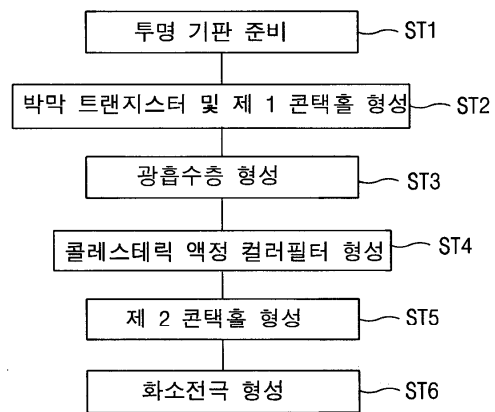
4



5



6



|                |                                                        |         |            |
|----------------|--------------------------------------------------------|---------|------------|
| 专利名称(译)        | 使用胆甾型液晶滤色器的反射型液晶显示装置                                   |         |            |
| 公开(公告)号        | <a href="#">KR100393389B1</a>                          | 公开(公告)日 | 2003-07-31 |
| 申请号            | KR1020010005973                                        | 申请日     | 2001-02-07 |
| [标]申请(专利权)人(译) | 乐金显示有限公司                                               |         |            |
| 申请(专利权)人(译)    | LG显示器有限公司                                              |         |            |
| 当前申请(专利权)人(译)  | LG显示器有限公司                                              |         |            |
| [标]发明人         | MOON JONG WEON                                         |         |            |
| 发明人            | MOON,JONG WEON                                         |         |            |
| IPC分类号         | G02F1/1335                                             |         |            |
| CPC分类号         | G02F1/133536 G02F1/133553 G02F1/133514 G02F2001/133543 |         |            |
| 代理人(译)         | 贞媛KI                                                   |         |            |
| 其他公开文献         | KR1020020065791A                                       |         |            |
| 外部链接           | <a href="#">Espacenet</a>                              |         |            |

#### 摘要(译)

在本发明中，包括薄膜晶体管 and 像素电极以及CLC滤色器和光吸收层的阵列层一起形成在同一板上。此时，CLC滤色器和光吸收层到达薄膜晶体管和像素电极。阻止了该光吸收层阻挡非像素区域上的光的黑矩阵作用与像素电极和栅极布线以及数据线之间的电串扰的产生。它形成与某个间隔重叠。以这种方式与其相邻的像素电极具有增强孔径比和增加反射亮度的优点。

