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(21) 10-2003-0043978
 (22) 2003 06 30

(71) . 20

(72) 1 1027-31

1145 641 603

(74)

(54) 4

가 4 , , ,
 ; R(Red), G(Green), B(Blue), W(White) ; , R, G, B, W
 ; R, G, B, G R, G, B, W

7

, 4 , W(White) , , ,

1(a) 1(b)

2(a)

2(b) 2(a) II-II'

3

4

5(a) 5(b) 4

6 4

7 4

102 : 103 :

105 : 107 :

108 : 109 :

115:

117 : 118 :

118 : TOTAU, ROZIA : K

, R,G,B,W 가 4

가 가 가 가 가
TN TN TN TN TN
(refractive anisotropy)

가 , 가
가 , 가
IPS 가
1(a) 1(b)

1(a) , IPS (1) (1) (5) (5) (7)
 , (1) (7) (42) (5) (5) (7)
 . (7) .
 (5) (7)

IPS 가 .
 3 , IPS R, G, B (, R, G B (, R, G, B가
)가 , R, G, B R, G, B (34) , R, G, B (34)
). R, G, B (color resist) R, G, B (34) , R, G, B (34) 가
 , 가 .

R, G, B, W 4

R(Red), G(Green), B(Blue), W(White) ; R, G, B, W
R, G, B, G R, G, B, W

가 가 IPS (,
) 가 , , R, G, B , , R,
 G, B
 R, G, B , 가 R, G, B W
 (White) , W
 W , W
 55% 가 40%
 R, G, B , . , 가 .
 4 4 , . , 가 .
 4 , 4 (, R, G, B)
 가 , , ,
 4

4 4 IPS
 IPS R, G, B, W 4 가
 R, G, B, W 가 , R, G, B, W
 , , , ,
 가 2 W 가 , , ,
 , , ,
 a) W 가 W IPS 가 가 . 5(a)
 IPS W 가

R, G, B, W) (152a 152d)가 . , R, G, B, W 2
R, G, B, W .

B (151c) W , 1 (151a 151d) R (151a) G (152d) (151b)가 B (152c)
W (152d)가 R (152a) G (152b)가 . , 2 (152a 152d) B (152c)
가 . (151a,152a), G (151b,152b), B (151c,152c) W (151d,152c)) .
(107) . , (, R (105)

2

IPS R. G. B. W 4

(57)

1

R(Red), G(Green), B(Blue), W(White) ;

R. G. B. W

R. G. B. G R. G. B. W

2

1

3

1

4.

3

5

1

가

6

1

7.

R(Red), G(Green), B(Blue), W(White)

;

;

;

R, G, B, W

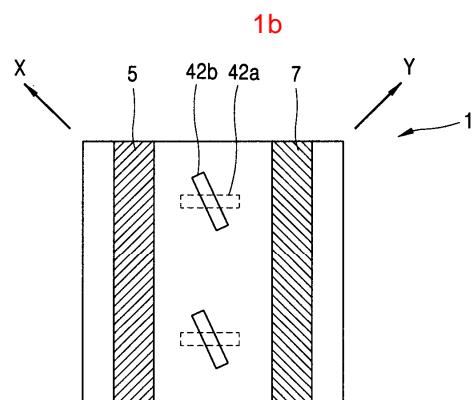
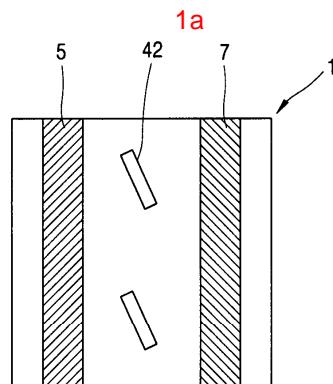
R, G, B, W

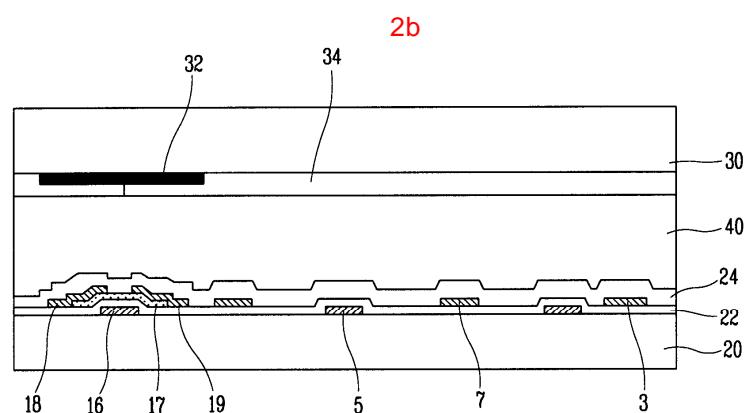
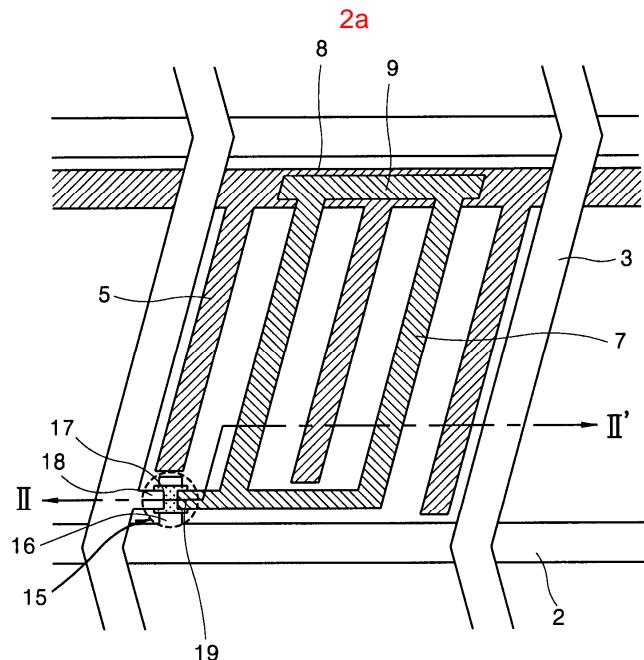
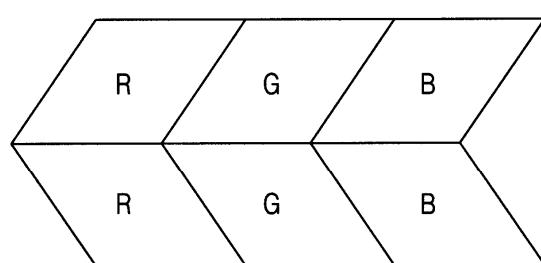
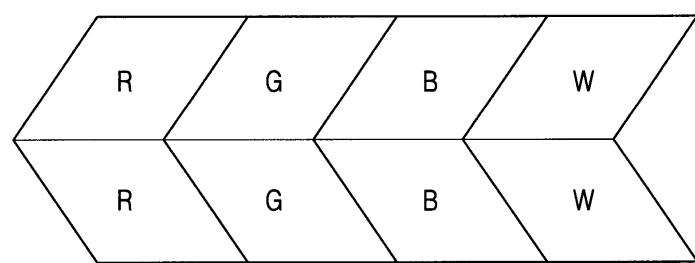
8.

7

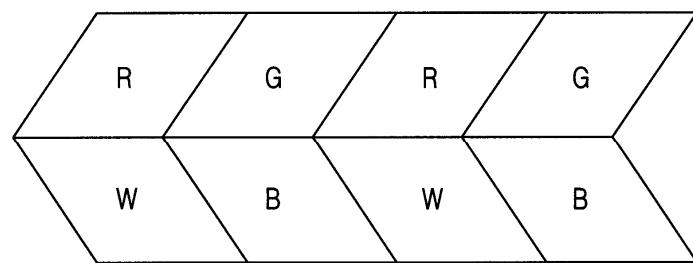
R, G, B, W

R, G, B, W

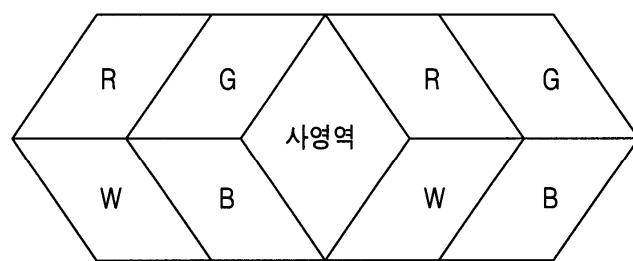


**3****4**

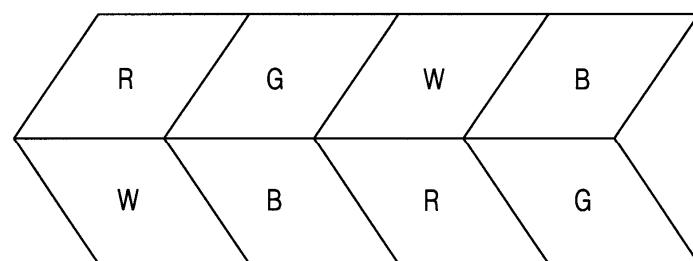
5a

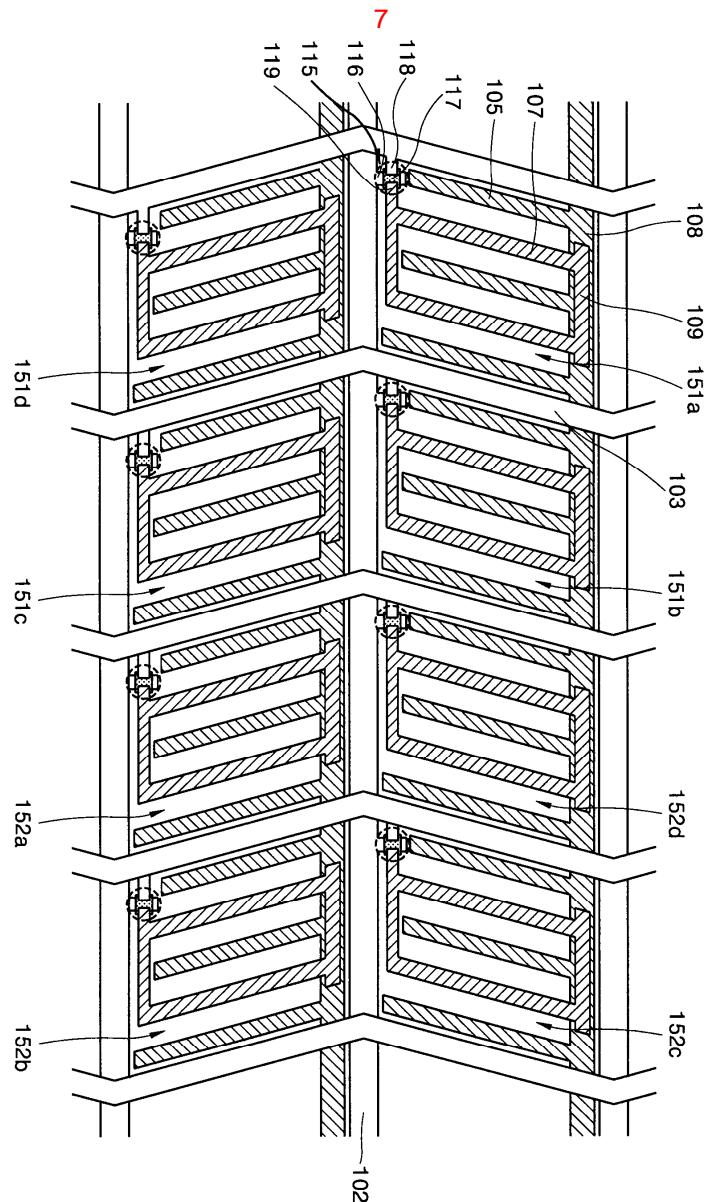


5b



6





专利名称(译)	4像素结构横向电场模式液晶显示元件		
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[标]申请(专利权)人(译)	乐金显示有限公司		
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摘要(译)

本发明涉及一种4像素结构的平面转换模式液晶显示装置，具有改善的视角特性，提高了亮度。并且由定义的多个R(红色)，G(绿色)，B(蓝色)，W(白色)像素的多条栅极线和数据线，布置在子像素内的驱动器组件以及至少一对电极组成。并且R，G，B，W像素被布置在围绕R，G，B，W像素的数据线方向和布置成Z字形的栅极线中，并且其中每个R，G，B，W像素是相邻的。至少一对电极布置在子像素内并形成平面切换。在平面切换模式下，4像素结构，W(白色)像素，锯齿形，固定角度场，亮度。

