

(19) (KR)
(12) (A)

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G02F 1/1343 (43) 2004 03 24

(21) 10-2002-0056872
(22) 2002 09 18

(71) 416

(72) 607 703

102 1004

289-12 102 504

(74) :

(54)

가 , , 가 , ,
가 , 가 2:3 . ,
.

15

, , ,

1 1 ,
2 3 1 II-II' III-III'

,
4 2
,
5 4 V - V' ,
6 8 3 5
,
9 10 4 (column) 2
,
11 12 3 5
,
13 3 5
,
14 6 가 ,
15 7 ,
16 15 XVI - XVI' .

가 ,
 .
 가 ,
 가 ,
 , , 가 , ,
 가 , , ,
 가 , 가 ,
 .
 (R), (G), (B)
 (stripe) , (R), (G), (B) .
 (mosaic) , (R), (G), (B)
 (delta) . (R), (G), (B)
 (dot)
 가 .
 , 'ClairVoyante Laboratories' 가
 'The PenTile Matrix™ color pixel arrangement'
 (PenTile Matrix) ,
 , 가

SVGA

가

UXGA

, 가

가

가

가

가

가

가

가

가

가

가

(flicker)가

가

가

(rendering)

가

가

가

2:3

4.0

가

가

[illegible]

가 2:3 () 가

가 1

1 3 가 1

1 3 (110) (Al) 1 (Al alloy), (Mo), (Cr), (Ta) 가
(Au Alloy)

(123) (121a, 121b) (121a) (121a)
(121a, 121b) 가 (121a) (125)

(121a, 121b, 123, 125, 127) (190)

(121a, 121b, 123, 125, 127) 가 (190)

(121a, 121b, 123, 125, 127) (171) (179) 1 (122)가 (B1, B2)
(D) C (D)

(R, B1, G, R, B2, G,)

(121a, 121b, 123, 125, 127)

, Cr/Al(Al) Al/Mo

(121a, 121b, 123, 125, 127) (122) (SiN_x)
(140) (121a, 121b, 123, 125, 127) (122)

(140) (hydrogenated amorphous silicon)
(154) (154) (P) n
(ohmic contact layer) (163, 165)

(163, 165) Al Al, Mo MoW, Cr, Ta, Cu Cu
(171), (171)
(173) (171)
가 (179) (171, 173, 179)
(123) (154) (173)
(175) (B1, B2) (171)
2 (172) 가 1 (122)
2 (172)

(171, 173, 175, 179) 2 (172) (121a, 121b, 123, 125, 127)
가

(163, 165) (154) (173) (175)

(171, 173, 175, 179) 가 (154)
(180) (180) (175) (179) (181,
183) 가 (140) (125) (182) 가
(180) 2 (172) (184) (140) 1
(122) (185) 가

(180)
(190) (190) ITO(indium tin oxide) IZO(indium zinc oxide)
(181) (17

5) (190)
(121a, 121b, 123, 125, 127)

(B1, B2) (190) 1 2 (901, 902)
(B1, B2) (190) , B 2
(902)가 (121a, 121b) (B1, B2)
(B1) (190) 1 (901) A
(121a) (121a) , 1 (901)
(121a) (190) 가
(121a, 121b, 123, 125, 127) (190)
1 (901) (121a) A
1 (901) 5% 1 (901) (121a) 1
(901) (121a) 5% 1 Volt 가
140) (182, 183) (125) (190) (179) (95) ((97)가
(B1, B2) (171) (190) (179)
3 (903)가 (B1, B2) 1
(122) (171) 2 (172) (903) (171)
(G, G) (184, 185) 3 (122, 172, 903) (184, 185)
(179) (B1, B2) (171) 1 2 (179) (122, 172, 903) 가
가 3 (122, 172, 903) 가 (1
71) 가 20% (171) 20% ,
5% 가
, 1 3 (B1, B2) (903) , 2
(190) 3 4 5
4 2 (B1, B2) , 5
4 V-V' 1
4 5 (171) 1
(122) (124) (141) 가 (140) 1
(122) (171) 2 (172)가 (141) 1
(122)
(190) ITO IZO
(190) 가
가
,
GA (179) SVGA UX
가

. ,
 . ,
 .
 , 1
 ,
 ,
 , 가 (flicker)가
 가 , , ,
 .
 6 8 3 5
 , '+' '-' , '??'
 가 ()
 .
 6 8 3 5
 , (R, G, B)가 , (G, R)가 , (B)
 (B) (G, R) (B)
 .
 6 3 n+4 (17
 1) n+1 (171) n+4 n+1 (17
 (171) , n+7 (171)
 171) n+10 (171) n+7 n+10 (17
 (171) , n+5
 (171) n+6 n+6 n
 +5
 가
 . , +++, ---, +-+, -+-, . 6 가
 .
 7 4 n+7 (17
 1) n+1 (171) n+7 n+1 (17
 (171) n+4 (171) , n+10
 (171) n+10 n+4
 (171) n+9 (171) . , n+8
 n+9 n+8
 가 4
 . , +++, -+-, . 7 가
 .
 8 5 n+10 (1
 71) n+1 (171) n+10 n+1 (1
 (171) n+4 (171) , n+7
 (171) n+7 n+4
 . , n+8

+8 (171) n+9 (171) n+9 n
 가
 , + + + , - + - , + - + , - - - . 10
 가
 , + + + , - + - 4 가
 2 (column)
 9 10 4 (column) 2
 9 , 4
 10 , 2
 , 3 5
 (171) (1 2) , (1 2 , 11)
 12
 11 12 3 5
 , 124 1 710
 720 2 720
 3
 11 , 3 5 n+5 n+6 n+8 n+9 (171)
 2 (710) , n+5 (171) (179)가
 , 1 n+5 n+8 (171) n+6 n+9 (179)
 n+5 n+8 (179) (124) 3 (720) n+6 n+9 (171)
 2) 2 (180, 2) (710) , 1 (124) (720) (140, (1
 71) (910) 1 (124) (179)
 12 (124) 11 2 (710) (710) 1
 (180, 2) 12 (910) , 2 (710) (140, 2)
 3 (720) (171) (179)
 , 가 1, 2 3
 가 가 , 13
 13 3 5
 13 (171) 1 (12
 6) 2 (720) (179) .

가 (171) 2

가 ,

(rendering)

(dot)

가 , 가

(phase error)가

(190, 190R, 190G, 190B1, 190B2, 1 (121) (171) 가

6) 가 1

(127) 2 1 6) (190, 190R, 190G, 190B1, 190B2, (180) (190) (171) 가

가 (180) SiOC SiOF 4.0 (1

가 (180) 90, 190R, 190G, 190B1, 190B2, 1 6)

가

, 1 5

가 ,

14 6 1 3

14 , 6 가 (R, B, G,) (R, B, G,) (R, B, G,) (R) (B) (G)가 (, 121) (121) (171) (R, B, G,) 2:3 () 가

6 가 (121) (171) (173), (123) (121) (1

73) (123), (171) (175) (154) (121) (171) 가 (121) (19

(190) (190) , 1 2 가 (131) (181) (173) (171) (179)가 (171) (B) (1

71) (179) 4

5 가 가 ,

가 가
(B) (175) (179)
, 1 3 가 가 가
7
15 7 , 16 15 XVI-XVI'
.
.
.
15 16 , (110) 가 (121) , (1
23) (121) (110) (131)
(133) (131) 가 가
, (133) (131) .
(121, 123) (131, 133) (140) .
(140) (154), N
(163, 165) (171, 173, 175) (171, 173, 175)
(163, 165) 가 , (154)
(171, 173, 175) 가 , (154)
(171, 173, 175) (163, 165)
(154), (163, 165) (171, 173, 175) 3
.
(171, 173, 175) (171), (173) (173)
(171) , (175) (121) (173)
.
(171, 173, 175) (181, 184, 185) 가 (180) .
(180) (191) 가 (190) (191) (190)
, (190) .
.
가 (210) (220)가 , (220) , (230)
가 (230) (250) , (250) (271)
) (270) . (271) V , 90 (190) (191)
(121) 45 135 .
, (271) (175) 가 ()
271) (175) . (271) (271)
.
(190) (270) 가 가 (110, 210)
.
가 , 가 (x) (y) 2:3 .
가 ()

4 (190, 270) 4 (191, 271) .

(191, 271)

가

가 $\frac{1}{2}$ 가

(57)

1.

가 2:3 .

2.

1 ,

3.

1 ,

4.

1 ,

4.0

가

가

5.

1 ,

3

6.

1 ,

가

7.

1 ,

가

8.

1 ,

1 가

1 2 ,

가

가

2:3

9.

8

1 가 ,

2 가

1

2

10.

9 ,

가 가

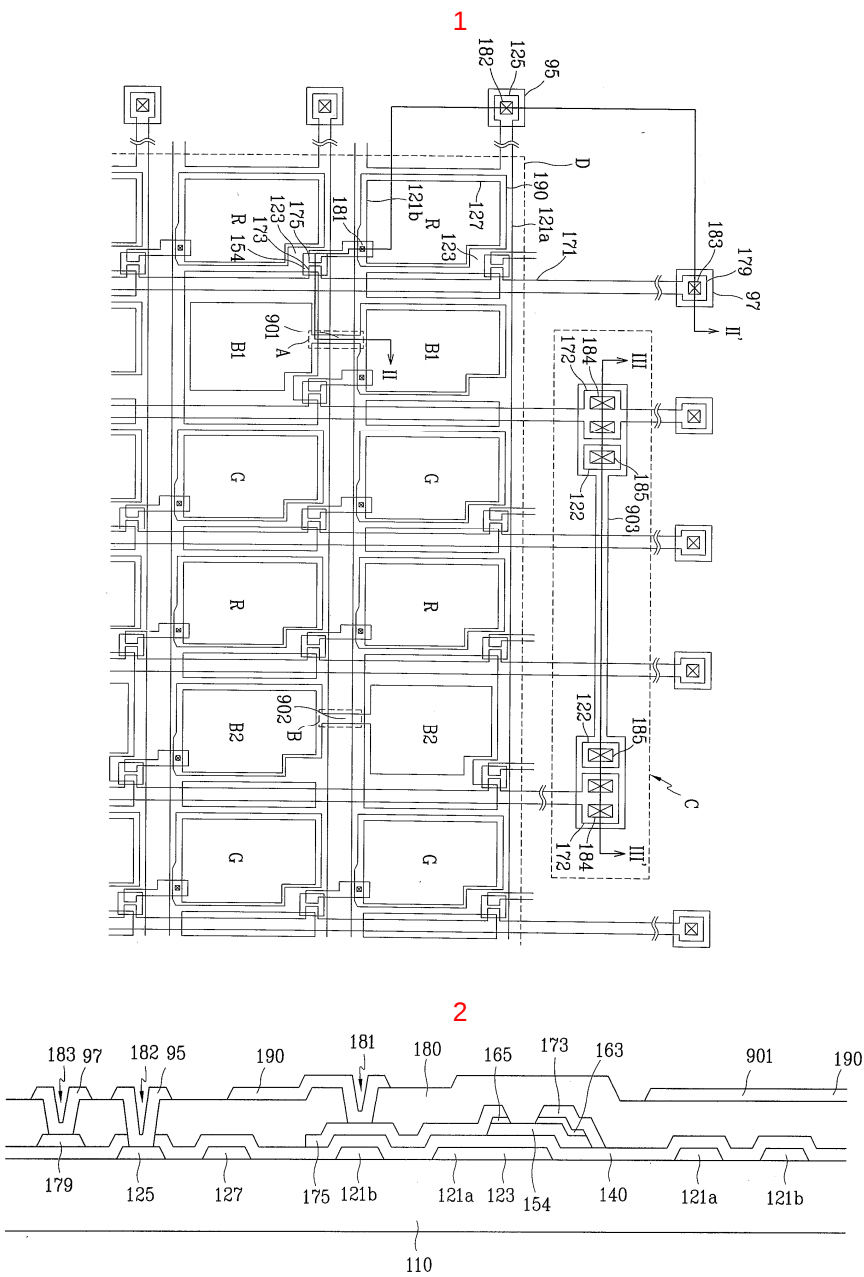
1 2

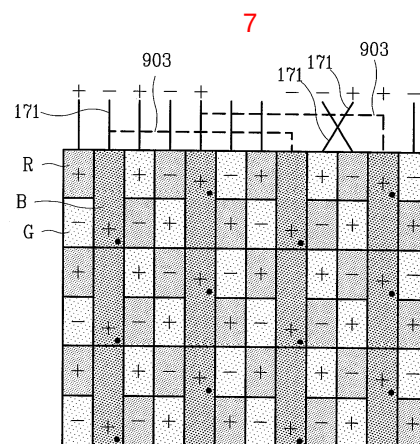
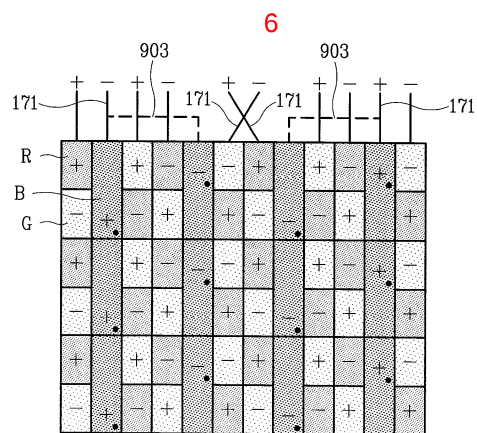
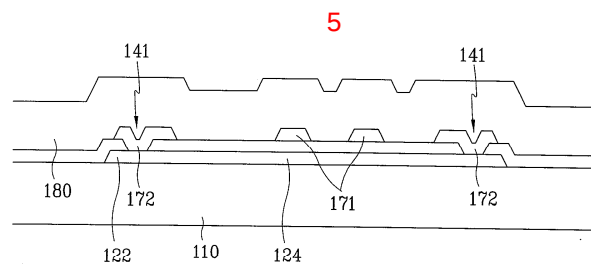
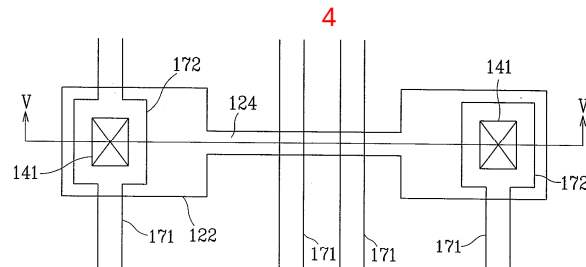
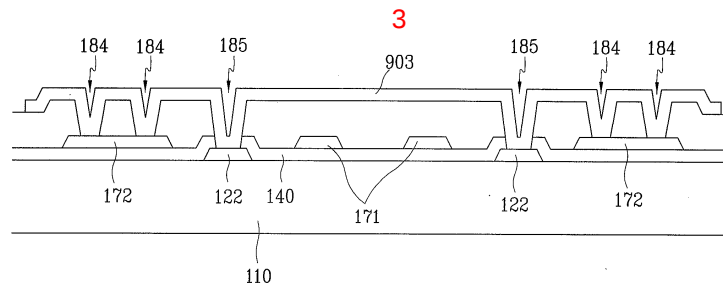
11.
9 ,

가

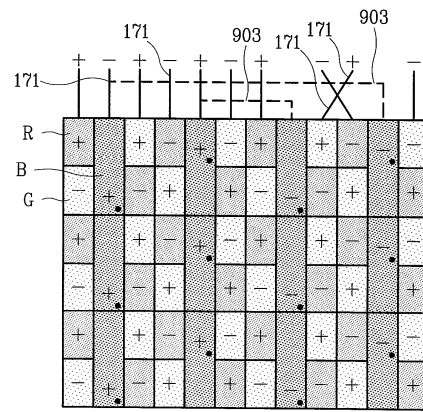
가

2

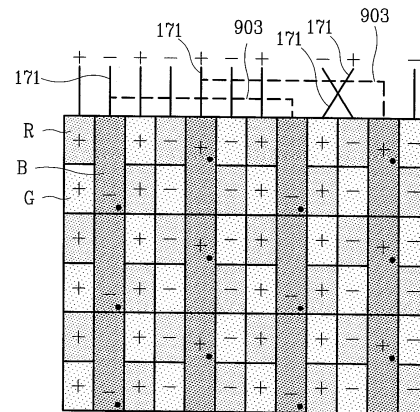




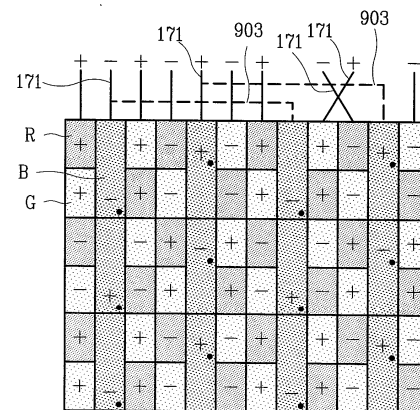
8



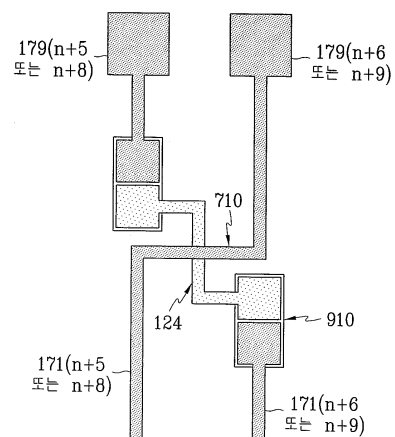
9

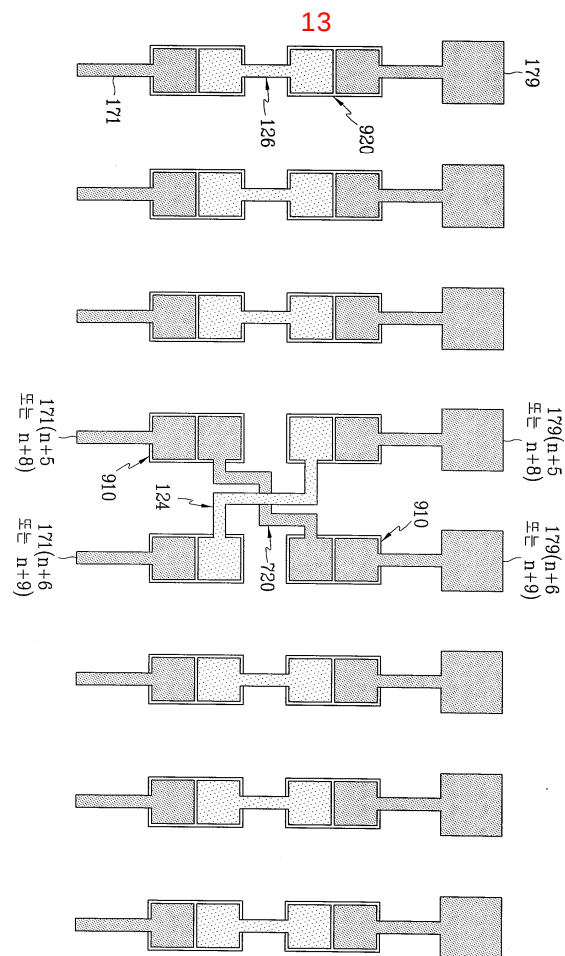
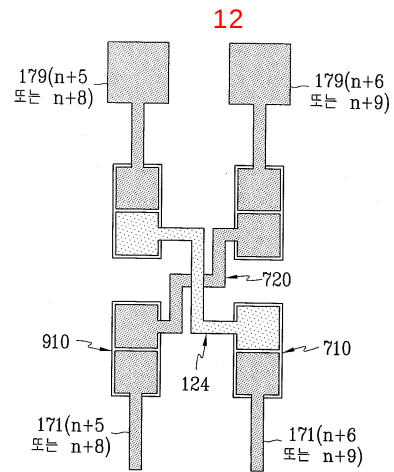


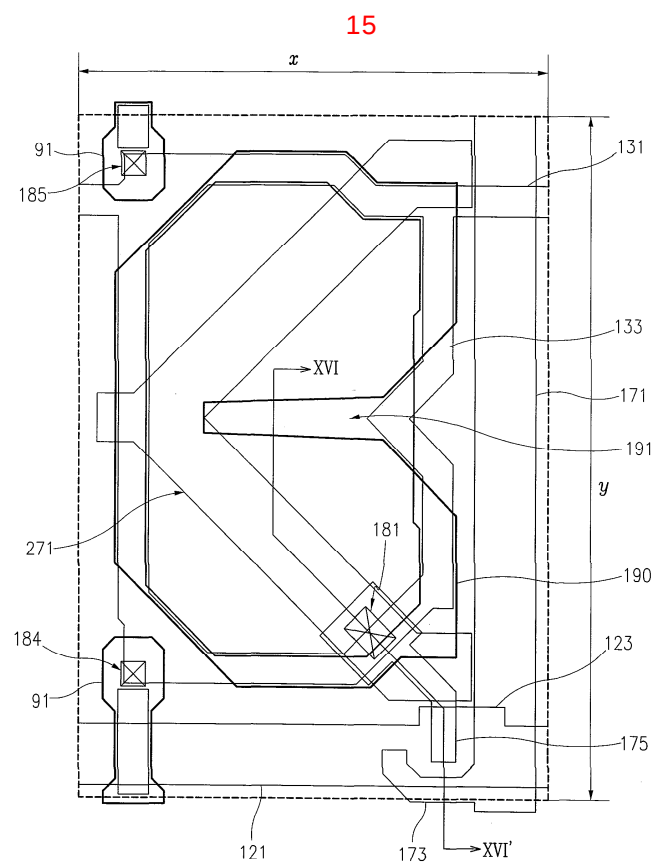
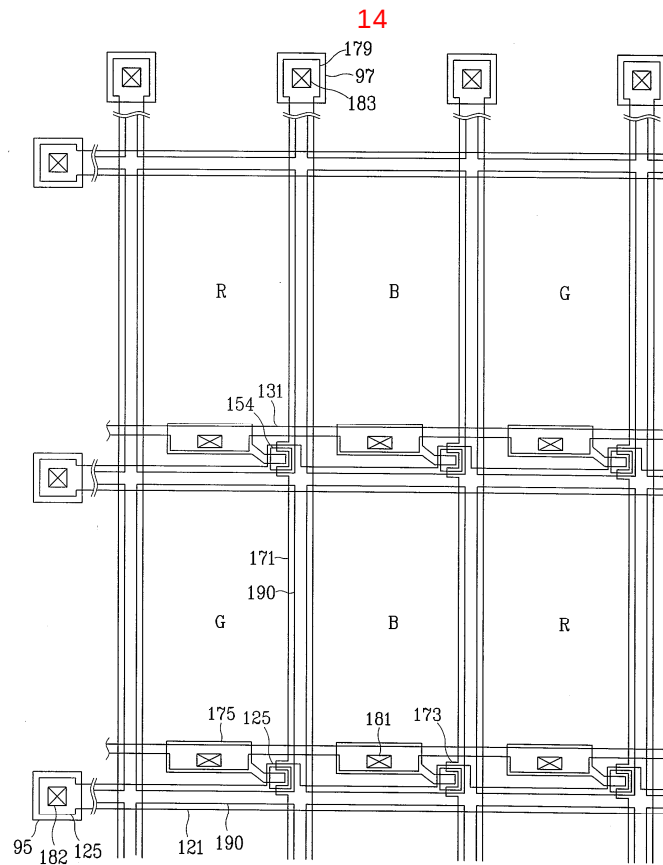
10

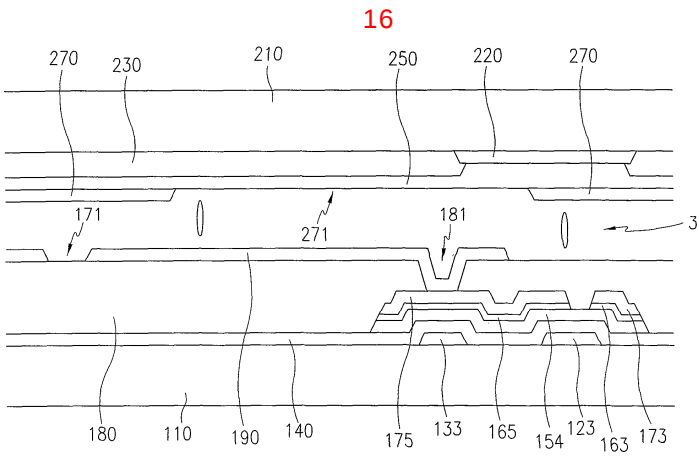


11









专利名称(译)	液晶显示器		
公开(公告)号	KR1020040025063A	公开(公告)日	2004-03-24
申请号	KR1020020056872	申请日	2002-09-18
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	ROH NAMSEOK 노남석 CHAE CHONGCHUL 채종철 SHIN KYONGJU 신경주		
发明人	노남석 채종철 신경주		
IPC分类号	G09G3/36 G02F1/1368 G02F1/1343 G02F1/1362 G09F9/30 G02F1/1335		
CPC分类号	G09G2300/0452 G02F1/136286 G02F1/133514 G02F1/134336 G09G3/3614 G02F2201/52 G09G3/3607		
其他公开文献	KR100890024B1		
外部链接	Espacenet		

摘要(译)

在本发明中，列方向红色和绿色像素红色，蓝色和绿色像素连续排列到行写入方向，像素电极和参考电极是切出部分，四个像素为绿色，红色是在两个像素行中相邻的两个蓝色像素相邻的两个蓝色像素被布置成彼此面对。并且准备称为像素的横杆长度比为2：3的液晶显示器。这样，在通过下侧表示较高分辨率的图像的同时，通过同时控制液晶分子与上下电极的切除部分的排列来驱动阴茎矩阵，宽 - 可以确保观察角度。像素，pentile，渲染，反转。

