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(12)

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(43)

10-2004-0087469
2004 10 14

(21) 10-2003-0021875
(22) 2003 04 08

(71) 416

(72) 2 108-1510

5 504 101

1 130 306

4 302 1507

(74)

:

(54)

2 가 1 가 , 가 ,
가 , 2 가 ,

2

1

2 1

3 2 A-A`

4

5 4 B-B`

6

7

< >

100 : 120 : TFT

130 : 140 :

150 : 160 :

200 : 400 :

GL : DL :

PA : TA :

RA : OA :

R, G, B

R, G, B

R, G, B

R, G, B

가

가

1.0µm 10µm

(Short)

가

가

(high pixel)
가

2 3 , 1 (110) (GL), (GL) (1
 21) (122) 4000 (121) (GL) (SiNx) (124)
 (125) , 1 (110) (122) (123)
 (120)가 (125) (126) , 1 (110) TFT
 TFT(120) (SiNx) (130) 2000
 TFT(120) (130) TFT(120) (126) 1
 (131) , (130) (140) 2
 3μm (126) 2 (141) (131) TFT(120)
 (TA) (140) (130) (145)
 (RA) (145) (140) 가 (130) ,
 (140) (145) (130)
 (Indium Tin Oxide; , ITO) (Indium Zinc Oxide; , IZO)
 (150) (150) 1 2 (131, 141)
 TFT(120) (126) (TA) (150)
 (130) (122) (GL)
 (150) (AlNd) (AlNd)
 (MoW) (160) (16) (14)
 (150) (165) , (160)
 (160) (160)
 (100) (100)
 (GL) (150) (GL) (150)
 (OA) (130) (122)
 (150) (GL) (150)
 (GL) (150) (160) (150)
 (160) (GL) (150)
 TFT(120) (GL) (frame) (GL)
 (on) , (off)
 (150) (GL) , 가
 (150) (off) ,

4 , 5 4 B
 -B`
 4 5 , 1 (D1) (GL)
 1 (D1) 2 (D2) (DL) (D1)
 TFT(120), (150) (160) TFT(120) (12
 (GL) , (125) (DL) , (126)
 (150) (160)
 (150) TFT(120) (126) (160)
 (150) (150) TFT(120) (126)
 (160) (150) (165) ,

(160) (RA) (165) (TA)

(160) (RA) (GL)

(160) (GL)

4 5 1 (110) (GL), (GL) (122)

(121) (121) (GL) (122)

10) (122) (123) (123) 1 (125) (125)

(DL), (DL) (125)

(126) 1 (110) TFT(120)가

TFT(120) (130) TFT(120) (130) T

FT(120) (126) 1 (131) (131)

(140) (140) 1 (131)

TFT(120) (126) 2 (141)

(140) (GL) (160) (OA)

(130) (147)

(140) (147) (130) (150)

(140) 1 2 (131, 141) TFT(120) (126)

(150) (165) (160) (160)

(OA) (130) (122) (GL)

(160) (GL) (OA)

(130) (122) (150) (160)

(GL)

(150) (160) (GL) (150)

(160) (off) 가

1 5 (PA) (TA) (RA)

(140)

6

6 (GL), (GL)

1 (DLn-1) 2 (DLn) 1 (DLn-1) n-1

2 (DLn) n , n 2

(GL) 1 (DLn-1) 1 (PA1)

2 (GL) (DLn) 2 (PA) 1

(PA1, PA2) TFT(120), (150) (160)

(150) (160) (GL) (GL) 6

(150) (GL) 1 (PA1) 1

(OA1) (150) (150) (GL) 2 (PA2) 2

(OA2) (150)

(160) (150) 1 2 (PA1, PA2) (150) (PA)

1, PA2) (150) (160) 가 가 1 2 (PA)

가 ,
 , 1 (PA1) (150) (GL)
 , 1 2 (PA1, PA2) (150)
 (160) (off) 가 .
 , 1 2 (PA1, PA2) (150) (160)
 , 1 (PA1) (GL) 가 (GL)
 2 (PA2) (150)
 , 가
 .
 7
 7 , (200) (100) (400) (200), (100)
 (200) (200) (300)
 .
 (100) (GL) (PA) TFT(120),
 (150) (160) (150) (150) TFT(120) (126)
 (126) (150) TFT(120)
 (PA) (160) (150) (RA) (165) (165) (TA)
 (150) (150) (TA) (GL) (GL)
 , (200) 2 (210) (220), (230) (240)
 .
 (220) B(Blue) R(Red) , R, G, B G(Green)
 .
 , (220) R, G, B
 (230) (230) (230) (240) (240)
 ITO IZO .
 7 (220) R, G, B ()
 230) (231)가 (230) (230) (231)가
 . (240)
 , (TA) (150) (240) 1 (d1)
 (RA) (TA) (160) (RA) (240) 2 (d2) , (400)
 (RA) (RA)
 1) (RA) (TA) (RA) (160) , (23
 (240)
 .
 가 가 , (150) 가 (160) 가
 가 가 , (SA) 가 (400)
 .

(150) (150) (GL) (GL) (GL) (OA0) (150) (160)
 (GL) (GL) (400) (SA) (400)
)
 7 (220) R, G, B (220)가 R, G, B 가 ()
 가

가

가

(57)

1.

;

1

;

가

2

1

2.

1

;

3.

2

2

4.

3

5.

3

6.

3 , 2

7.
1 , ;

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8.
7 ,

9.
7 , 1 ,

;

2

10.
1 ,

11.
, 1

가

1

2

1

;

1 2 ;

1 2

12.
11 , ,

;

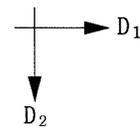
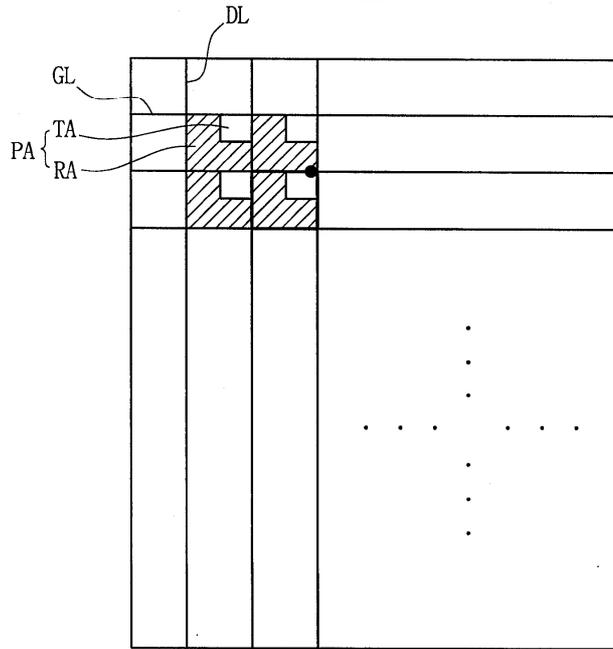
13.
12 , 2

14.
13 , 1 2

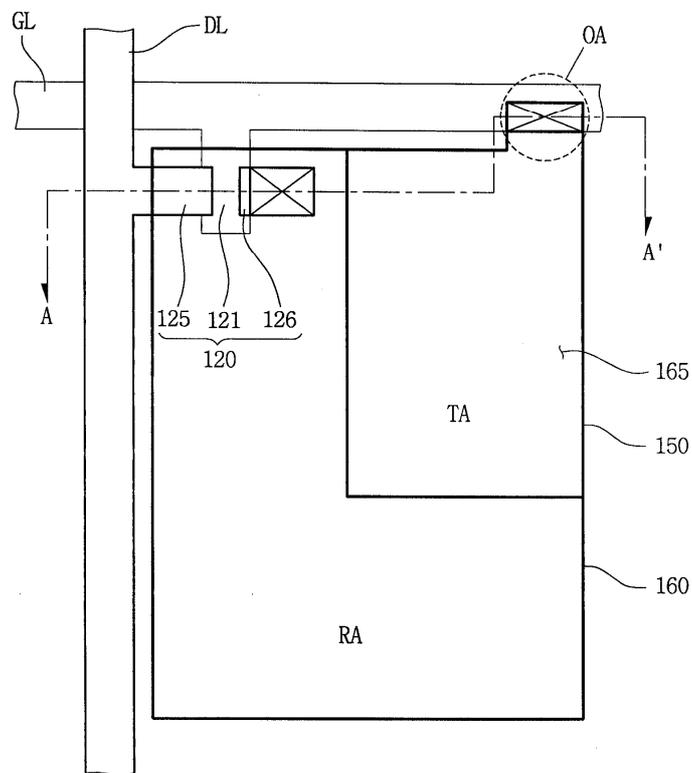
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13 ,

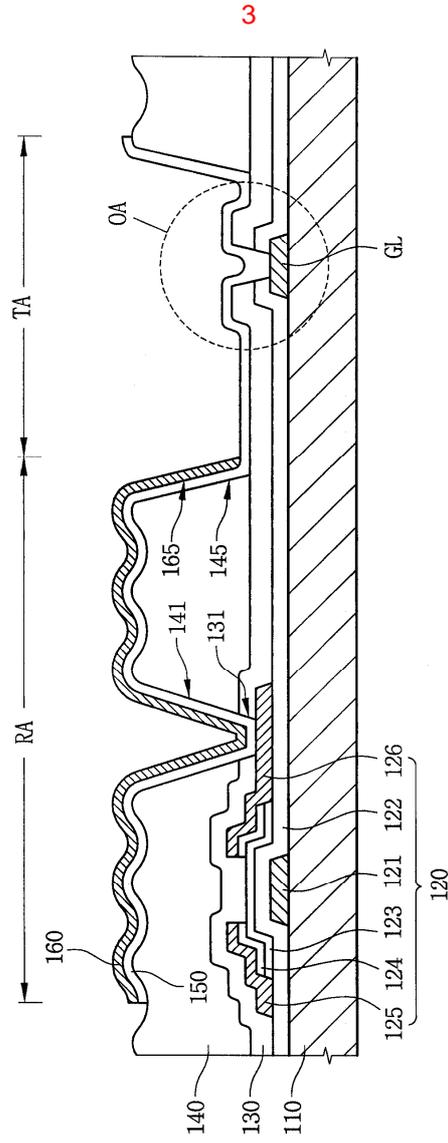
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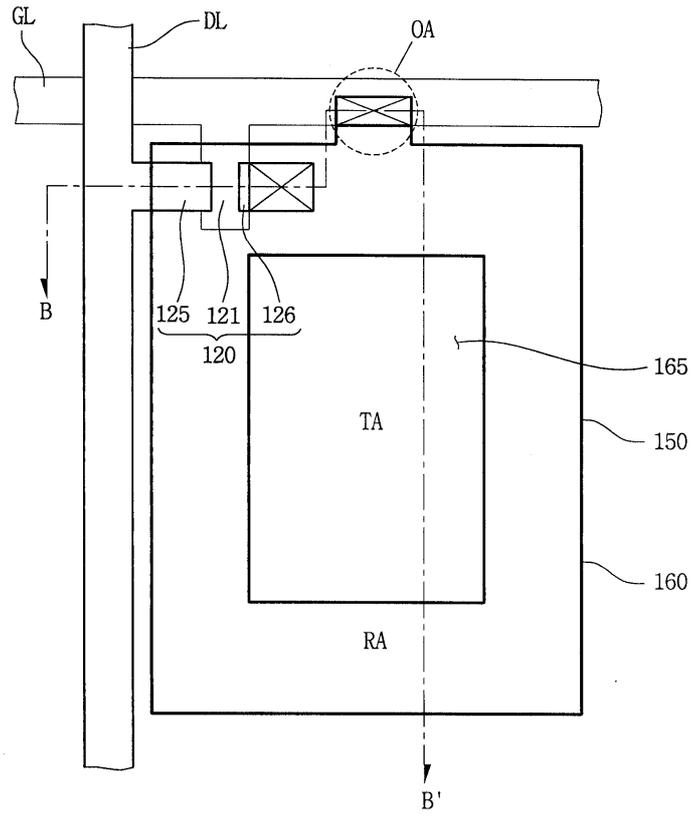


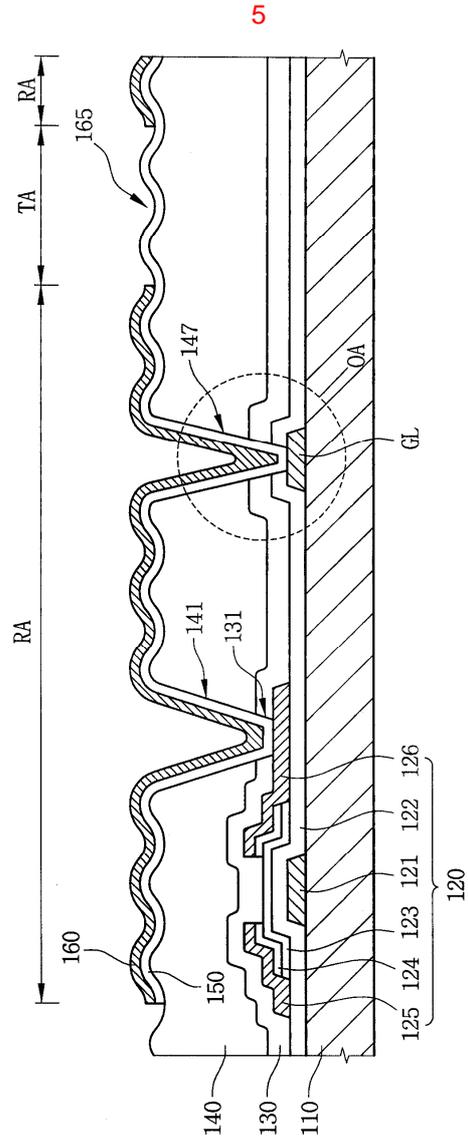
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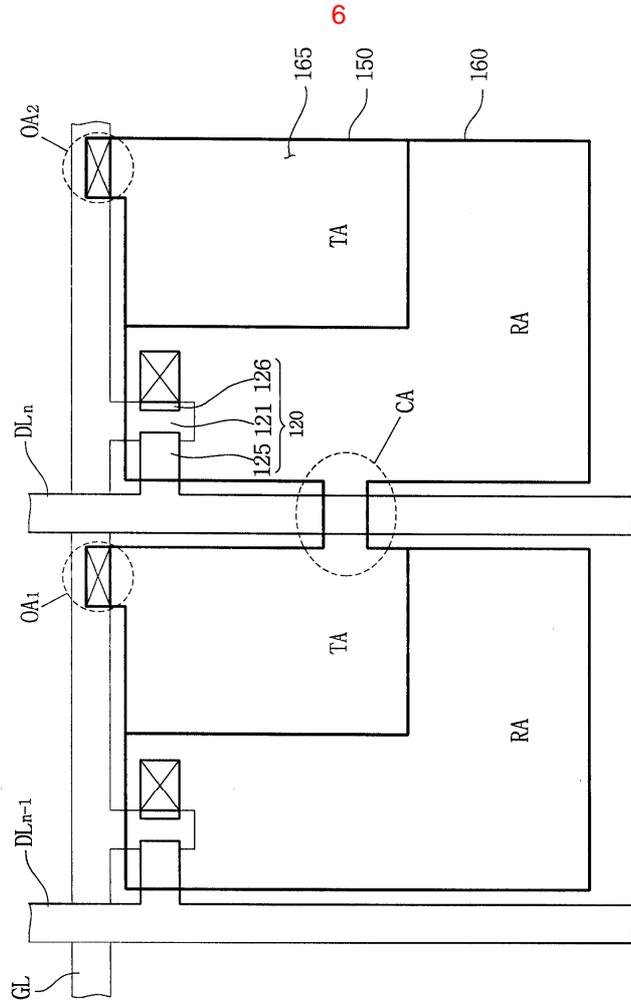




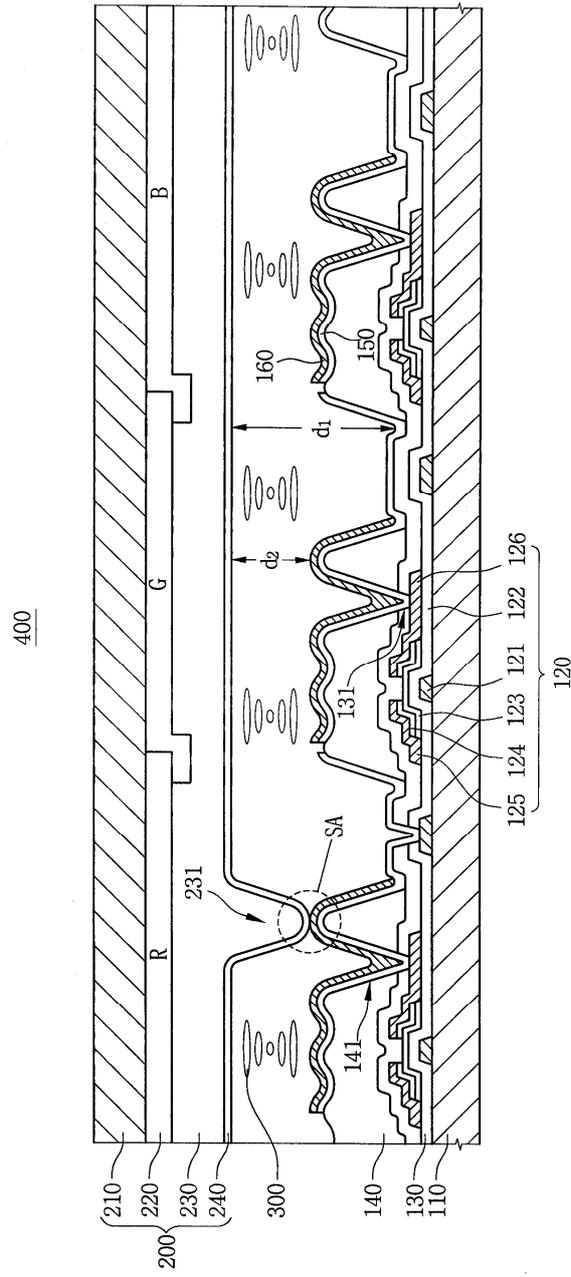
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专利名称(译)	阵列基板和具有该阵列基板的液晶显示装置		
公开(公告)号	KR1020040087469A	公开(公告)日	2004-10-14
申请号	KR1020030021875	申请日	2003-04-08
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
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发明人	양용호 윤주선 추교섭 박진석		
IPC分类号	G02F1/1368 G02F1/1343 G02F1/1362 G02F1/1335		
CPC分类号	G02F1/136259 G02F2001/136268 H01L27/1214 H01L27/124		
代理人(译)	PARK , YOUNG WOO		
其他公开文献	KR100931681B1		
外部链接	Espacenet		

摘要(译)

公开了一种用于改善显示特性的阵列基板和具有该阵列基板的液晶显示装置。阵列基板包括像素电极，信号线和第二绝缘膜。信号线与像素电极重叠，其间具有第一绝缘膜，并且电连接到像素电极，以释放施加到像素电极的信号。第二绝缘膜介于像素电极和信号线之间，并且具有在重叠区域中厚度减小的结构。因此，可以改善液晶显示装置的显示特性。 2

