

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G02F 1/1335

(11)
(43)

10-2004-0092137
2004 11 03

(21)

10-2003-0026346

(22)

2003 04 25

(71)

.

20

(72)

1 206-18

(74)

:

(54)

가

1 2 3

가

가

6

1

2

3 2 -

4 3

5 가 .

6 .

7a 7f , 가

8a 8d , .

< >

200 : 212 :

223 : 224 : 1

226 : 2 228 :

230 : 3 232 :

243 :

, .

, 가 ,

(transmission type) (reflection type)

(backlight)

, .

(power consumption)가 , 가

, 가 .

,

1 .

1 (20) (21) (22) 가 (10) (20)

side : (21) - - (indium-tin-oxide : ITO .) - - (indium-zinc-ox
 (22) IZO .) (Al)

(10) (10) (30) (30)
 (20) (40)가 (40) ITO IZO

(50)

(30) (10) (60)

(10, 30) (retardation film, 71, 72)
 (71, 72) (71, 72)

$\lambda / 4 (\lambda = 550\text{nm})$

(71, 72) (81) (82)
 (82) (81) 90 가

(81) (81) (90)가

2

2 (2, 4) (T)가
 (P) (2) (4) (32) (34) (36) (6) (32)
 8)가) (38)

(P) (P) (E) (20) (44) 가 (46)
 (P) (R)

3 , 2 (P)

3 (10) (SiNx) (SiO₂) ()
 12) (12) 1 (14) 1
 (14) (44) 2 (18)

2 (18) (46) (46) ()

(50) (46) (60) (60)

(E) (23) 3 (23) (d2)
 (R) (d1) (60) (n · d) (60) (anisotropy of refractive i
 ndex)(n) (d) (23) (d2)가 (d1)
 가

(E) (60) (d2)가 (B) (60) (d1)

가

4, 3 (R), ,

4, (44)

(44)

5 (R), (dimple)

5 (R), (100) (112) 1
2 (120, 124) (140) (128)
(140) 3 (130) (132)

1 (120, 124) (BC
B) (acryl) 2 (resin) (photo resist)
hoto acryl) (128),

3 (130), ITO IZO
(132)

5

(100) (140) 1 (120)
(Fas nozzel) (spin)

1 (120)
(photo lithography) (120)
(120) 1 (120) () 1
(120) () 1 (exposure)
가 1 (120)

1 (120) 가
(120) 2 (124) 1

2 (124) 1 (120) 가
1 (120) 2 (124)

5 가 (140)

2 (124) (128) (128) 2 (124)
(132) 가 (128) 3 (130)

가 (128)

5 (100) (a,

, (128) , (140)
 1 2 , 2 (124) , (140)
 2 , 2 (124)
 1 (120) 1 , ,
 , 2 (124) ,
 가 ,
 , 가
 , ; , D1 가 D2
 가 1 2 1 : 2
 ; 2 3 ; 3
 , 1 2 (D2) (D1) , 1 1 2 ,
 D1 1 가 1 , 1 2 D2
 가 2 , 2
 , 2 , 1 2
 , 1 2 ITO IZO ,
 2 가 ,
 ,
 6 , (P) , (G)
 R) (200) () () (P) (
 (E)
 (R)
 (R) , (200) (212) , 1 2
 (240) , (228) , 3 (230) , (232)

(E) (223) (240) (223) (G) (R)
 , (240) , 가 ,
 , (240)
 , (223)
 (223) (d2) (d1) , 2 가 ,
 (E) , (200) (210) 3 , (230), (232)
 (G) (243) , (243) (R) (240)
 ,
 , 가 1 가
 (243) 가 , (R) 가
 (240) 가 ,
 (G) (200) (212) (241)
 (241) , (P) (240)
 , 가 (228)
 7a 7f 8a 8d , (P)
 (E) (R) (G)
 7a, 8a (212) (200) 1 1 (214)
 1 (214) 1 (214) (200) 1 (214)
 1 (214) (200)
 , 1
 (R) 1 (214) (216)
 , 1 (250) (200)
 , 1 (250) , (R) (A) (B)
 (R) (B) (E) (A) 가
 (G) (243) 가 (A) (A) (A)
 (200)
 (R) , (E) (G) , (217, 218) , 7b 8b ,
 , 1 (224, 225) (P) (G) 가
 , (E) (G)
 (E) , 가 (R) , 2 가 , 1
 , 가 2 (226)
 (224, 225)
 , (E) (G) (223) (243) , 2 , 2
 1 (224, 225) (200) () ,
 () (R) 2 ,
 (E) (G) 2 ,
 , (E) (G) (223) (243)

7c 8c 1 (224, 225) (223) (243)

7c (R) 1 (224)

() () 가

1 (224, 225) 2

7d 8d 1 (224, 225) 2 (226, 227) 2

(226, 227) 1 2

2

1 (224, 225) (223) (243) 1 (224, 225)

(200) 가 1 (224, 225)

(200) 가 2 (R) 1

(224) 2 (226)

7d (R) 2 (226)

(E) (G) (223, 243) 2

7e 2 (226, 227) (228)

(228) 가

(G) (228)

7f (P) 3 (230) (232)

3 (230) ITO IZO

(P) (R) 가

8a 8d 1 (G)

가

가

가

(57)

1.

;

D1 가 D2 가 1 2 1

;

2 ;

2 ;

3 ;

3 .

2.

1 ,

D2>D1 .

3.

2 ,

1 ,

, 1 ;

1 , 1 2 D1 가 1 ;

1 2 D2 가 2

.

4.

1 3 ,

2 ,

가 1 , 2 ;

5.

1 ,

1 2

.

6.

5 ,

1 2

.

7.

1 ,

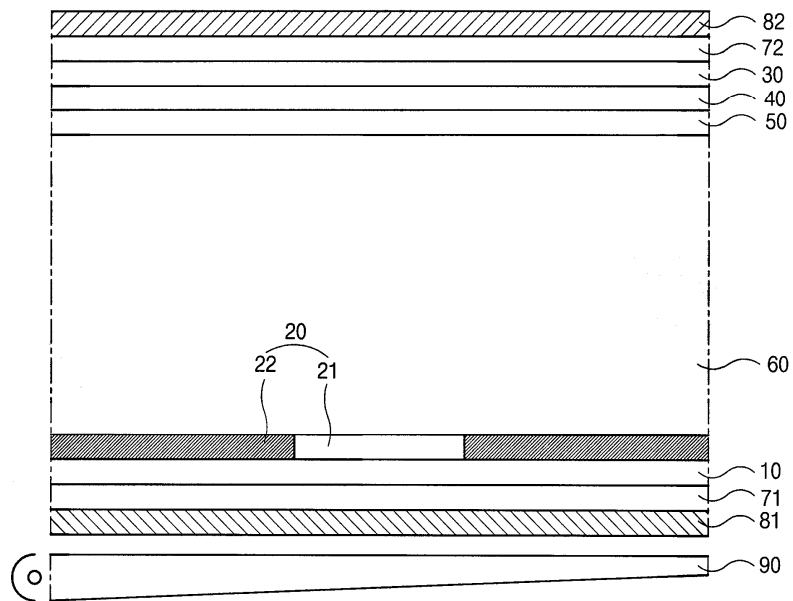
ITO IZO .

8.

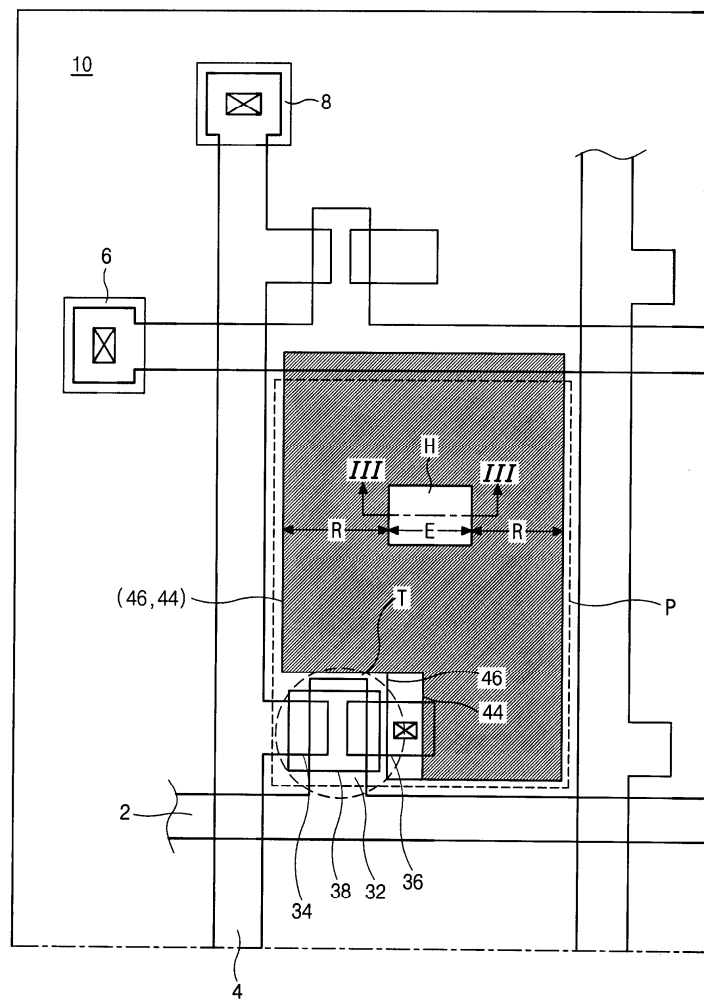
1 ,

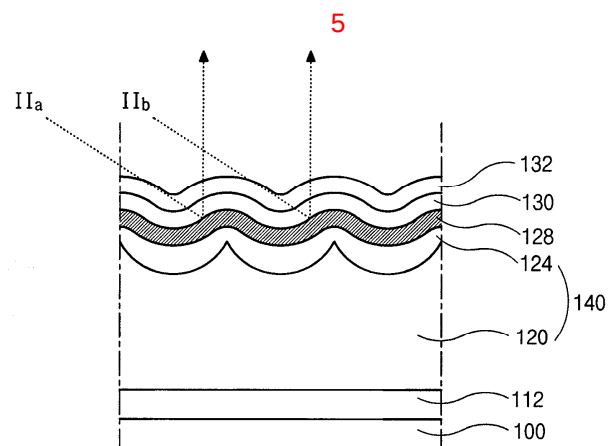
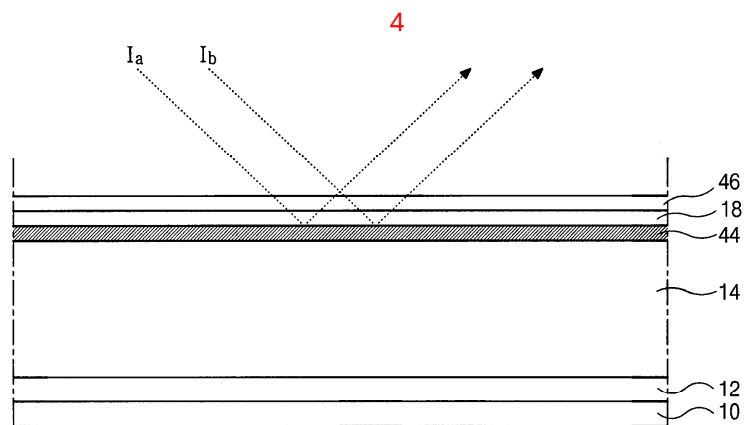
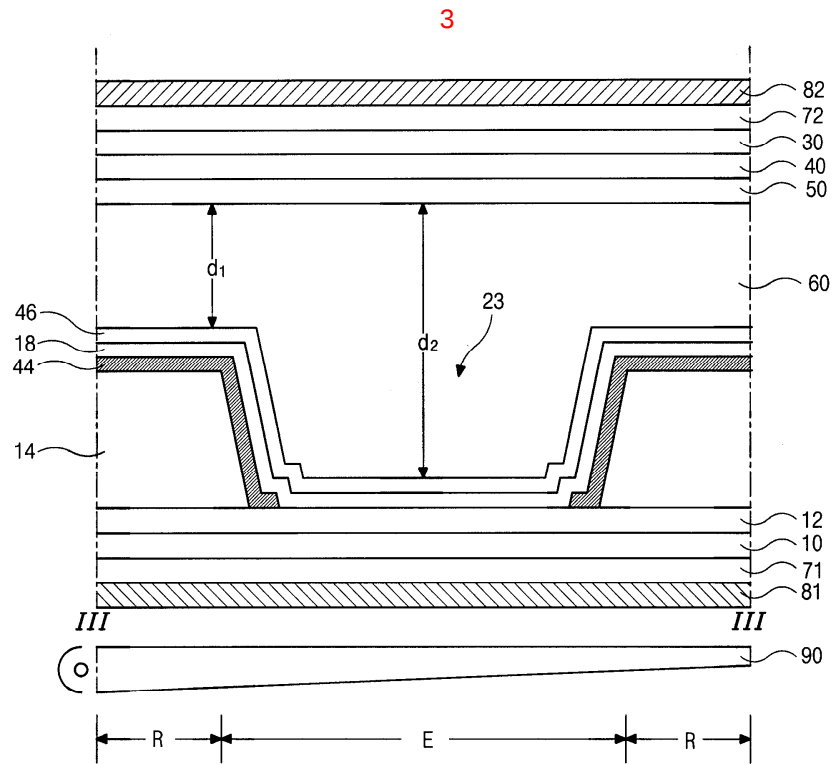
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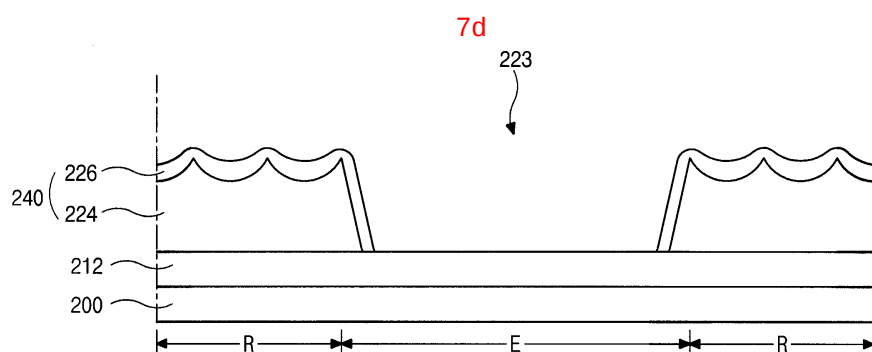
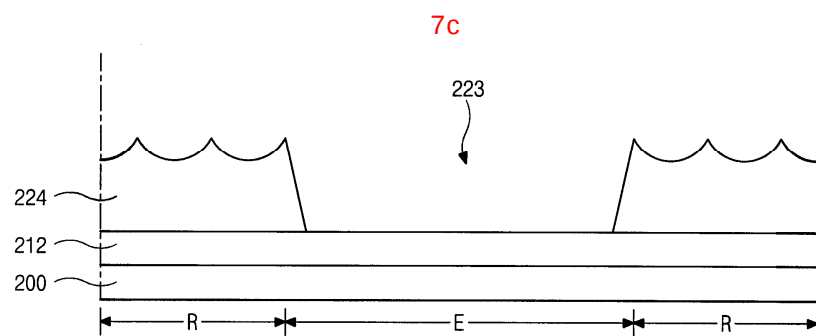
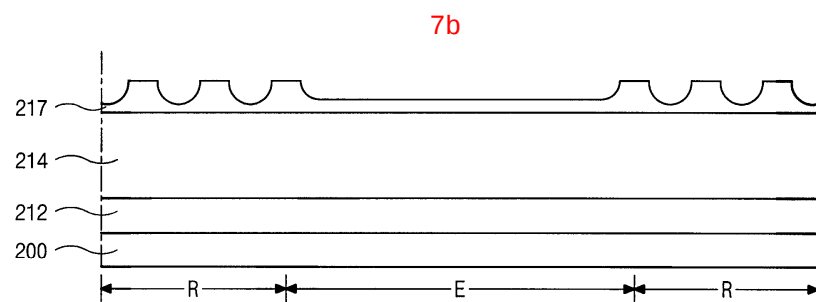
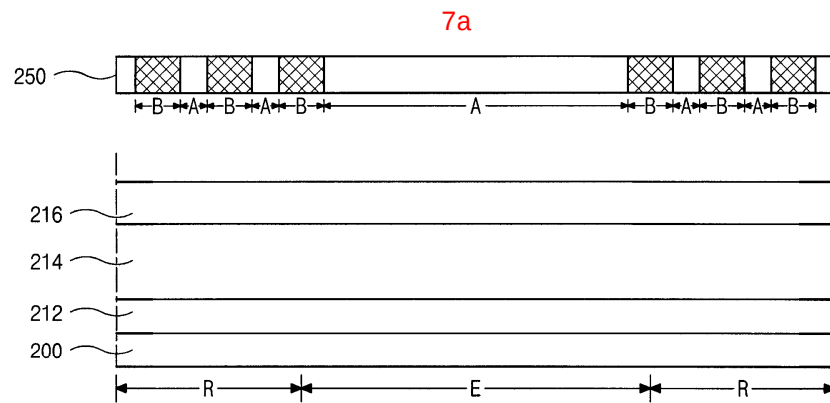
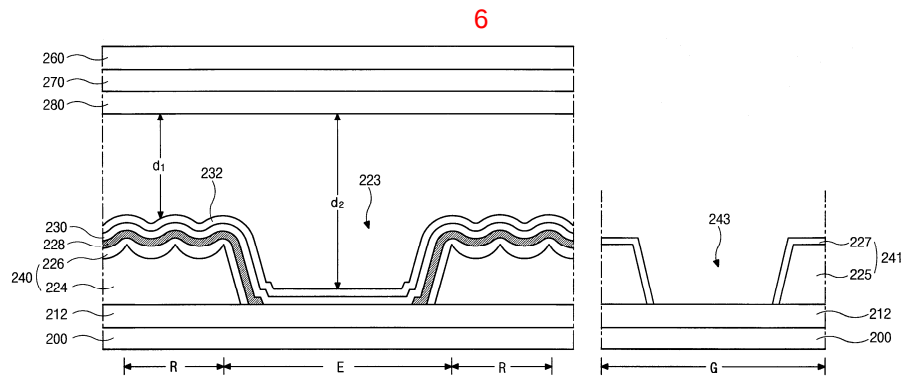
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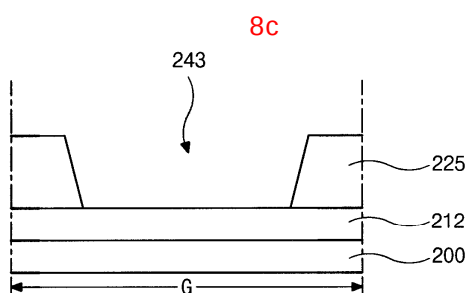
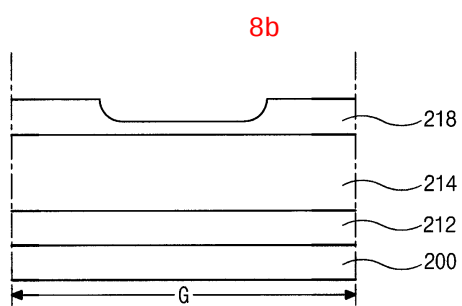
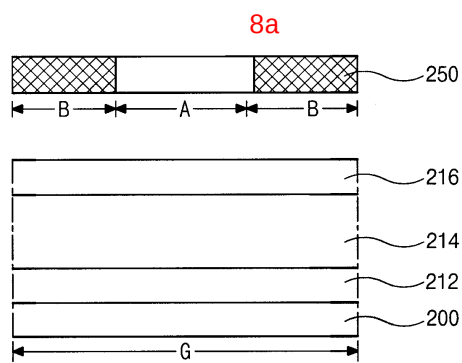
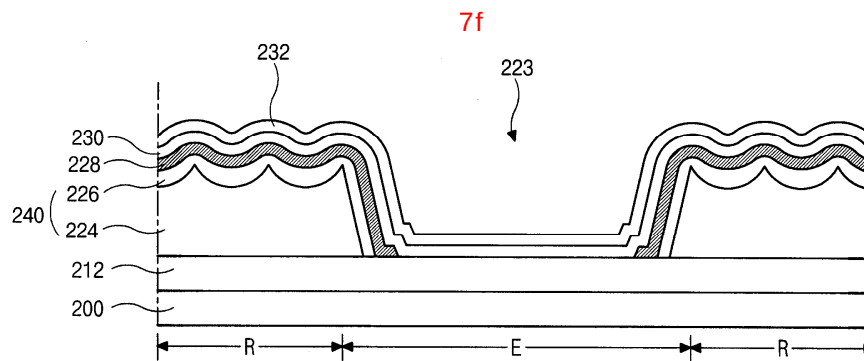
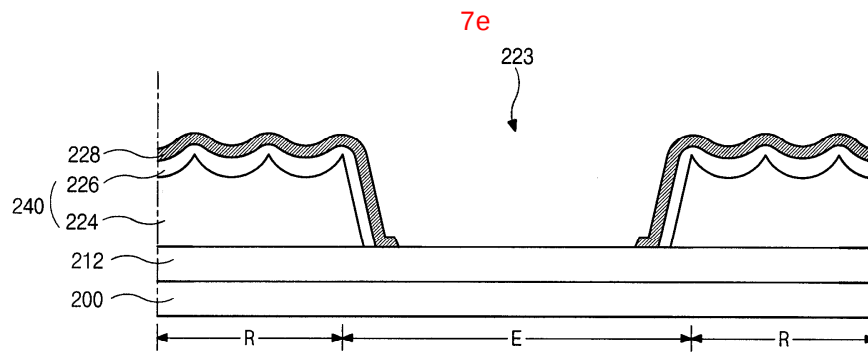


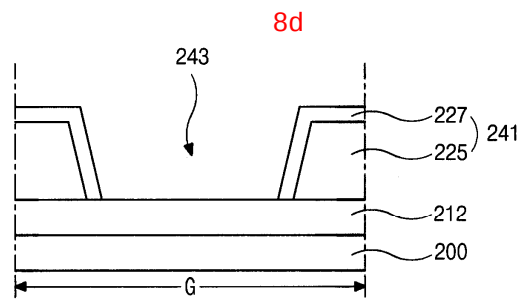
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专利名称(译)	用于反射透射型液晶显示器的阵列基板的制造方法		
公开(公告)号	KR1020040092137A	公开(公告)日	2004-11-03
申请号	KR1020030026346	申请日	2003-04-25
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	KIM YOUNGGOO 김영구		
发明人	김영구		
IPC分类号	G02F1/1335		
CPC分类号	C02F1/28 C02F1/481 C02F2303/22		
其他公开文献	KR100943281B1		
外部链接	Espacenet		

摘要(译)

本发明涉及透反型液晶显示装置，可根据需要用作反射模式和透明模式。在形成凹坑图案的过程中，本发明的目的是反射电极下部的保护膜，反射电极具有凹陷图案凹凸形状，其防止保护膜被平坦化并且与之相反。形成了理想的。在涂覆第一保护膜以实现上述目的之后，与基板上部类似，在传动部分上形成传动部分孔。外围单元孔形成在外围单元上。凹坑图案形成在反射体上。第二保护膜涂覆在其中模制凹坑图案的基板上。反射电极形成在第二保护膜上。在反射电极上形成第三保护膜和透明电极，并制造反射型LCD阵列基板。其结果是，优选形成具有如上所述的本发明的构造的凹坑图案的凹凸形状的反射电极。并且，可以制造能够提高反射体的亮度并实现高亮度的半透射型液晶显示装置。

