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(11)
 (43)

2003-0034855
 2003 05 09

(21) 10-2001-0066643
 (22) 2001 10 29

(71) . 20

(72) 1027-15

1145 640-1204

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(74)

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(54)

가 , , 가

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2a 2b 가

3a 3b 가

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5 4 -

6a 6g 1

7 2

8a 8g 2

9 3

10a 10f 3

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110 : 122 :

125 : 1 130 :

141 : 145 : 2

151, 152 : 162 :

163 : 170 : 1

172 : 1 180 :

182 : 2 190 : 2

191 : 192 : 3

200 :

, 가

(transmission type) (reflection type)

(backlight)

(power consumption) 가

가

가

y white)
50%

가

(normal

가
가

가

, ,
 (A) (B) 1
 , ,
 1 (10) 1 (22)
 (30) (30)
 (10)
 30) (50) 가
 , ,
 2 (40) 2 (52) (50)
 (30) (30)
 , ,
 (61) (10) (60)
 (62) (62)

,
 1 (10) 2 (60)
 /4(1 2 (71, 72) (71, 72)
 =550 nm
 1 2 (71, 72) (81)
 2) (81) (81)
 , (81) (90) 가

, (62) (50)
 가 (100), (100)

index) (100), 1 (n · d) (22) (100) (A) (100), (100)
 (B) (100) 가
 (anisotropy of refractive
 (B) (100) (100) 가
 (A) (100) (100) 가

가

가

, 6e (170a) 1 (170) 2 (172)
 (182) 가 (180)

, 6f 2 (190) 1 2 (170a)
 (163) (191) (172, 182)
 3

, 6g (200) (191) (163) (200)
 ITO (indium-zinc-oxide ; IZO) (indium-tin-oxide ;

1

2

7 1 (225) , (210) (C) (D) (222) 1 (E) (225) , (D)

, (222) 1 (225) 1 (230) (241) (230) , 1 (225) , (222)
 0) 가 2 (E) (245) 2 1 (245) (225) (23
 (D) (225) (245) (225) (C) 가

, (241) (222) (251, 252)
 (262) (263)

, 1 (270) (262, 263) 1 (270a) 1 (270) 1 (270) 1 (271)
 (C) 1 (272) 가 1 (270) (263) (263) (270a) (270)

, 1 (280) (270) ITO IZO (263) , 1 , ITO IZO 1 (280)
 (280) 1 (271) (263) , 1 (270)

2

, 2 (280) 2 (290) 1 (271) (280) 2 2 (290) 2 (291) 가 (290)
 (290) 1 (272) (300) 2 (300) (302) (291) (D) (280)

2

8a 8g

8a (225) , (210) 1 (225) (C) 가 (222) 1 (C)
 (D) (E)

, 8b (230) (222) (241) (253) , 1

(225) 2 (245) (255) .
 , 8c (245) (8b (8b 253) 253) (251, 252) (262, 263),
 , 2 (245) (8b 255) .
 , 8d BCB 1 (263) 1 (270) 1 (271) 1 (C) 1 (270) 1 (270a)
 . , 1 (272) (230) 1 (272) (270a),
 , 8e (280) 1 (270) 1 ITO IZO (263)
 (280) (280) 1 (271) (271)
 , 8f (291) 2 (291) (2) (290)
 90) , 1 (271) 1 (280) 2 (280) 2 (291)
 , 8g (280)
 , 1 (272) 2 (290) 2 (302) 가 2 (291)
 (300) .
 1 2 1 가 2
 , 1
 3 9 .
 9 1 (325) , (310) (322) 1 (325) (325) (D)
 (E) (325) (322) (330) (330) (341) (330) (330),
 (345) (341) (322) 가 (345) (345)
 (362) (363) (363) . (351, 352)
 (362) 1 (370) . (362, 363)
 (382) 가 1 (380) , (380) (380) (C) (E)
 2 (390) (390) 2 (390) 1 (390) (390) BCB
 (391) 1 (382) , 2 (392) 가 (370) 2 (263)
 (330) (363) , 2 (400) (392) (392)
 3 1 (370) , 1 (370)
 , 1 2
 3 10a 10
 f .
 10a (325) , (310) (322) 1 (325) (C) 가 (322) 1
 (D) (E) . , (C)
 , 10b (325) 2 , (345) (330) (322) (341) (353) , 1
 (325) (355)
 , 10c , (10b 353) (351, 352) (362, 363)
 , . , 2

(345) (10b 355)

, 10d , 1 1 (370) , (382) 가 , (380)

, 10e 1 BCB 2 (390) , (363) , 2 (390) (391)
1 (370) (382) (330) (392), 10f ITO IZO (391) (3)
63) (400)

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(57)

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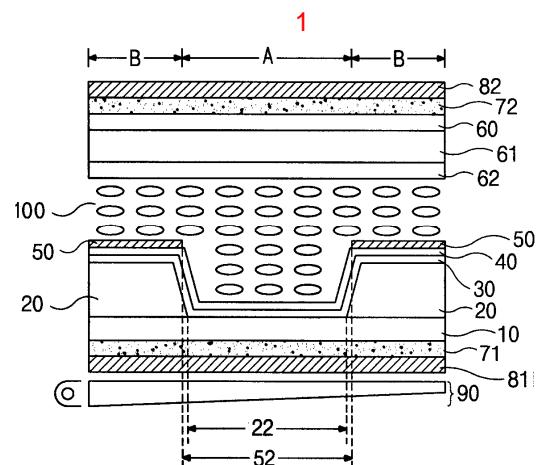
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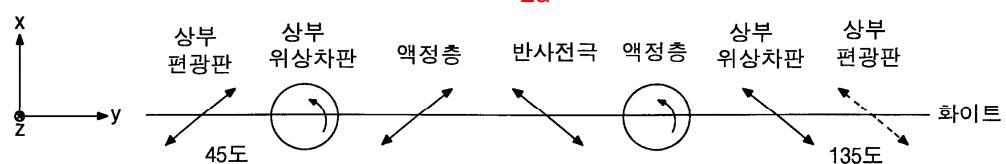
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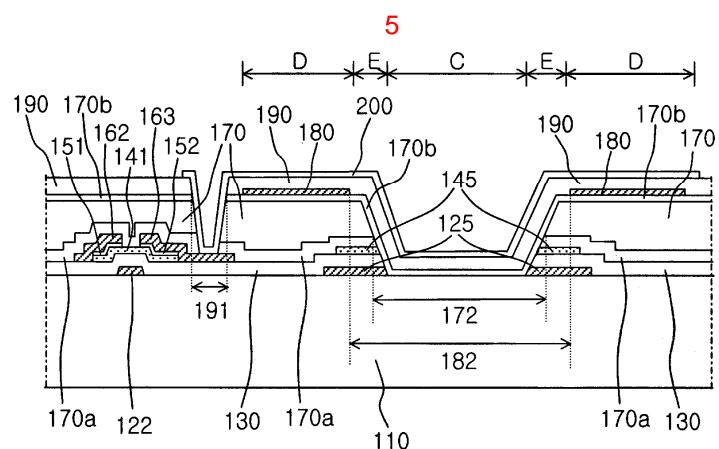
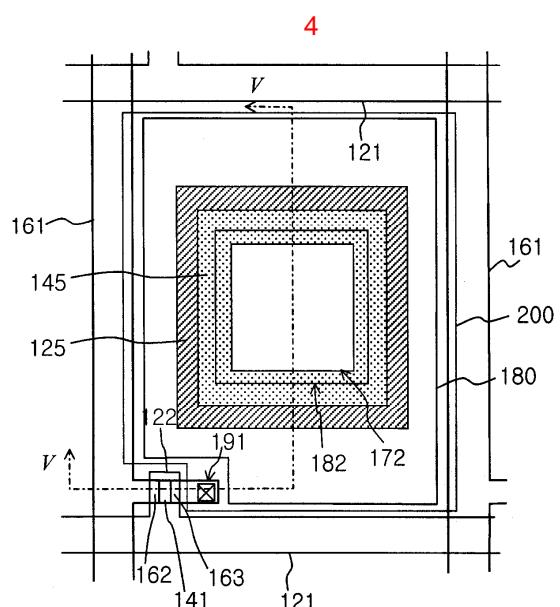
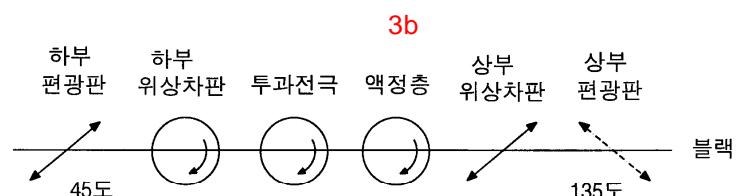
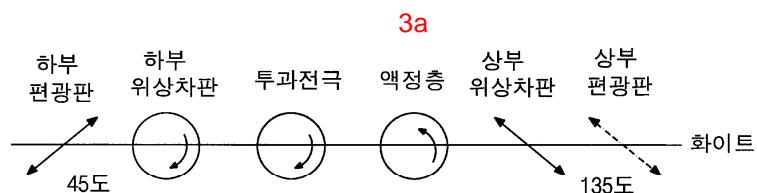
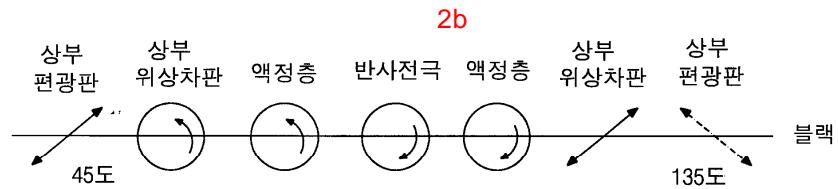
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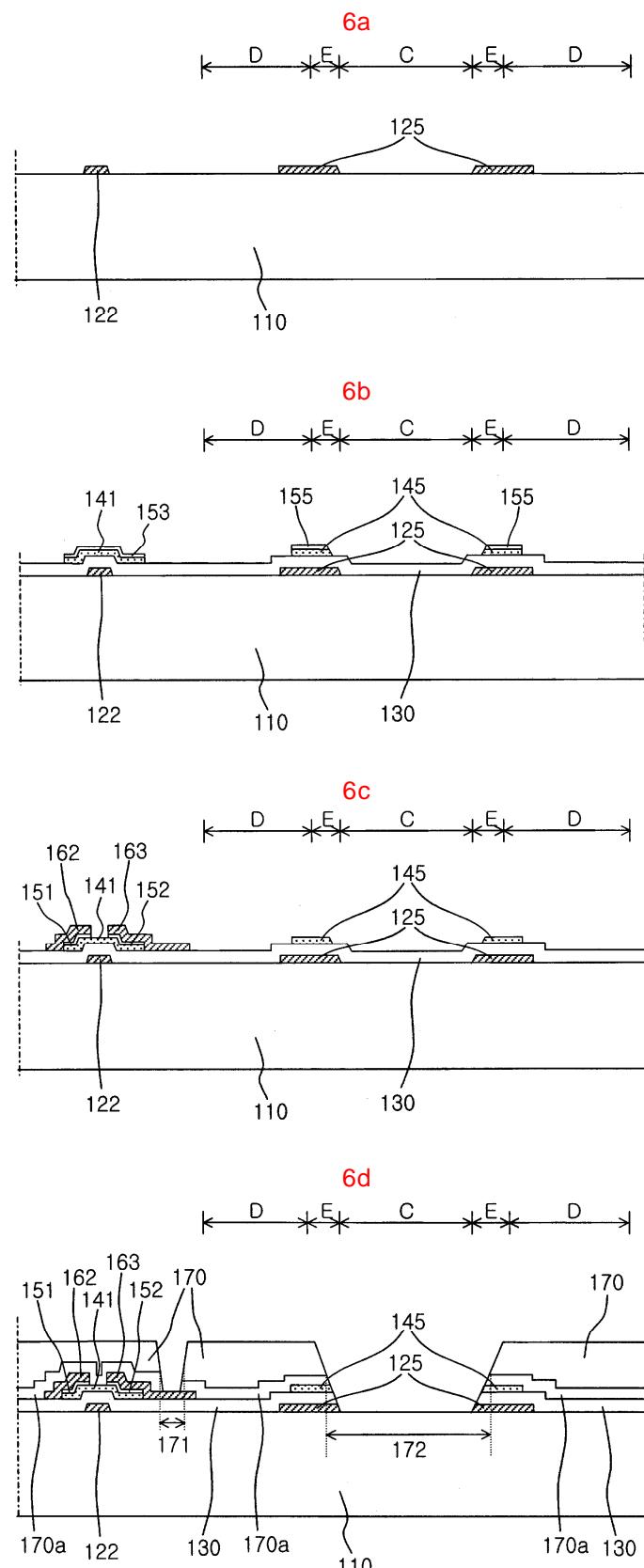
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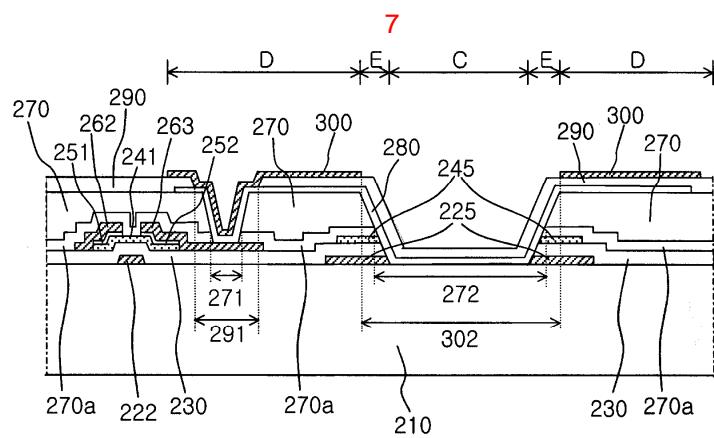
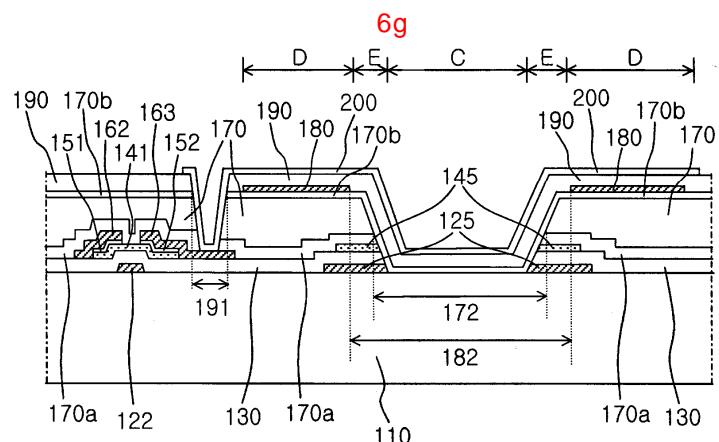
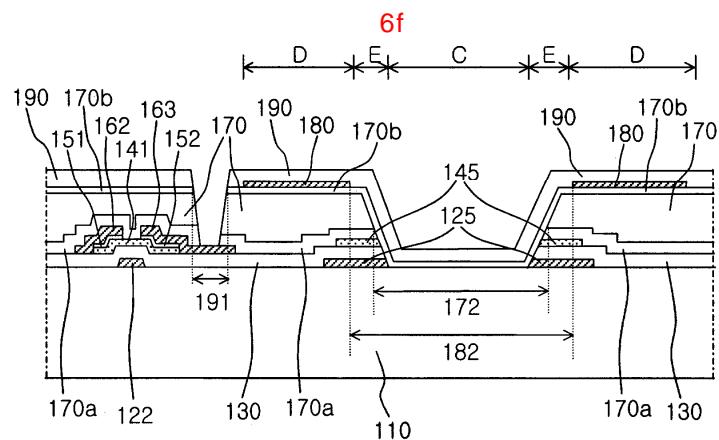
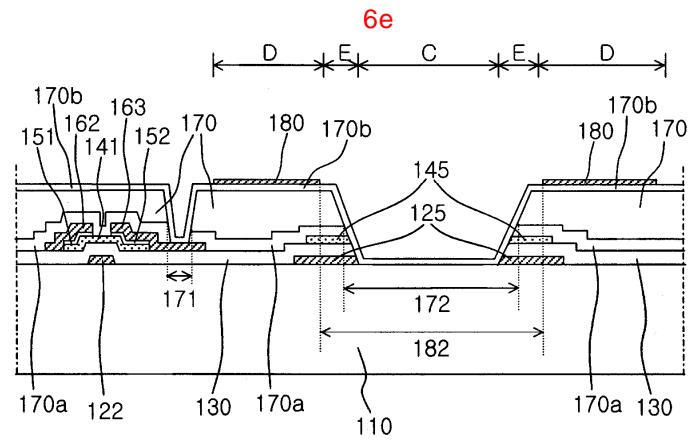


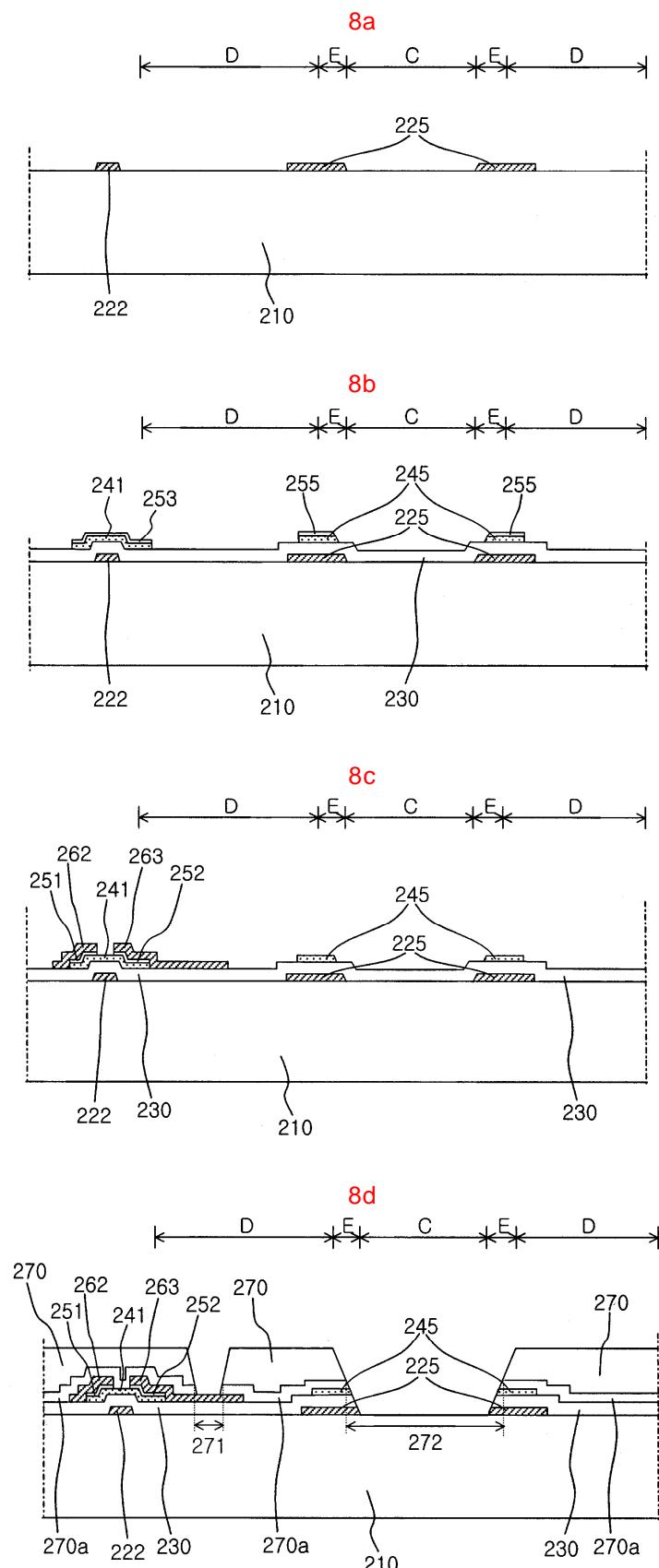
2a

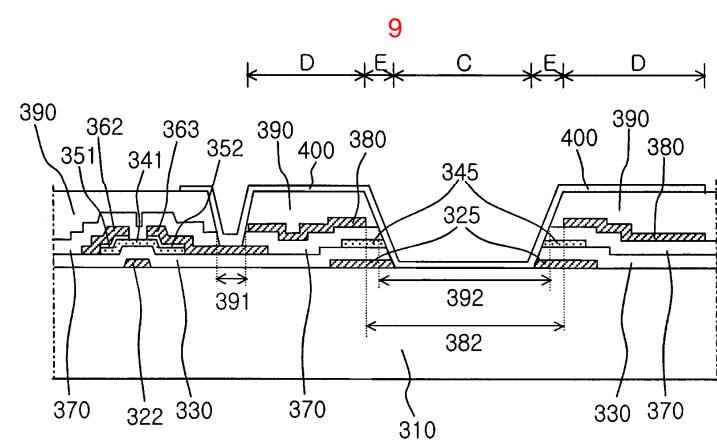
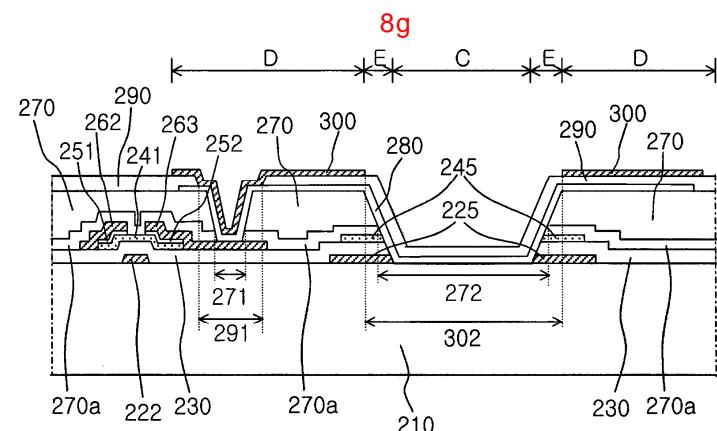
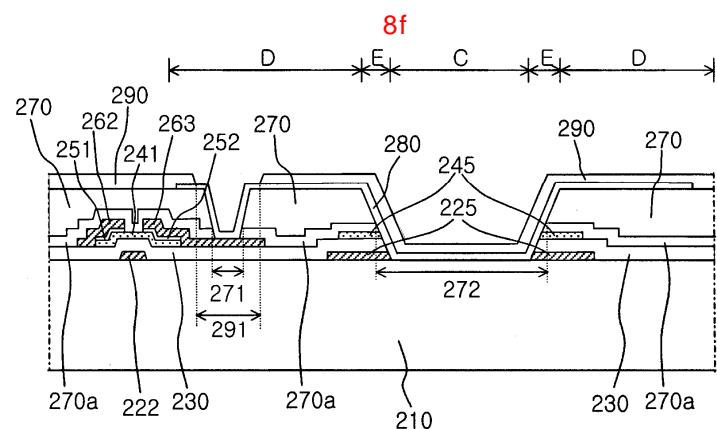
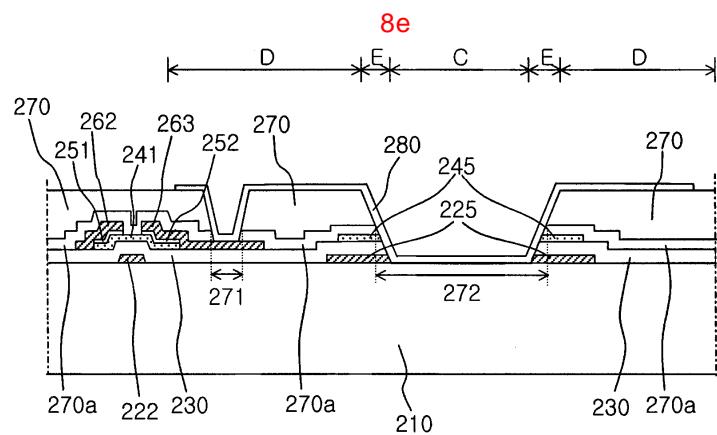


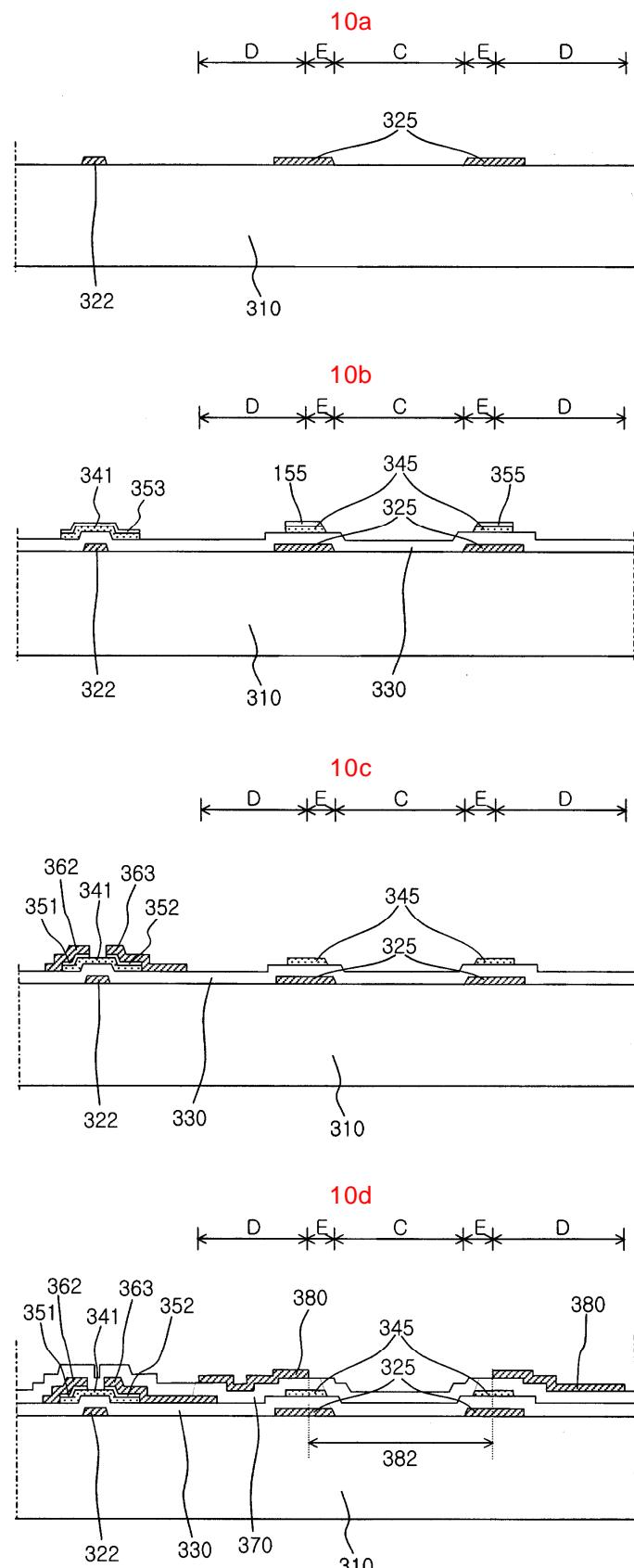


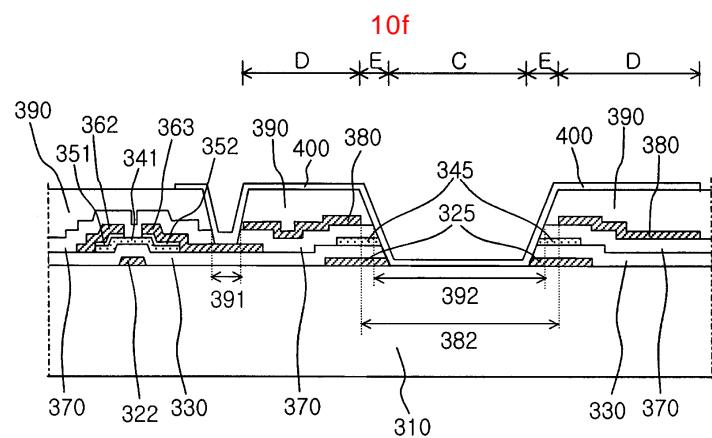
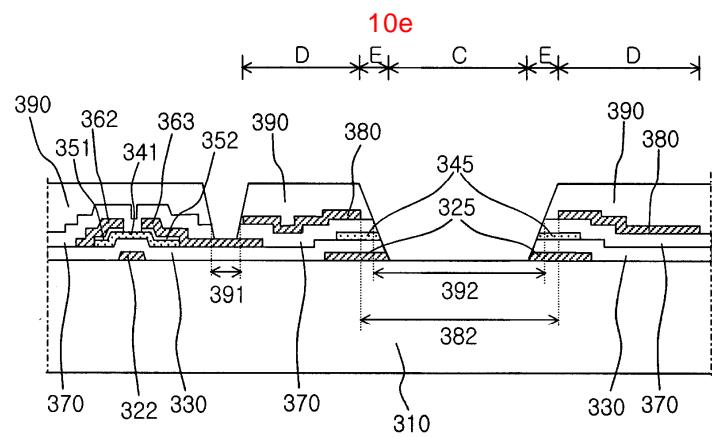












专利名称(译)	透反液晶显示器		
公开(公告)号	KR1020030034855A	公开(公告)日	2003-05-09
申请号	KR1020010066643	申请日	2001-10-29
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	HA KYOUNGSU 하경수 KIM WOONGKWON 김웅권 KIM DONGGUK 김동국		
发明人	하경수 김웅권 김동국		
IPC分类号	G02F1/1362 G02F1/1368 G02F1/1335 G02F1/1343		
CPC分类号	G02F1/133512 G02F1/136227 G02F1/133555		
其他公开文献	KR100820647B1		
外部链接	Espacenet		

摘要(译)

用途：提供透反液晶显示装置，通过用栅电极材料和有源层材料形成屏蔽图案，防止边界区域的光损失，从而提高反射模式和透射模式的每个对比度。组成：薄膜晶体管由栅电极（125），源电极和漏电极（162,163）形成。第一钝化层（170）覆盖薄膜晶体管并具有第一透射孔（172）和第一透射孔的边缘的倾斜台阶部分。反射板（180）形成在第一钝化层上，并具有对应于第一透射孔和倾斜台阶部分的第二透射孔（182）。第二钝化层（190）覆盖反射板并具有暴露漏电极的接触孔（191）。透射电极（200）形成在第二钝化层上并通过接触孔与漏电极连接。第一屏蔽图案由与栅电极相同的材料形成，具有对应于第一透射孔的孔，并且对应于倾斜台阶部分。有源层（141）由硅形成。第二屏蔽图案（145）由与有源层相同的材料形成。

