

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

(51) Int. Cl.<sup>7</sup>  
G02F 1/1337

(11)  
(43)

10-2005-0000586  
2005 01 06

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(21) 10-2003-0041040  
(22) 2003 06 24

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(71) 416

(72) 602

7 673-73

1052-2 APT242 1104

2 102 1004

(74)

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(54)

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가

1		1	
2	1		1
3	2	1	가
4	1		2
5		2	.
6	5		.
7	6	A	.
8		3	.
9	6	B	.
10	8		.
11		4	.
12	11		.
13	11	C	.
14		5	.
15	14	D	.
16	14		.

, (Liquid Crystal Display device, LCD) (Liquid Crystal, LC)  
 . , (Liquid Crystal Display panel, LCD panel)  
 (first substrate), 2 (second substrate) (back-light assembly) 1 2  
 , 1 2  
 1 1 , 2  
 1 가 , 2  
 가 ,  
 , 1 2  
 , (cell gap)



2 3  
 1 1 (134) 2 (130)  
 1 (134) 1 (110) 1 (136)  
 68 1 (134) . 1 (134) , 1024 × 768  
 . 1 (134) , 1 (134) , 1024 × 3  
 2 (136) 1 (134) ,  
 68 (G) (S) 1024 × 3 2 (136)  
 . 1 (134) 2 (136) (110) 2 (136)  
 (D) (132) 1 (134) 2 (136) (G), 1 (C), (PR1)  
 (C) (S) (G) (D) (G) (138)

1 (120) 1 1 (PR1)  
 R1) 1 (110) 1 (125) 1 (120) 1 (120)  
 . 2 (125) (pile) 45° (P)

1 4 , 2 (200) 1 (100) 1 (200) 2 (200) 2 (200)  
 (210), 2 (second pixel region ;PR2), (230) 2 (220) 2 (210)  
 2 (PR2) 1 (PR1) (210) 2 (PR2) 2 (PR2) 1 (210) 2 (PR1)

3 4 , (230) 1 (PR1) (138) 2 (230)  
 (210) (230) (Indium Tin Oxide, ITO) (Indium Zinc Oxide) (230)

2 (220) (230) 2 (225) 2 (220) 2 (220) 2 (225) 2 (230)  
 25) 1 2 (225) (pile) 1 (220) 2 (225) O 1 (230) 1 (1)
 135°

, 1 (120) 1 (125) 2 (220) 2 (225) 90°

1 (100) 1 , (300) 1 (100) 2 (200) 2 (200) 2 (300) 1  
 2 (304) 1 (PR1) (300) 1 (302) 1 (100) 2 (200) 2 (200) 2 (300) 1 (PR2)

1, 2 4 , 1 (120) 1 (120) 2 (120) 1 (120) 2 (120) 1 (125)  
 2 (225) (127,227) 2 (225) 1 (120) 2 (120) 2 (220) 1 (125) 2 (220)  
 2 (225) (127,227) 1 (125) 2 (125)

1 (300) (125) . (127) (127) L2 1 5μm 1 (127)

가 1 (PR1) , 1 (PR2)

, 2 (225)  
(300) . . . . .  
2 (PR2) , 2 (227)  
L3 5μm . . . . .  
2 . . . . .  
가 . . . . .  
1 (127) 1 (300) 가 1 (300)  
1 (110) (PR1) 1 (PR1) 1 (PR1) 1 (300)  
7) 1 (300) 1 (PR1) . . . . .  
1 (300) L4 5μm 10μm 2 (227) 2 (227)  
R2) 2 (300) L4 (300) 2 (210) 2 (PR2) (PR2) (300) 2 (P  
1 , , (400) 1 (100) 2 (200) 1 (100)

2

5 6 A 2 . . . . .  
7 1 5 6 5 1 . . . .  
5 7 (PR2) , (300) 2 (300) 2 (200) 2 (225) 2 (300) 2 (200) 2 .  
5 (300) 2 (300) 2 (225) 2 (200) 2 (225) 2 (300) 2 (210) 2 (300)  
2 (220) 2 (220) 2 (220) 2 (220) O 135° 2 (227) 2 (227) 2 (227) 2 (227)  
2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300)  
L3 (227) 2 L3 (210) 2 (210) 2 (210) 2 (210) 2 (210) 2 (210) 2 (210) 2 (210)  
L3 (PR2) L4 가 2 (220) 2 (220) 2 (220) 2 (220) 2 (220) 2 (220) 2 (220) 2 (220)  
2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300) 2 (300)  
2 (300) 2 (PR2) (PR2) (PR2) (PR2) (PR2) (PR2) (PR2) (PR2) (PR2)

3

8 3 . . . . .  
8 9 (310) 2 (PR2) 2 (PR2) (310) . . . . .  
310) 2 (310) . . . . .

312), 3 , (313) (310)  
 (313) 4 (314) b  
 4 (314) b  
 1 (311) 2 (312)  
 4 (314) 2  
 135°

1 (311), 2 (312) a  
 (311) 4 (314) 90°  
 2 (310) O  
 (310) 2 (220)  
 (227)  
 (225)

10) 2 (220) 2 (225)  
 2) (PR

10 8

10 , (320) (320)  
 , 1 (321) 1 (321)  
 323) 4 (324) c  
 4 (324) 2

(321), 2 (322), 3 (323)  
 2 (322) c , 4 (324)  
 , 1 (321) 2 (320)  
 , 2 (322) 3 (323)  
 2

, 2 (220) 2 (225)  
 2 (PR2)

(320)

4

11 4  
 13 11 C  
 , 1

11 13 , (300) 1 (100)  
 (PR1) (300) 1 (300) 1 (120) 1 (300) 1 (100)  
 , (110) 1 (300) 1 (120) 1 (300) 1 (100)

, 1 (120)  
 (300) 가  
 (300) (PR1) 1 (127) , (127) 1 (110)  
 (127) L2 (127) 1 (300) 1 (110) 1 L1  
 (127) 1 (300) 1 (110) 1 L2 (PR1) 1 (300) 1 (100)  
 , 1 (300) 가 1 (300) 1 (110) 1 (PR1) 1 (120)  
 1 (300) 1 (127) (127) 1 (300) 1 (100) 1 (PR1) 1 (120)

5

14 5  
 14 15 , (PR1) (330) 1 (PR1)  
 (330) 1 (330) (330)  
 (332), 3 (333) 4 (334) b (334) . , 1 (331), 2 (331) 1 (332) 2 (332) a  
 (333) 4 (334) b (334) 1 (331) 2 (331) 2 (332) 1 (332) a  
 , 3 (333) 3 (333) 3 (333)

15 14 D  
 4

)
 4 (334) b , 1 (331) 2 , 1 (332) 2 (331) 4 (334) 9 , 2 (334) 90 ° , 3 (333)  
 4 (334) 2 . , O 2 (220)  
 135 ° . (330) 2 (330)  
 2 (320) 2 (225) , (227) 2 (PR2)

16 14

16 , (340) 1 (341), 2 (342), 3 (343), 4 (344) 가  
 , 1 (341) 1 (341) 2 (342), 3 (343) 3 (343) 3 (343)  
 343) 4 (344) 2 , 1 (341) 2 (342) 2 (340)  
 4 (344) 2 (220) 2 (225) , (340)  
 2 (PR2)

(57)

1.

1 1 1 ; 1 1 1

1 2 , 1 2 2 2  
 2 ;

2 1 가 ; 1 가 , 2 1

1 2 ,

2 2 2 2 , 가 2

2.

1 , 2 5μm 10μm

3.

1 , 1 , 1

4.

1 , 2 , 2 가

5. 1 , 1 2 .

7. 1 , 2 2

10. 9 . 2 2

11. 10 . 2 가 2

**12.**      1      1      1      1      1

$$1 \quad , \quad 1 \quad 2 \quad 2 \quad 2 \\ 2 \quad ; \quad 2 \quad 2 \quad 2$$

2 1 가 ; 1 가 , 2 1

1 2 ,  
1 1 1 가 1

13. 12 1

14. 12 1 1

15.  1  $5\mu\text{m}$   $10\mu\text{m}$

16. 12

17.

12

18.

17

1

19.

18

2

2

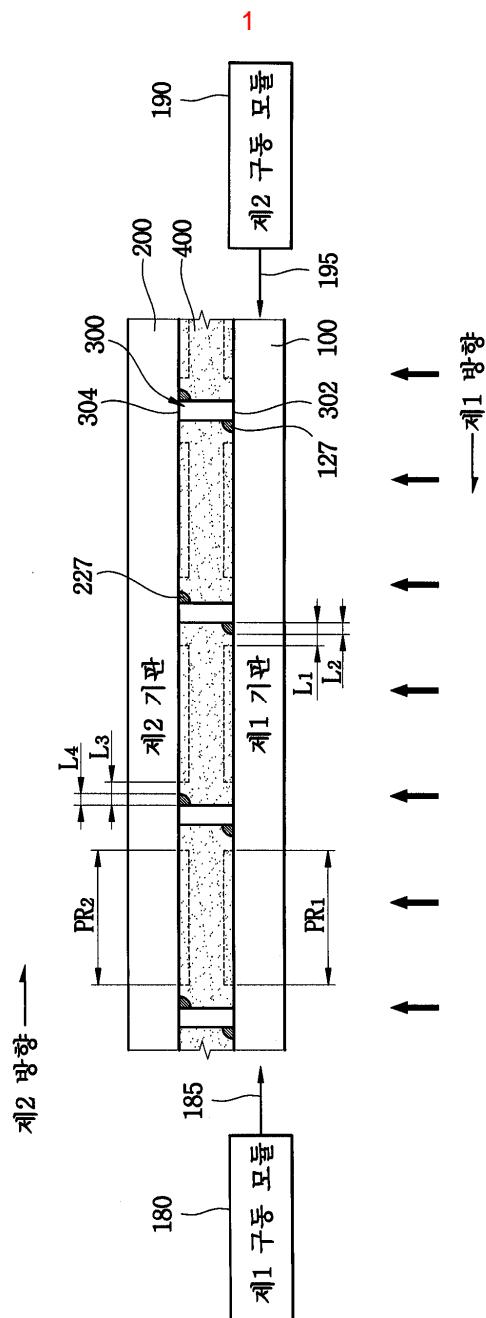
20.

17

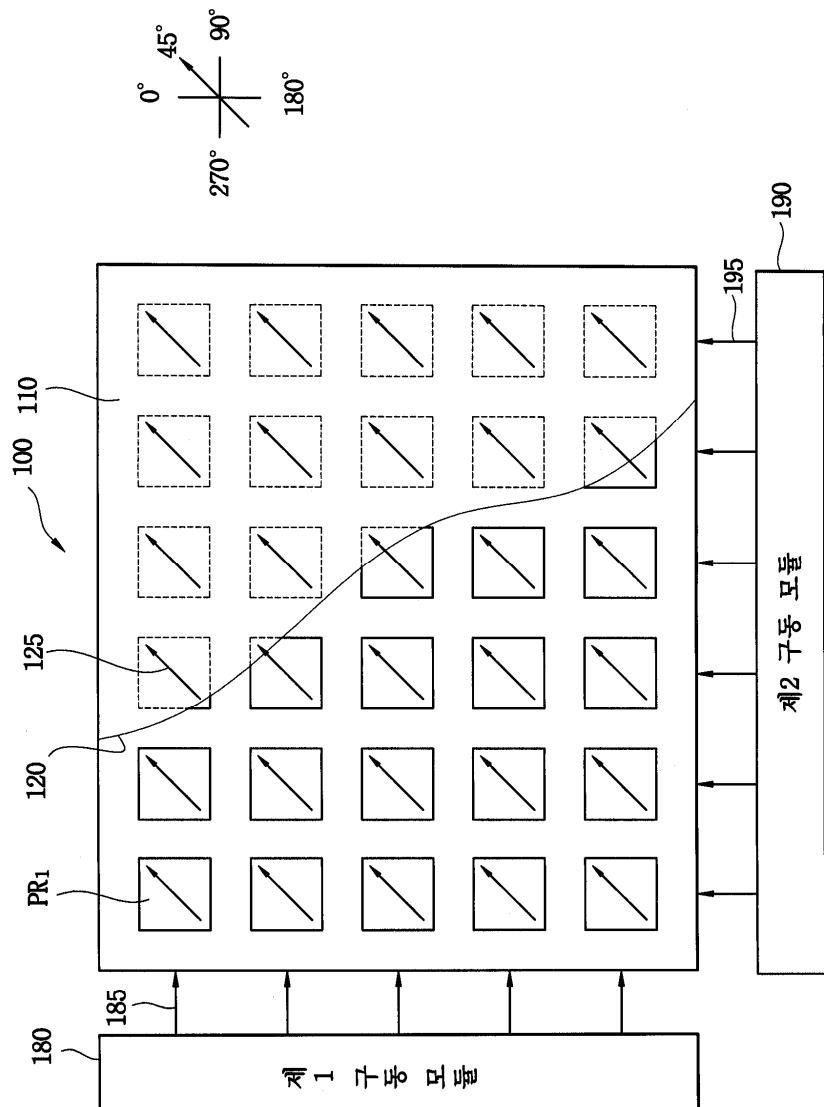
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가

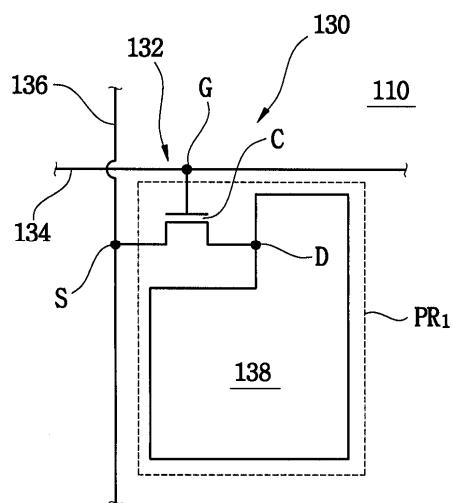
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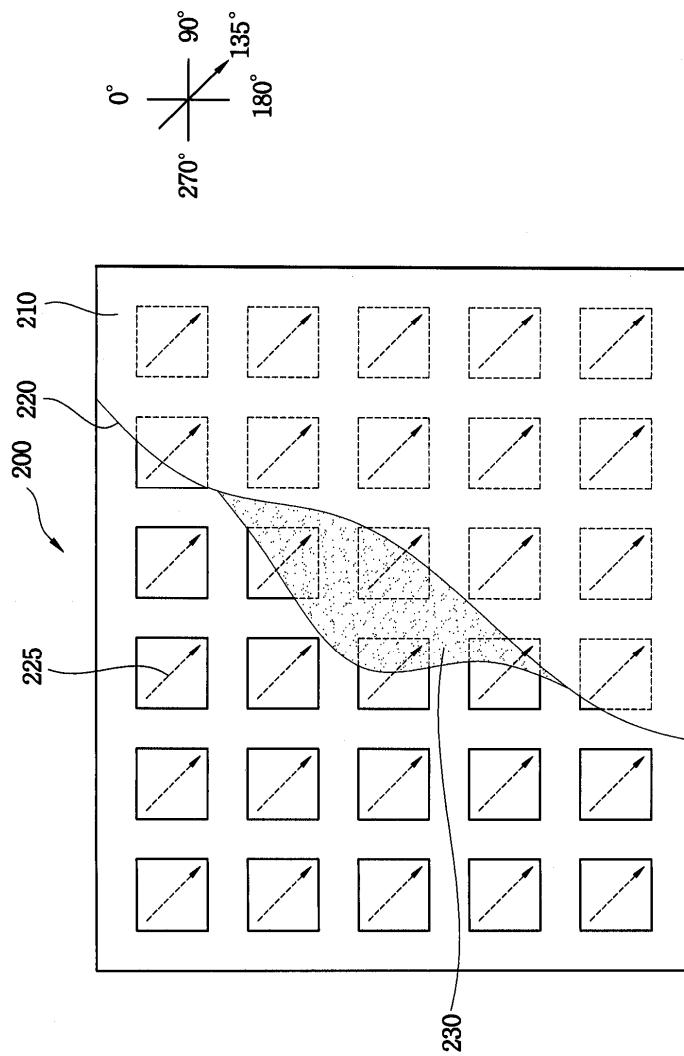
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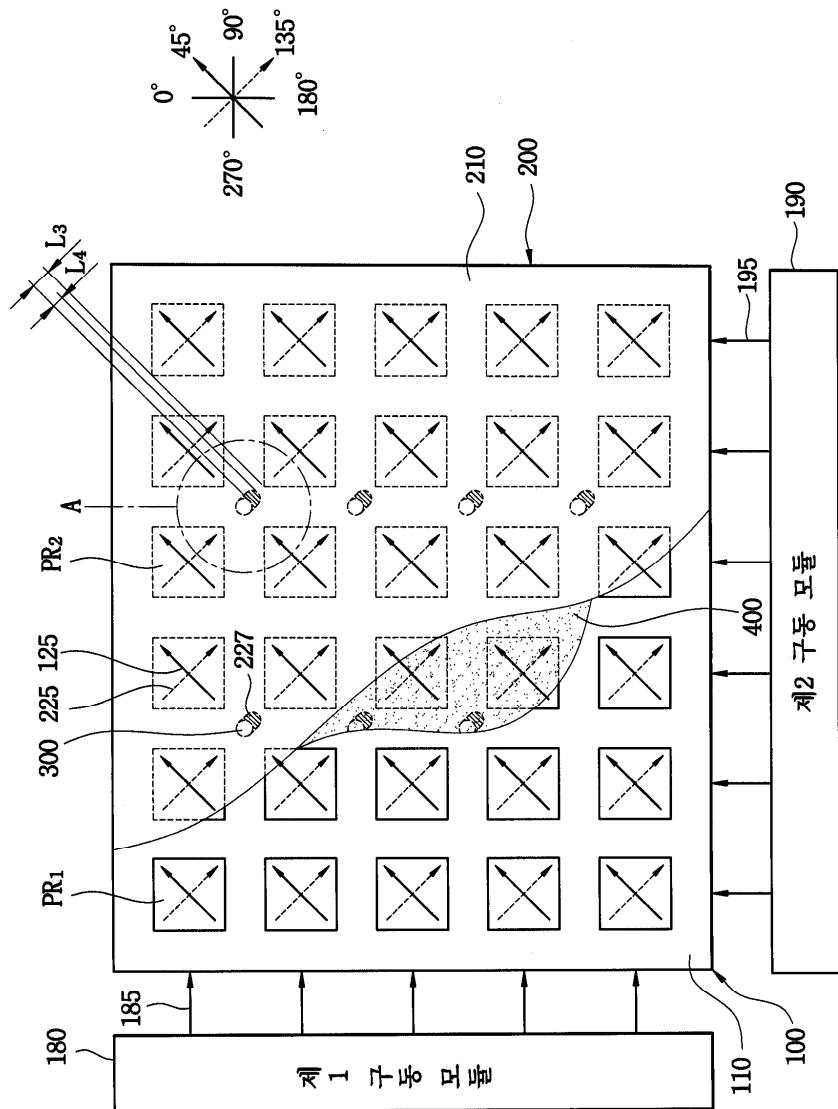
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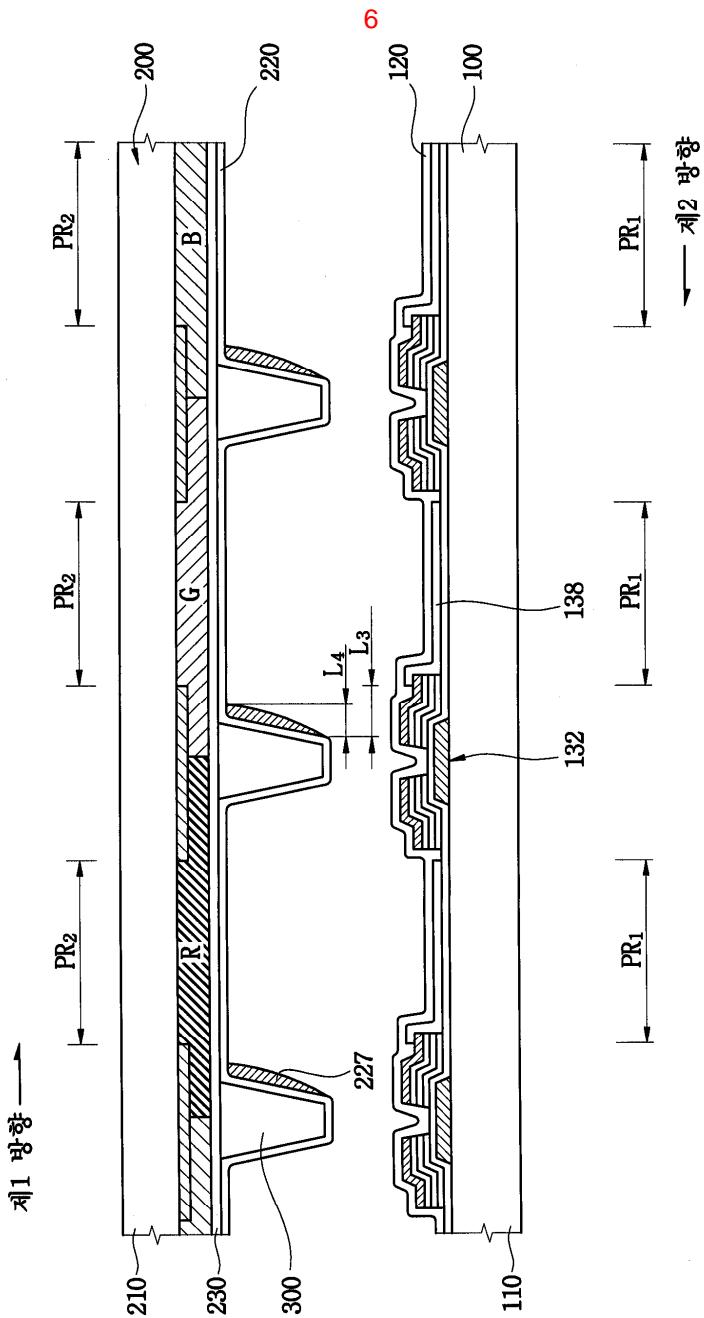


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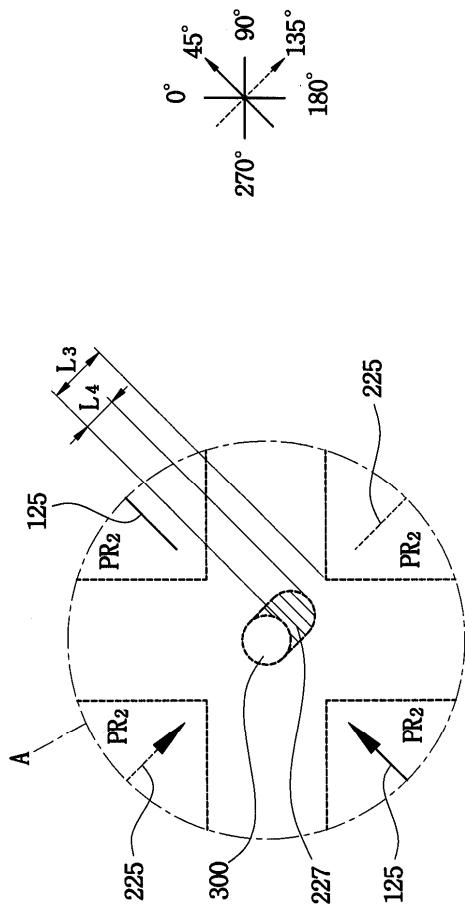


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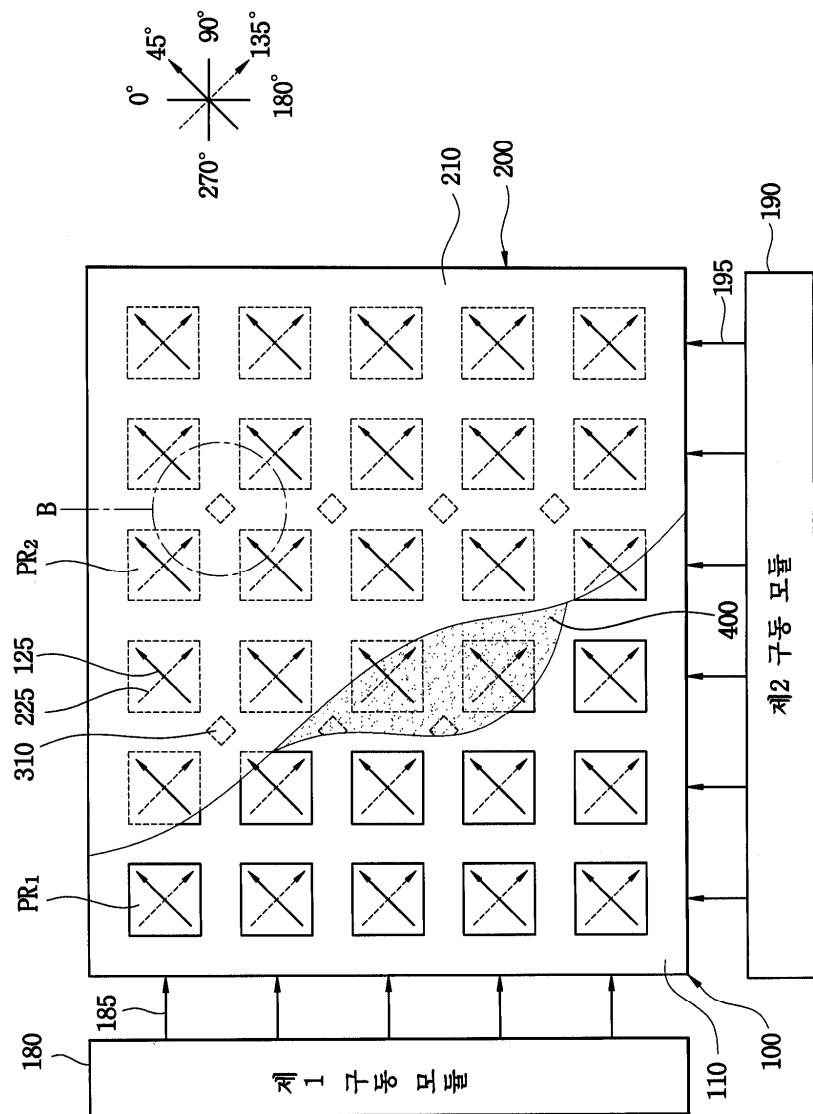


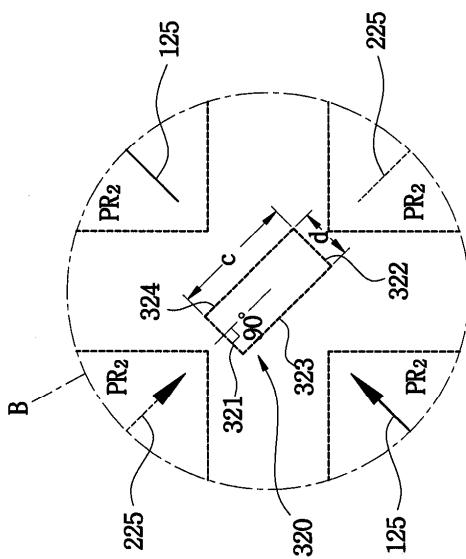
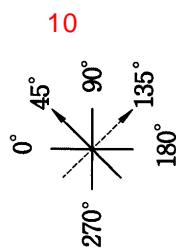
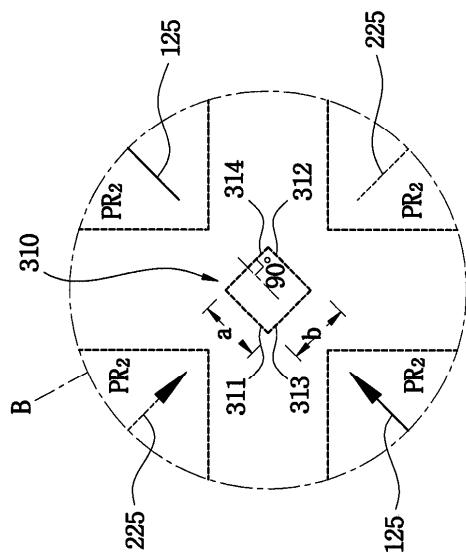
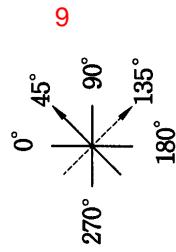


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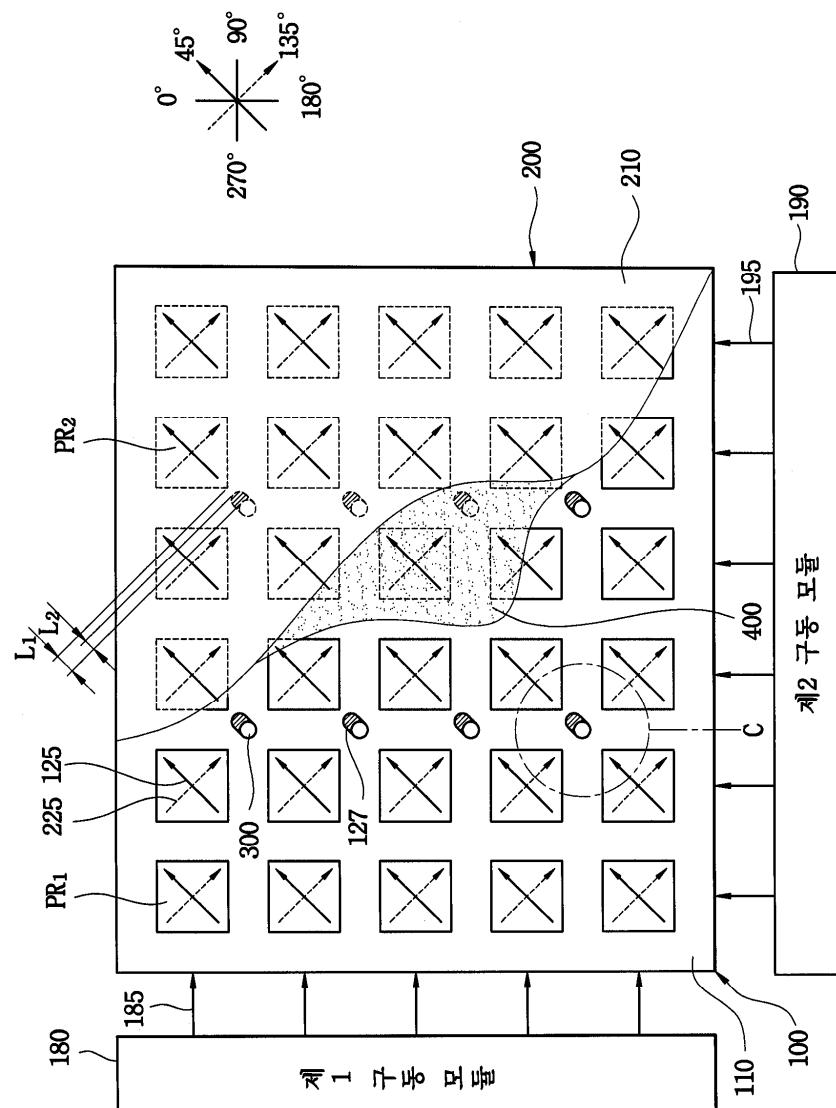


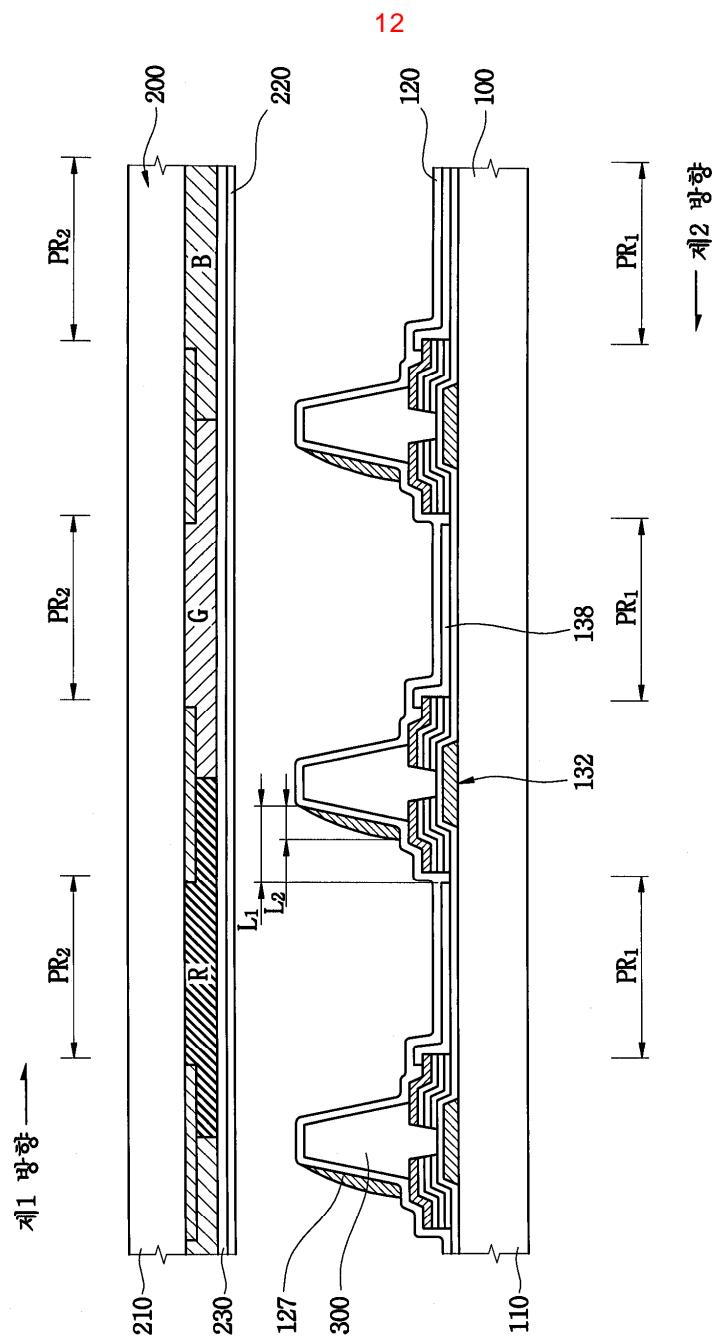
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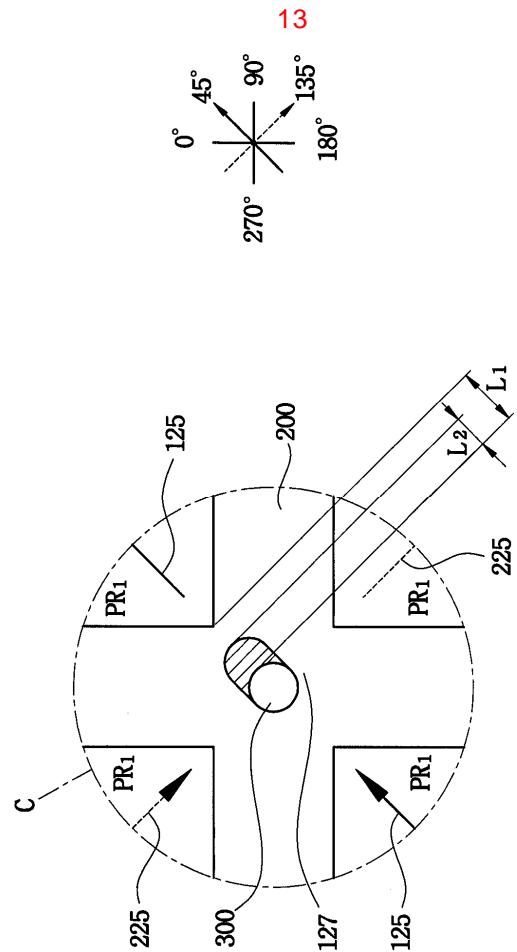




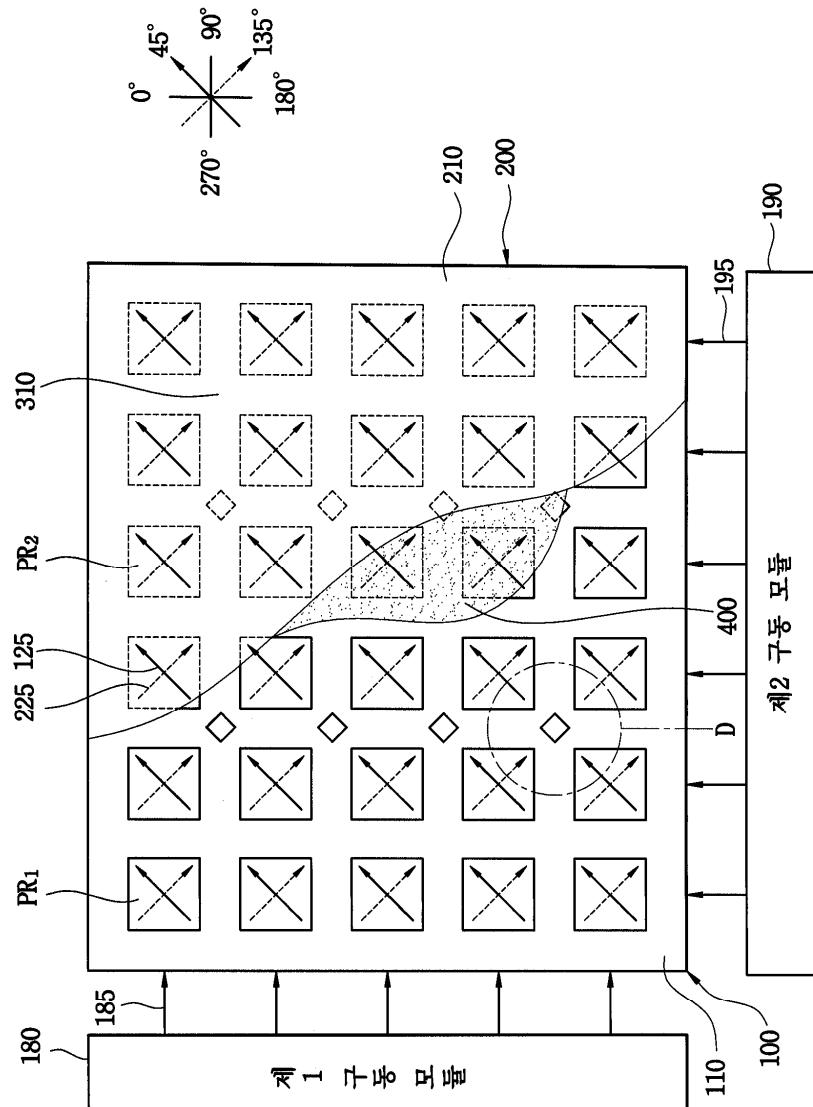
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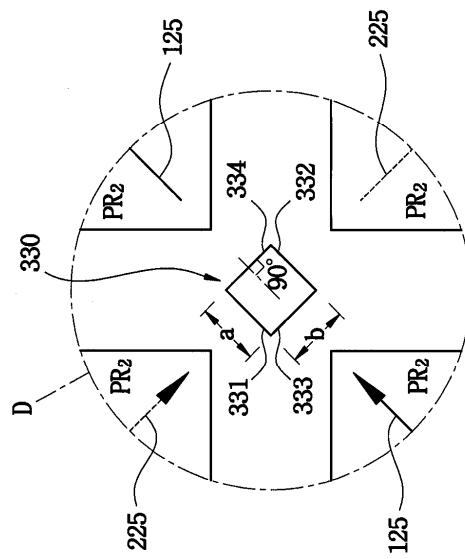
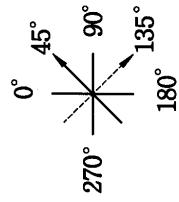




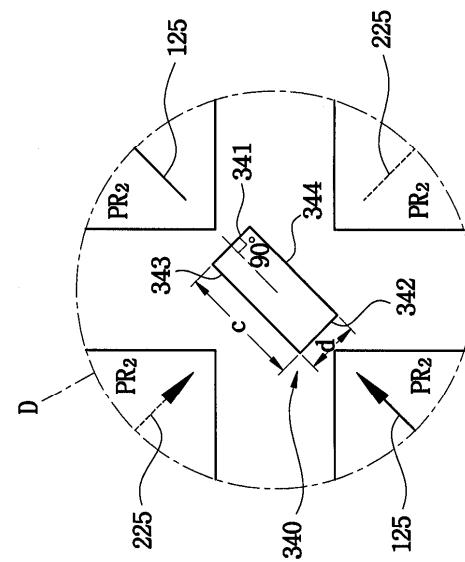
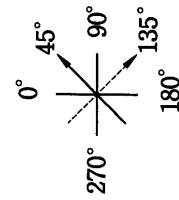
14



15



16



专利名称(译)	液晶显示器		
公开(公告)号	KR1020050000586A	公开(公告)日	2005-01-06
申请号	KR1020030041040	申请日	2003-06-24
[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	HAN HYERHEE 한혜리 AHN BYEONGJAE 안병재 LEE KYEHUN 이계훈 HUR MYUNGKOO 허명구		
发明人	한혜리 안병재 이계훈 허명구		
IPC分类号	G02F1/1337		
代理人(译)	PARK , YOUNG WOO		
外部链接	<a href="#">Espacenet</a>		

## 摘要(译)

公开了一种改善图像显示质量的液晶显示装置。当在用于对准液晶的取向膜中形成对准槽时，改变间隔物的布置和形状，使得从取向膜产生的异物不会流入显示图像的像素区域。使间隔物和像素区域之间的距离比附着在间隔物上的异物的长度宽，从而防止附着在间隔物上的异物流入像素区域。另外，间隔物的形状形成为多边形柱状，从而防止从配向膜分离的异物粘附到间隔物上，从而防止异物流入像素区域，从而提高图像的显示质量。1 指数方面液晶显示装置，取向膜，间隔物

