

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

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(21)	10-2003-0045781		
(22)	2003 07 07		
(71)		416	
(72)	1547	apt504 201	
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(74)			
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3 1 1 .

4	3	B	.
5	3	C	.
6	3	D-D	.
7	3		2 .
8	7	E-E	.
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10	9	2	.
11		3	.
12	11	2	가 .
13	11	2	.
14		4	.

, (Liquid Crystal, LC)

(Liquid Crystal Display device, LCD)

, TV

가 2 1 2 1 1 가 2 1 , 2

1 1 가 (Indium Zinc Oxide, IZO) , (Indium Tin Oxide 1

1 1 가

1 2 1 가 ,

e, IZO) , (Indium Tin Oxide, ITO) (Indium Zinc Oxid 2

1 2 . , 2

Figure 1 shows the crystal structure of the Indium Zinc Oxide (IZO) film. The structure is a wurtzite-type crystal structure, which is a hexagonal crystal system. The unit cell is shown with the following parameters: a = 0.354 nm, c = 0.591 nm. The atoms are arranged in a hexagonal lattice, with Indium (In) atoms represented by large spheres and Zinc (Zn) atoms represented by smaller spheres. The oxygen (O) atoms are represented by small spheres. The structure is labeled with the following Miller indices: (100), (110), (112), (114), (120), (122), (124), (126), (128), (130), (132), (134), (136), (138), (140), (142), (144), (146), (148), (150), (152), (154), (156), (158), (160), (162), (164), (166), (168), (170), (172), (174), (176), (178), (180), (182), (184), (186), (188), (190), (192), (194), (196), (198), (200).

3 (100) 6 , 1 (120) 1 가 , 1 (112) 1 (114) 가 1 (120) 1

1 (120) 가 4 (130), 1 (140) 2 (150) 1 (

(130) 1 (120) (130) (G), (S),
(D) (C) 6 , (G) (160) , (

160) (C) (C) (G) (C) (n + am
(amorphous silicon film)
ophous silicon film) (C) (G) 가 (+)
(S) (D) (

C) (D) 1 (120) (contact hole)

1 (140) (130) (G) , 1 (140) (G)

1 (140) 1 (114) 1 1 (112)

3 가 1024 × 768 , 1 (140) (700) 1 (140) 1 (112)
(700) 768 1 (114) 256 1 (140) 가 1
(channel) 가 1024 × 768 (7
00) 3 2 1 , 1 (gate tape carrier package)

6 (S) , 2 (150) (130) (S) , 2 (15
0) (D) 2 (150) 2 , 1 (114) 1
(112)

2 (150) (700) 가 1024 × 768
1024 × 3 2 (150) 2 (112) 1
, 1 (114) 256 2 (150) 가 1 2
2 , 가 1024 × 768 12 2
(source tape carrier package)

1 (140) 2 (150) , 1 (140) 2 (150)

, 1 (114) 2 (150) 2 2 (170)
2 (170) 2 (110) 2 (114) 2

가

7 3 2 8 7 E-E

1, 7 8 , 2 (200) 2 (210), (220), 2 (230) 가 (235)

2 (210) 1 (110) 2 (210)
substrate) 2 (210) 2 (212) 2 (214) 2 (glass
(214) 2 (212) 2 (212) 2 (210)
, 2 (214) , 1 (112) 2 (212)
12)

(220) 2 (212) 2 (214) , (220) 2 (210)

0) (220) 2 (210) (220) 2 (210) (210) 2 (210) (220)
 2 (230) (220) (Indium Zinc Oxide, IZO) 2 (230) 2 (210) 2 (214)
 2 (210) 2 (212) (212) 2 (214) 2 (214) (230)
 , 2 (230) (220) (220) 2 (210)
 가 (235) 2 (212) 2 (230) 가 2 (214)
 (214) 가 (235) 5 가 2 (230) (170) 2
 (230) 2 W 가 (235)
 2 (110) 2 (300) 1 (110) 2 (210) 1
 (110) 2 (210) (300) 1 (110) 2 (210)
 (300)가 1 (110) 2 (210) (300)가 1 (110) 2 (210)
 (212) (300) 1 (114) 2 (214) (214) 1 (112) 2
 (300) 2 (114) 2 (214) (220) (500) 2 (212)
 2 (214) 가 (235) 가 가 (235)
 (300)가 (300)가 (220) (300)
 (300) (220)
 5) 2 (400) (300) 가 2 (214) 가 (235)
 1 (114) 2 (170) 가 (235) (400) (170)
 (Au) 가 (170) 2 (400) 가 (235)
 2 (230)
 (500) 1 (112), 2 (212) (300)
 (220) 2 (230) (300) (220) (300)가 1 (110)
 2 (210) (500) 가

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 9 2 10 9 2 1
 2 1 2 1
 9 10 2 (212) 2 (230) 1 (120)
 (237)가 (237) 2 (230) 1 (120)

(Vertical Alignment mode liquid crystal)

(120) (550) 1 (120) 1 (230) 2 가 1 (230) 2 (237)

(120) 2 가 1 (120) 2 (230) (550) 300 500

(110) 1 (120) 2 (210) 2 (230)

(237) 가 (550)

3

11 1 2 3 가 1 3

11 1 (120) 2 1 (120) (210) (220) (250)가 (250)

(254) (254) (256) (252) (250) (252),

(254) (256)

12 11 2 가

12 2 (210) (220) (250) 가

(256) (252) (254) (256) (252) (254)

(252), (254) (256) 1 (120)

(250)

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14 1 1 4 가 1 4

14 1 (110) (190)가 (190) (192),

(194) (196) (192), (194) 1 (120)

196) 1 (130), 4 1 (140) 2 (150) 1 (120)

(192), (194) (196) 1 (120) (130), 1 (1

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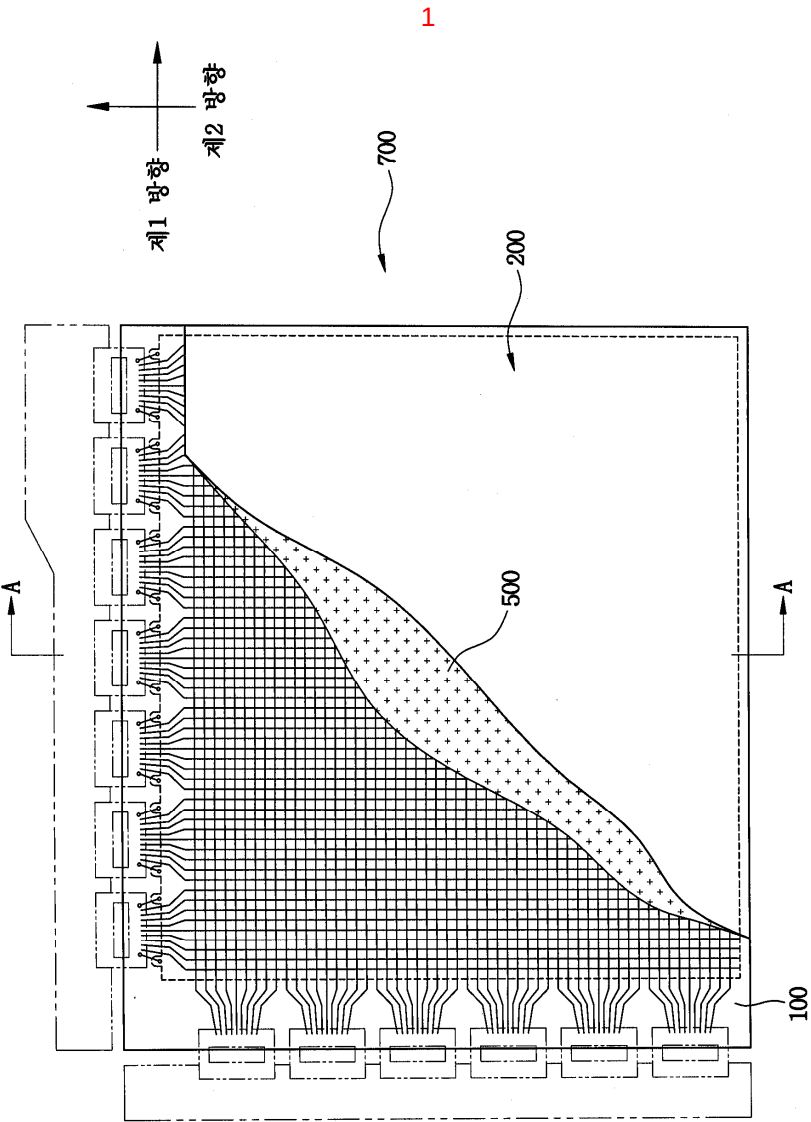
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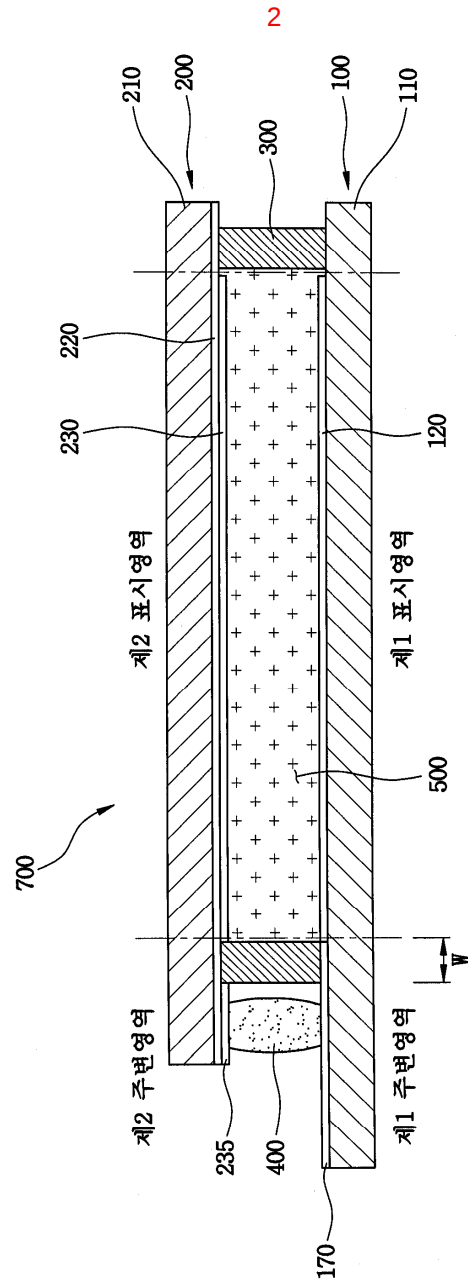
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(57)

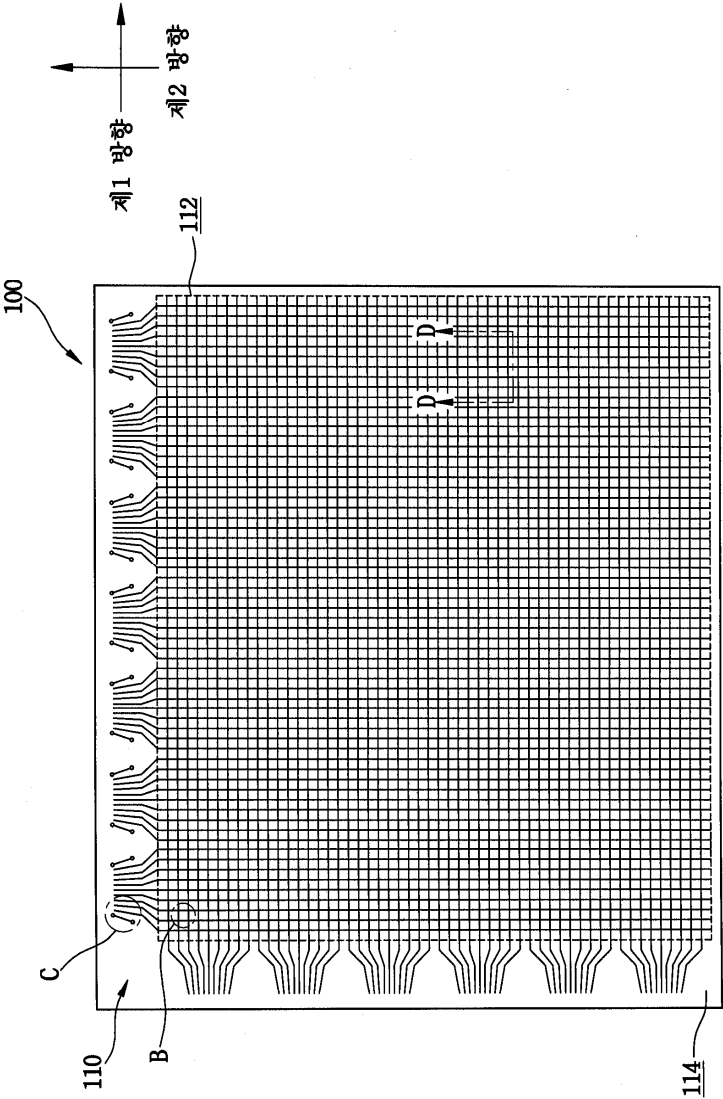
1. 1 1 1 1 1 가
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가 가 2 .
5. 1 , 2 가 .
6. 5 , .
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- 7, 21
- 9.8, 1
- 10.7, 1
- 11.1, 1, 1가
- 12.11, 1가

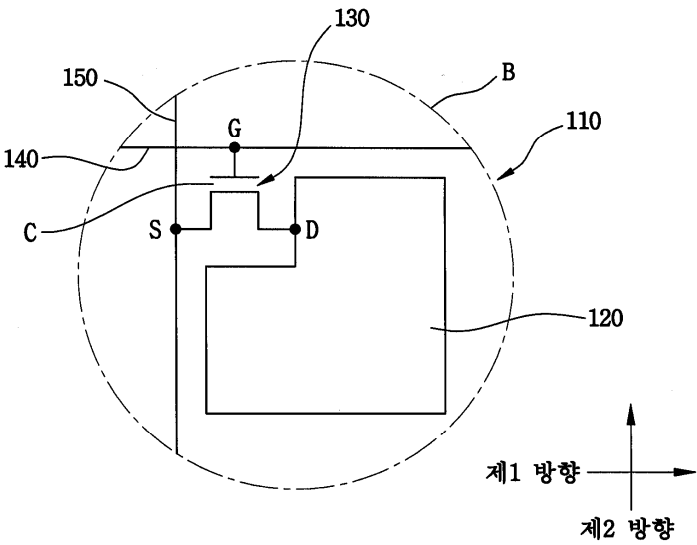


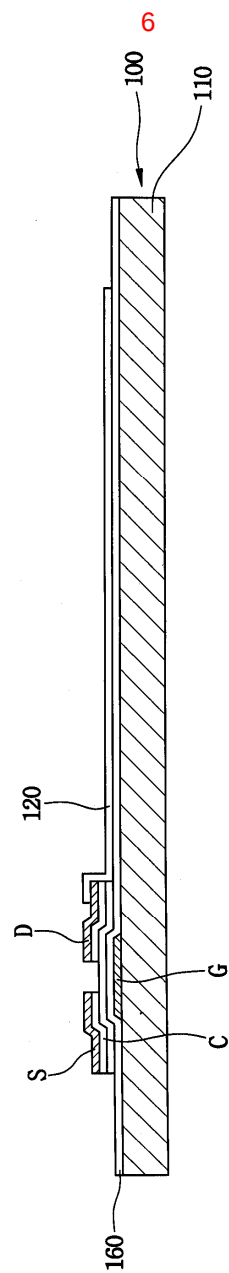
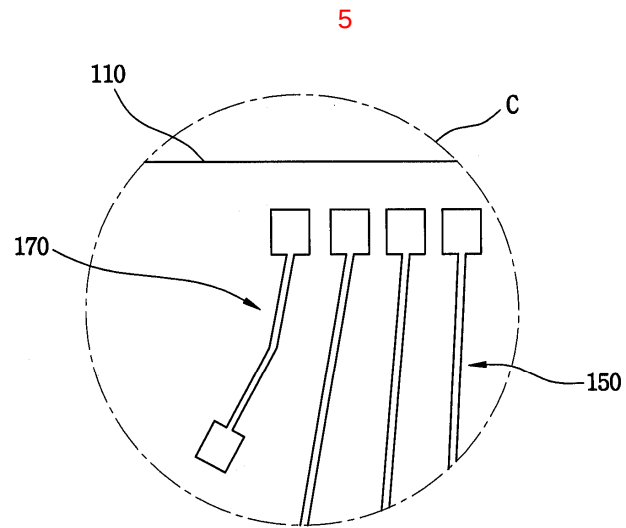


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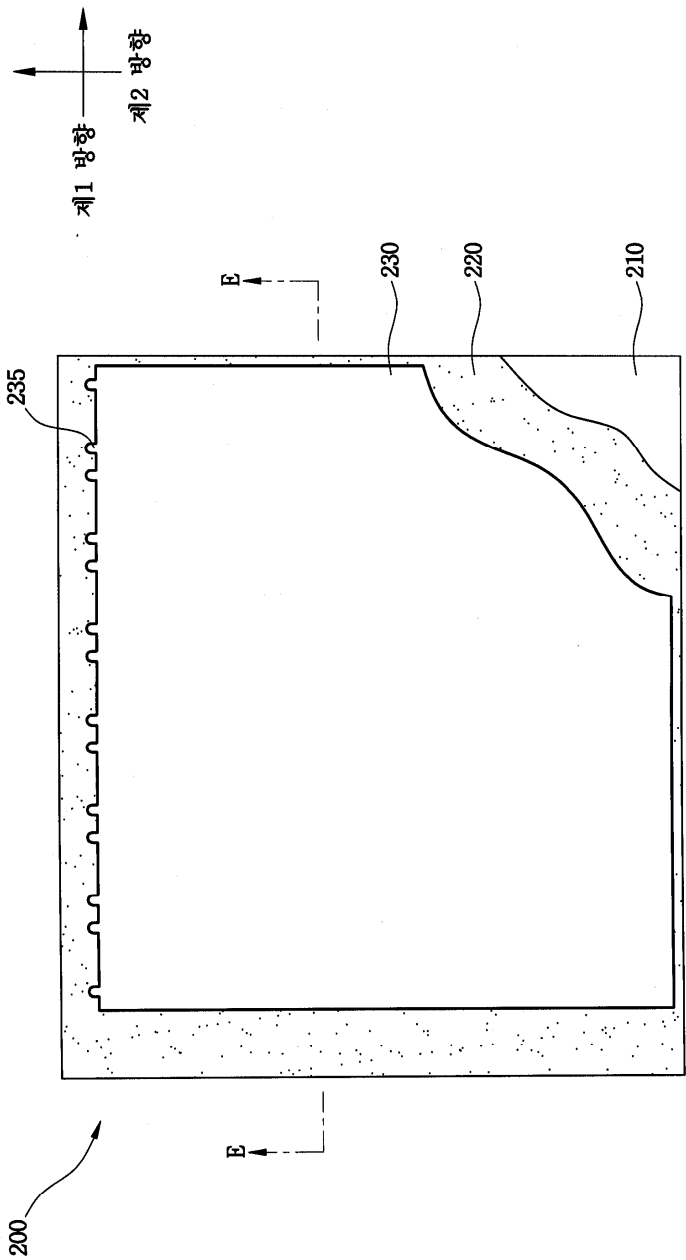


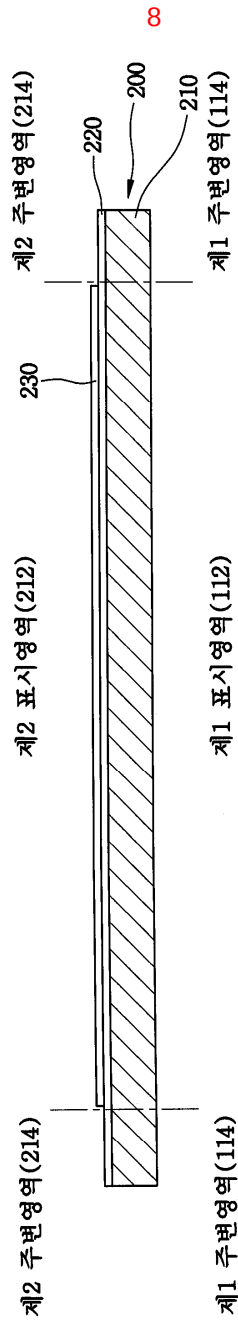
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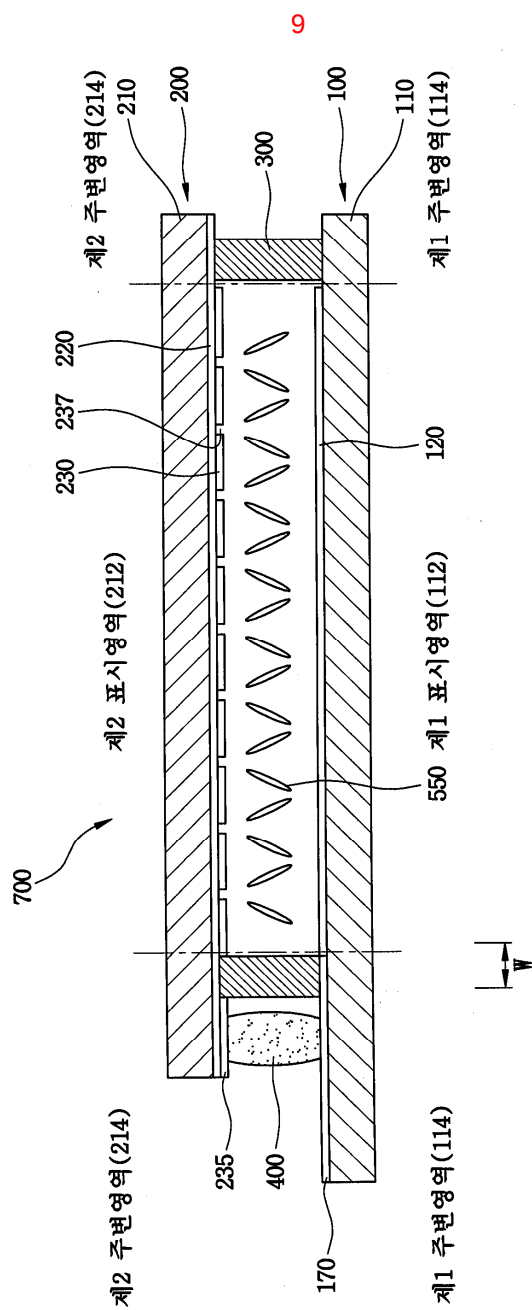




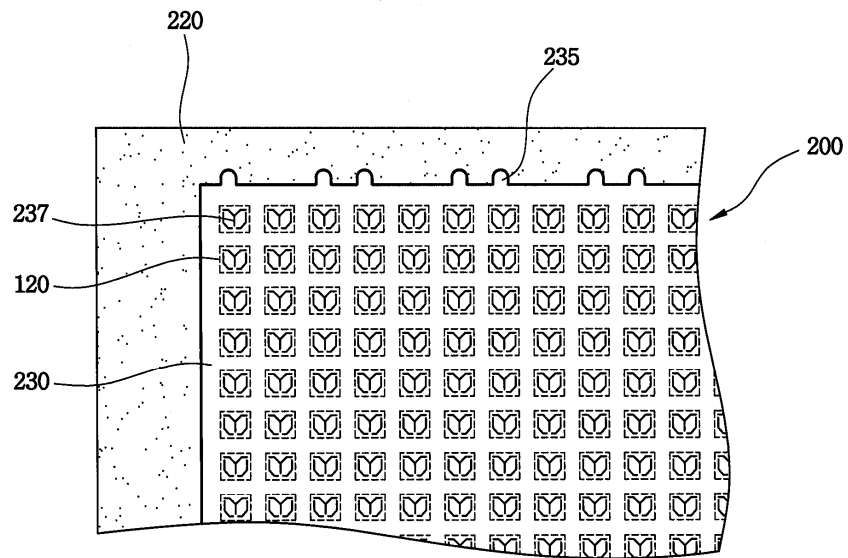
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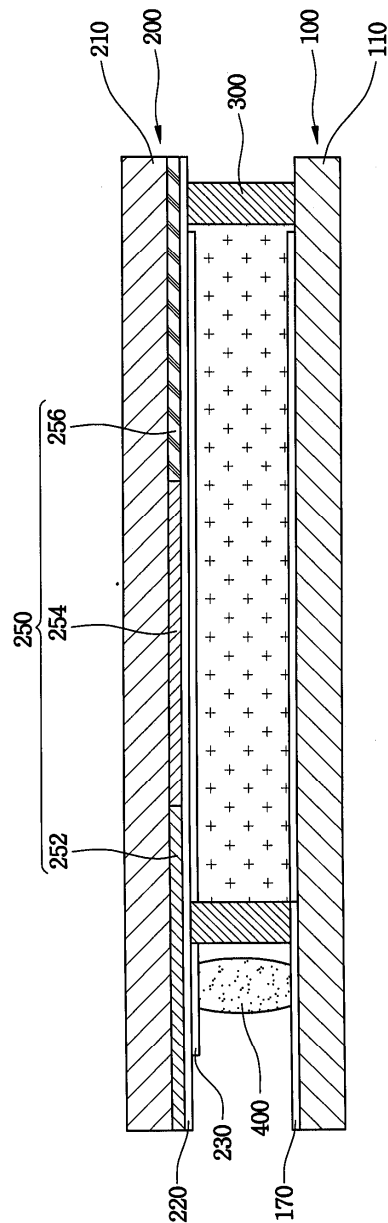


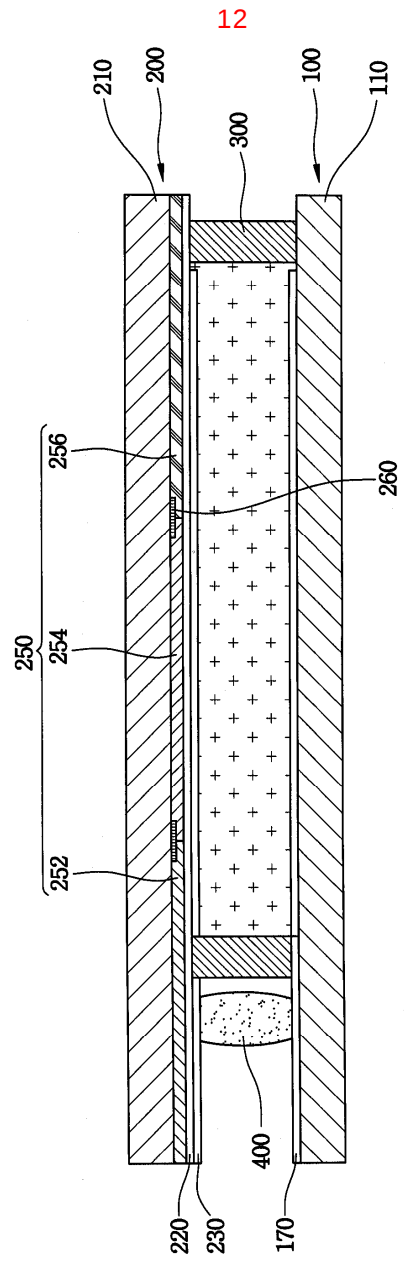


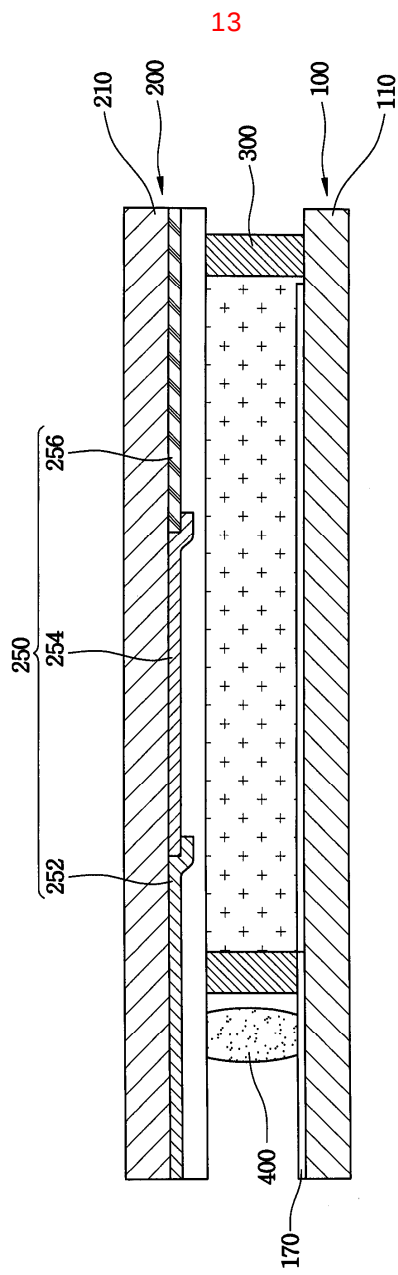
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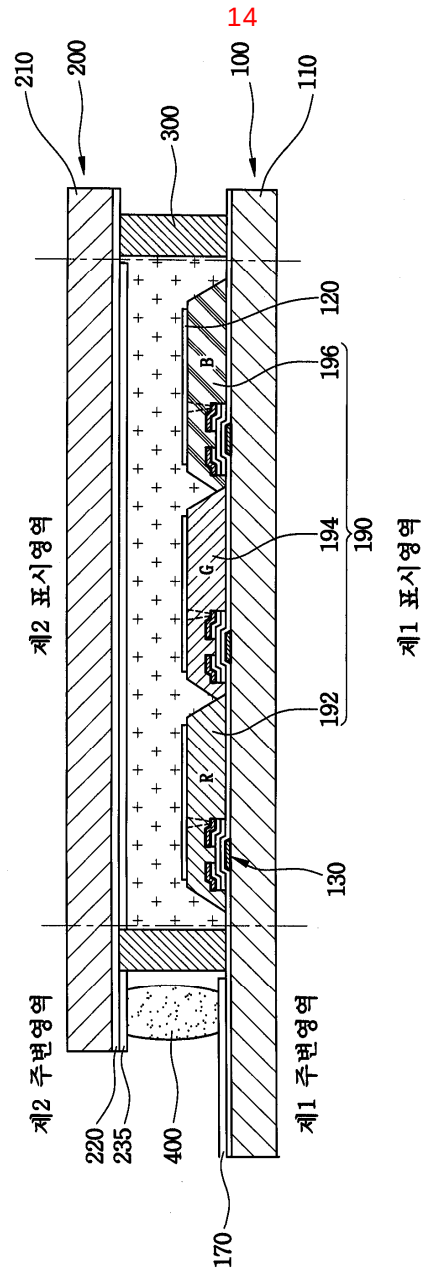


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专利名称(译)	液晶显示器		
公开(公告)号	KR1020050005881A	公开(公告)日	2005-01-15
申请号	KR1020030045781	申请日	2003-07-07
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	WOO SEUNGCHANG 우승창 HEO JEONGUK 허정욱		
发明人	우승창 허정욱		
IPC分类号	G02F1/1339 G02F1/1333		
CPC分类号	G02F1/1339		
代理人(译)	PARK , YOUNG WOO		
外部链接	Espacenet		

摘要(译)

公开了一种防止在液晶显示板内部形成的薄膜之间的剥离的液晶显示装置。由有机材料制成的薄膜和由无机材料制成的薄膜，例如由无机材料制成的玻璃基板，设置在玻璃基板上的有机膜，设置在有机膜上的有机膜，由无机材料制成的透明电极，设置在有机膜的上表面上的透明电极的一部分被局部图案化以对应于密封构件，以直接接触由有机材料制成的有机膜和密封构件，以防止薄膜之间的剥离。防止形成在液晶显示面板上的薄膜剥落，从而防止液晶泄漏和由于液晶泄漏导致的图像显示质量的劣化。 1 指数方面 液晶显示器

