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[illegible]

(72)

| | | |
|------|---|---|
| 5656 | . | 6 |
| 5656 | . | 6 |

(74)

•

•

(54) O L E D

()가 가 가 가 . , LED 가 . 가 . 가 가 .

LED

가

100 (100PPI)
66.7 x 200

254 x 254

0.3

127 PPI

LED

가

가

가

US 6,143,450

가

가

가

가

가

가

1 22

가

가

1

가

가

가

$$R_{filling} = \frac{\text{격실에 의해 유지된 최대 체적}}{\text{격실 체적}}$$

가

1 2 가 , 1 2

1 2 1 2 1 1 1 2

90 °

1 2

(R filling)

가

10μm, 5μm, 1μm 0.5μm

가 / 가 가

가 . 가 ,
 .
 .
 (-) ,
 .
 , , (,
 ,)가 , 가
 ,
 5 μm 40 μm , 20 μm , 10 μm ,
 2 μm , 5 μm 10 μm 가
 가 , 20 μm , 30 μm , 50 μm .
 10 μm , 5 μm 2.5 μm , 20 μm . -
 1/4, 1/2,
 3/4 .
 , 가
 μm 가 20 μm , 10
 , ,
 , -
) (1 μm^2 , 0.1 μm^2 10 μm^2 3
 (square root) ,
 (LED)
 가

- 1 .
- 2 1 가 .
- 3 .
- 4 3 가 .
- 5a , 가 .
- 5b , 가 .
- 6a 6d .
- 7 11 .
- 12 , .
- 13 가 .

가

1

3 (301) (302) (308) 1 (302) (303) (307) (308) 2 (305) (303, 305) (311 312) 가 (304)가 (304) 1 (321) (304)가 2 (304) (3) (305) (307) (312) 가 2 가 (304) (312) (307) (303 305) (302) 6a 6d 가

4 3 (311, 312) (312) (307) (315) () 12)가 () , 가 (3)

4 (302) (314 316), (318) (311 320) (320) (308) (311) (307) (311) (314) (318) (314, 315) (304)가 가 (322) 1 2 가

5a 5b (501) (5) (502) 가 () (513) (504) w w

$$\cos\theta_c = \frac{\gamma_{sv} - \gamma_{sl}}{\sigma}$$

가 가 sv sl 가

w 가 , 6b

w c ,

가 , $w > c$ 가 , 6c 6d
 , 가 , 가 ,
 가 , 가 , 가
 , =0 =0.1rad , +0.1 =1 , 2-D
 +1 가 .
 , 5a 5b (504) 가
 가 (502) .
 7 (701) (702) (702) (701) (702)
 , (707) .
 4 (305) 가 - (705) 가 - (705)
 . 가 . 가
 8 (801) (802) (802) (807) (804)가
 , - (803) (802) - (803) (803) (803)
 9 (901) (902) (902) (904)가
 - (903) (902) - (903) (907)
 10 (1001) (1002) (1010) (1007) (1004)가 (1010)
 , (1002) (1010)
 11 (1101) (1102) (overhanging)
 , -
 12 (1201) (1201) 25 μ m (1207) 가
 1202)가 가 (1204)가 ,
 가 .
 13 (1301) (1302) (1312) ,
 (1302) (1314) (1302)
 . ,
 6, 11, 6,6 10,10
 가 ,
 가 CF4 가 ,
 , (1312) (1314)
 (1312) 가 (1301)
 ,
 , (1314) 14 (1415)
 , (1402) (1414) 14

가 (1414) .
 , (lotus leaf structure) ,
 (1415) (1402) . (1402)
 1402) () .
 () ()
 200-300mm , 3 , 100-66mm .
 () , , 가 , .
 15 (1502) , (1501) (1504)가 ,
 (1510) 13
 (1502) (1512) ,
 (1502) (1514) .

가

, .
 , ()가 가 가 LE
 D 가 가
 , 가 가
 , 가

(57)

1.

,
 ,
 가 ,
 가 가
 ,
 가 (107, 307, 707, 807, 907, 1007, 1207)
 (102, 302, 502, 602, 702, 802, 902, 1002, 1102, 1202, 1302, 1402, 1502)
 , 가

(imprint) .

2.

1 , 가 ,
 (101, 301, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301, 1501) .

3.

1 ,
 , .

4.

1 , (moulding form) ,
 가 가

5.

1 , ,
가 가
.

6.

1 , ,
가 가
.

7.

1 , 가 -
(1314, 1414, 1514)
.

8.

1 ,
,
.

9.

,
,
(101, 301, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301, 1501),
,
,
1 1 ,
2 2 ,
1 2 (107, 307, 707, 807, 907, 1007, 1207),
7, 1207) 1 , (102, 302, 502, 602, 702, 802, 902, 1002, 1102, 1202, 1302, 1402, 1502)
1502) ,
.

10.

9 , 가
가 , 가
.

11.

가 (101, 301, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301, 1501)
,
(102, 302, 502, 602, 702, 802, 902, 1002, 1102, 1202, 1302, 1402, 1502)
,

(107, 307, 707, 807, 907, 1007,

1207)

12.

11

,

,

13.

11

,

14.

11

,

1 (307)

2(308)

1

2

가

1

(31

1, 811, 911, 1011)

2

(314)

(318)

,

2

1

(315)

(305)

,

1

2

2

,

2

1

1

15.

14

,

90 °

()

1

2

,

16.

11

,

(1415)

10 μ m²1.6 μ m**17.**

11

,

10 μ m²**18.**

11

,

5 μ m²**19.**

11

,

1 μ m²**20.**

11

,

10 μ m**21.**

20

,

20 μ m**22.**

가

(101, 301, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301, 1501)

(102, 302, 502, 602, 702, 802, 902, 1002, 110

2, 1202, 1302, 1402, 1502)

가

가 ,

(107, 307, 707, 807, 907, 1007, 1207)

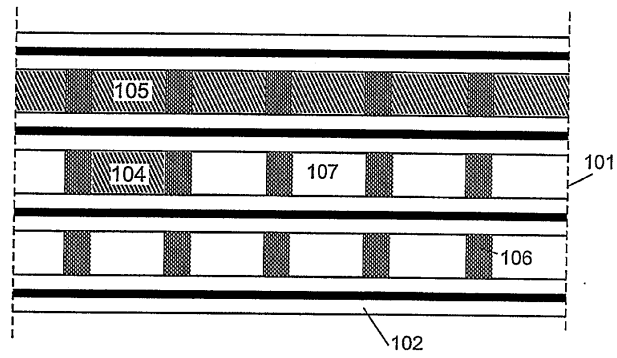
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,

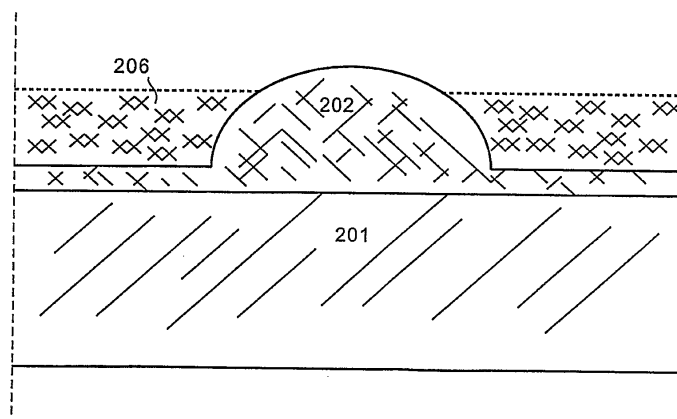
,

가

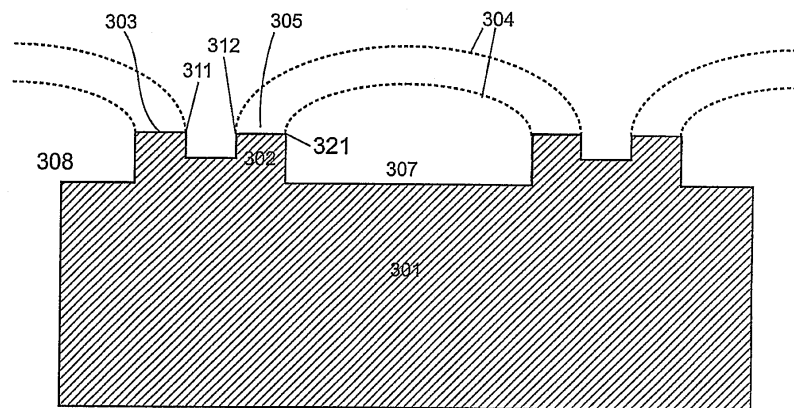
1

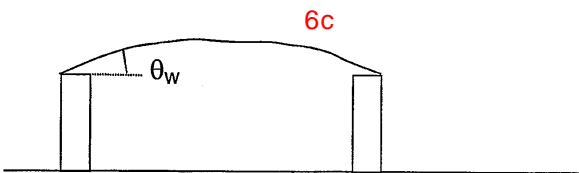
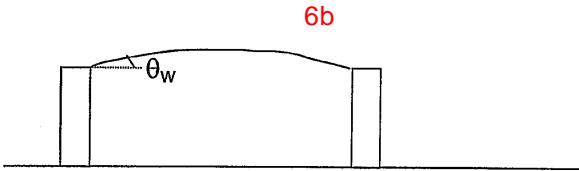
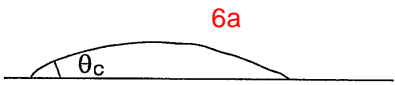
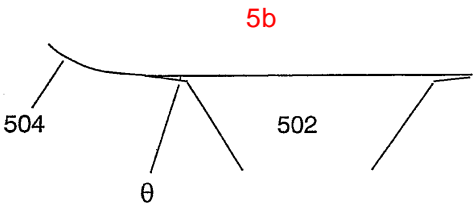
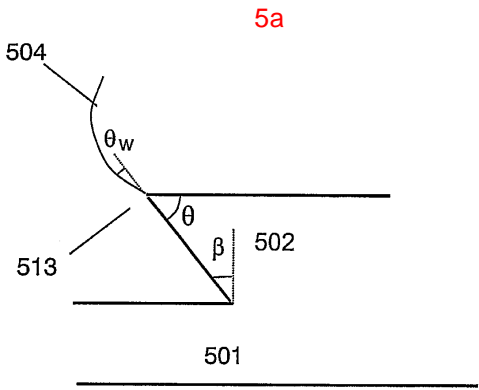
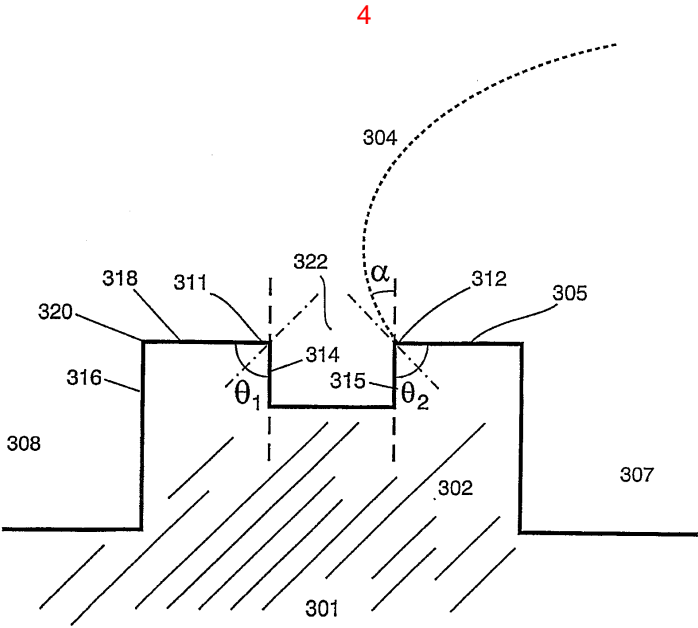


2

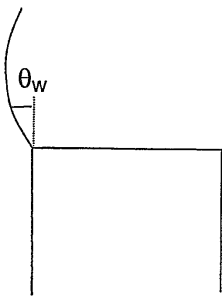


3

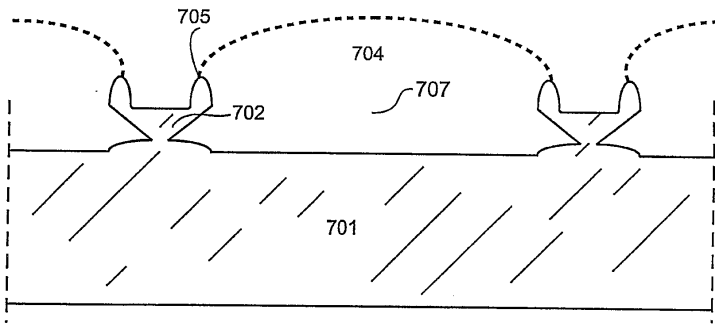




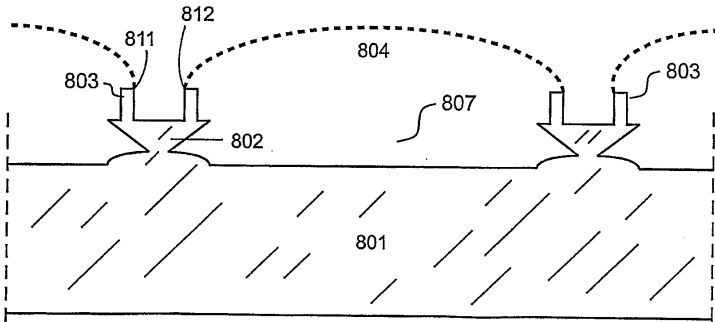
6d



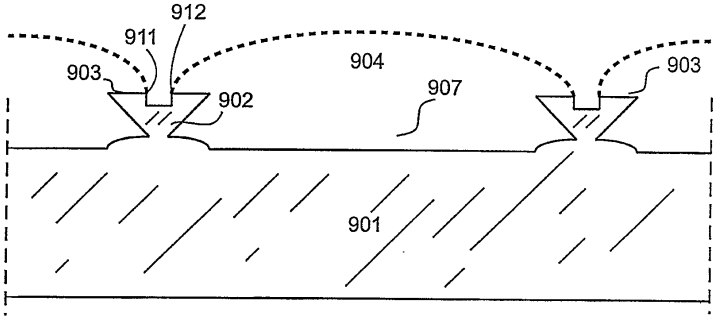
7

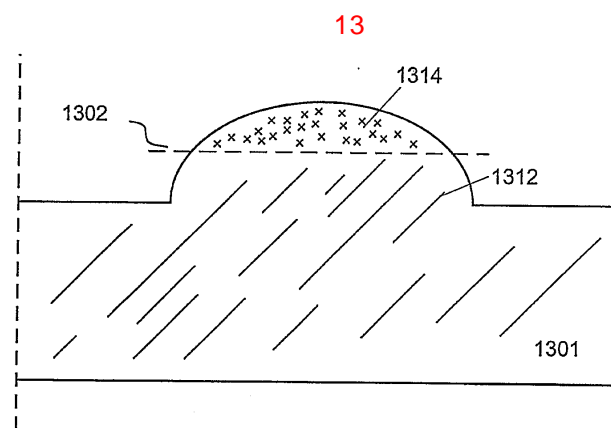
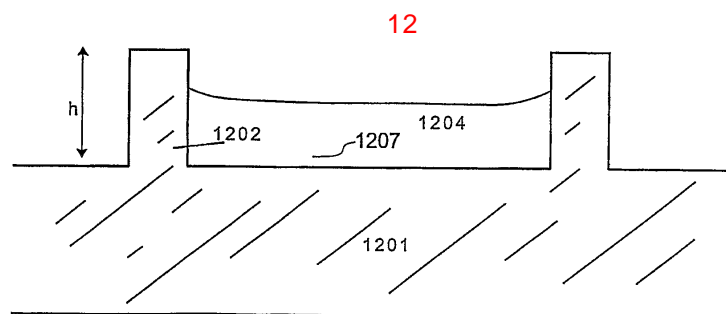
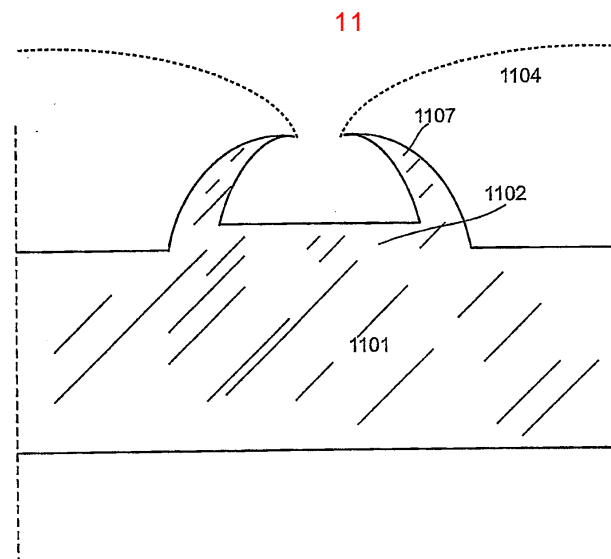
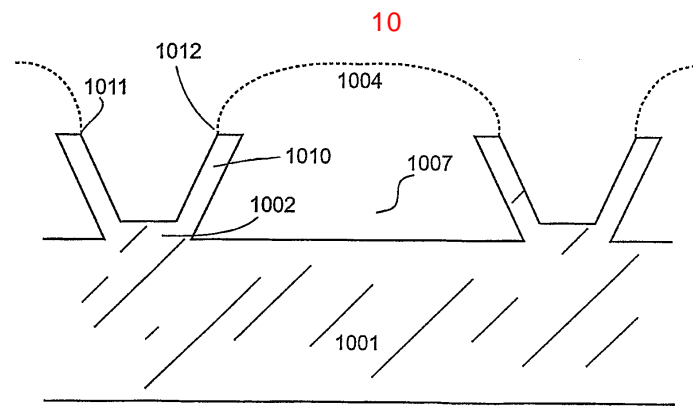


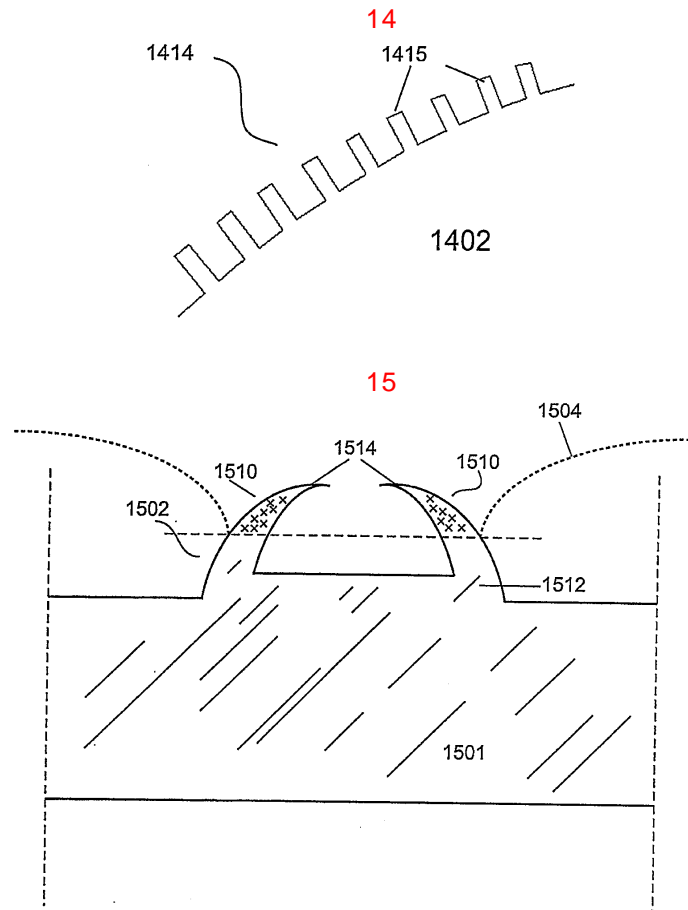
8



9







| | | | |
|----------------|---|---------|------------|
| 专利名称(译) | 用于OLED矩阵的喷墨印刷的结构化聚合物基材 | | |
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| 发明人 | 듀이네벨트파울루스씨. 디직스만요한에프. | | |
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| CPC分类号 | H01L51/0014 H01L51/52 H01L51/0005 H01L27/3246 H01L27/3283 H01L51/0096 | | |
| 代理人(译) | 李昌勋 | | |
| 优先权 | 2002075423 2002-02-01 EP | | |
| 外部链接 | Espacenet | | |

摘要(译)

保持用于接收和保持印刷液体的像素矩阵的基板由可变形的柔性聚合物材料制成，其允许凸起结构（屏障）分离基板材料本身内的像素。作为示例，这使得能够制造用于聚LED显示器的矩阵基板的许多新颖制造方法。根据本发明的材料和制造方法进一步消除了现有技术材料和制造方法中已知的设计自由度的许多限制。这导致屏障轮廓具有突出结构，改进的分辨率和新的尺寸范围的可能性。

