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(12) (A)

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H05B 33/22  
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H01L 51/40

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2004 07 30  
(86) PCT/IB2003/000307 (87) WO 2003/065474  
(86) 2003 01 29 (87) 2003 08 07

(30) 02075423.0 2002 02 01 EP(EP)

(71)

(72) 5656 6

5656

(74)

## (54) O L E D

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

가

가

가  
가  
,

가 . . . . .  
가 . . . . .  
( . . . . . ) . . . . .  
가 . . . . .  
가 . . . . .

가 가 . ,  
가 가  
가 가  
가 가

가 가 가 ( ) 가 10 $\mu$ m 가 가

$$1, \quad \quad \quad ( \quad , \quad , \quad \quad \quad ) \quad ,$$

-  $\mu\text{m}$

가

(backbone)

35 가

가

, 가

가

20 가

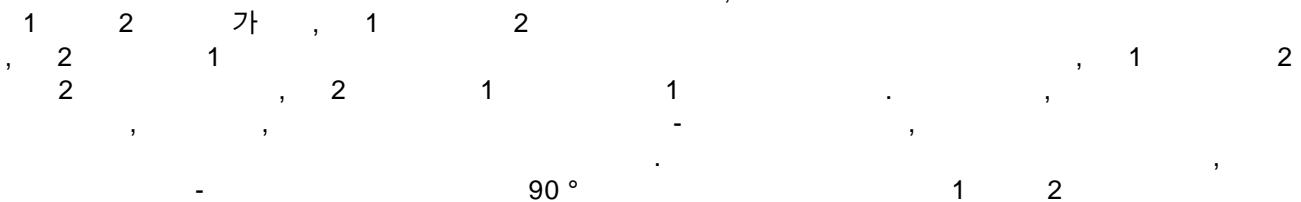
가가

가

).

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

가

(R<sub>filling</sub>)

가

10μm, 5μm, 1μm 0.5μm

/ 가 가

가

가

가 . 가 ,

40 $\mu$ m , 20 $\mu$ m , 10 $\mu$ m , 5 $\mu$ m .

가 2μm, 5μm, 10μm, 20μm, 30μm, 50μm 가

10  $\mu\text{m}$ , 5  $\mu\text{m}$       2.5  $\mu\text{m}$       , 20  $\mu\text{m}$

3/4

가  $20\mu\text{m}$  , 10

( LED)  
가

1

2 1 가

3

4 3 기

5a , 가

5b . 가

6a

6d

7 11

12



가

1

가

5a 5b . . . , , ( . . . ) (513) (501) (5)  
02) 가 . . . .

5a (502) , (504) w . w  
(513)

$$Cos\theta_c = \frac{\gamma_{sv} - \gamma_{sl}}{\sigma} \quad , \quad \begin{matrix} c \\ - \end{matrix} \quad \begin{matrix} 가 \\ . \end{matrix} \quad \begin{matrix} 가 \\ , \end{matrix} \quad \begin{matrix} , \\ 가 \end{matrix} \quad \begin{matrix} , \\ sv \end{matrix} \quad \begin{matrix} , \\ sl \end{matrix} \quad \begin{matrix} - \\ 가 \end{matrix}$$

w 가 . , 6b

6c	6d
가	가
가	가
가	가
가	가
5a (502)	5b (504)
7 (707)	7 (701)
4 (305)	7 (702)
8 (803)	7 (702)
9 (903)	8 (801)
10 (1002)	8 (802)
11 (1101)	9 (902)
12 (1201) 가 (1204)가	9 (903)
13 (1314)	10 (1001)
1302 ,	10 (1002)
1302 ,	10 (1007)
1302 ,	10 (1004)가
1302 ,	10 (1010)
13 (1301) (1302)	11 (1102)
13 (1314)	12 (1201) (1207)
13 (1301) (1312)	12 (1201) (1207)
13 (1314)	13 (1302) (1312)
13 (1314) (1402)	14 (1414)
13 (1314) (1402)	14 (1415)

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) 74

(imprint)

2

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

3.

1

4

1 (moulding form)

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

,

7, 1207)  
1502)

1

,

2

(107, 307, 707, 807, 907, 100

(102, 302, 502, 602, 702, 802, 902, 1002, 1102, 1202, 1302, 1402,

10.

9

가

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)

11.

가

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

**12.**

11

,

,

**13.**

11

,

**14.**

11

,

1, 811, 911, 1011)

2

1

2

2

1 (307)

2(308)

1

2

(314)

(315)

2

(305)

1

가

(318)

1

,

1

(31

**15.**

14

,

90°

( )

1

2

,

**16.**

11

,

(1415)

$10\mu\text{m}^2$

$1.6\mu\text{m}$

**17.**

11

,

$10\mu\text{m}^2$

**18.**

11

,

$5\mu\text{m}^2$

**19.**

11

,

$1\mu\text{m}^2$

**20.**

11

,

$10\mu\text{m}$

**21.**

20

,

$20\mu\text{m}$

**22.**

가

,

(101, 301, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301, 1501)  
(102, 302, 502, 602, 702, 802, 902, 1002, 110

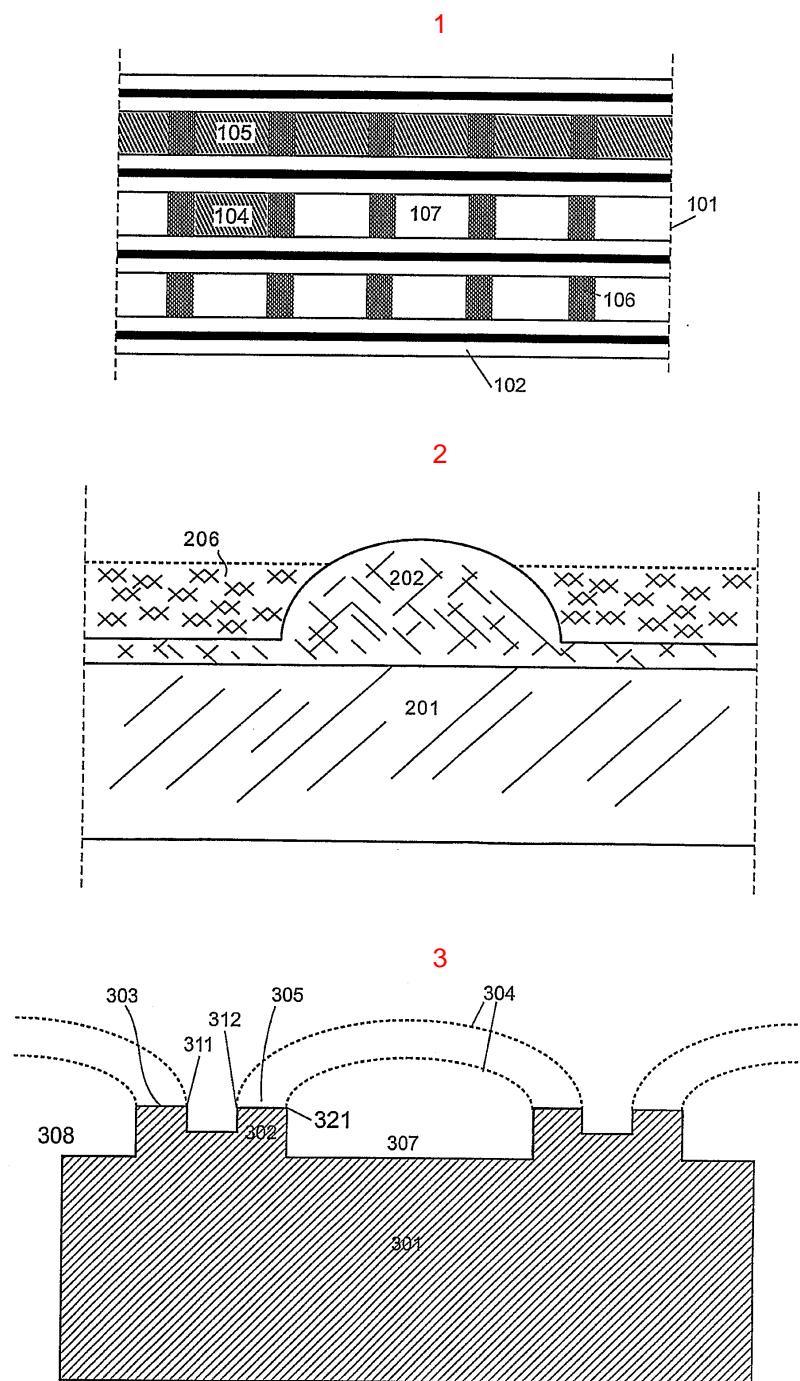
2, 1202, 1302, 1402, 1502)

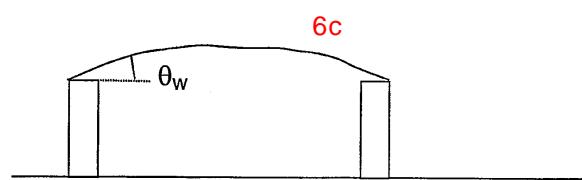
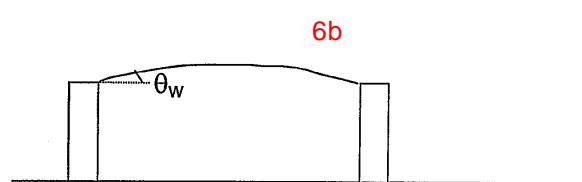
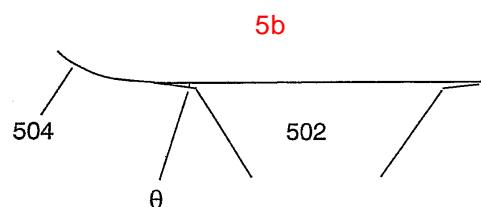
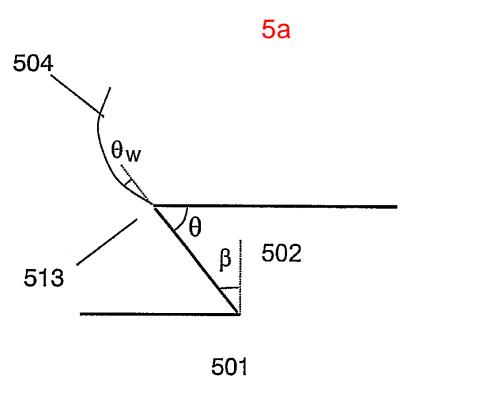
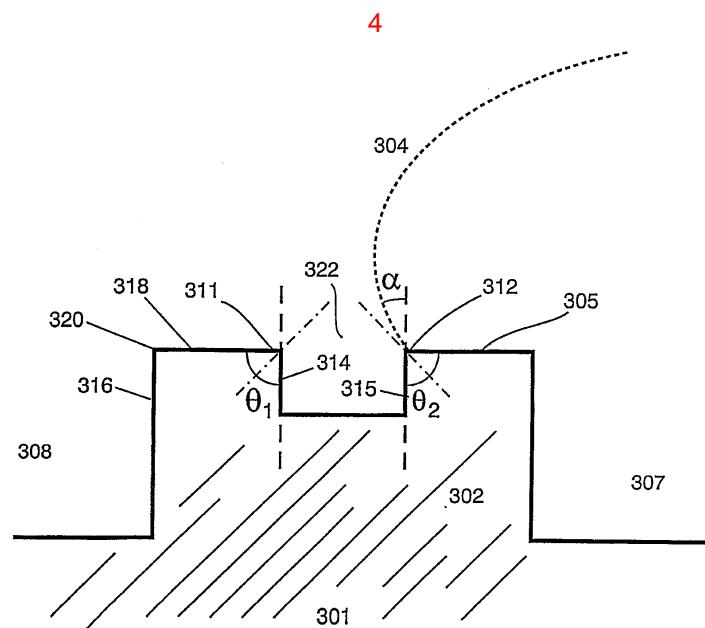
가

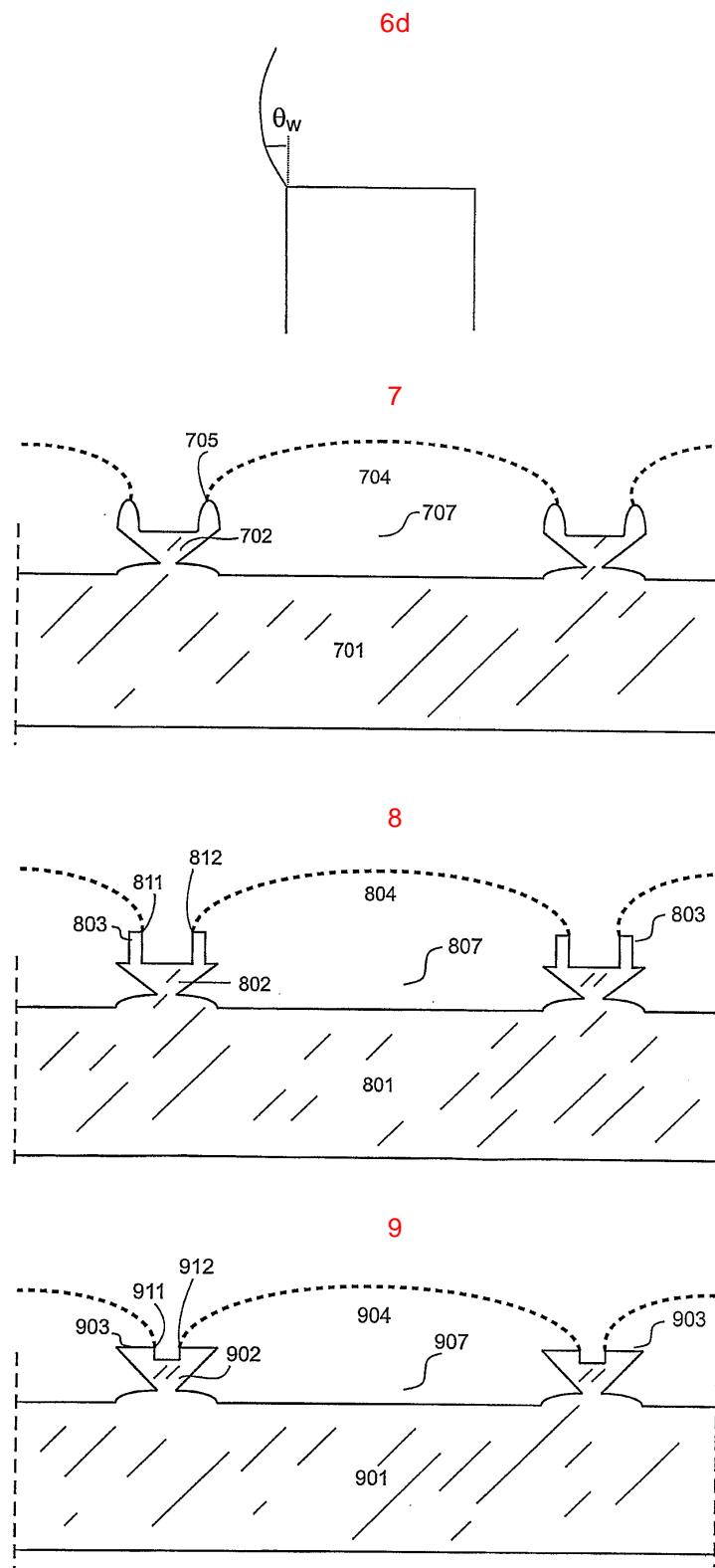
(107, 307, 707, 807, 907, 1007, 1207)

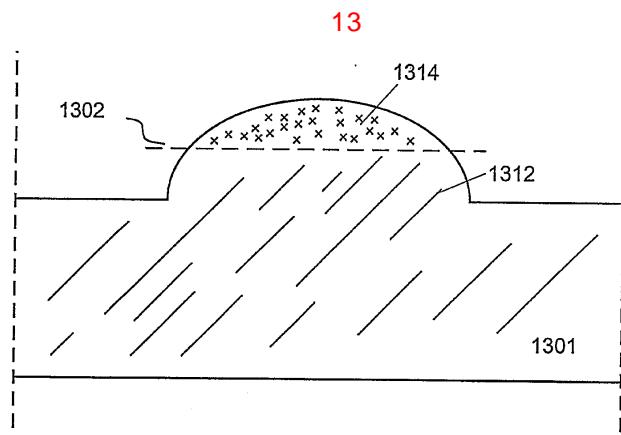
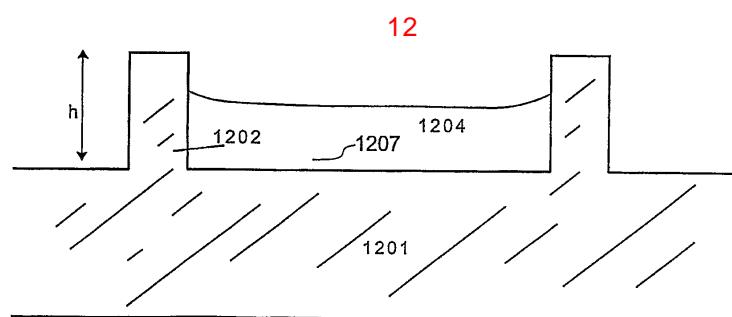
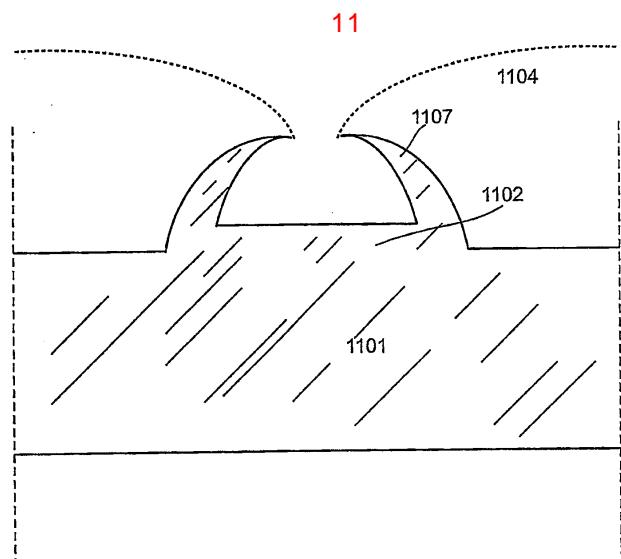
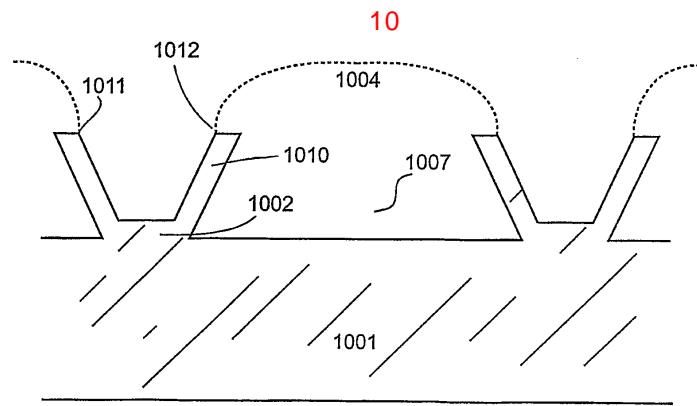
,

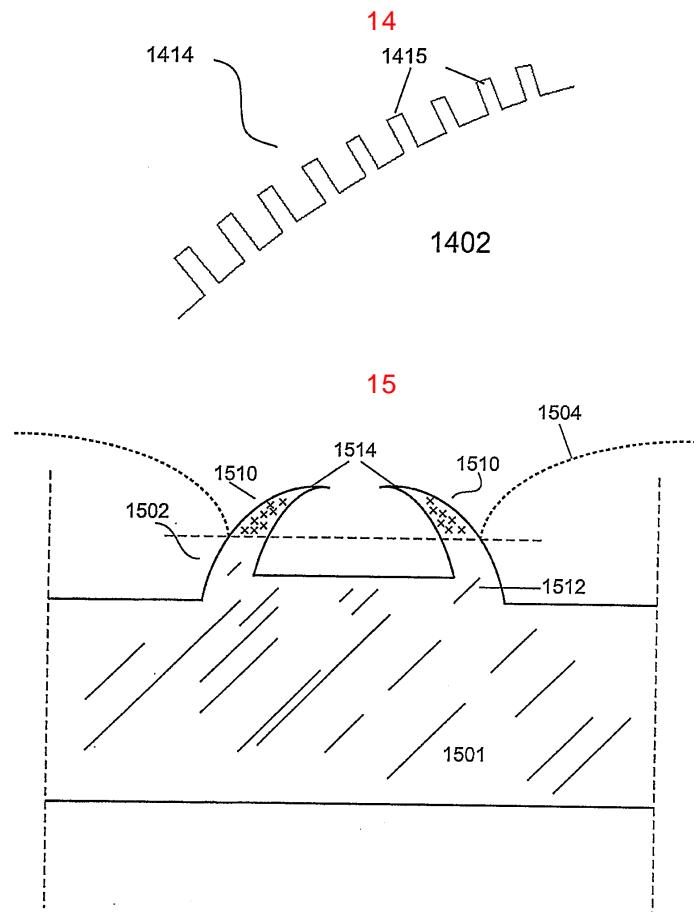
가











专利名称(译)	用于OLED矩阵的喷墨印刷的结构化聚合物基材		
公开(公告)号	<a href="#">KR1020040081164A</a>	公开(公告)日	2004-09-20
申请号	KR1020047011863	申请日	2003-01-29
[标]申请(专利权)人(译)	皇家飞利浦电子股份有限公司		
申请(专利权)人(译)	科宁欣克利凯恩菲利普斯日元.V.		
当前申请(专利权)人(译)	科宁欣克利凯恩菲利普斯日元.V.		
[标]发明人	DUINEVELD PAULUS C DIJKSMAN JOHAN F		
发明人	듀이네벨트파울루스씨. 디직스만요한에프.		
IPC分类号	H01L51/50 H01L51/00 H05B33/22 H05B33/10 H01L51/52 H05B33/12 H01L27/32 H01L51/40 H05B33/02		
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	<a href="#">Espacenet</a>		

#### 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。

