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(43)

2003-0067998
2003 08 19

(21) 10-2002-0007774
(22) 2002 02 09

(71) .
20

(72) 2 109-30

(74)
:

(54)

1, 2
가 1, 2
1, 2
1, 2
.

4

1
.

2 1 , 1 2
.

3a 3j .

4 .

5a 5g 4 .

6 .

7a 7g 5

8 7a 7g 1 4

9a 9b 1, 2

10a 10f

100: 110,130: 1, 2

120: 1 140:

(matrix)

(integrated circuit : IC)가

(color filter)

1

가

1

가

가

가
가

, (scribe) , 가 (break) .

1 .

1 , (10) (13) , (13)

(14) (14) (15) (2) (15) (1) 가 (13)

13) , (15) (

가 , (13) (1) 가

가 가 , ,

13) (2)

(1)

(cell-gap) , (13) (1) (2) -

(1) (2) () ,

2 (1) 1 (2) 2

2 , (1) (2)

가 1 (14) (15)가 (1) (2)

1 , 2 (30) (2) 1 (20) (

1) (dummy region, 31) .

1, 2 (20,30) , (model)

(32)

(1) 1 (20) (2) 2 (30)

(2) (31) , 2 (30)

(32)

3a 3j

3a 1 (20) 2 (30) 1 (33) (loading)

3b 1 (20) 1 (33) , (

41) (42)

3c 1, 2 (20,30) 90 ° 1 (33)

(41) 1 (20) 2 (43)

, 3d 1, 2 (20,30) 2 (34) , 2
 (34) 2 (30) 1 (20) (crack) (44) 2 2 (43)

, 3e 2, 1 (30,20) 90 ° 2 (34)
 1 (20) , (44) 1 (42) 2 (30)

, 3f 2, 1 (30,20) 3 (35) , 3 (35)
 , (45) 2 (30) 3 (46)

, 3g 2, 1 (30,20) 90 ° 3 (35)
 , (45) 2 (30) 4 (47)

, 3h 2, 1 (30,20) 4 (36) , 4
 (36) 1 (20) 2 (30) (48) 4 4 (47)

, 3i 1, 2 (20,30) 90 ° 4 (36)
 2 (30) , (48) 3 (46) 1 (20)

, 3j 1 4 (42,43,46,47) 1, 2 (20,30)
 (49) (unloading)

4 4 2 4

, 2 2 가

1, 2 1, 2 1, 2 1, 2
 가 1, 2 ; 1, 2 90 °
 1 ; 2 3, 4
 1, 2 가 1, 2 2 2

1, 2

, 1, 2

2 1, 2 1, 2 1 1, 2 ; 1, 2
1, 2 90° 1, 2 1, 2 3, 4 1, 2
2 2 3, 4 2 3, 4 1, 2
2 2
.
,
1, 2 1, 2 1, 2 1, 2 1, 2 1, 2 1, 2
1 가 1, 2 1 ; 1 1, 2 90°
1, 2 1, 2 2 ; 2 2 가
1, 2 2
.
,
1, 2 1, 2 1, 2 1, 2 1, 2 1, 2 1, 2
1, 2 1, 2 90° 1, 2 1, 2 1, 2 1, 2 1, 2
1, 2 3, 4 2
;
3, 4 1, 2 2
.
.
4
1, 2 (100) ; 1, 2 1, 2 1, 2 1, 2
1, 2 1, 2 (110) ; 1, 2 90° 1, 2 1, 2
2 (120) ; 1, 2 2 가 1, 2 2
2 (130) ; 1, 2 (110,130) 2
2 (140) .
, 5a 5g 4
.
, 5a (100) (103,104) 1 (105) (align mark, 106)
.
1, 2 (103,104) 2 (104) 1, 2 (103,104)
1 (103) , 가
.
, 5b 1 (110) 1, 2 (103,104) 1 (105)
2 (111) , 1, 2 (105,111)
1 (112) 1 (113) 1, 2 (103,104) 1
(114,115) .
1 (103) 2 (104)
1 2
.
.
.

1 (112) (R1) 1 (103) 1 (114)
 , 1 (113) (R1) 1 (112) 2
 (104) 1 (115) .
 , 가 (, (113)
 1, 2 (103,104) 1 (112) 1 (114,115)
 .
 1, 5c 1 (110) 1 (114,115)
 1 (116) 가 1, 2 (103,104) .
 1 (116) 1 (112) 1 (114)
 가 1, 2 (103,104) 1 (114,115) .
 , 1 (116) 1 (112) 1 (103) 1 (114)
 , 1 (112) 1 (114) 가
 , 1 (114) 가 .
 , 1 (116) 2 (104) 1 (115)
 1, 2 (103,104) 1 (114,115) .
 가 1 (116) , 1 (103)
 (particle)
 , 5d (120) 1, 2 (103,104) 90 ° .
 , 5e 2 (130) 1, 2 (103,104)
 3, 4 (131,132) 2 (133) 2 (134) 1, 2 (103,104) 3, 4 (131,132)
 (135,136) 2 .
 5b 2 (133) 2 (134) 1 (112) 1 (113)
) (R1) 1, 2 (103,104) 2
 (135,136) 2 , (134) 1, 2 (103,104) 2
 2 (133) 2 (135,136) .
 , 5f 2 (130) 2 (135,136) 2
 (137) 가 1, 2 (103,104) .
 5c 2 (137) 1 (116) 2 (133)
 2 (135) (135) 가 1, 2 (103,104)
 2 (135,136) , 2 (133) 1 (103) 2
 (135) 가 2 (135) 가 ,
 , .
 , 5g (140) 1, 2 (114,115,135,136)
 .
 (140) 2 (150) (100) 90 ° , 5g
 90 °
 , .

, 5g (140) 1 (160)

2 가 1, 2 1, 2 1, 2 1, 2 1, 2

1, 2 1, 2

1, 2 1, 2

2 1, 2

6 1, 2

1, 2 1 (200) ; 1, 2 1 1, 2

1 2 1, 2 1, 2 1, 2

1 (210) ; 1, 2 1, 2 90° 1 (220)

2 1, 2 3, 4 2 3, 4 1, 2 (230) ; 1, 2 (240)

10,230) (240)

, 7a 7g 6

, 7a (200) 1, 2 (203,204) 1 (205) (206)

1, 2 (203,204) 2 (204) 1, 2 (203,204)

1 (203) 가

, 7b 1 (210) 1, 2 (203,204) 1 (205)

2 (211) 1 (213) 1 (214) 1, 2 (212) 1, 2 (203,204) 1, 2 (205)

211) (215,216) 1 (213) 1 (214) 1, 2 (203,204) 1

1 (203) 2 (204)

1 (203) 1 (215)

1 (213) (R1) 1 (203) 1 (215)

1 (214) (R1) 1 (213) 1 (215)

(204) 1 (216)

가 (213) 1 (214)

1, 2 (203,204) 1 (215,216)

, 7c 1 (210) 1, 2 (203,204) (212)

1, 2 (205,211) 1 (215,216) 1, 2
 (203,204) .
 (212) 1, 2 (203,204) 1, 2 (205,211) 1, 2 (205,211)
 , 1, 2 (203,204) 1, 2 (205,211) 1, 2 (205,211) 1, 2 (203,204)
 1, 2 (203,204) 1, 2 (205,211) 1, 2 (205,211) 1, 2 (203,204)
) .
 , (312) (212) 8 1, 2 (305,311)
 (212) , 1, 2 (203,204) (203,204) (dot) ,
 .
 , 7d 1 (220) 1, 2 (203,204) 90 ° .
 , 7e 2 (230) 1, 2 (203,204)
 3, 4 (231,232) 2 (234) 2 (235) (233) 3, 4 (231,23
 2) (236,237) 2 (234) 2 (235) 1, 2 (203,204) 2
 .
 7b 2 (234) 2 (235) 1 (213) 1 (214
) (R1) 1, 2 (203,204) 2
 (236,237) ,
 2 (234) 2 (235) 1, 2 (203,204) 2
 (236,237) .
 , 7f 2 (230) 1, 2 (203,204) (233)
 3, 4 (231,232) 2 (236,237) 1, 2
 (203,204) .
 3, 4 (231,232) (233) 1, 2 (205,211)
 (212) , 8 (312)
 .
 , 7g (240) 1 ,2 (215,216,236,237)
 .
 (240) 2 (250) (200) 90 ° , 7g
 90 °
 ,
 , 7g (240) 1 (260)
 .
 2 3, 4 1 ,2 , 1, 2 1 2 1, 2
 1, 2
 , 1, 2
 1, 2
 2 1 ; 1, 2 2
 .
 , 1 9a 1, 2 (301,302) 1, 2 (30
 3,304) 1 (305) 1 (306) 1 (307)

, 1, 2 (301,302) 1 (307) 가 , 1, 2 (303,304) (309) .

2 (301,302) 2 (309) 9b 1, 2 (301,302) 1, 2 (303,304) 1 (305) 1 (306) 2 (308) , 1, 2 (301,302) 1 (307) 가 , 1, 2 (301,302) .

, 1, 2 (301,302) 1, 2 (301,302) (309) 1 2 .

, 가 1, 2 (301,302) , 1 2 (309) .

309) , 1, 2 (301,302) 가 2 (303,304) 1, 2 (301,302) 1, 2 (303,304) 가 .

10a 10f , .

, 10a (404) 1, 2 (402,403) (405) 1, 2 (402,403) 1 .

, 10b (406) 1 (407) 1 (404) 1, 2 (402,403) 1 (408) .

, 10c 1 (408) 1, 2 (402,403) (r obot grip, 409) (401) (405) .

1 (409) 1, 2 (402,403) (405) 1 (406) 1 (407) 1 (408) 1 (408) 가 .

, (409) 가 , 2 (sub motor) (403) 1 (402) , (409) 1, 2 (402,403) (405) , 가 1, 2 (402,403) (405) (409) .

, 10d 2 (410) (405) 1, 2 (402,403) 1 (404) .

, 10e (407) 1, 2 (402,403) 1, 2 (404,410) 2 (411) 1 (406) 1 .

, 10f 1, 2 (404,410) 2

(411) 1, 2 (402,403) .

1, 2 (404,410) 1 2 (406) 1, 2 (402,403) 1 (407) 2 (411) (

411) 가 .

가 1, 2 1, 2 , 1, 2 1 2 1, 2 1, 2

가 , 1, 2 , 1, 2 , 1, 2 가

가 , 1, 2 1 2 1, 2 1, 2

2 3, 4 1, 2 , 1, 2 1, 2 1, 2

가 .

가 1, 2

1, 2 1, 2 가 가 .

(57)

1.

, 1
1, 3, 4 ; 2
가 1, 2
.
90°

1, 2
1
가 1, 2 ;
1, 2
2

2.

1, 2
1 .
2

3.

1, 1 , 1 1 가 1
,
.
1

4.

1, 2 .

5.

$\begin{matrix} & & 1, & 2 \\ & & 1 \\ & & 90^\circ \\ & & 2 \end{matrix}$
 $\begin{matrix} & & 1 \\ & & 1, & 2 \\ & & 2 \end{matrix}$
 $\begin{matrix} & & 1 \\ & & 1, & 2 \\ & & 2 \end{matrix}$
 $\begin{matrix} & & 1 \\ & & 1, & 2 \\ & & 2 \end{matrix}$

6.

[illegible]

7.

6, 1 4 (dot)

8.

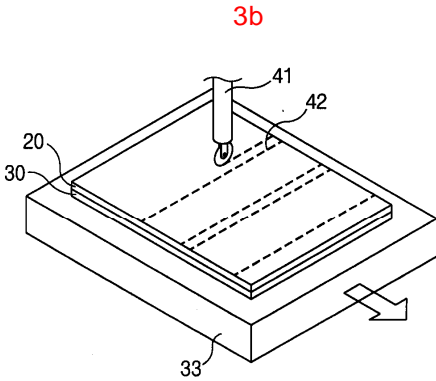
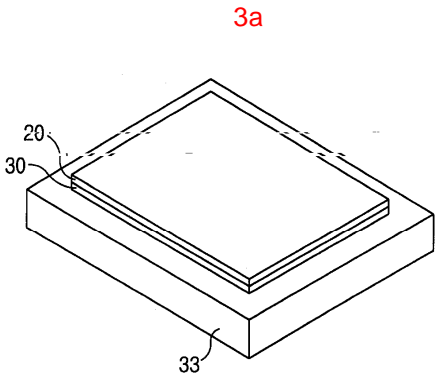
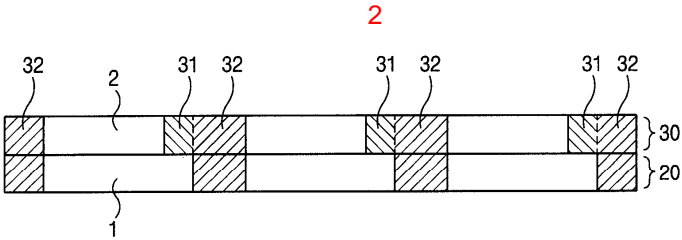
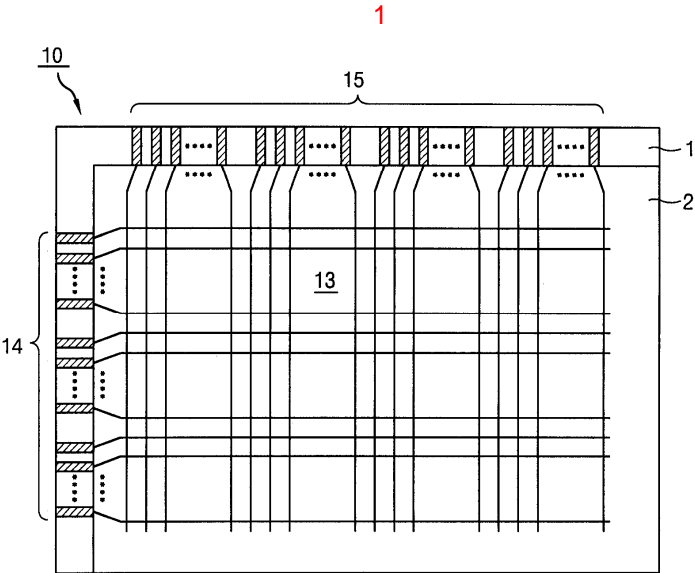
$\begin{matrix} & & 1, 2 & & 1, 2 & & & & 1, \\ 2 & & & & 1 & & & & \\ & 1 & & & 1 & & & & \\ & 1, 2 & & & & & 1, 2 & & \\ & & 3, 4 & & 1 & & 1, 2 & & 90^\circ \\ & & 2 & & & & 1, 2 & & \\ & 2 & & & 3, 4 & & & & 1, 2 \end{matrix}$

9.

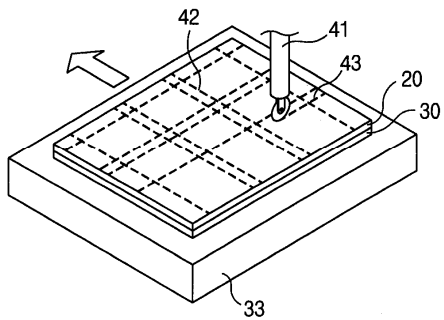
(robot grip)

10.

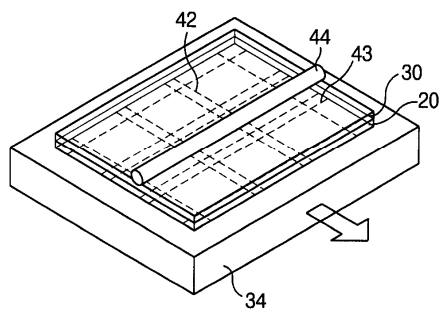
9, 1, 2, 1, 2가 1, 2



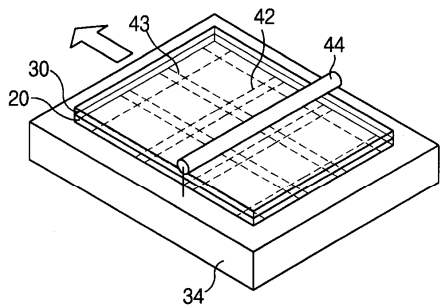
3c



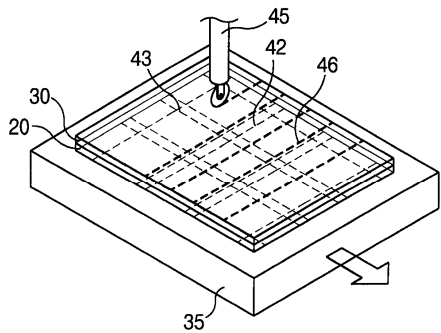
3d



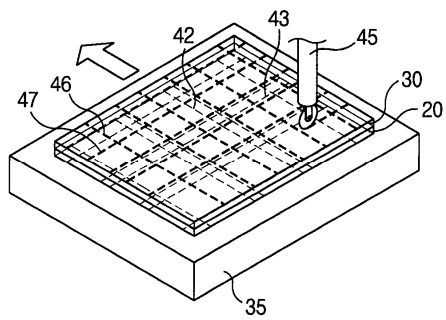
3e



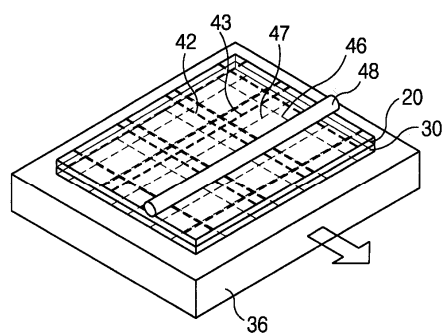
3f



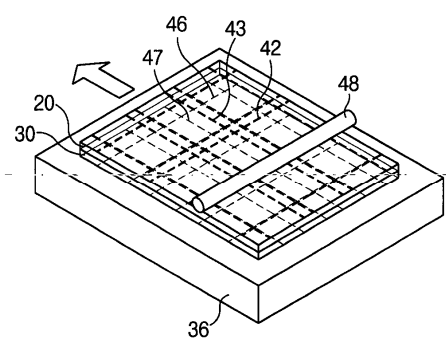
3g



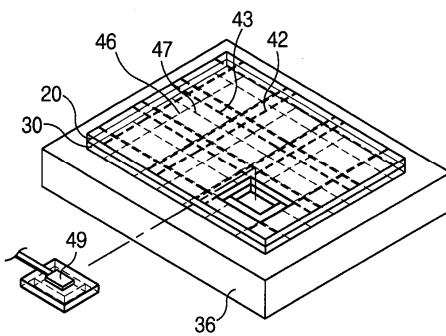
3h

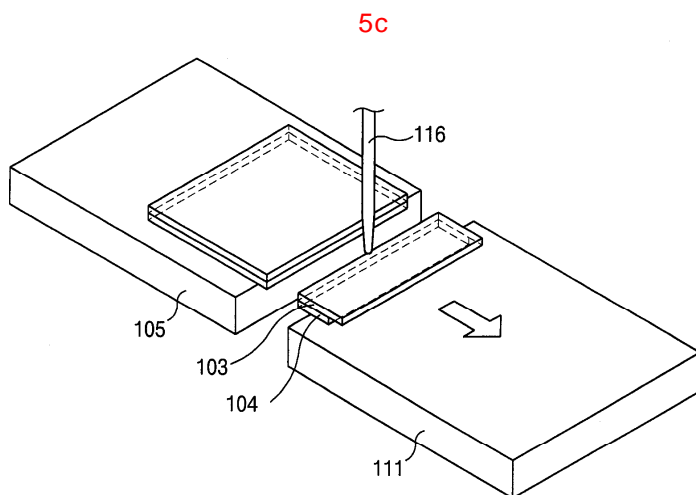
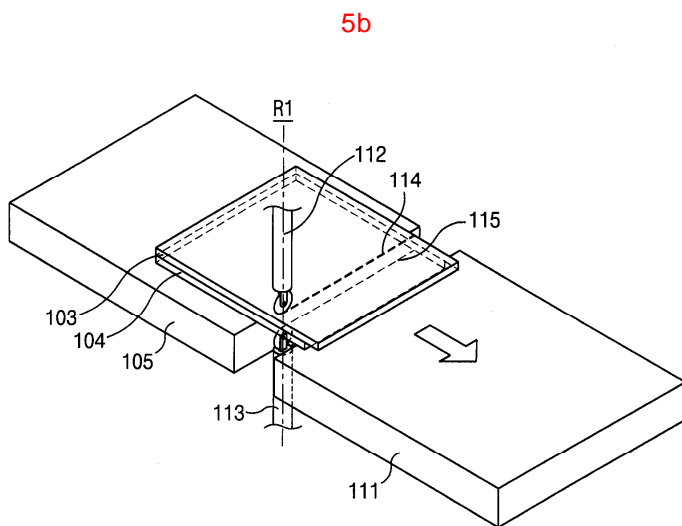
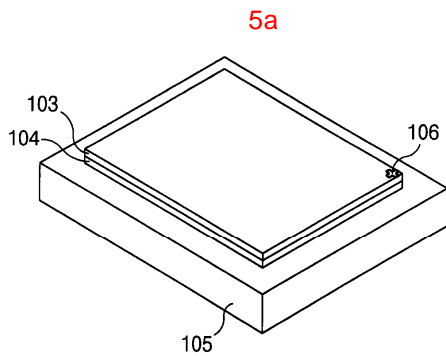
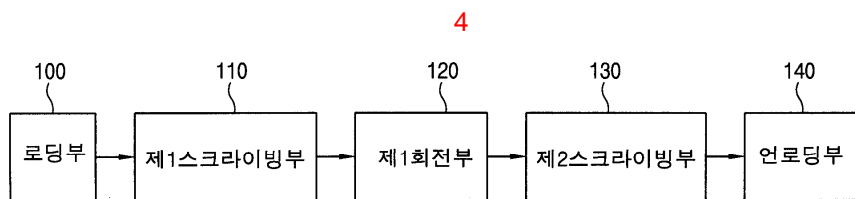


3i

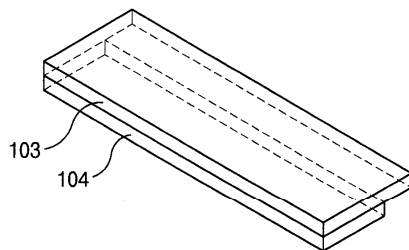


3j

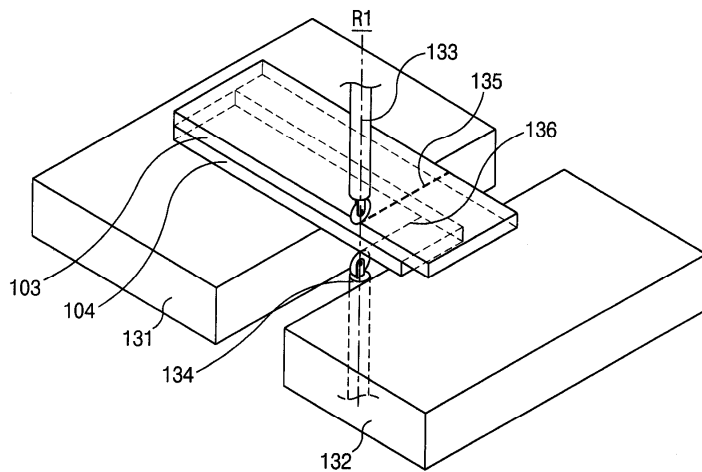




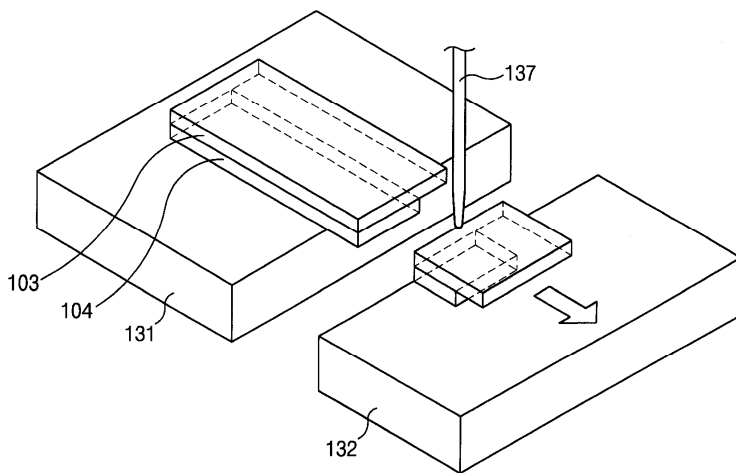
5d



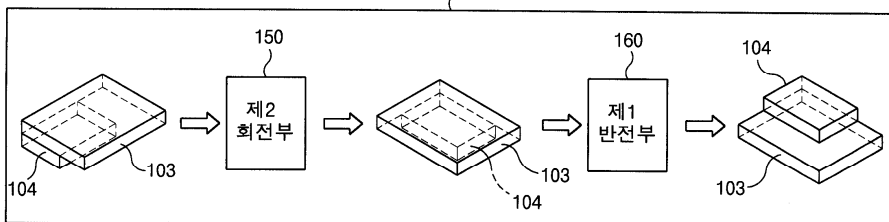
5e

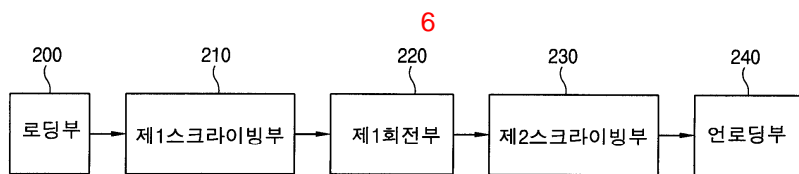


5f

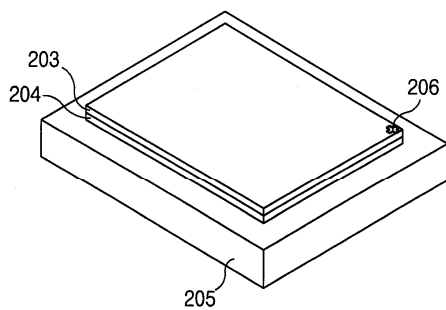


5g

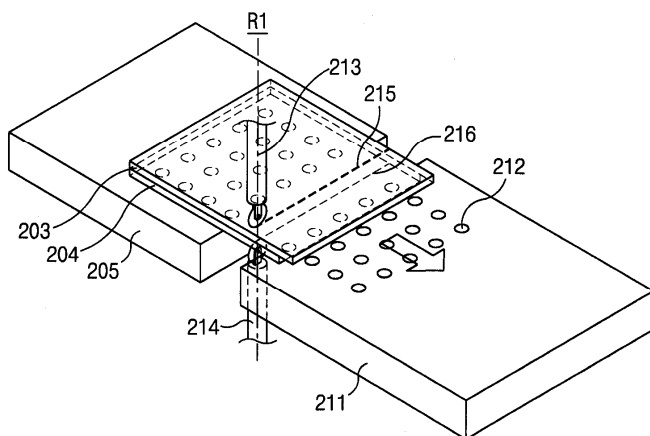




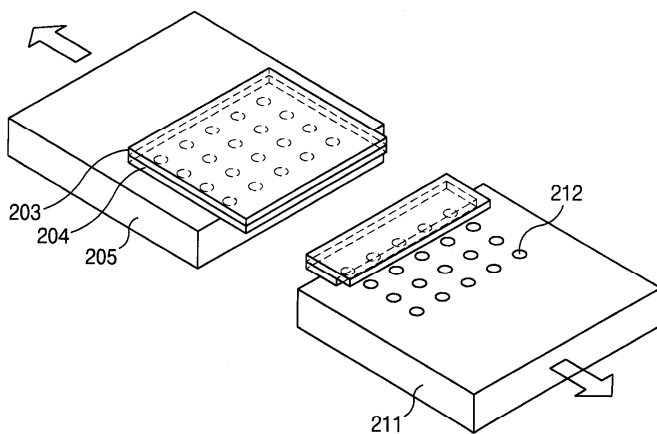
7a



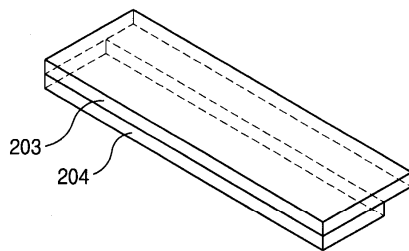
7b



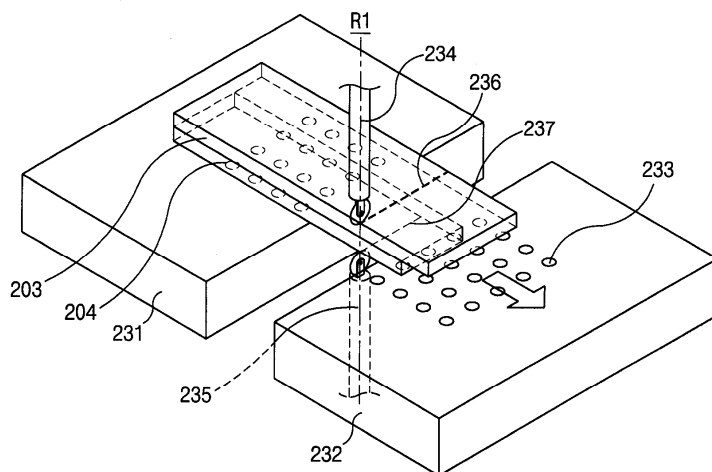
7c



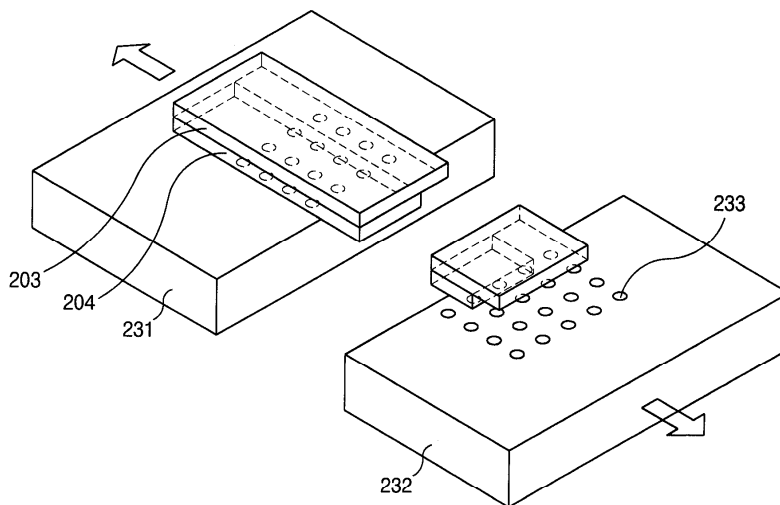
7d



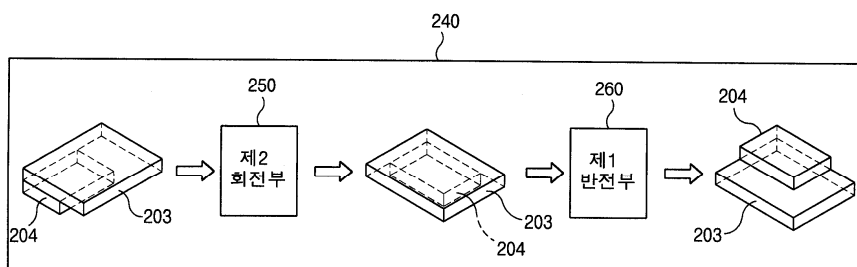
7e



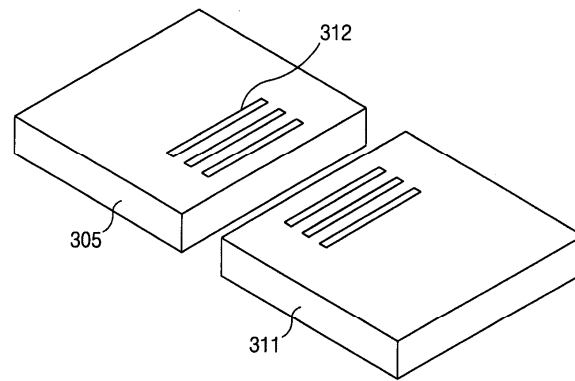
7f



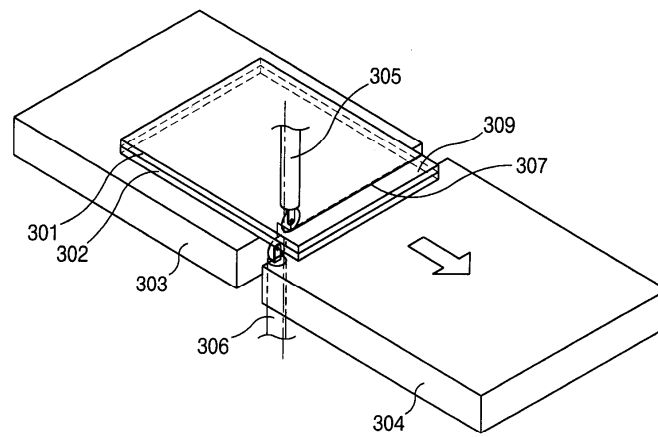
7g



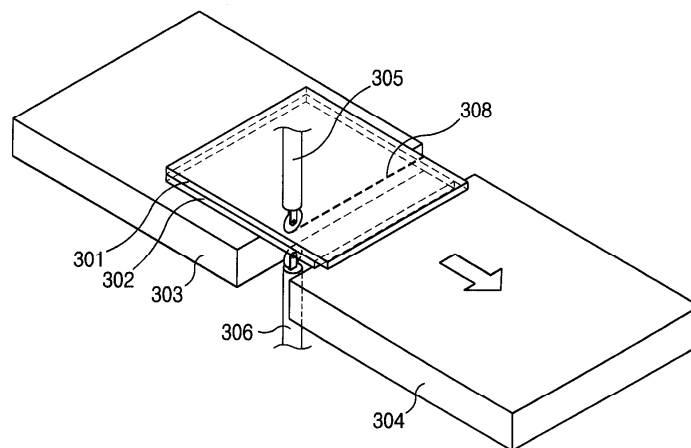
8



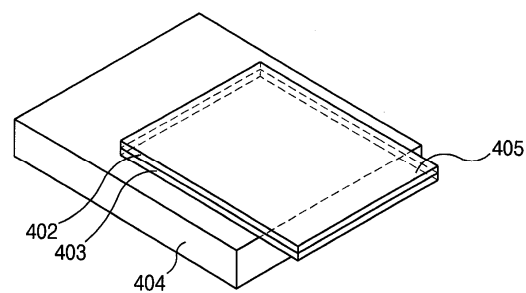
9a



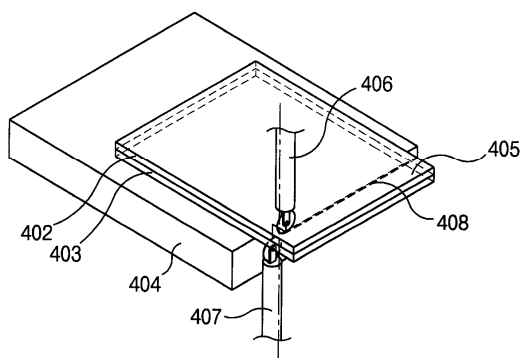
9b



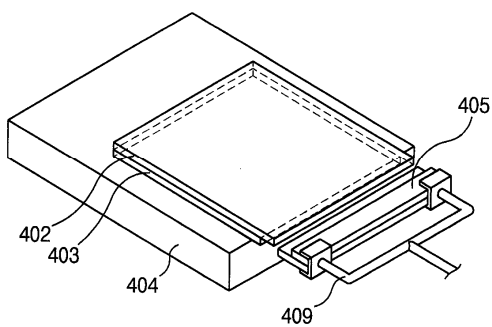
10a



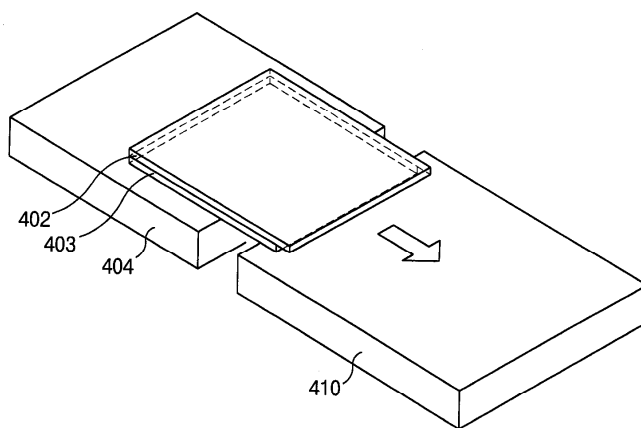
10b



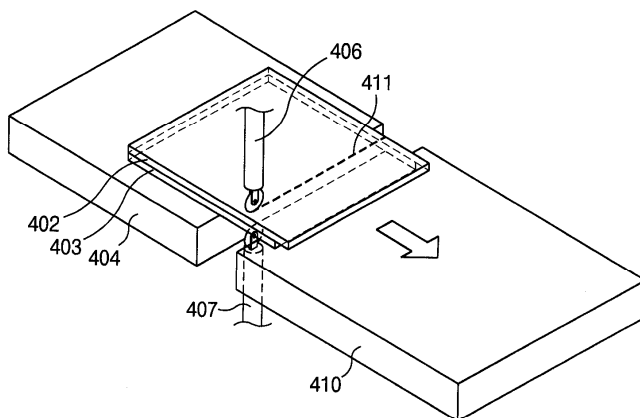
10c

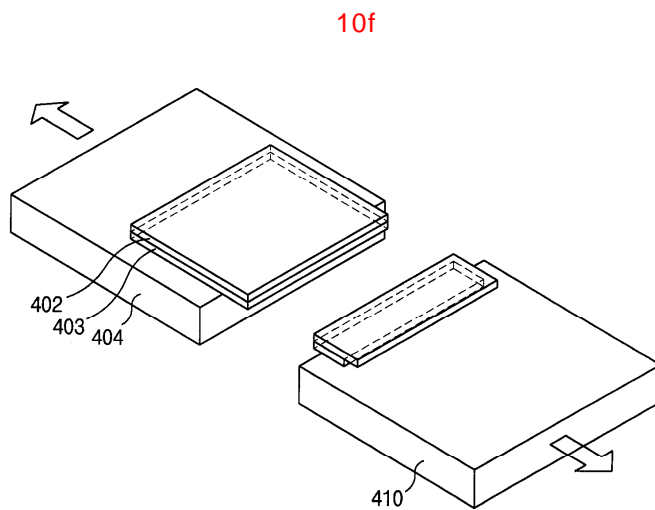


10d



10e





专利名称(译)	切割液晶面板的装置和方法		
公开(公告)号	KR1020030067998A	公开(公告)日	2003-08-19
申请号	KR1020020007774	申请日	2002-02-09
[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	SHIN SANGSUN 신상선		
发明人	신상선		
IPC分类号	G02F1/13 G02F1/1333 C03B33/07		
CPC分类号	C03B33/07 G02F1/133351 Y02P40/57 Y10T83/0378 Y10T225/325		
代理人(译)	PARK , JANG WON		
其他公开文献	KR100789454B1		
外部链接	Espacenet		

摘要(译)

本发明的目的在于提供一种单位液晶面板的锯切机，该锯切机在通过上轮和下层对所安装的第一和第二母板的表面进行上下同时划线后，通过切割预期线上的辊通过压力。轮子和形成切割预期线或它移动到成为第一和第二主板被吸收的桌子的方向并且切割第一和第二主板并且以这种方式它可以最小化划线所需的时间并且不需要分离第一和第二母板倒置或断开，并且它减少了倒置和断开所需的时间，并且可以优化设备的安装费用和安装空间及其方法。

