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2004 07 23
10-0441329
2004 07 13

(21)	10-2001-7011472	(65)	10-2001-0112314
(22)	2001 09 10	(43)	2001 12 20
	2001 09 10		
(86)	PCT/JP2001/000007	(87)	WO 2001/51985
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(81) : , , , , ,

(30) JP-P-2000-00004627 2000 01 13 (JP)

(73) 가 가
2 4-1

(72) 가 3 3 5 가 가

가 3 3 5 가 가

가 3 3 5 가 가

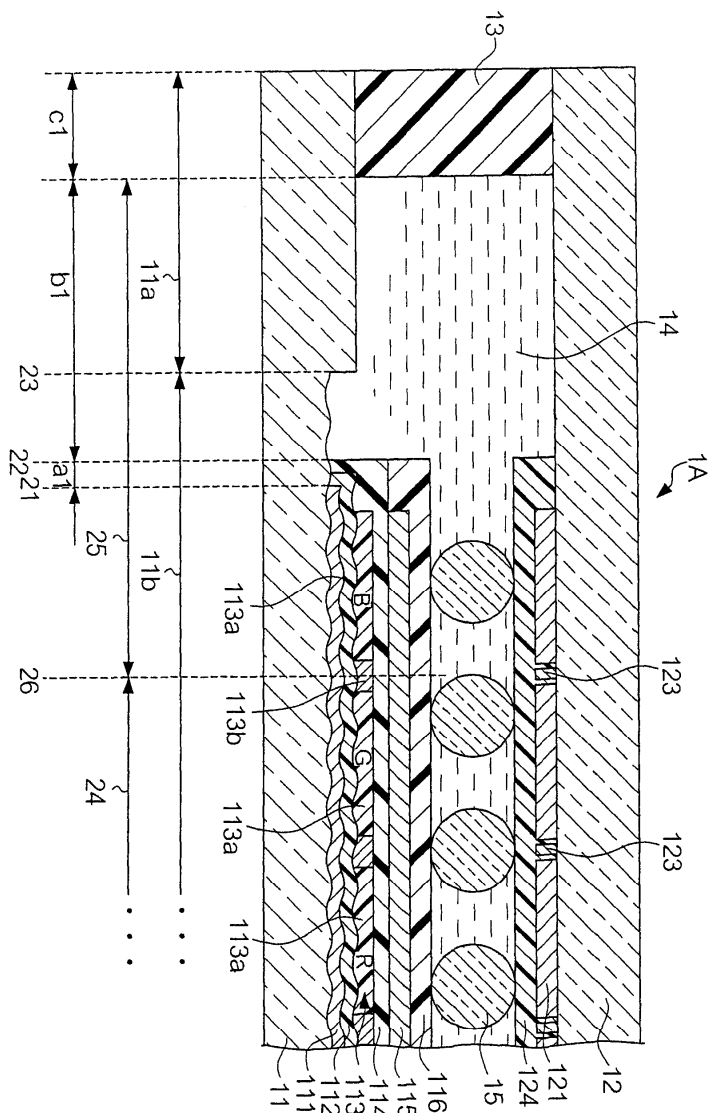
가 3 3 5 가 가

(74)

:

(54) ,

1) (13) (11, 12) , (14) , (1
(111) , (111) (116)
(11) , (11b) , (11b)
(11a) (116) (11b) , (13)
(11a) .



가 가 (前面) (가)

가

11 (passive matrix) (5A)가

A) (背面) (51) (52) (53) (54) (52) (54) (52) (522) 가 (54) (52) (522) 가

(51) (54) (511), (512), (513) (514) (512) (513a) (513b)

511) (513)

(514) (513) (514) (521)
(515) (514)
(522) 가 (515) (55)가
(51) (516) (52) (522) (球) (, 「 」)
(55)
(52) (52) (54) (51
1) (54) (52) (54)
가 (511) (specular surface) 12
(5A) H ((正)) 12
θ가 θ가
가 13
11 (5B) (52)
(56) (52)
(5B) (54) (511) (56) (54)
(52) (52) (56) 가 (56)
(5B) (5A)
(5B) (5B)
(56) 2
가 14
11
14 (5C) (51) (54)
(粗面化) (recess)가 (517)가
(517)
(5C) (52) (52) (54)
(517) (517) 가 (52)
(5A) (54) (52)
(5B) (5C)
15
15 11 14
(5D) (51) (57)
(572) (571) (571) (571) (cold cathode tube)
(572) (571) (51) (519) (5D)
(5C) (517) (519)
(519a)가 (52) (54) (54)
(519) 가 (52) (52)
(571) 가 (571)
(572) (51) (51), (519) (519a),
(54) (52) (5C 5D) 14 15
(51) (53) (51) (53) 가

(52)가 , (53) (54) (51) , (54) (51) (54)

가 , 가 (glass fibers)가 (53)가

(53) (51) (53)가 (51)

(53) (51)

_____ , 14 15 (53) 1 3 1

가 (64) , (53) 1 (63) (51) (63)

) 가 , 16 (51) (63)

(51) 가 (sand blast)

, 16 (63) (64) (65)) h가

) (64) , (63) (513) (516) h

(51) h 가 (513) (516) (516) 가

, (55) (516) (516) 가

, (55)가 가

가 , STN(Super Twisted Nematic)

, (516) 가 (516) 가 (516)

(63) (54) , 가 (63) 가

(63) 11 15 , TFD(Thin Film Diode) 2 , TFT(Thin Film Transistor) 3 , TFD(Thin Film Transistor)

가

가

가

가

가

가

[illegible]

6 (a) 1 , 가
6 (b) 6 (a) B-B' ,
6 (c) 1 , 가
6 (d) 1 , 가
6 (e) 1 ,
6 (f) 1 ,
7 (a) 1 ,
7 (b) 1 , 가
7 (c) 1 , 1 ,
7 (d) 1 , 가
7 (e) 1 , 2 ,
8 (a) 2 ,
8 (b) 2 , 가
8 (c) 2 ,
8 (d) 2 ,
8 (e) 2 , 가
9 (a) 2 ,
9 (b) 9 (a) C-C' ,
9 (c) 2 , 가
9 (d) 2 ,
9 (e) 2 ,
9 (f) 2 ,
10 (a) ,
10 (b) ,
10 (c) ,
11 ,
12 ,
13 ,
14 ,
15 ,
16 .

(A:)
(A-1 : 1)
D(Thin Film Diode) 1 TF
1 (1A) 2 (1A)
(1A) 1 2 A-A' (12) (13)
(11) (14) (11) (12)
(11) (14)
1 2 (12) (14) (121)
(121) , ITO(Indium Tin Oxide) (123)
(12) (14)
(121) (123) TFD(122)
1 (121), TFD(122) (123) (12) (124)
(124) 가 (14)
가 (124)

, 1 (11b) , (11) (14) (11a) (11b)
 . (11b) 0.5×10⁻⁶ 2.5×10⁻⁶ m , (11b) (11b)
 10×10⁻⁶ 15×10⁻⁶ m
 , 3 (11a) (11) (11a) (11b) 가
 , (11a) (11) 가 (11b)(3
)
 (13) c1(1) , 0.8×10⁻³ 1.1×10⁻³ m (13) (11a)
 (11a) (11b) (11) (111) (111)
 , 1 (12) (11) (11b) (111) (111)
 (111)
 . 1 (111) (11b)
 가 가 (111) (112) (112) (111)
 , (111) (112) (111) (111)
 가 1 (112) (111)
 가
 (112) (113a) (113b) (113)
 (113a) , R(), G() B() 2
 (113a) (color resist
 method), (113b)
 (113b) , (113a) (113b)
 (113) (114) (114) (113) (113)
 . 1 (114) (111), (112) (113) (113)
 (111) 가 (21) (114) 가 (22) a1 , 0.0
 2×10⁻³ 0.05×10⁻³ m (114) 가 (22) (13)
 b1 0.1×10⁻³ 1.1×10⁻³ m
 (114) (115) 2 (115) (115)
 (123) (121) (115) (114) (12)
 (116) (116) (12) (124) 가
 2 (12) (124) (11) (116) (15)가 ()
 , (111), (112), (113), (114) (116) (11) ()
 11b) 가 (22)가 (111) 가 (21) (, 1 (13)) (114)
) (114) (11) (114) 가 (22) (116
)가, (12) 가 , 3 (114)
 (11) (11b) (111), (112), (113),
 (114) (116) 가 (11b) (11)
 (11a) (11b) (23) , 1
 (13) 가
 (25) , (25) (26) 가 , 3 ()
 26) (12) (26) 가 (11b)
 , (11) (14) (11a) (11b)
 (111), (112), (113), (114) (116) 가
 (11b) (11) (11b) (11a) (23)
 (11a) (11b)
 가 가 가 가
 (116) (13)가 (13) (11a) (13) (11) (14)
 , (13) (13)
 , (13)
 (11a)
 (A-2 : 2)
 1 (1A) 가 가 ,
 , 가 가

가, 4 (1B) , 4
 1
 4 (1B) (11) (16)
 (16) (161) (162) (161) (11)
 (162) (162) (161)
 (1B) (1A) (111)
 (117) (117) (117a) (117a) (162)
 4 (117a) (117a) (11) 가
 (11) (117a)
 , 1 (117a)
 (117) , (11)
) (117) 가 가 , 가 ,
 , 1 가 가 , ,
 (A-3 : 3)
 , 5 3 (1C) , 5
 1 1 2 (12) (124) (11) (1
 16) (11a) (12) (17)가 (17) (球) (11)
) (11a) (12) (17) (11) (11a) (12) (15)
 , 5 (17) (17) (15)
 (17)
 , 1 가 가 , (124)
 (116) (11) (11a) (12) (17)가
 (A-4 :)
 (1) (11) (11b) 1, 4 5 (117))
 (11b) (111)(2 (117))
 (11b)
 (2) 1 3 (11) (113) (12) TFD(
 124)가 , (11) TFD(124) (12) (113)
 , (111) TFD (122), (121)
 (123) , 가 (111) (124)
 (11) TFD(122) , (111) , (121)
 (3) 1 3 , 1 3
 2 TFD(122) , TFT(Thin Film Transistor)
 3 가
 (4) 1 3 (11) (111)(
 (117)), (112), (113), (114), (116) 가 (11b)
 , 가 (11b) (116) (11b)
 , (116) (114) (114)
 (11b)
 (B :)
 , 1 3 , 1
 4 (多面)
 (B-1 : 1)
 , 6 (a) 6 (f) 1 (11) (1
 , 4 (31) (31) (11)
 1a) (32)가 (11)) 가 6 (a) 6 (b) (32)가
 (31) 4 (32) , (31) (32)
 , 6 (c) , (31) (32)
 , 6 (d) , (32)가

(31) (32)가 (11a) ,
 (11b) , 6 (e) (11a) (11b) (31)
 (33) (33) , 6 (f) (11b)
 (33) (33) (111) (111) (11b)
 (11b) (33) 가 (111) (111) (11b) (11b)
 11) (11b) (112), (113), (114), (115) (116) (117a)
 , 2 (1B) , (111) (117a)
) (117) (11b) (11a)
 (13)가 (13) (31) (13)
 (31) (111) (13) (31) (13)
 (14) (11) (11b) (, 6 (a)
 6 (d))
 (1) 1 1 (31)
 7 (a) (31) (31) (31)
 (311) , (311) (312)
 (311) ,
 (312) , (31) (31) , 5wt%
 , 25 5 (31) (11a) (32)가
 , 7 (b) (32) 6 (a) 6 (b) (32)가
 (31) 30wt% (31) 25
 30 (, 「 1 」). (311)
 (312)
 12) (31) (313)가 (311) (3)
 (, (313)가
 (31) , (313)가
 (314)가 (32)가 (32)가 1
 , 7 (d) (32)가 (32)가
 (31) (, 「 2 」).
 , 50wt% , 40wt% 1:3
 (31) 25 20 (313) , (31)
 (314) ()가 , 7 (e) (11b) (32)
 (32)가 (11a) 2
 (32) (31) 2
 (32)가 2
 (11a) (11b) 가 2 (31)
 (11a) (11b) 가
 가 가
 (32)가 (31) 2 (11a) (11b)
 11b) 가
 (2) 2 , 8 (a) 8 (e) (11) 2
 , (31) , 8 (a) (311) (312) (31)
 1 (31) 가 , 8 (a) (312)가 (31)
 (311)가 , 1 (31)
 , 25 (31) (31) 5wt%
 5 , 8 (b) (31) (1)

1a) (32)가 (32) 6 (a) 6 (b)

(31) , 30wt%, 45wt% 25 15

(31) 8 (c) (31) (312)가

(311)가

(31) 8 (d) (311) (32)가

(11b) 8 (e)

(11a) (11b) (31)

(B-2 : 2)

9 (a) 9 (f) 1 3 2

(11) (31) 4

9 (a) 9 (b) (31) (31) (3)

4) (34) (31) (11b)

(34a)가

9 (c) 가 (35)가 (34) (34a)

(31) 가 (35)가 (34)

가 (35)가

(31) 가 (35) , 가 (35) (31)

가 가 (31) (50wt%)

(40wt%) 1:3

9 (d) (11a) (11b)

(31) 가 9 (e) (31)

(33) (33) 9 (f) (111)

1 가

1 2 가 (11b)

1 2 가 (311) (11b)

가 (35) (11b) (111)

((117)) (11b)

(31) (11b) (31) (11a) (11) (13)

(13)

(C :)

(1A 1C)

10 (a) (411)가

(41) (42) (422) (423)

10 (b) (421)

10 (c) (43) (431) (432)가

10 (a) 10 (c)

(57)

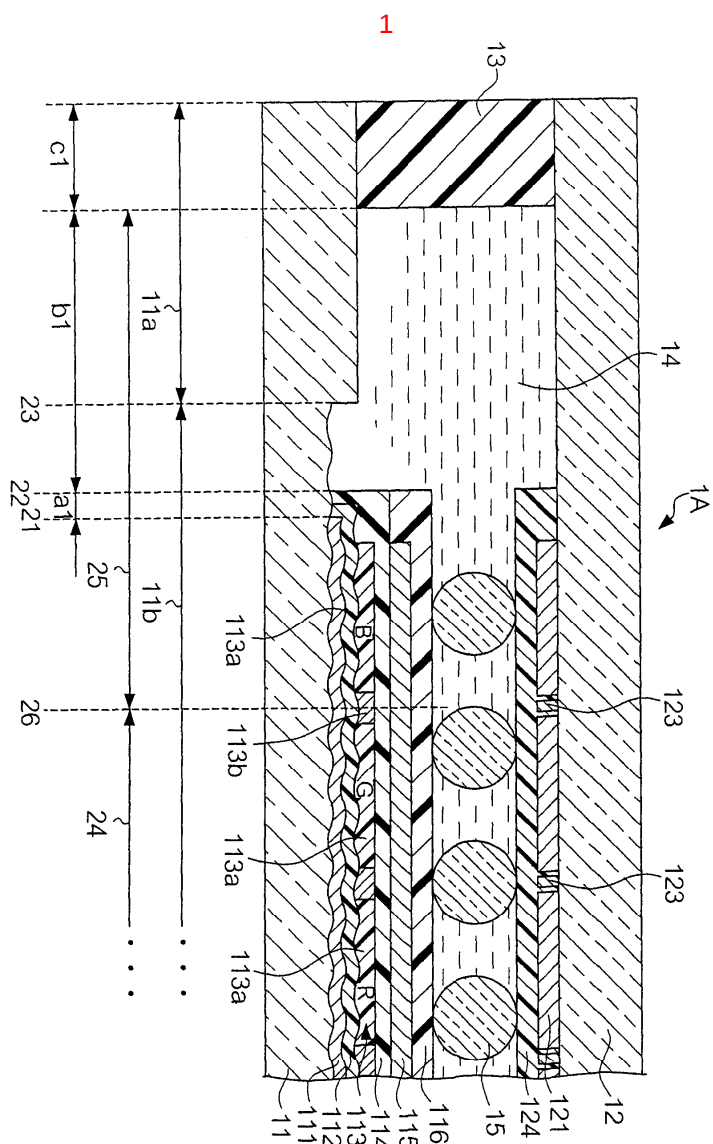
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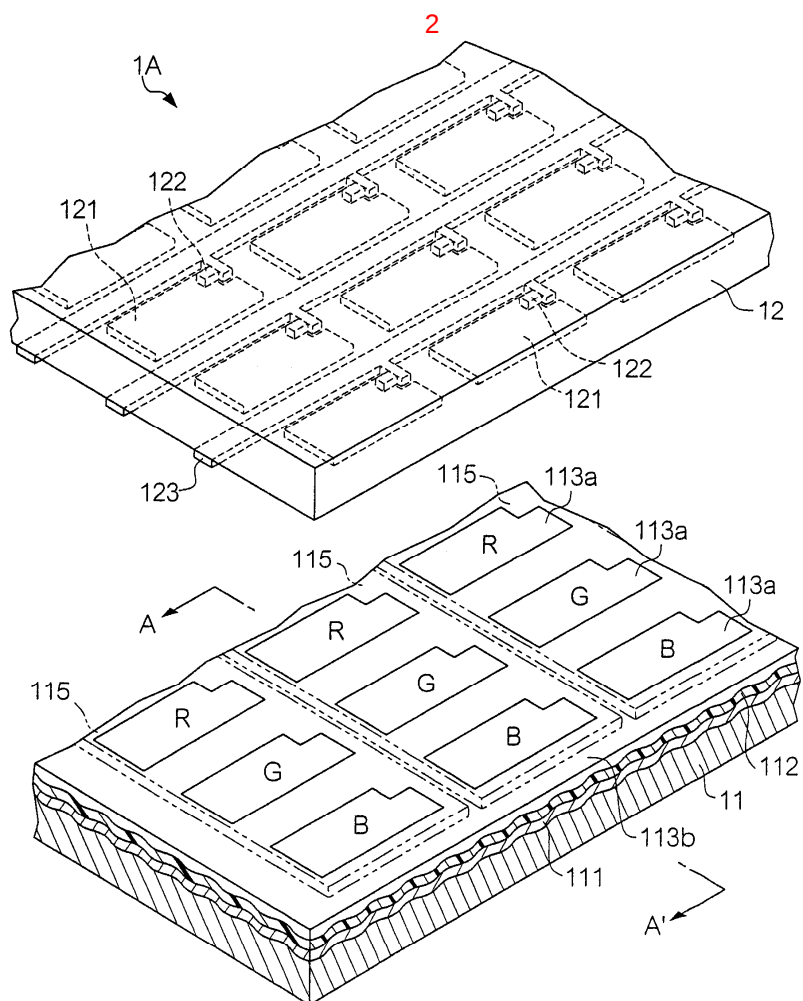
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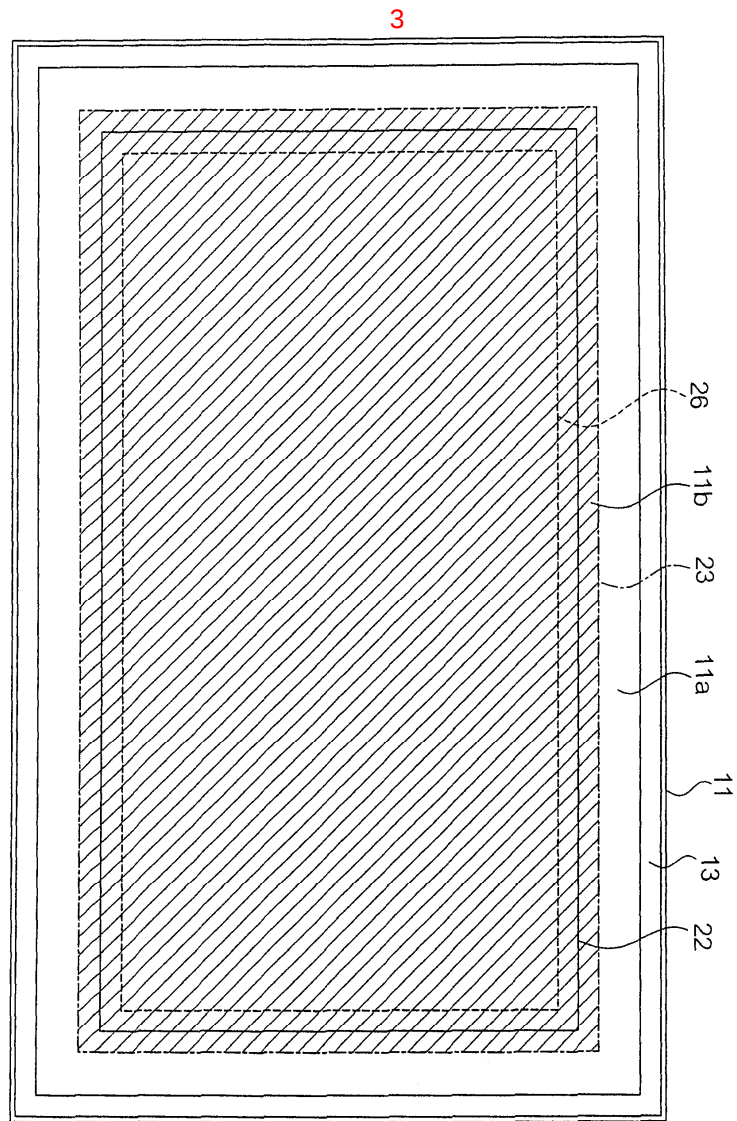
(粗面)

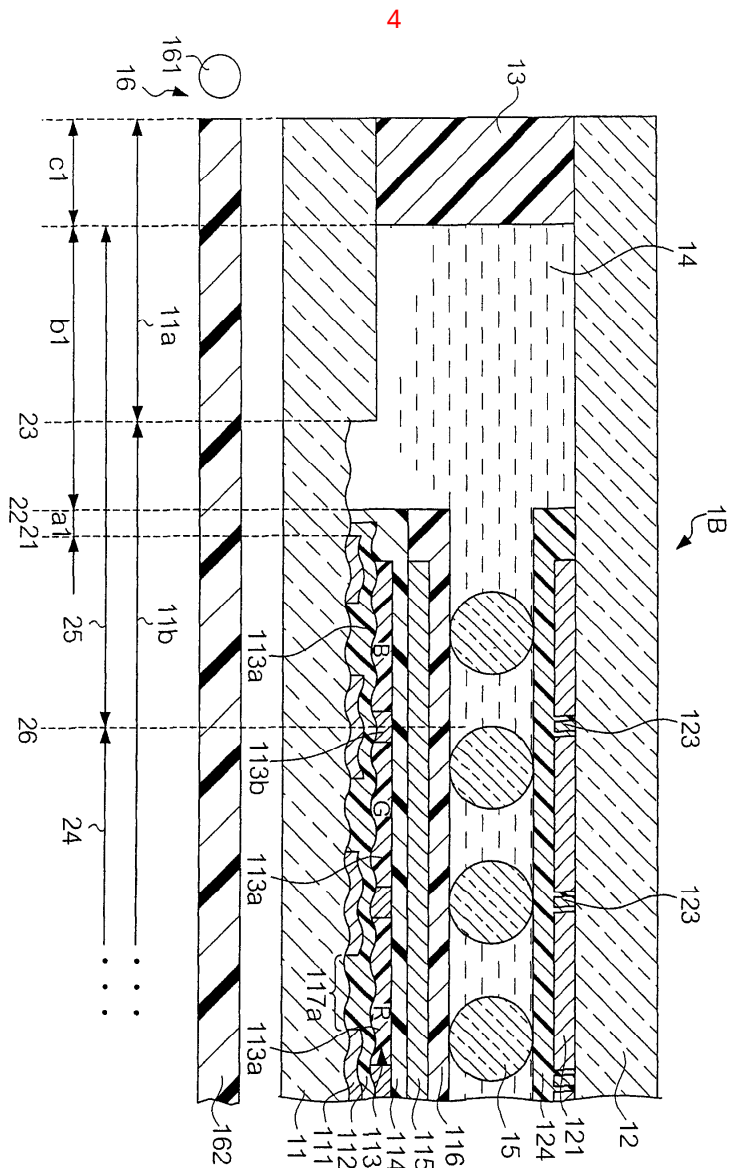
가

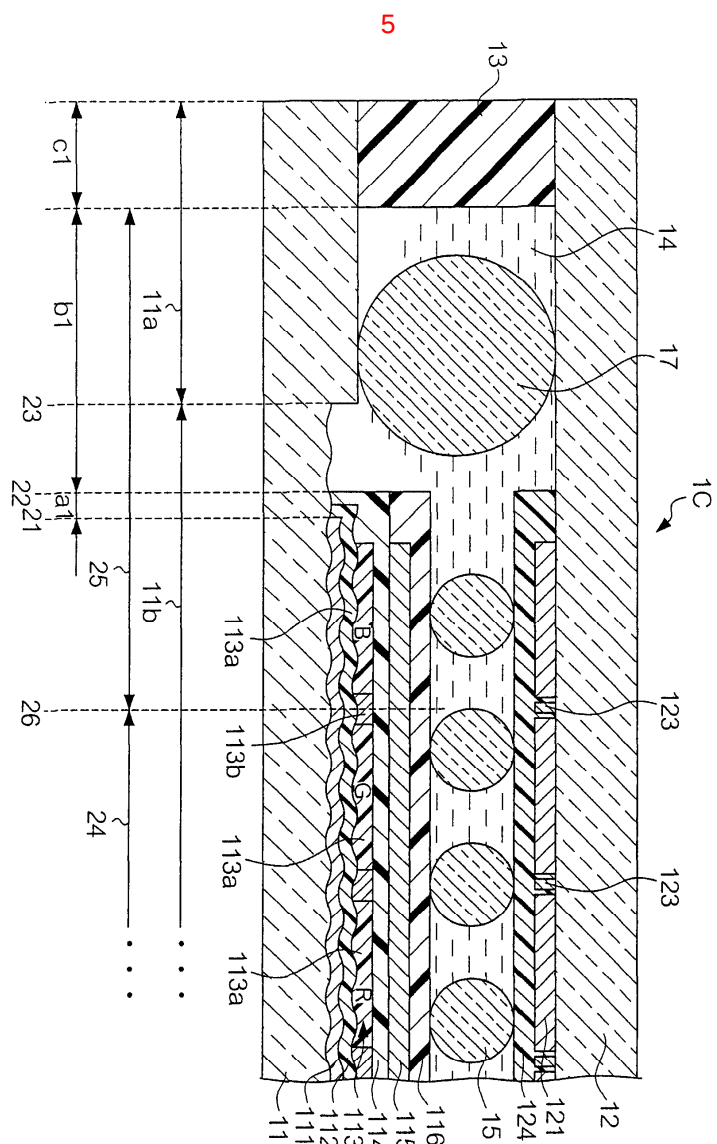
가

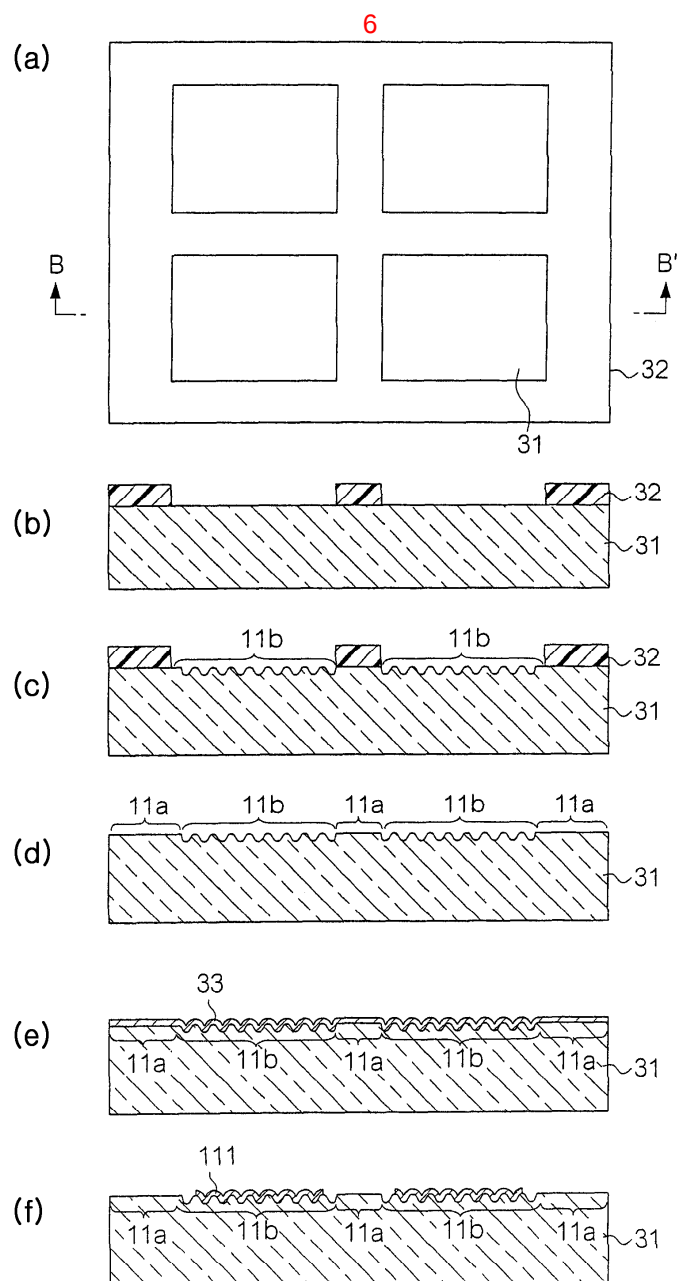


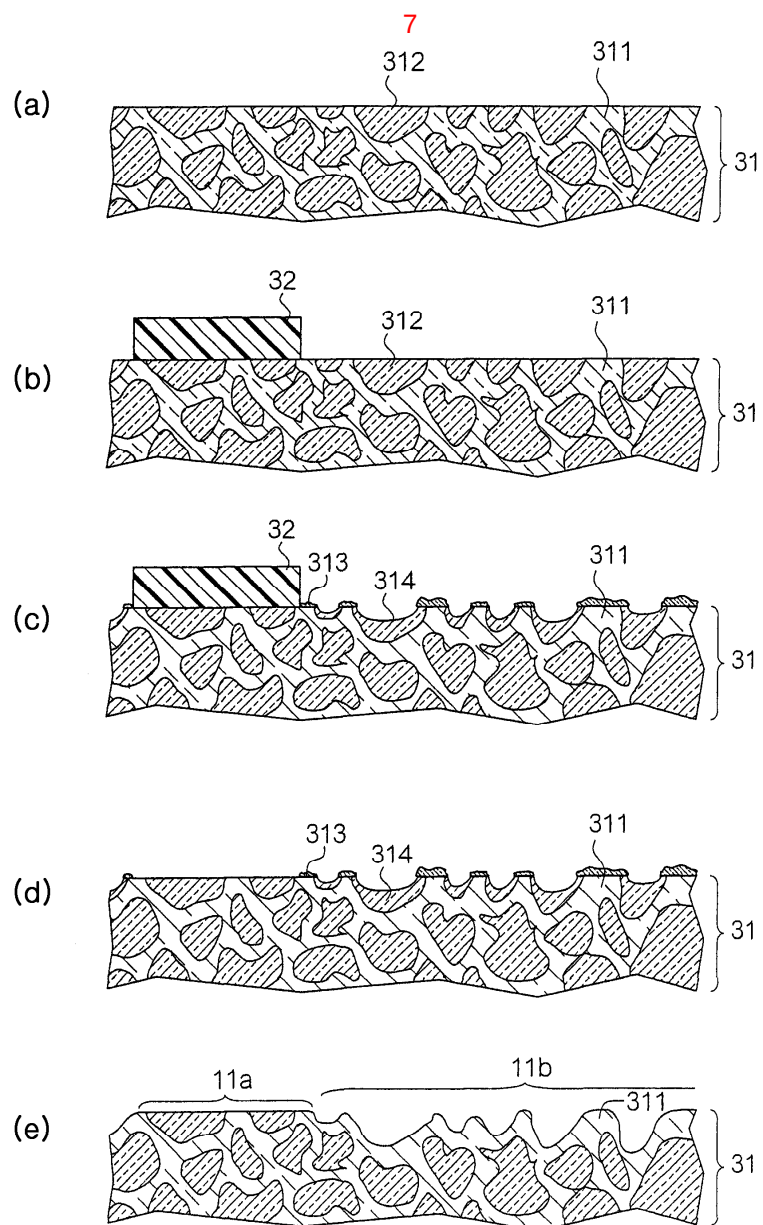


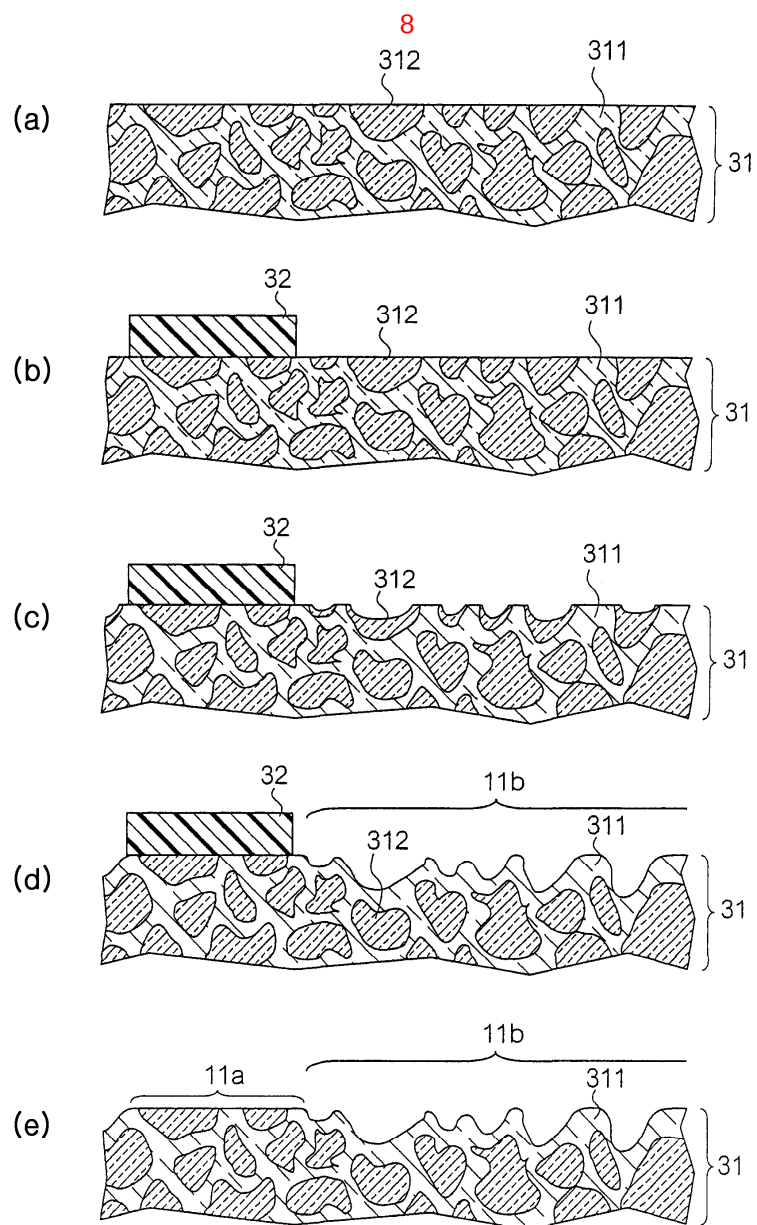


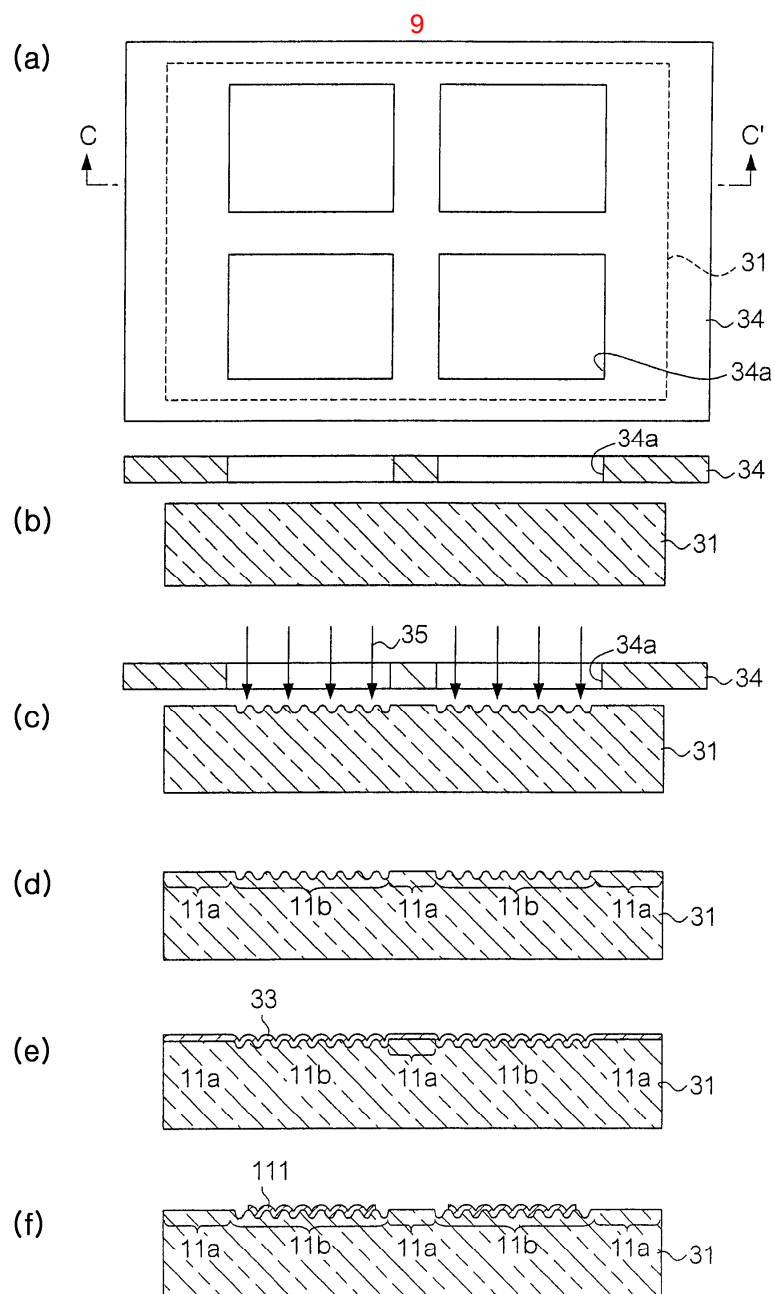


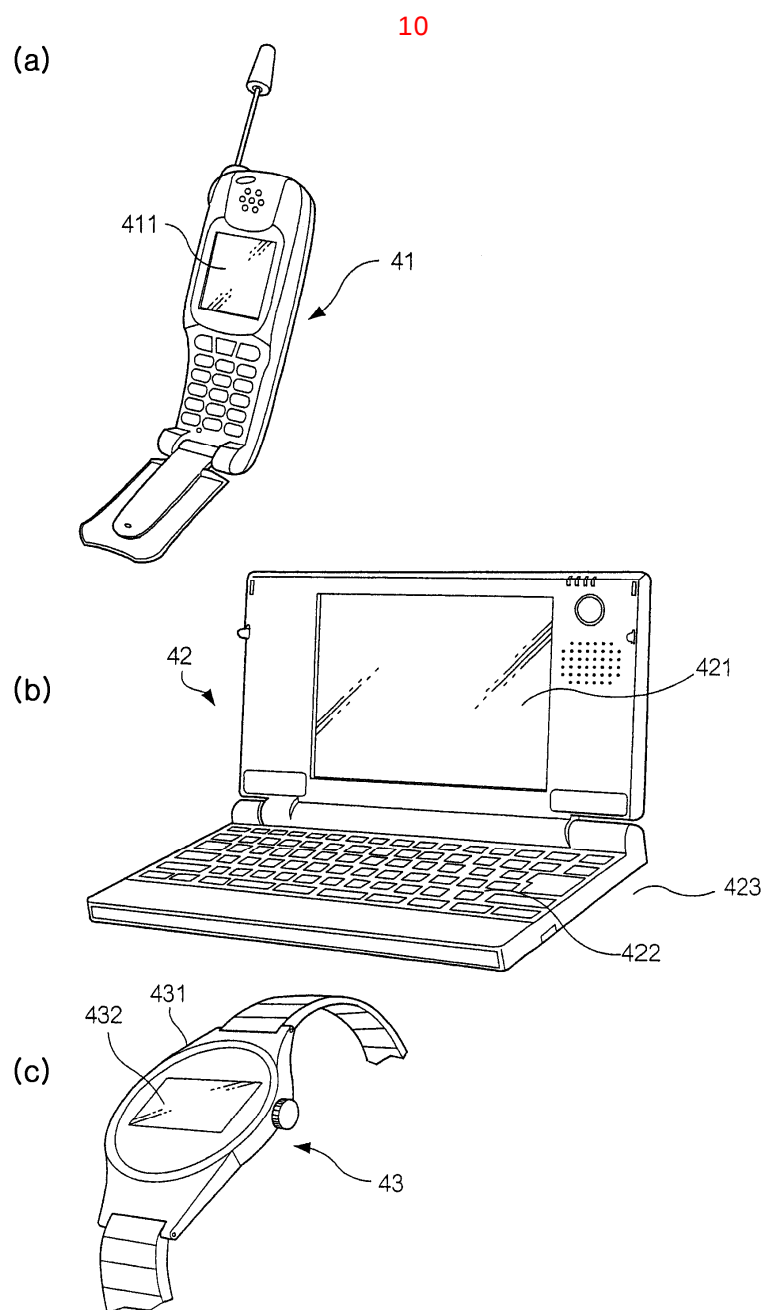


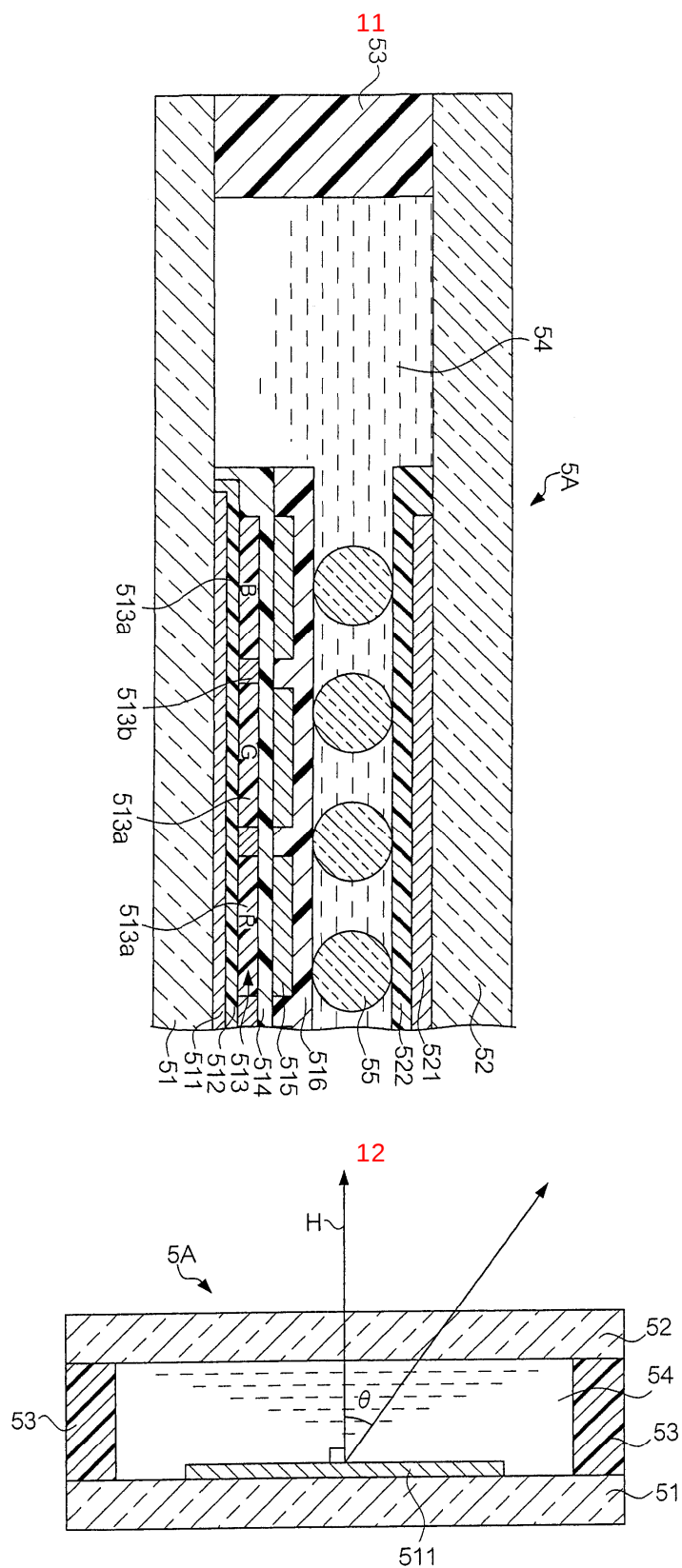


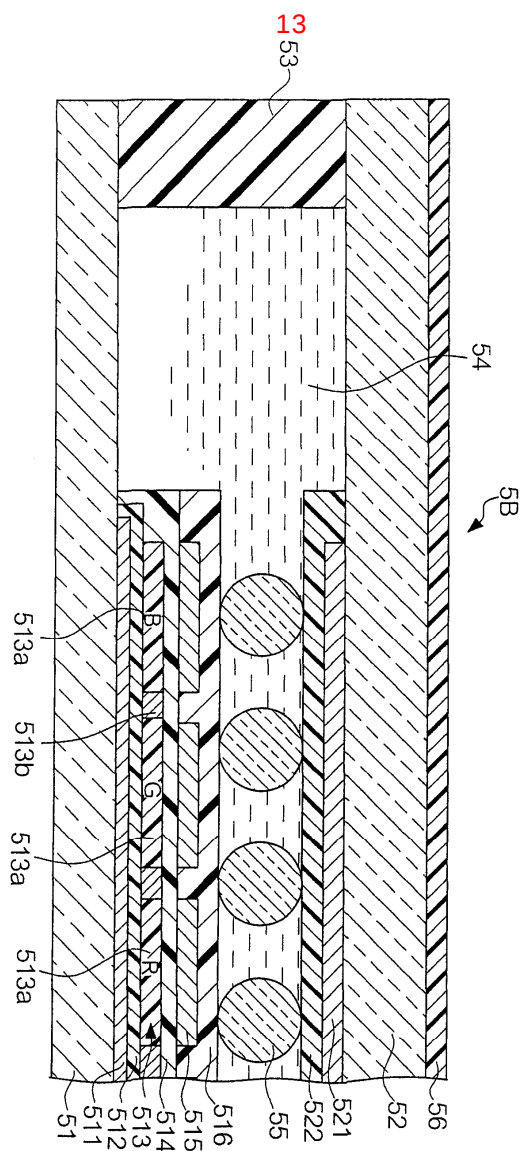


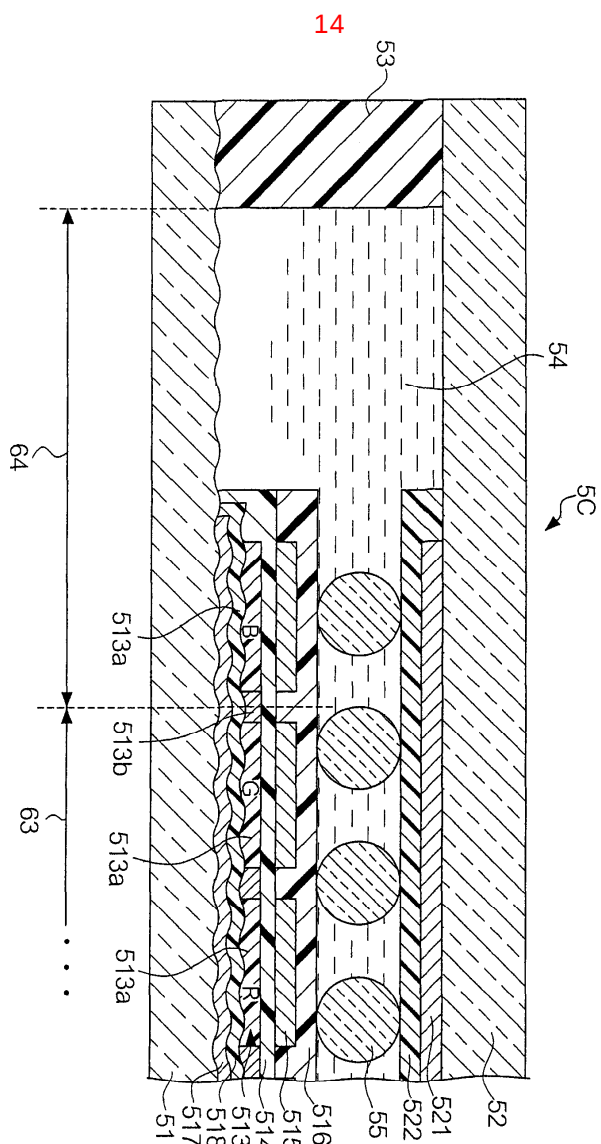


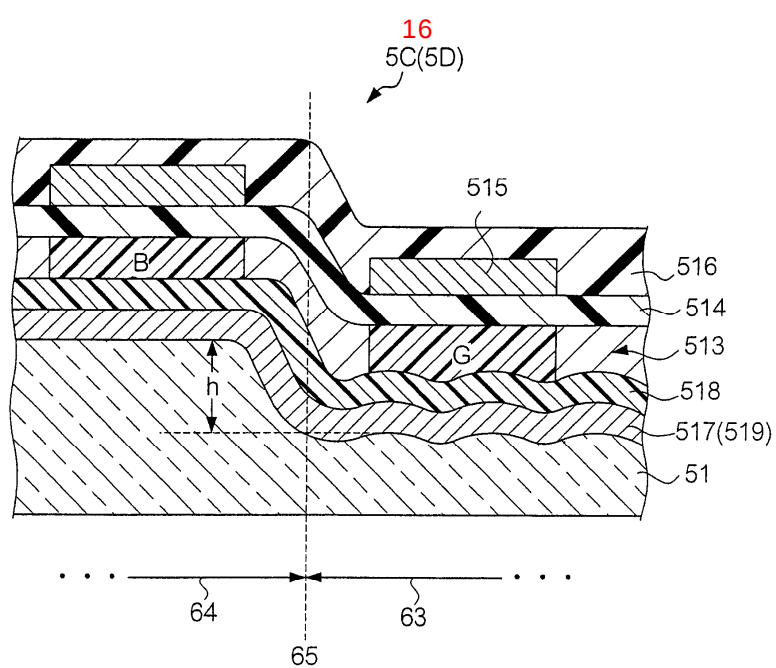
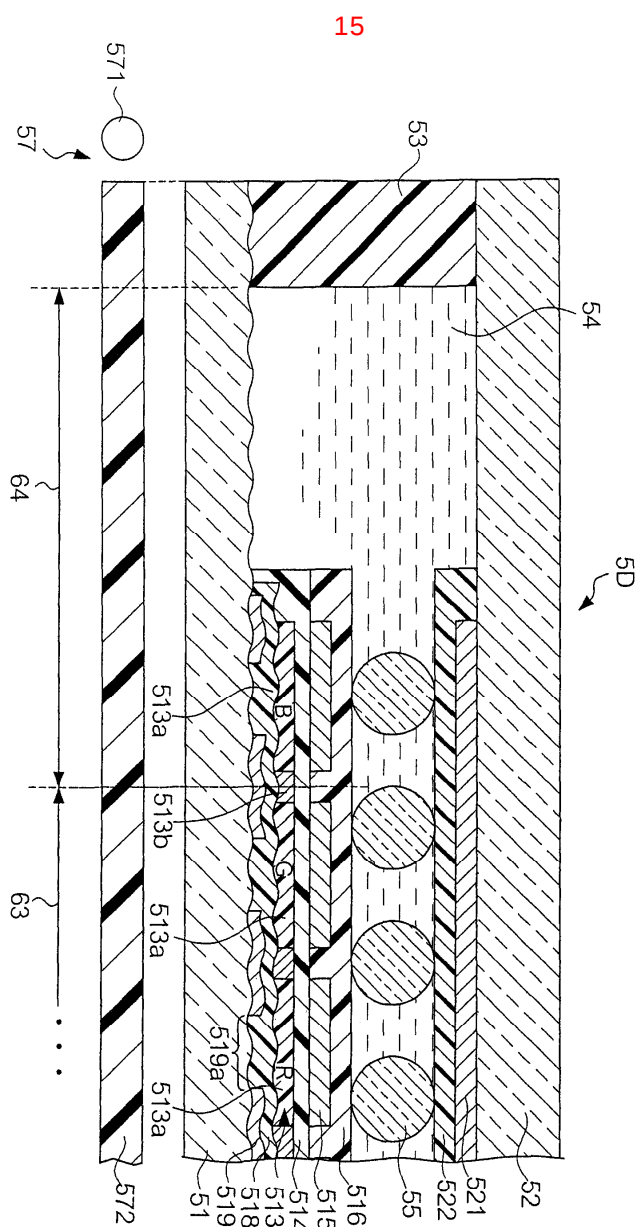












专利名称(译)	液晶显示装置，其制造方法以及电子设备		
公开(公告)号	KR100441329B1	公开(公告)日	2004-07-23
申请号	KR1020017011472	申请日	2001-01-04
[标]申请(专利权)人(译)	精工爱普生株式会社		
申请(专利权)人(译)	精工爱普生株式会社		
当前申请(专利权)人(译)	精工爱普生株式会社		
[标]发明人	MIWA NAONORI 미와나오노리 TAKIZAWA KEIJI 다키자와게이지 USHIKI TAKEYOSHI 우시키다케요시 YAMAGUCHI YOSHIO 야마구치요시오		
发明人	미와나오노리 다키자와게이지 우시키다케요시 야마구치요시오		
IPC分类号	G02F1/1333 G02F1/1339 G02F1/1335		
CPC分类号	G02F1/133504 G02F1/1333 G02F2001/133302 G02F1/133553 G02F2001/133388 G02F1/1339		
代理人(译)	KIM, CHANG SE		
优先权	2000004627 2000-01-13 JP		
其他公开文献	KR1020010112314A		
外部链接	Espacenet		

摘要(译)

通过框形密封材料13粘合的一对基板11和12，保持在两个基板之间的液晶14，形成在一个基板11的液晶侧上的反射层111，并且，在反射层(111)的液晶侧形成取向膜(116)。一个基板11的液晶侧表面具有粗糙的粗糙表面区域11b和围绕粗糙表面区域11b的平坦的平坦区域11a。取向膜116形成在粗糙表面区域11b中，并且密封材料13形成在平坦区域11a中。

