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(JP)

(71)

가 가 가 가 6 7 35

(72)

가 가 6 7 35 가 가

(74)

:

(54)

가

1

,

1 1 .

2 1 .

3 1 .

4a 4b 1

5 4a 4b

6a 6b 5

7a 7c

8 2

9a 9b

< >

10 :

10R, 10G, 10B :

11 :

11A : ()

12 : 1

13 :

13A :

13B :

13C :

13D :

13E :

14 : 2

20 :

21 :

21A, 22A :

22 : (touch-side)

30, 60 :

40 :

50 :

51 :

52 :

52R :

52G :
52B :
70 :
80 :
91 :
92 :

CRT(cathode Ray Tube;) PDA(Personal Digital Assistant)
, 2 (, '가 ') , 가
PDA, , 가
, 가 가
, 가 4 , 가
, 가 , 가
, 가 가
(getter) 가 4
(mobile device) 가

1

가

가

가

가

2

가

가

1 2

2 (blooming) 가

[1]

1 1

(20) (30) (10)

(10) (40) (50) (40, 50)

(60)

(40) (11)

10R) , (10G) , (10B)가

(11A;) (11) (10R, 10G, 10B)

(10R, 10G, 10B) , 1 (12) , (13) , 2 (

14) (11) . 2 (14) , (11A)

1 (12) 가 , 가

(Pt), (Au), (Ag), (Cr), (W)

(simple substance)

1 (12)

100nm 300nm , 0.3 %

1 % (Pd) 0.3 % 1 % (Cu) AgPdCu .

(13) (10) 2 (10R, 10B) (13) (13A), (1)

3) (13B), (13C), (13D), (13E) 1 (12) (13C) (13D)

(13E) (13C) (13C)

(10R) (13A) 30 nm 가 , 4, 4', 4' - (3- (13B) (10R) (10R) (13D) 30 nm 가 , 8- 가

30 nm (13C) 가 , 50 nm [(N-)-N-] (-NPD) (10R) (13D) 30 nm 가 , 8- 가

(BSB) (Alq) (10R) (13E) 1 nm 가

(LiF)

(10B) (13A) 30 nm , MTDATA (10B) (13B) 30 nm , -NPD (10B) (10B) (13C) 30 nm , (spiro) 6 (10B) (13D) 30 nm Alq (10B) (13E) 1 nm (LiF)

3 (10G) (13) (10G) (13) (13A), (13B), (13C) (13E) 1 (12)

(13C)

(10G) (13A) 30 nm , MTDATA (10G) (13B) 30 nm , -NPD (10G) (13C) 60 nm , Alq (10G) (13E) 1 nm (LiF)

(Ca), 1 3 2 (14) 1 nm 50 nm , (Al), (Mg), (Na) (MgAg) , Mg:Ag = 5:1 20:1

(14) (12) 1 (P1) , (13C) (10R, 10G 10B) , 2 (14) 2 (P2) (P2) (13C) (13C) (50) (10R, 10G 10B)

(52)(1) 가

1 (P1) 2 (P2) (L)가 1 , (L)가 1 (L)가

$$(2L)/ + \frac{1}{(2)} = m$$

(P2) , L 1 (P1) 2 (P2) , 1 (P1) 2 (rad) , 2 (P2)

, m L 가 . 1 L (nm)

.)

1 (50) (60) (10R, 10G, 10B) (51)

(51) (10R, 10G, 10B)

(51) (52) (10R, 10G, 10B)

(10R, 10G, 10B)

(52) (51) (52) (40)

(52)가 (52) (antiweatherability

(10) (20) (20)

(52) (52R), (52G) (5

2B) 가 (10R, 10G, 10B)

(52R), (52G) (52B)

(52R), (52G) (52B)

(52)

(50) (52) (10R, 10G, 10B)

()

()

(10R, 10G, 10B)

(11A) (SiO₂), (SiN_x) (11A)

(10R, 10G, 10B)

(20) (21) (22)

(11) (51) (22)

(20) 가 (21A) (22) (22A)

(21) (21) (22) (21A, 22A)

(21A, 22A) 가 (22) (21A, 22A)

4a 4b 6a 6b (11) 1 (12) 4a DC

(13B), (13C), (13D), (13E) 2 (14) (13A),

(11) (10R, 10G, 10B) (10R, 10G, 10B) 4a (11A)

(40)

4b (51) (52R)

(52R)

4b (52B) (52G) (52R)

(50)

5 (60) (11A) (52) (51)

(11) (10R, 10G, 10B) (11) (51)

(51) (40) (52)가 (50)

(10)

6a 6b (10) (30) (20) (1

0) (70) (30) (20) 6a 가 6b (20)

(80) A (70) (20) (10) (20) (80) (70)
 , 1 (30) 3 가 . (20) (10)
 , 1 (12) 2 (14) 가 , 가 (13C) 1 (12) 2 ,
 가 , 2 (13C) (14), (11A), (52), (51) (20)
 (14) 가 (22) (20) (30) (20)
 , (20) (10) , 가 (20)
 , (20) (20) (10) , 가 (30)
 , (20) (10) , 가 (60)
 , (10) (11) (51) (60)
 , (10) 가 가 .
 , (20) , (21A) (21) , (22A)
 (22) (21A, 22A) 가 . , (20) (22)
 20) (10) , 가 (10)
 , (20) (10) (30) (80)가 (20)
 가 (80) 가 가 , (30) 가
 (10R, 10G, 10B) (20) (10) .
 []
 7a 7b 1 (20)
) (30) , (80) 가 .
 , (10) 1 4a, 4b 5 , 7a
 , (20) (30) (21) ()
 U .
 , 7b (10) (30) U (20)
 20) (20A) (10) (20A) (80) 가 , (80)
 (22) 가 .
 , 7c (80) (22) (80)
 (20) 가 , (20) (10) , (22)
 (22) 가 . 3 , (22)
 , 1 가 .
 , (30) (21)
 , (10) (22) (80) (20) 가
 (20) (10) , (20) (22)
 가 . , (22)
 , .
 [2]
 8 2 . , (10) (

50) (10) (40) 1

(20) (11) (10R, 10G, 10B)가 (30)
 (10R, 10G, 10B) (20) (50)(1)
 (60) (11A), (30) (20) (10R, 10G, 10B)가

(11A) (30) (20) (10)

(50) (10R, 10G, 10B) (20)
 (10R, 10G, 10B)가

(11A), (30) (20)

(80) (20) 가 (70) (91) (70) 9a 9b
 (92) (20) (92)

가 (20) 가 (20)

2 가 (21) (22) (21)

(50)

가 1 2 가

(20)

(10R, 10G, 10B) 2
 (14), (13) 1 (12) (11) (11) (10R, 10G, 10B)
 (11) (20)

1 (12) 2 (14)
 1 (12) 2 (14) 가
 1 (12) (11) (11) (14), (13)

가

2 가 1 (12) Al

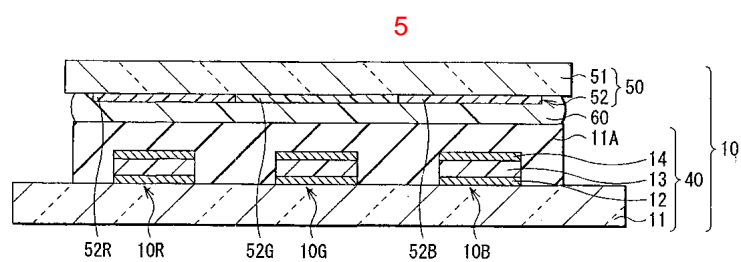
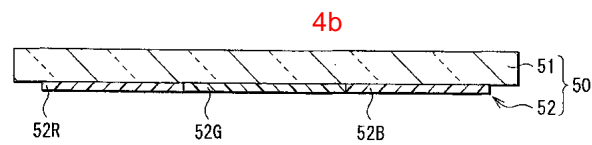
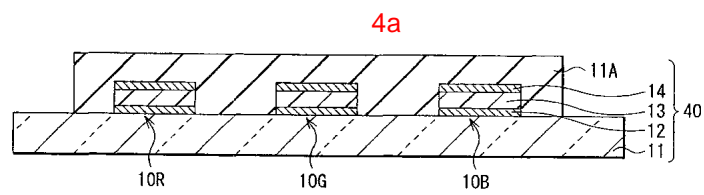
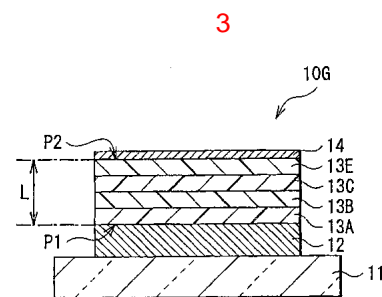
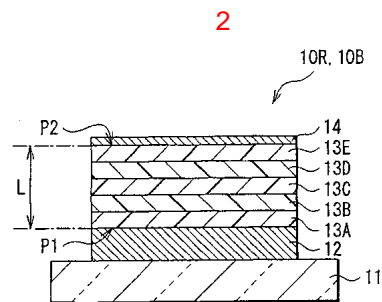
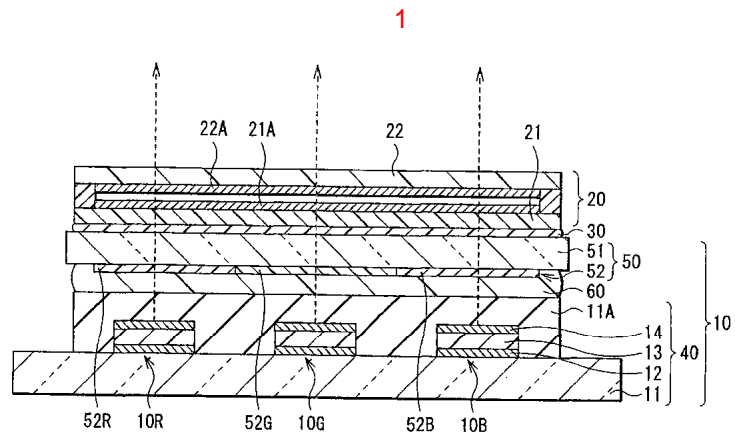
2 가

2 (14) 2 (14)
 1 (12) 가

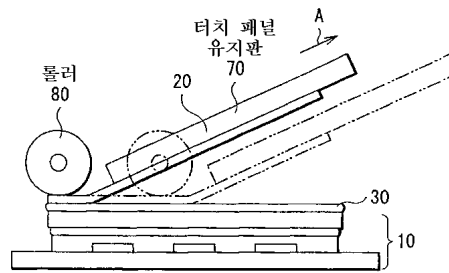
ITO (Zn)

30 nm 1,000 nm

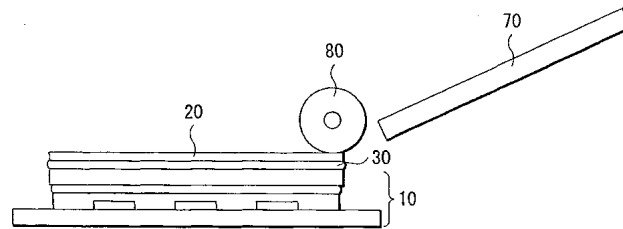
- 1 , , .
5.
4 , .
6.
1 , 2 1 2 가 , .
7.
가 ,
가 .
8.
7 , 가 ,
가 .
9.
7 , , 2 .
10.
7 , , , .
11.
10 , , .
12.
7 , 2 , 1 2 ,
2 .
13.
7 , 가 , 가 .
14.
13 , , 가 , 가 .



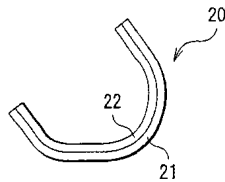
6a



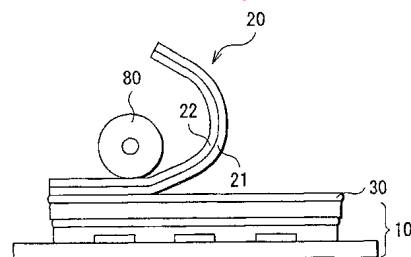
6b



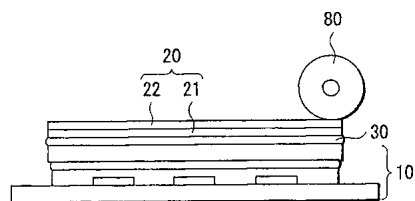
7a



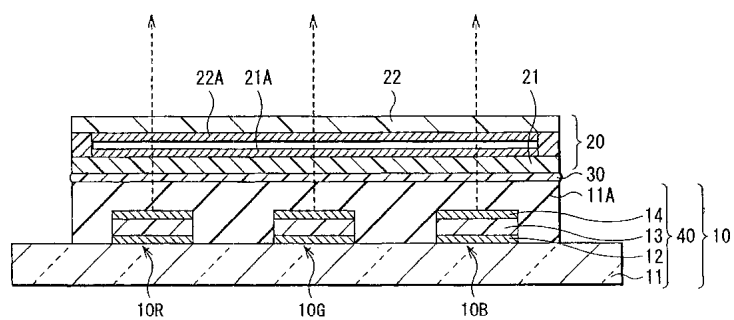
7b

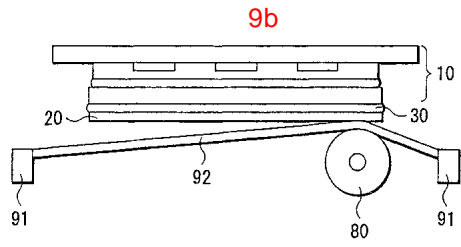
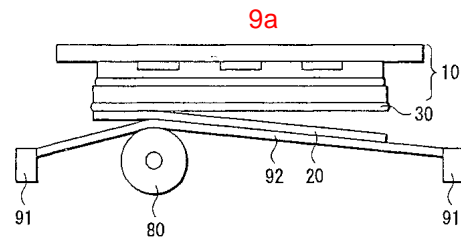


7c



8





专利名称(译)	显示装置及其制造方法		
公开(公告)号	KR1020040030345A	公开(公告)日	2004-04-09
申请号	KR1020030068120	申请日	2003-10-01
[标]申请(专利权)人(译)	索尼公司		
申请(专利权)人(译)	索尼公司		
当前申请(专利权)人(译)	索尼公司		
[标]发明人	IWASE YUICHI		
发明人	IWASE,YUICHI		
IPC分类号	H01L27/32 G06F3/033 H05B33/00 G06F3/041 G06F3/048 G06F3/147 G06F3/03		
CPC分类号	G06F3/0418 G06F3/0488 G06F1/1692 H01L27/323 Y10T428/10 G06F1/1626 G06F1/1643 G06F1/1652		
代理人(译)	CHU , 晟敏 AN , KOOK CHAN		
优先权	2002288803 2002-10-01 JP		
其他公开文献	KR100971053B1		
外部链接	Espacenet		

摘要(译)

用途：提供一种显示装置及其制造方法，通过去除触摸面板和显示面板之间的空间来实现纤薄和轻量化，并通过防止触摸面板的变形或弯曲来提高图像质量。组成：第一电极（12）在驱动基板（11）上形成/蚀刻/图案化成预定的形状。空穴注入层（13A），空穴传输层（13B），发光层（13C），电子传输层（13D），电子注入层（13E）和第二电极（14）依次形成沉积方法，形成有机电致发光元件（10R，10B）。通过形成覆盖驱动基板的有机电致发光元件的保护膜来形成驱动面板。

