

(19) (KR)
(12) (B1)

(51) 。 Int. Cl.⁷
H05B 33/00

(45)
(11)
(24)

2004 01 24
10-0415616
2004 01 06

(21) 10-2001-0046052
(22) 2001 07 30

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(43)

10-2003-0012157
2003 02 12

(73) .
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(72) 572-127 201

104 703

(74)

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(54)

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;
(CO₂)
)
(CO₂)

8b

1
2 1
3a 3b 2
4 1
5 4
6 5
7 4
8a 8b 4

9 2
10a 10b 9
< >
10 : 12 :
14,36,64,88 : 16 :
20,42,70 : 22,44,72 :
24,46,74 : 28,52,76 :
30,54,78 : 32,56,80 :
34,58,82 : 38,60,84 :
40,62,86 :

가, (Cothode Ray Tube), (Liquid Crystal Display : "LCD"), (Field Emi
ssion Display), (Plasma Display Panel) (Electro - Luminescence
: "EL") EL
EL EL 가 EL
EL 가
1 , EL (10) , (10) (12) , (1
12) (16) (14) (Al), (Ca)
(10) 가 (12) Alq₃ , AIP(PBI)₃ , Balq, BeBq₂ , Zn(BTZ)₂ , DPVBi, PtOEP, Ir(ppy)₃ , PPV, MEH-PPV, CN
-PPV, LPPP, PAF, PPP, PAT, ZnS, Mn (16) (Indiu
m - Tin - Oxide : "ITO") - - (Indium - Zinc - Oxide : "IZO")
(10) (16) 가 (10) (12) 가 (16)
(16) (12) 가 (12) (14) (16)
(12) 가 (10) (16)
2 , EL (20) (GL1
GLm) (DL1 DLn) , (GL1 GLm) (DL1 DLn)
(PE) , (GL1 GLm)
(24) (22) (GL1 GLm)
DL) (PE) (GL1 GLm) (GL1
EL , 가 (24) (GL1
GL1 GLm) 가 (22) GLm)
DL1 DLn) (DL1 DLn) (PE)
3a 2 (22) "A - A"
3a (22) (20) (28) , (28)
(30) , (30) (32) , (32) (38) ,
(38) (34) , (38) (40) ,
(40) (36) (32), (34) (SiO₂)
(28), (30), (38) (Mo) (40)
, ITO, IZO (36)

laser) , (22, 24) (40) (22, 24) (36) (3b) (36) (40) ITO 가 (40) ITO 가 (36) (40) (40) ; (CO₂) ; 1 1 2 가 1 가 1 2 가 2 1 2 ; 1 2 가 1 2 1 2 1 2 3 4 가 (CO₂) ; 4 10b 4 1 EL (DL1 DLn) , (42) (GL1 GLm) (DL1 DLn) (PE) , (GL1 GLm) (DL1 DLn) (PE) (GL1 GLn) (46) (44) (DL) EL 가 (44) (GL1 GLm) (DL1 DLn) 가 (46) (GL1 GLm) (DL1 DLn) (PE) (DL1 DLn) (PE) EL (OLED) , EL (OLED) (DL) EL (OLED) (50) (DL) 2 PMOS TFT(T2) EL (OLE D) 1 PMOS TFT(T1) , EL (OLED) (VDD) (VDD) 2 PMOS TFT(T2) , 1 PMOS TFT(T1) (Cst) 6 (GL) (LOW) 가 1 PM OS TFT(T1)가 1 PMOS TFT(T1)가 1 PMOS TFT(T1) (Cst) (GL) (VDD) (VDD) (GL) (V DD) 2 PMOS TFT(T2) 가 , EL (OLE

D) 가 EL (OLED) (Cst) (DL) (DL)
 1 (Holding)
 가 EL (OLED) (Cst) (DL)
 7 4 (PE) (GL) (DL)
 4 TFT(T3, T4, T5, T6) (GND) EL (OLED), EL (OLED) (DL)
 7 (PE) (GND) EL (OLED) (VDD) 3 4 PMOS TFT(T3, T4); 4 PMOS TFT(T4), (DL) (GL) (GL)
 5 PMOS TFT(T5); 3 PMOS TFT(T3) 4 PMOS TFT(T4) (GL)
 5 PMOS TFT(T5) 6 PMOS TFT(T6); 3 PMOS TFT(T3) 4 PMOS TFT(T4) (GL)
 (VDD) (C_{ST}) 가 5 PMOS TFT(T5) 6 PMOS TFT(T6)
 (T6) - 5 PMOS TFT(T5) 가 5 PMOS TFT(T5) 6 PMOS TFT(T6)
 (Cst) (Cst) 3 PMOS TFT(T3) 4 PMOS TFT(T4) (VDD)
 (GL) (DL) (DL) (Holding) (Cst)
 (Cst) (DL) 가 EL (OLED) (Cst) EL (OLED)
 (DL) 가 1 RGB 가 (Cst) EL (OLED)
) 8a 8b 4 "B-B'" (42) (52) (52) (60) ,
 8a (54) , (54) (56) , (56) (62) ,
 (60) (58) , (60) (62) ,
 (62) (64) (56) , (58) (SiO₂) (Mo) (62)
 (52), (54), (60) (64) (64)
 , ITO IZO (64)
 (44, 46) (64)
 8b (66), (CO₂) (64) (64)
 (66) (64) (66)
 (64) 가, (66)
 9 (GL1 GLm) 2 EL (70) (GL1 GLm) (DL1 D
 (DLn) (DLn) (76) , (GL1 GLm) (DL1 D
 Ln) (74) (72) (GL1 GLm) (DL) EL ,
 (76) (GL1 GLn) (DL) EL (GL1 GLm) (DLn) (DLn)
 가 (74) (72) (GL1 GLm) (DL1 DLn) (DLn)
 가 (72) (76) (DL1 DLn) 가
 (76) (76) (DL1 DLn) 가
 10a 10b 9 (72) "C-C'" (76) (76) (84) ,
 10a (78) , (78) (70) (80) , (80) (86) ,
 (84) (82) , (84) (88) (86)
 (86) (76), (78), (80), (82) (SiO₂) (Mo) (86)
 , (84) ITO IZO (88)

10b (72, 74) (88) (72, 74) (88) (88)
 , (88) (CO₂) (88) , (88)
 가,

, (CO₂) 가, (CO₂)
 가

(57)

1.

; ;
 (CO₂)

2.

1 , ,

3.

1 ,
 2 ; 1 1 가 1
 가 1 ,
 1 1 ,
 1 1 가 2
 2 가 2 가 2

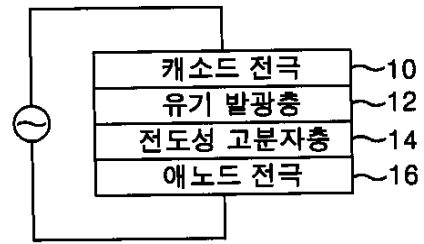
4.

1 ,
 2 ; 1 2 , ,
 1 2 1 2 , 3
 1 2 가 , 3 4
 가

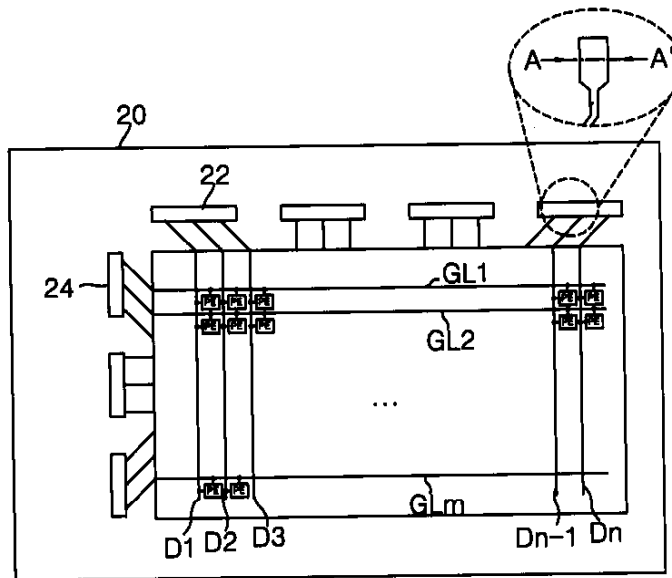
5.

, , , ,
 (CO₂)

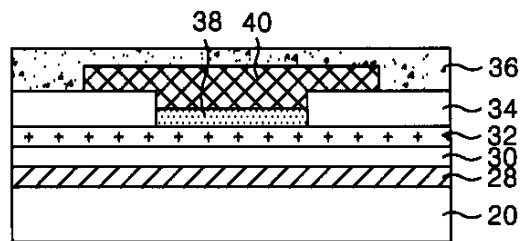
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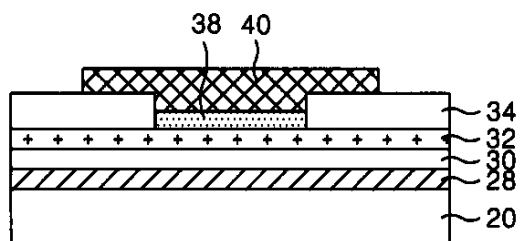
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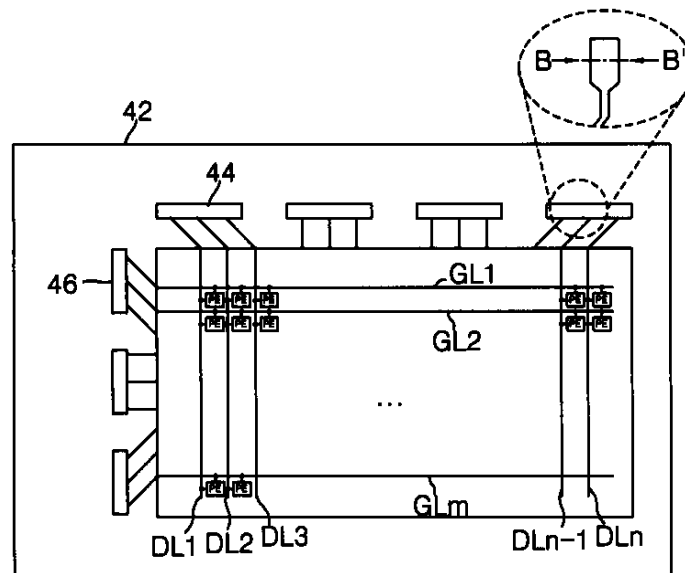
3a



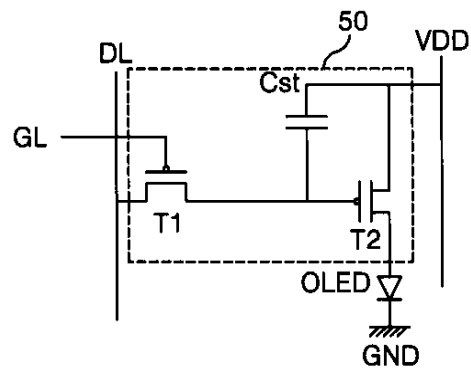
3b



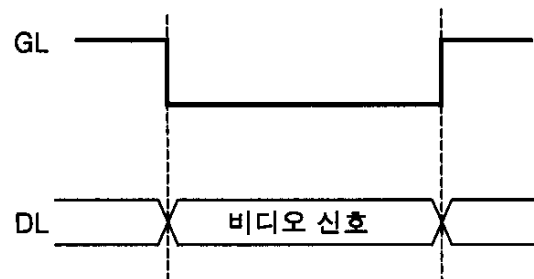
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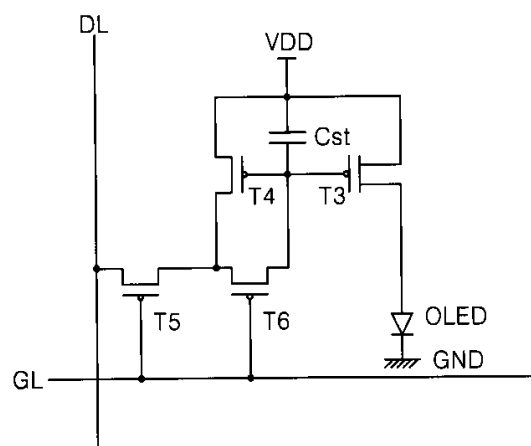
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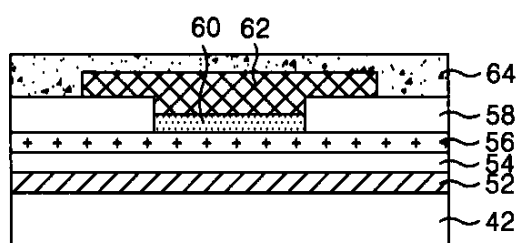
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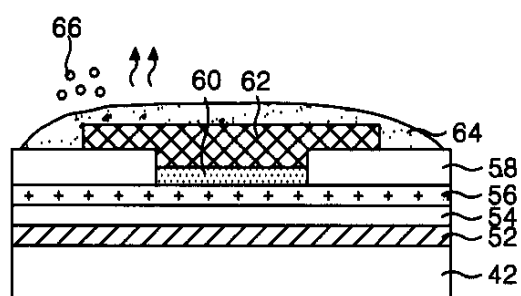
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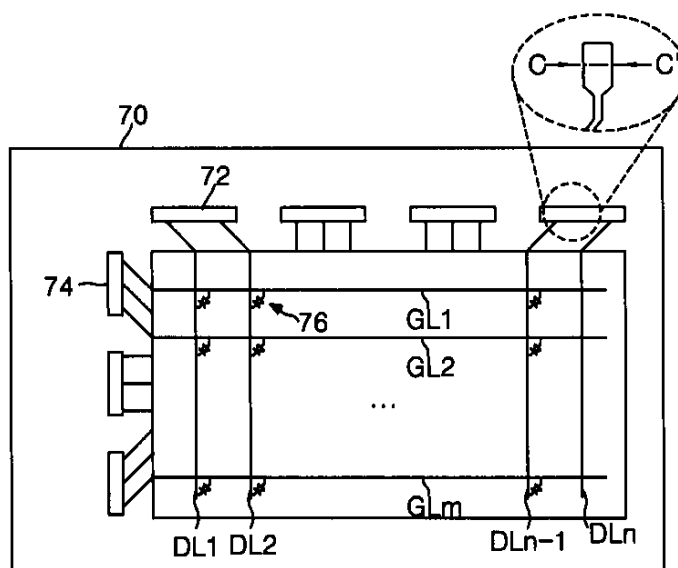
8a



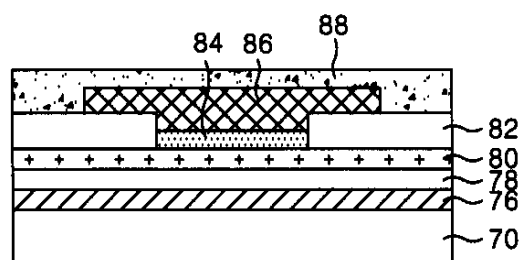
8b



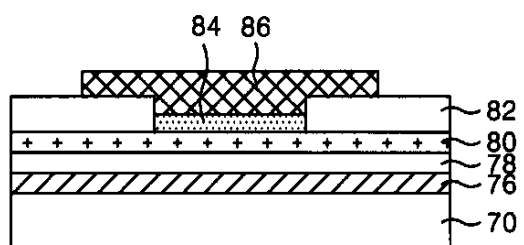
9



10a



10b



专利名称(译)	制造有机发光器件的方法		
公开(公告)号	KR100415616B1	公开(公告)日	2004-01-24
申请号	KR1020010046052	申请日	2001-07-30
[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	HAN CHANGWOOK 한창욱 BAE SUNGJOON 배성준		
发明人	한창욱 배성준		
IPC分类号	H05B33/00		
CPC分类号	H01L27/3244 H01L51/52 H01L51/5234 H01L51/56		
代理人(译)	KIM , YOUNG HO		
其他公开文献	KR1020030012157A		
外部链接	Espacenet		

摘要(译)

用途：提供一种制造有机电致发光器件的方法，以通过使用CO₂去除导电聚合物层来防止导电聚合物层的下层上的损坏。组成：缓冲绝缘层（52）形成在基板（42）上。在缓冲绝缘层（52）上形成栅极绝缘层（54）。在栅极绝缘层（54）上形成层间电介质（56）。在层间电介质（56）上形成数据线（60）。在数据线（60）上形成保护层（58）。透明电极（62）连接到数据线（60）的漏电极。在透明层（62）上形成导电聚合物层（64）。缓冲绝缘层（52），栅极绝缘层（54），层间电介质（56）和保护层（58）通过堆叠诸如SiO₂的绝缘材料形成。数据线（60）由诸如Mo的金属材料形成。透明电极（62）由ITO或IZO形成。通过沉积聚合物材料形成导电聚合物层（64）。通过使用CO₂除去导电聚合物层（64）（66）。

