

(19) (KR)
(12) (A)

(51) Int. Cl.⁷
H05B 33/10

(11)
(43)

10-2004-0002750
2004 01 07

(21) 10-2003-0042040
(22) 2003 06 26

(30) 10/184,417 2002 06 27 (US)

(71) 343

(72) 14469 352227

14526 8

(74)

:

(54) (O L E D)

’ (angularly) ; (OLED) 가 OLED ;
, - 가 ; OLED
, - OLED ; OLED
OLED (raster) , OLED ;

7

1a OLED

1b

가 , EL

가 . EL

EL (Grande) 5,851,

709 1 , 1 2 ; 2)

; 4) 2 - ; 3) - ; 5) -

가 - ; 6) ; 7) -

가

(Wolk) (:) 6,114,088 ; 6,140,009 ; 6,214,520 ;

6,221,553) 가 EL

(registration) 가

- OLED
- (a) OLED OLED OLED
 - (b) ;
 - (c) 가 OLED OLED 가
 - (d) OLED ;
 - (e) OLED OLED ;
 - (f) , 1 1 2 1 2 ,
 - 1 , 2 , OLED
 - (OLED)

가 ,
 가
 가 EL

EL EL (가)
) 가 / 가 ,
 가 OLED
 가

'OLED' OLED
 (multicolor)

가 ,
 3 , 3 가
 (subpixel) 가
 , 2 , 3 가

(12) OLED (10) 가 1a (12)
 (thin-film transistor, TFT) (passive) (active)
 (12) () 100μm ()
 (10) 가
 가 (10) , , , ,
 (10) OLED TFT (10) OLED
 EL EL
 ED , , 'OLED' , (10) OL

1a (10) 가 , , , ,
 가 (10) (12) 2
 (10) (10)
 (40, 42) (40, 42) (10) , ,
 , 'X' , 가
 1a (10) 가
 (40, 42) 1 (44) ,
 (40) 2 가
 (, (46)) ,
 (42)

(, /)
 가 1 μ
 (Sony), (Princeton Instruments),
 (Micro-Lumetics) (Aegis Electronic Group)

1b (10)
 (46) (44) (50) (51)
 (52) (53)

2 (44, 46) (40, 42) (51, 53))가 x y
 (10) (10a)
 (10) (10c) (10b)
 (10) (40, 42)

3a / (100) 가 (100) (24)
 (100) ,가 (100)
 (Kay) 10/055,579 (16) (10) (16)
 (10) (16) 가 (96) (10) (10) (96) (16) (Ph
 ellips) 10/021,410 (16) (10)
 가 (10) (94) (24) 가
 (24) (24) 가 (96) (16) (16)
 (24) (98) (24)

3b OLED (16) (10) (16)가 (10)
 가 (16) (18), (20) (22) (18) (22)
 (16) (24)((20) 가
 (22) (22) (16) 가) (16) (26) (22)
 (10) (28) (10) (32)

3c OLED 가 OLED ,
 , 3
 가 (16) 1 (12a) - (32a) : - (22) 1
 2 (16) 2 (12b) - (32b) (22)
 (22) 3 (16) 3 (12c) - (32c)
 (32c)

(18) 가 :
 가 가 -가 - 가

가

가

가 가

(20)

5,578,416

(20)

OLED

(22)

(22)

5,935,721

EL

(LEL)

4,769,292

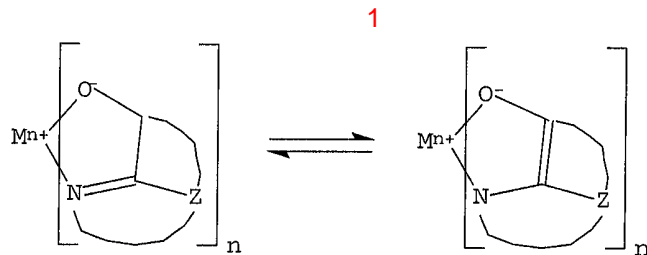
WO 98/55561 , WO 00/18851 , WO 00/57676 WO 00/70655
0.01 10 %

가 가
(bandgap potential)

4,768,292 ; 5,141,671 ; 5,150,006 ; 5,151,629 ; 5,294,870 ; 5,405,709 ; 5,484,922 ; 5,593,788 ; 5,645,948 ; 5,683,823 ; 5,755,999 ; 5,928,802 ; 5,935,720 ; 5,935,721 ; 6,020,078

8-

500nm (1) (: , ,) :



M ;

n 1 3 ;

Z

1가, 2가 3가 ;
1가, 2가 3가 ;

Z () 가 가 가 가 2 18

:

CO-1: [(8-) (III)]

CO-2: [(8-) (II)]

CO-3: [{f}-8-] (II)

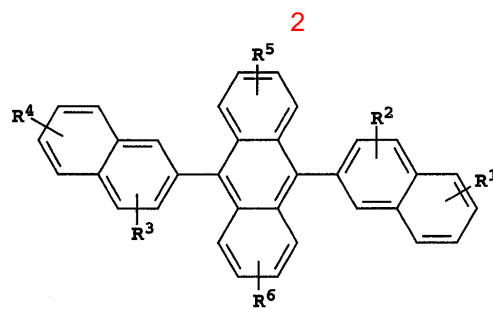
CO-4: (2- -8-) (III)-μ - - (2- -8-) (III)

CO-5: [(8-)]

CO-6: (5-) [(5- -8-) (III)]

CO-7: [(8-)]

9,10- -(2-) (2)
, 400nm (, , ,) :

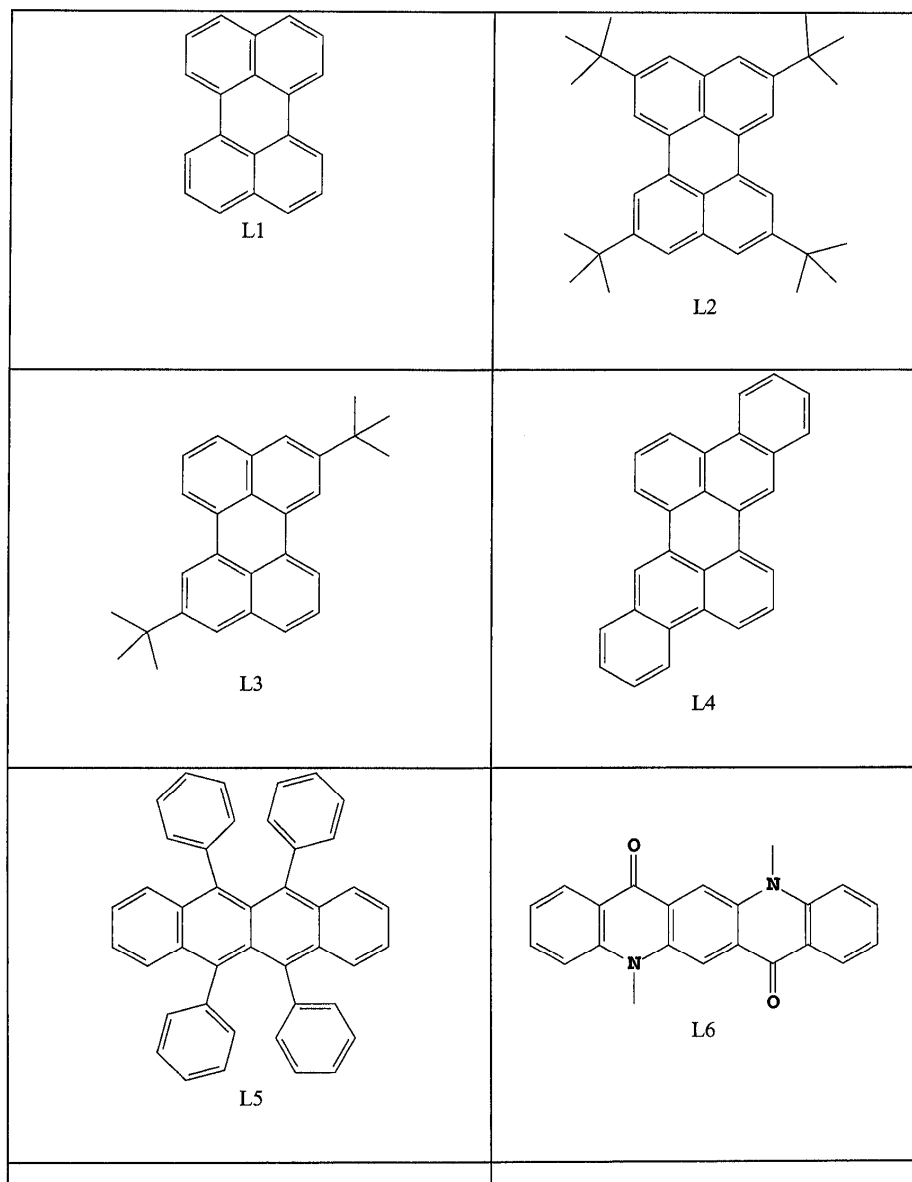


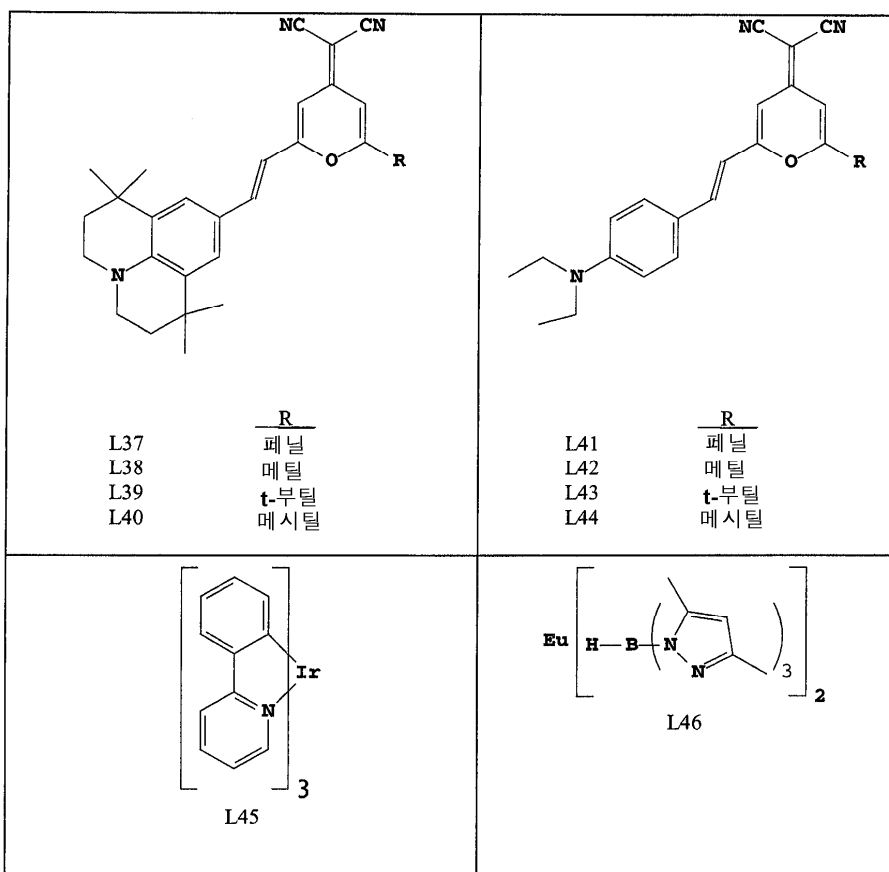
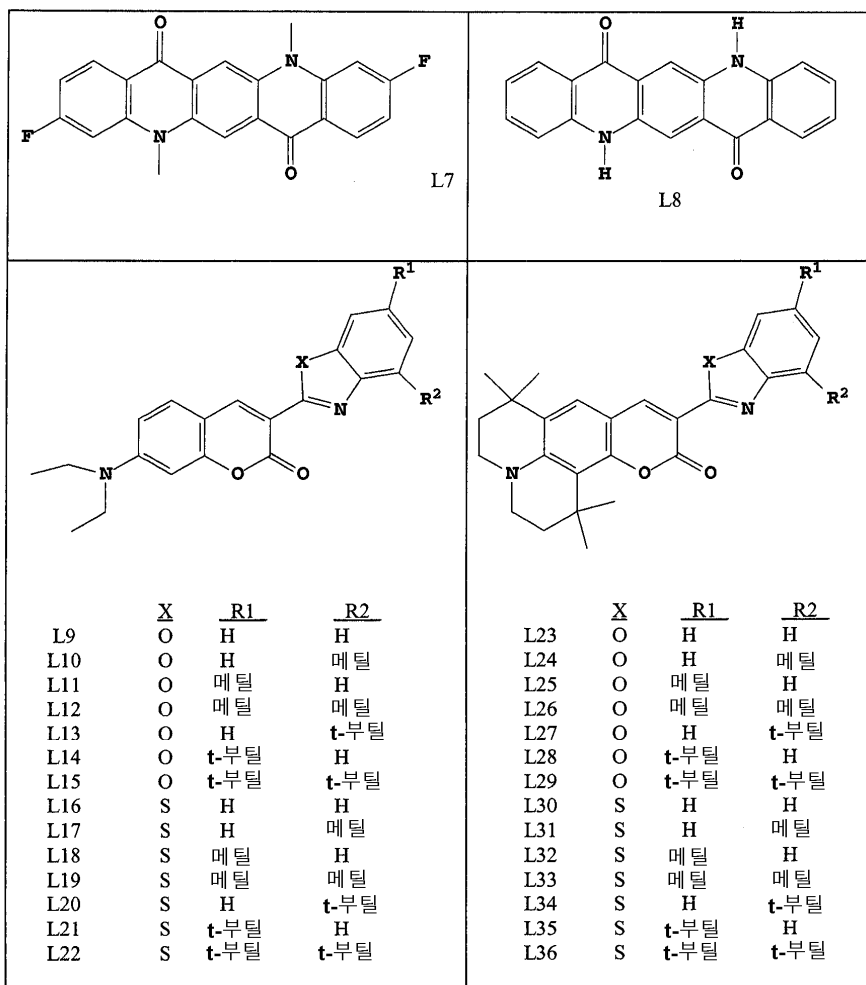
R¹, R², R³, R⁴, R⁵ R⁶ 가 ;

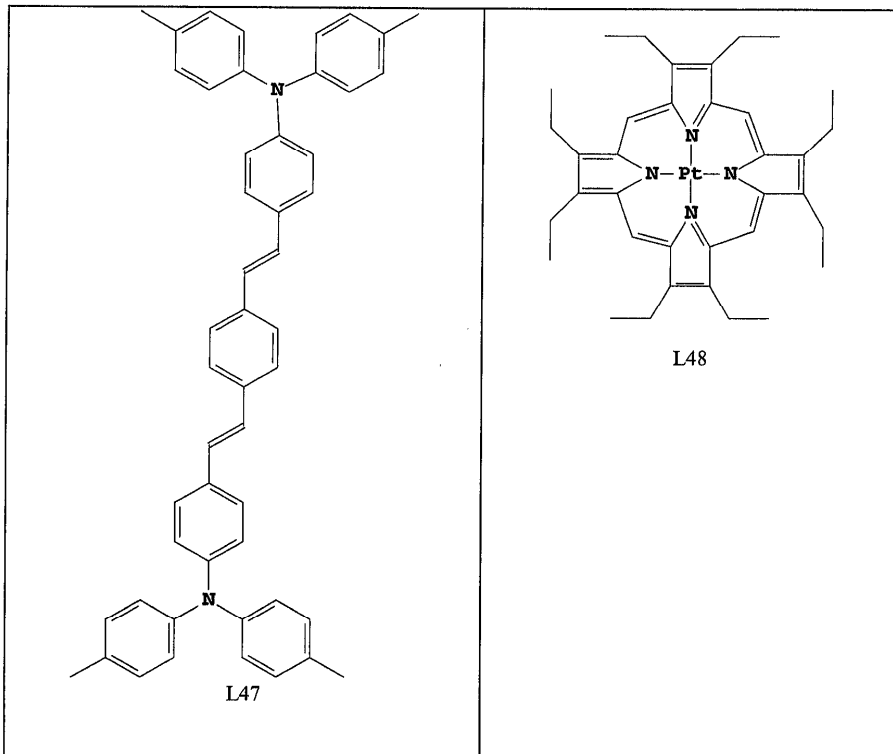
1 : , 1 24 ;

2 : 5 20 ;

3 : 4 24 ; ;







6,194,119 B1

(16) 가 (22) (12) (14) (24)

(10) 가 (12) 가 100 μ m 가

4a (44, 46) (10) (offset) 4a

(46) x_{c2}, y_{c2} x y (48) y (49) x_{c1}, y_{c1} (92)

(44) x_{c1}, y_{c1} (42) $x-y$

x-y (40, 42) (92) (10) (44) x_1 (62) y_1 (64) (40)

(46) x_2 (66) y_2 (68) (42) $x-y$

(92) x y (40) x_{f1}, y_{f1}

(42) x_{f2}, y_{f2}

4b 가 (74)

(40, 42) (74)

(80) (78) (80)

(10) (74) (76) (78)

(10) (74) (82) (80) (84)

10) (86) x_L (88) y_L (90) (80) (80) (74)

x_L (88) y_L (90) (86)

5 4a 가 가 가 (116) (116) (100) (24)

(102, 106, 108) (112)

10/055,579

(100) 가 (100) (102) (24) (100)

10/055,579 (102) μm (104) (100)

orp.) (102) (102) (112) (102) (Dover Instruments C 가 (100)

(100) (10) (102) (16)(4b x (48)) (100)

(102) (106, 108) (102)

(102) (110) (106, 108)

(102) (106, 108) 4b y (49) (104) (110)

(106, 108) 가 (100) (24) (106, 108)

(86) (100) (24)

6 (152) (246) (102, 106, 108) (100) (102, 106, 108)

(270) (246) (252, 254, 256)

(102, 106, 108) (100) (258, 260, 262) (100)

(246)가 (102, 106, 108) (100)

가 (pulse train) 가 (linear encoder)

(251) (102) (102)

(251) (100) (92)

x-y x-y 가 (10) (40, 42) (248)

(248) x-y (248) (248)

50) (250)가 x-y (92) (40, 42) (248) (248)

(10) (24) (250)

PC(150) (248) PC (40, 42) (250) (10)

(100) PC(150) (246) (102, 106, 108), (246)

(86) (246) PC(150)

(246) PC(150) (102, 106, 108)

PC(150) (250) (100)

(246) PC(150) (100)

(146) (148) (246) (154)

(100)

(102, 106, 108) (102, 106, 108)

(102, 106, 108) (258, 260, 262) (252, 254, 256)

(246) (246)

(258, 260, 262) (252, 254, 256)

(252, 254, 256) (246)

(102, 106, 108)

PC(150) (154)가 (100) (154)

(246) (264)

(100) (264)

(246)

(100)

(24) (10) 가

(100) (10)

(24) (10)

가

7, 4a 4b , 가

(44) (122) , 1 x-y (92) 가

(124, (46) 2

x-y (92) (10) (126, (10) (

) (16) (10) (123) (40, 42) 가 (

) (248)가

20% (44)

1 (40) (128, (46)

2 (42) (130, (

(92) x-y (92) (10) PC(150) x-y

(76) (40, 42) (132) (76) (78))

(10) (78) (134) (24) (10)

x-y (92) (82) (138) (246) (136), (

(106, 108) 가 (24)) PC(150)

x-y (92) (86) (128) (134)

(40, 42) 가, (102, 106, 108)

가

(136),

(142), (147) (144)

(145)

8 6 , x-y (24) , 7 (124, 126)가
 (156) , PC(150) (24) PC(150) (154) (100)
 (158). (100) , PC(150) (154) (100)
 06, 108) (160). PC (246) (100) (102, 1
 (162). (162).
 162 158 160 , 162 (248)가
 () (248) (24)
 () (248)
 , 20% .
 PC(150) (250) () (248)
 (164). (250) (100) (168),
 x y PC(150) (170). (24)
 PC(150) (152)
 (248) (24) x-y (92) , (24)
 (248)
 가 , PC(150) (152)
 (174). (152),
 (246) , PC(150) x y (92) (180).
 x-y (154) (100) (178) (100)
 (182). , (184), (15
 4) (152) PC(150)
 2 x-y
 (92)
 9, 1a 6 , (10)
 , 9 7 128 130
 (250)가 1a , (44 46) (40 42) 190 , (248)
) (192). , (250)
 (194). , (24) x-y (92) (10)
 (10)
 10, 4b, 5 6 , 10 7 134 200
 , PC(150)가 (40, 42) , (82) (202), PC(150) (74)
 84) x-y (204). PC(150) (74, 80) (86) ()
 (206). , x L (88) y L (90) (86)
 08 , PC(150)가 (74) (80) , PC(150) 2
 (212).
 , OLED
 10/055,579
 (swath)
 x-y , PC(150) (152) (154)
 가 (154) 가 , x
 -y 가 가 가 ,

OLED ;

(b) (angularly) ;

(c) 가 OLED OLED , - 가 ;

(d) OLED ;

(e) OLED , OLED ;

(f) , 1 1 2 1 2 , , OLED , 1 , 2 (OLED) .

2.

1 ,

(f) - - 가 .

3.

1 ,

가 OLED .

4.

(a) OLED OLED OLED ;

(b) , ; OLED

(c) 가 OLED OLED , - 가 ;

(d) 1 OLED ;

(e) OLED , OLED ;

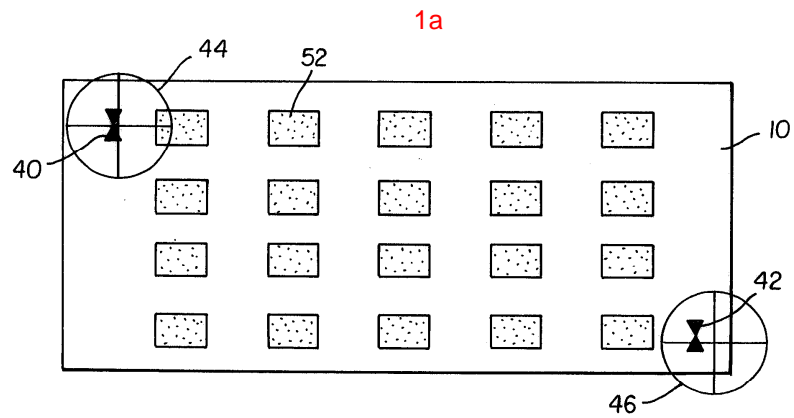
(f) , 1 1 2 1 2 , , OLED 1 1 2 , 2 OLED ;

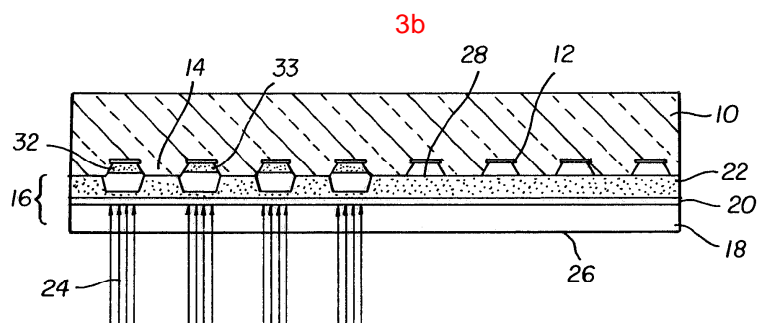
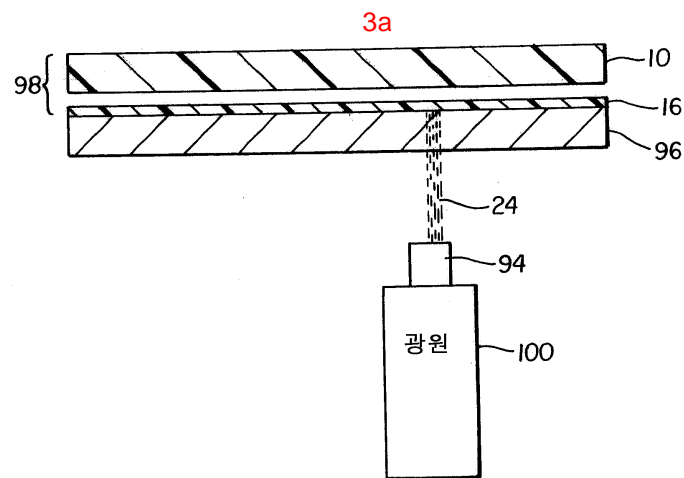
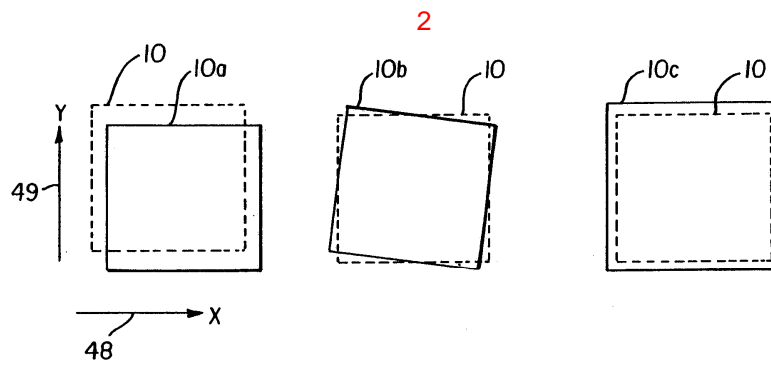
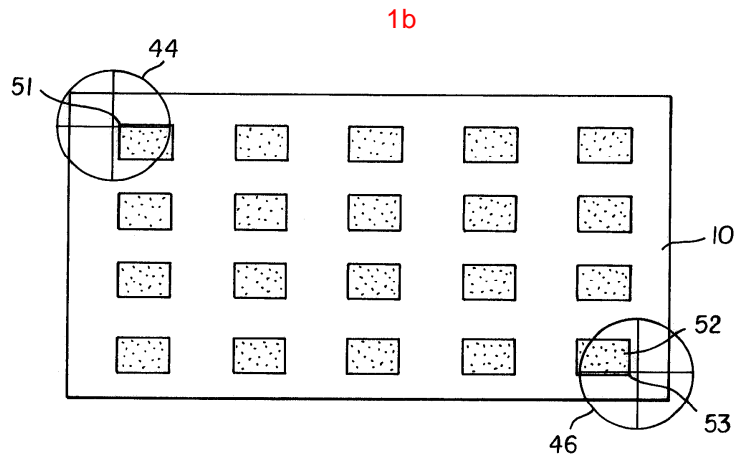
(g) OLED 2 (d) (f)

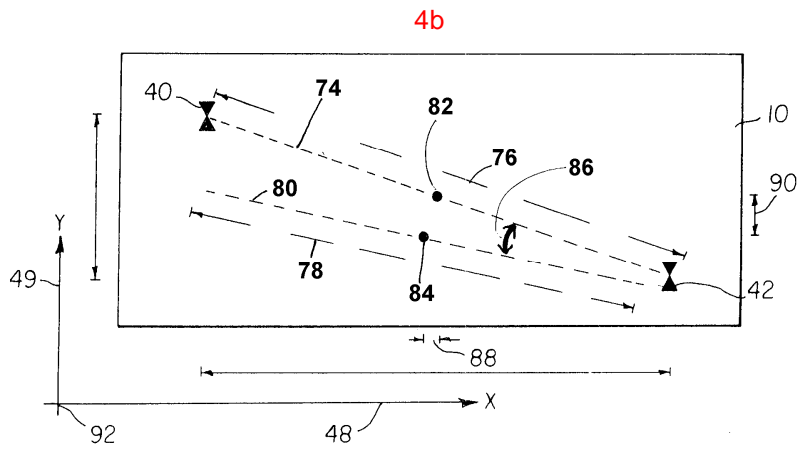
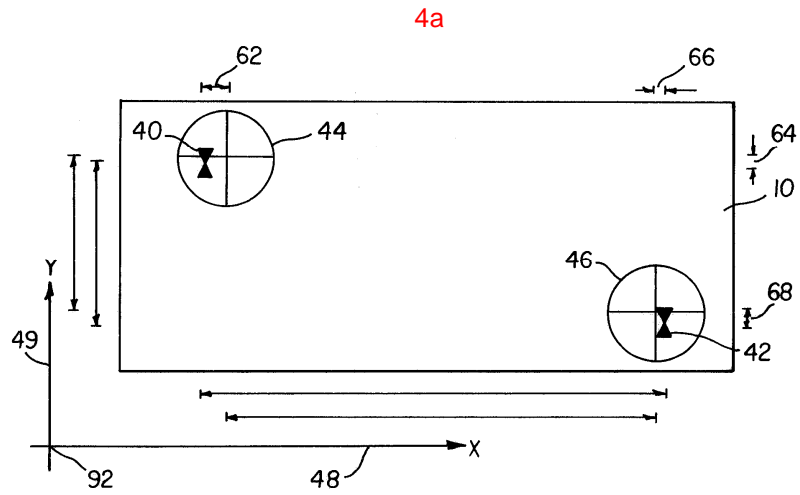
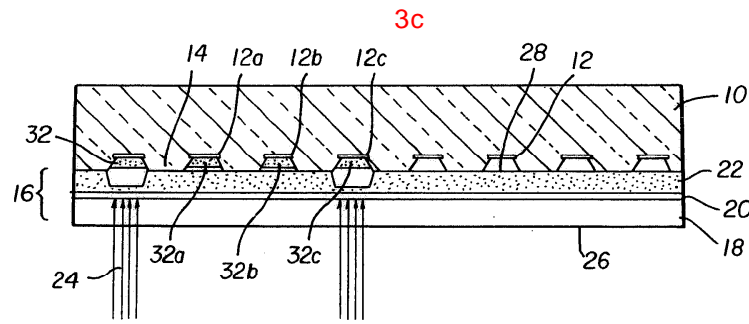
(OLED) ,

5.

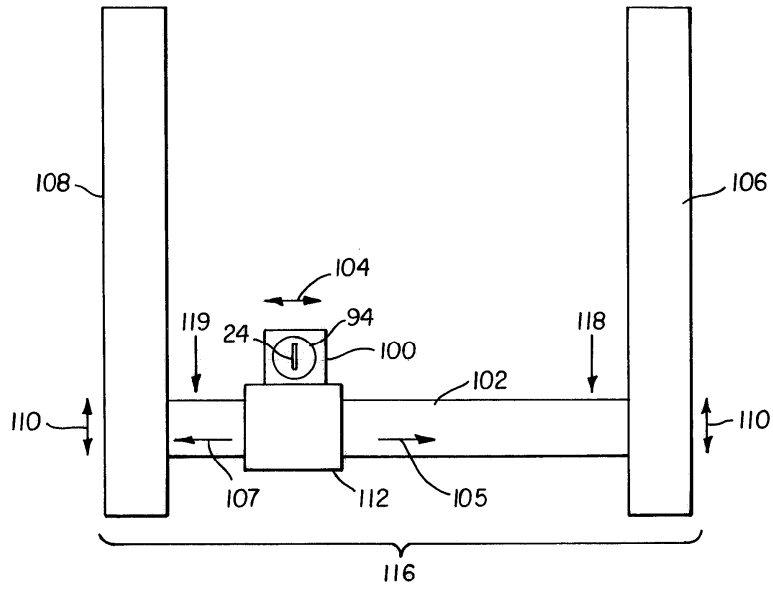
- (a) OLED
OLED ; OLED
- (b) , ; OLED
- (c) 가 OLED , - 가
OLED ;
- (d) OLED ;
- (e) OLED , OLED ;
- (f) , 1 1 2 1 2 ,
1 1 2
, OLED 1 1 2
, 1 OLED ;
- (g) OLED 2 (d) (f)
(OLED) ,



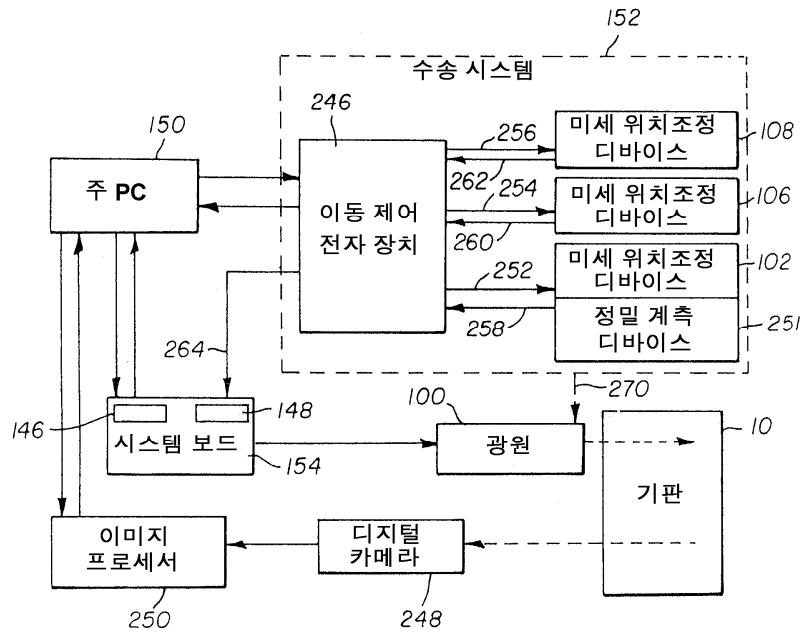




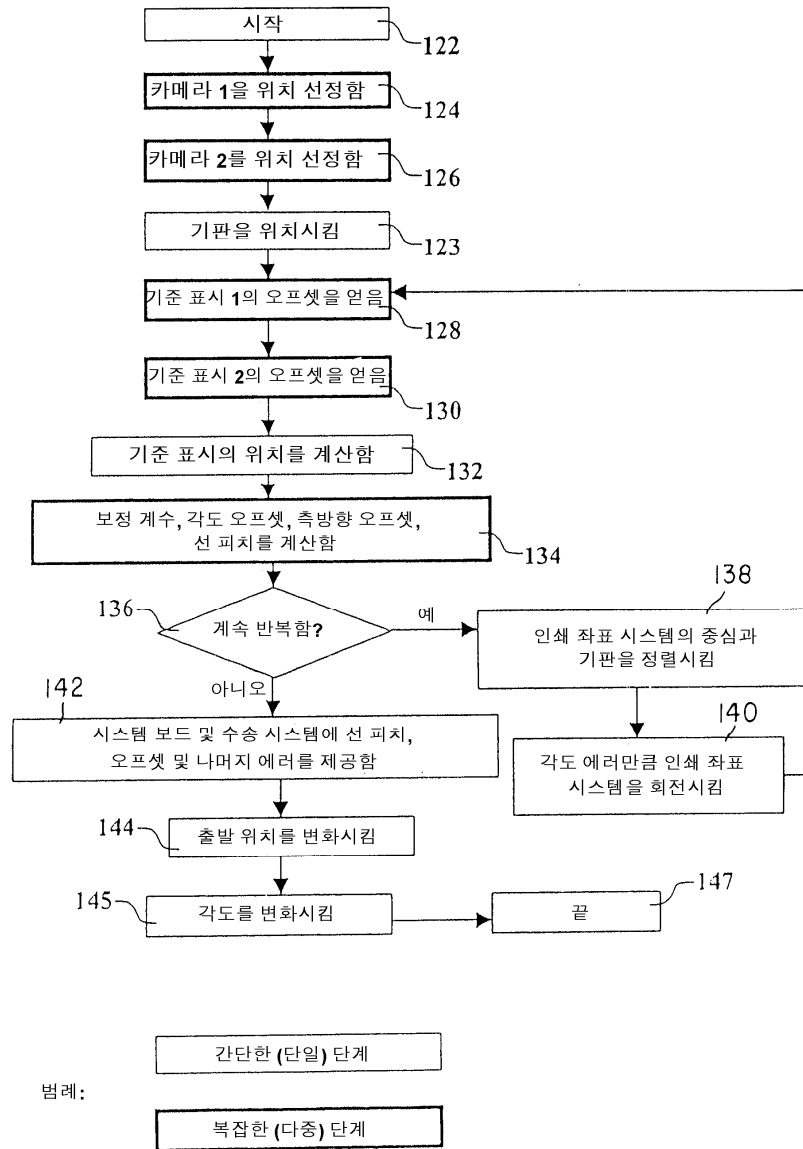
5



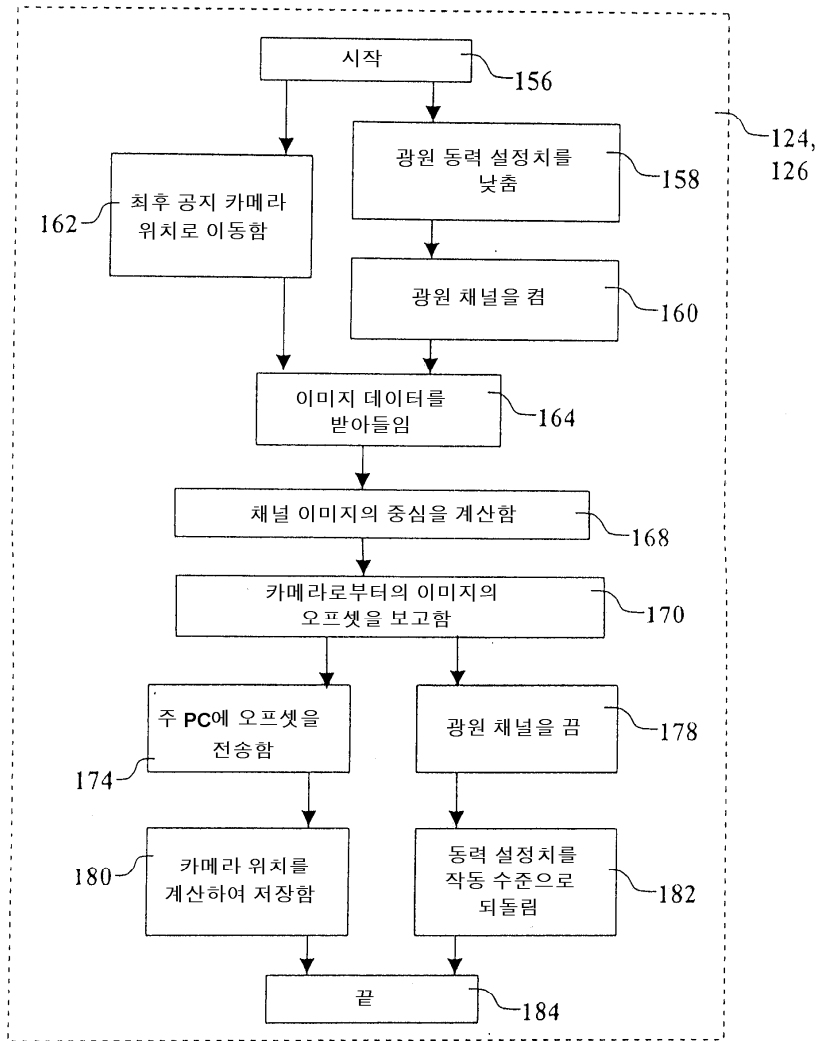
6



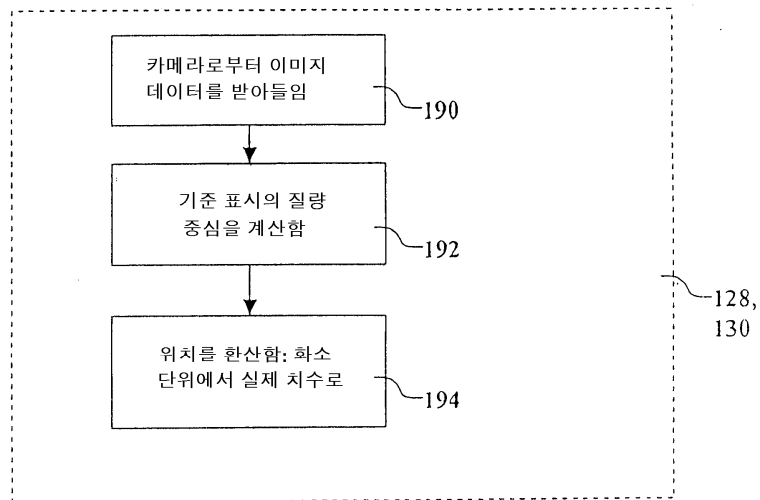
7

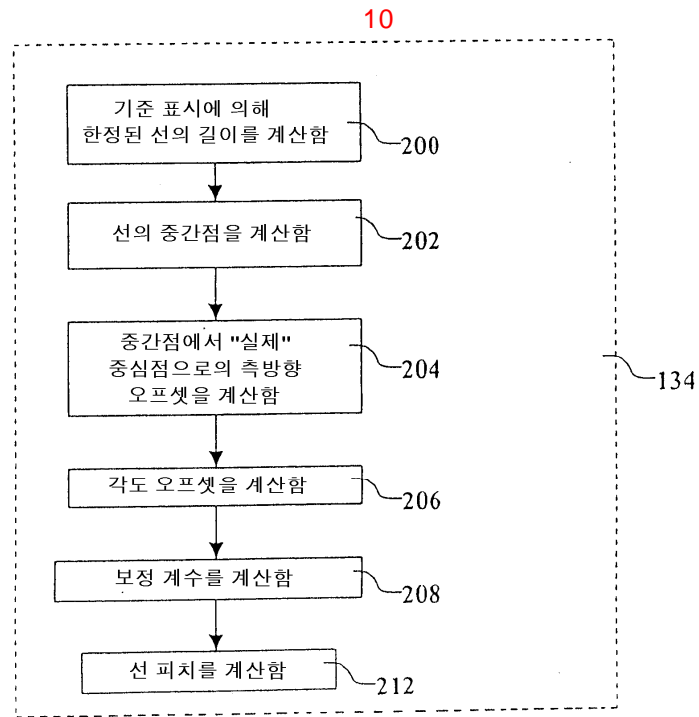


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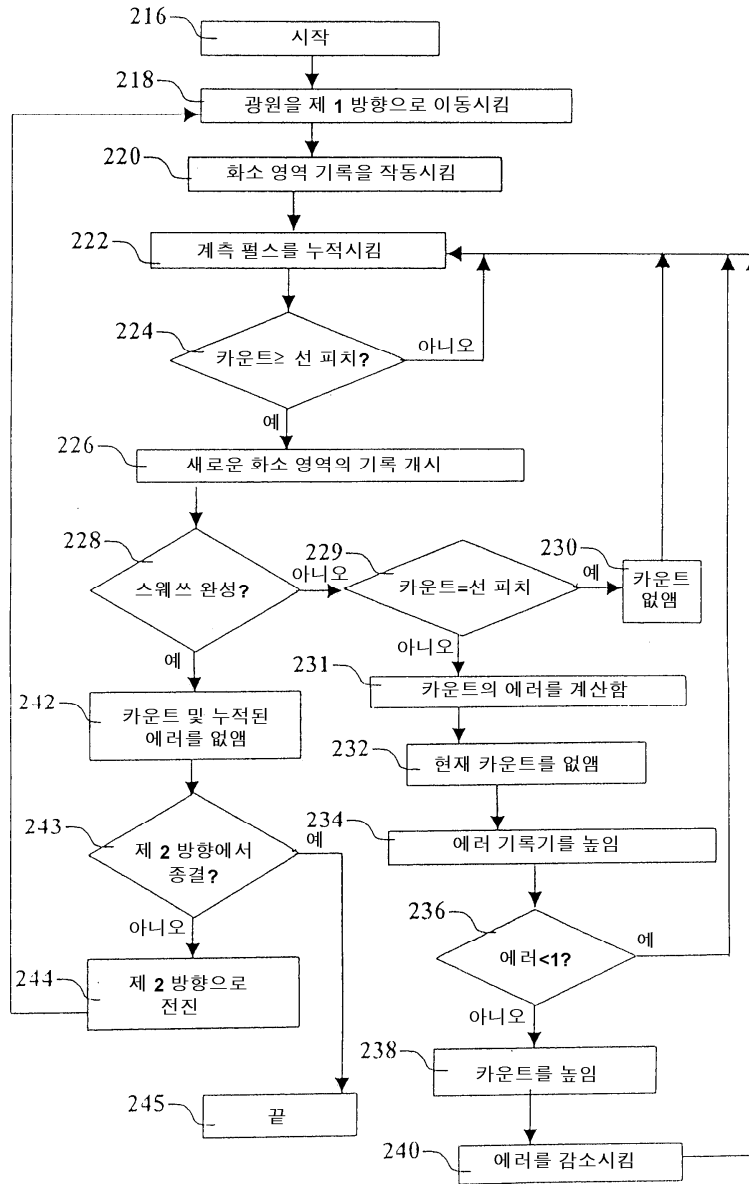


9





11



专利名称(译)	沉积用于有机发光显示装置 (OLED) 的发光层的方法		
公开(公告)号	KR1020040002750A	公开(公告)日	2004-01-07
申请号	KR1020030042040	申请日	2003-06-26
[标]申请(专利权)人(译)	伊斯曼柯达公司		
申请(专利权)人(译)	柯达公司针		
当前申请(专利权)人(译)	柯达公司针		
[标]发明人	RIVERS ANDREAS 리버스안드레아에스 TANG MANH 탕만		
发明人	리버스안드레아에스 탕만		
IPC分类号	H01L51/40 H01L51/50 H01L51/56 H05B33/10 H01L51/30 H01L27/32 H01L51/00		
CPC分类号	H01L51/56 H01L51/0084 H01L51/0059 H01L51/0089 H01L51/0062 H01L51/0085 H01L51/0013 H01L51/0077 H01L51/0052 H01L27/3211		
代理人(译)	KIM, CHANG SE 张居正, KU SEONG		
优先权	10/184417 2002-06-27 US		
外部链接	Espacenet		

摘要(译)

本发明提供一种有机发光显示装置, 包括: 具有至少一个标识的有机发光显示装置 (OLED) 基板; 提供横向且可角度移动的光束; 当供体元件相对于OLED衬底适当定位, 光束的能量 - 被吸收层吸收的包括被设置成被加热并使其他的转印发光材料和能量的发光材料 - 具有吸收层提供无图案的供体元件; 感测OLED基板上的识别相对于光束位置的位置, 以确定 OLED基板相对于光束的位置和取向; 根据检测到的OLED基板的位置和方向倾斜地移动光束, 然后以光栅方式移动光束; 并且当光束移动到不同的横向位置时改变光束的操作时序。 7

