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(87)

2003 05 08

(30) 0126122.1 2001 10 31 (GB)

(71) 3 0

(72) CB3OTX

CB3OTX

(74) :

(54) -

- 가 , , - , -
1 , 1 , 1 , 2 2
, LED - 2 .
3

(active matrix organic light emitting diode displays)

(OLED) 가 , 가 , 가 LED ,
 ()
 LED WO90/13148 WO99/48160
 (small molecule based devices) US4539507
 LED (100)가 1a (102) ,
 (106), (electroluminescent layer)(108) (cathode)(110) ,
 (ITO) (transparent anode layer)(104) (108) , , PPV(
 (p-phenylenevinylene)) (104) (108)
 (106) , , PEDOT:PSS(polystyrene-sulphonate-doped polyethylene-dioxythiophen
 e) (110)
 (114, 116) , (108) 가 ,
 (118) 가

1a (120) (104) (102) (b
 ottom emitters' (110) 50 100 nm

LED

WO99/42983

EP0717556A

1b OLED (150) (150) (b
 GND)(152), Vss(154), (ROW_SELECT)(164) (COLUMN_DATA)(166)

(164) 가 , (166)

(152, 154) (158) (159) (158) LED(156)
 (158) (159) (160) (162)
 (164) (159) (166) (162)
 (164) (166) (159) (160)
 (FET) (162)가 (on) , (166) (160)
 (162) (158) (160)

(158) FET , (159) OLED(156)
 () , OLED

1b 가 OLED(156) 가 OLED
 (158) (166)

OLED (200) , OLED(216) (210) , (202, 204), (210) (206) , 1b (208) , (low) (high)가 , (low)가 .
 2 (214)가 , (214) (208) (206) (212) OLED(216) (218) OLED(216) (212) OLED(216) (214)가 , (214) (208) (206) .
 2a (200) , , NMOS PMOS 가 .
 2a 가 , (206) GND -20 , OLED , Vss (208) 0 -6 .
 , (212) (224) , (220, 222) (I_col')가 , (222) (212) (214) (212)(. 가 (224) (218) (214) , (220, 222)가 , , OLED (212), (214) OLED(216) , , OLED (224) .
 212) (224) , (218) (I_col') (212) , , (220) (212) (218) / 가 (224) , (212) , , (220) , 가 (220) .
 OLED(216) , 2a 1a 가 (212) , , 2a , OLED(216) 가 .
 (OLED (OLED) . 2a , , 가 (I_col') , OLE D(216) (212, 214, 222)가 , .
 가 , OLED WO01/20591, EP0923067A, EP1096466A JP5-035,207 , . WO01/20591 2b .
 2b (252) - (250) . 2b

, , 가 가 ,

1 2

가

2b

가

가

(touch-sensitive)

(reflective tip)

가

()

가

(deconvoluting)

가

;

;

;

1 (de-assert)

1 2

1 2

(assert)

2 1 2

1 2

1 5

가

(electroluminescent)

1a 1b LED - OLED

2a 2b - OLED - OL
ED

3 LED

4a 4b OLED

3a LED (300)가
(row-by-row) ()가 OL
ED (GND) (302), Vss (304), (306, 307) (308)

(328) (308) (330) () (324)
() (324) ,
가 (308) 가 (324) 가
(328) , 가 (308) , 가
(306, 307) (332) (300) 가 1 2

(300) GND(302) Vss(304) LED (312)
(310) (310) (314) OLED (

312) 1 2 (306, 307) 2
(320, 322) (320) (322) (317) (316)가
(315) (317) (308) (317) (314) (310) (322)
가 3 PMOS

(316)가 GND (302) (317) OLED(312)
(316) , OLED(312) (318)가 OLED (312) (316)
, , GND (302) Vss , 가 (316) 가
(316)

1 (306) (320)가 ' ' , 가 (308) (3
17) (316)가 (308) (306) (307) (320)가
- (322)가 - (315) (317)가 , 2 (307) ,
가 - (315)가 (317)

(320, 322)가 - (, 1 2 (306, 307)),
(316) (307)), (320)가 (1 (306) (322)가
(316) (GND) (302) (308) (308) (316)
(316) (330)가 (308) (328) ,

(316) OLED(312) OLED

(316) (photovoltaic) 가 , OLED(312) 가 , (328)가 , OLED(312) (316)

3 (316) OLED(312)가 - OLED(312)가 - 1 2 (dark) OLED가 -

1 (306) , 2 (307) ()-()-()

1 (306) , 2 (307)

4 , OLED (406) (402) (404) OLED (406) (408) (410) (404) ()

4a () (450) (452)가 (454) (458) 1 (454) (454) (456) , OLED 가 가 가 (452) () , 4b 가 가

4a 4b LED , - EP880303 , 4b , CMO

S 가 , OLED

PMOS , NMOS가 , PMOS NMOS (TFT) , CMOS 가 , WO99/54936 가 OLED 가 ,

n Film Electroluminescent) LED (porous) TFEL(Thi 0121077.2 , 가 (segmented)

TFT 가 PN PIN FET가 가

1.

tive)

(photosensi

1 ; , 1 1
2 , 2 2

2.

1 ,
2 ,

3.

2 ,

4.

3 ,

(FET)

FET

5.

1 4 ,

1 2 FET

6.

- , 1 5

7.

6 ,

6 8. 7 , , 1 2

8 9. , , 가

8 10. 9 , 가

8 11. 10 , 가 1

8 12. 11 , 가 , 2 가
(on) 2 가 2 가

8 13. 12 , 가,

- 14. 가 , 6 13 1 5 .

1 15. 5 , ;

;

;

16.

1 5 ,

1 2 (assert) (de-assert) 1 2 ;

,

,

17.

1 5 ,

1 2 1 2 ;

,

,

18.

16 17 ,

;

;

19.

1 5 ,

, 2 2 ;

;

,

;

,

;

2 ,

(deselect)

1

20.

가 - , 1 - 5
;

21.

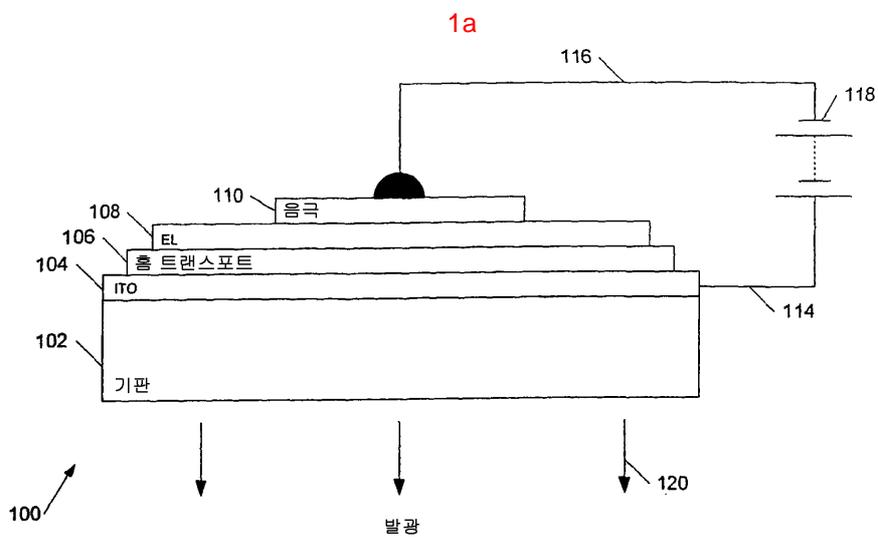
(electroluminescent)

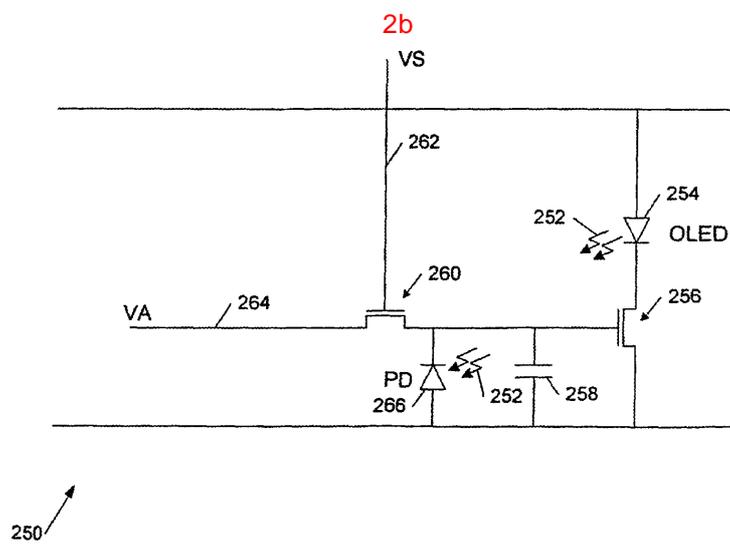
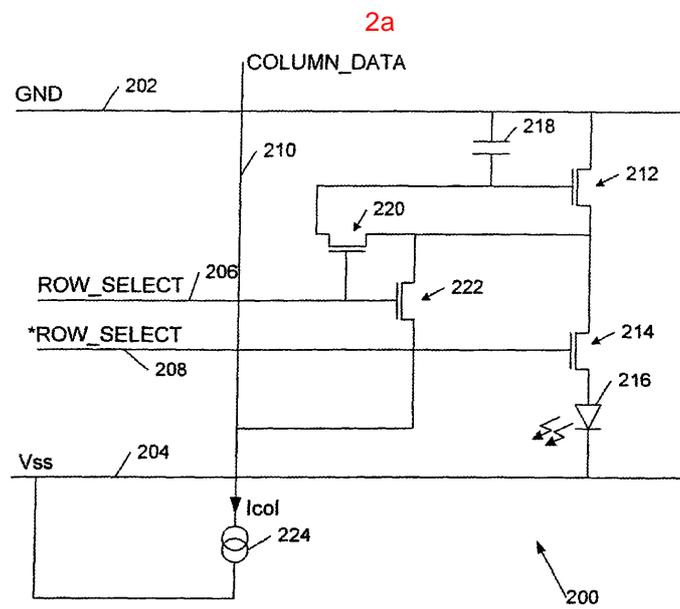
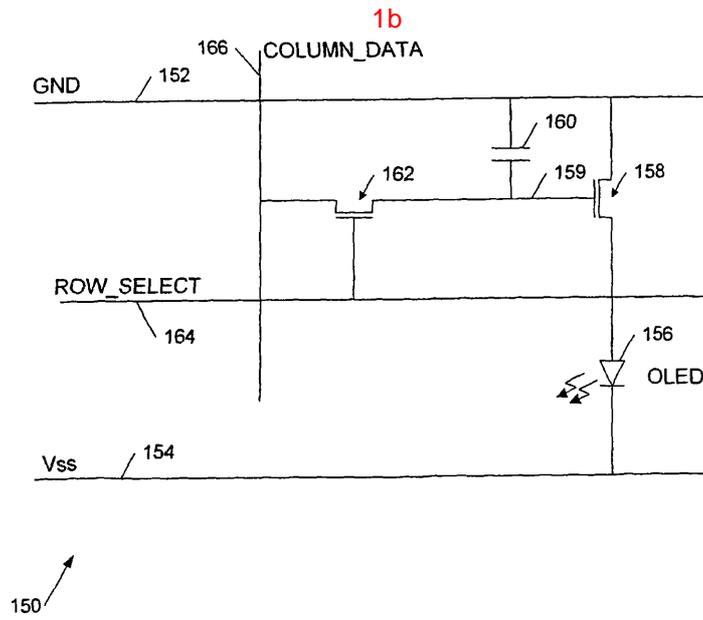
;

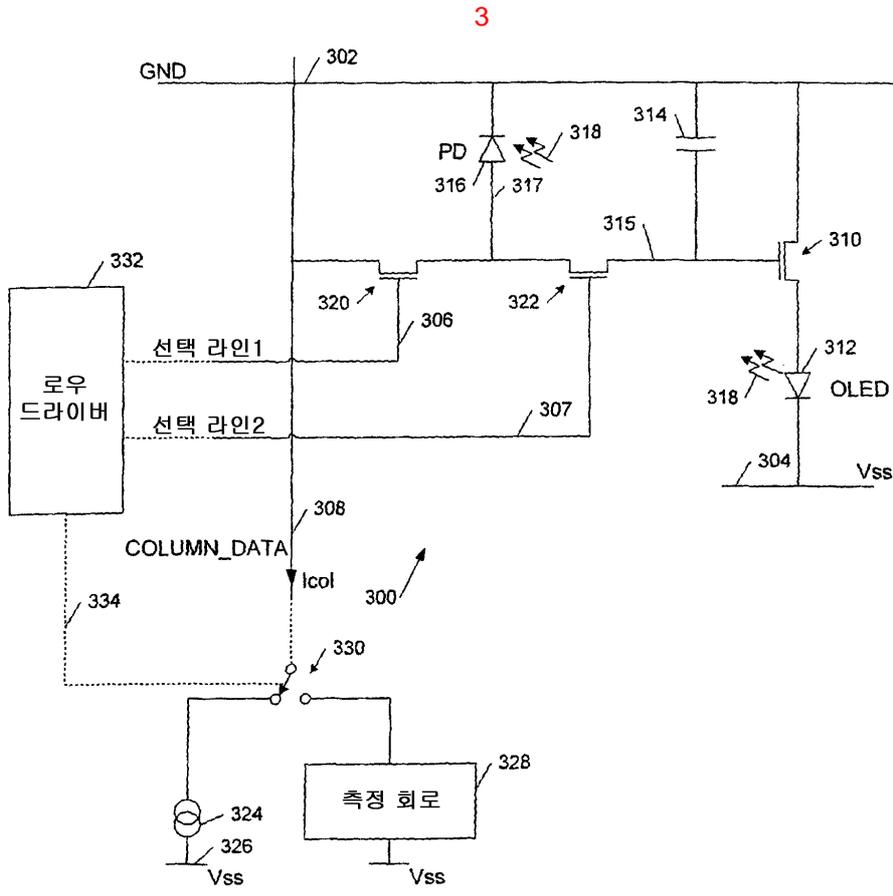
22.

15 , 18 21

(dark)







专利名称(译)	用于电光显示的显示驱动电路		
公开(公告)号	KR1020040058015A	公开(公告)日	2004-07-02
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优先权	2001026122 2001-10-31 GB		
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外部链接	Espacenet		

摘要(译)

提供一种有源矩阵显示器，其使用用于电光显示器的显示驱动器电路，尤其是有机发光二极管。该电路包括根据驱动电压光学连接到驱动器以驱动电光显示装置的光电传感器，以及电光显示装置和根据到达的灯通过电流的光电传感器，以及光电传感器，第一控制装置连接在数据线之间，用于响应第一代理在线的第一控制信号将光电传感器连接到数据线，第二代理装置连接在光电传感器和驱动器之间，用于将光电传感器连接到驱动器响应第二代理的第二控制信号在线。该电路可以操作多种不同的模式。可以提供像有机LED像素那样的电光显示装置的软控制。显示驱动器，有源矩阵，有机发光二极管，光电子。

