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(71) 가 가 가 4 6

(72) 1 - 5 - 1 가 가

1 - 5 - 1 가 가

(74)
:

(54)

, 가 ,
2 (CD) 2 (CNTB) 가 1 , 1 (SUB) 2 (CD) 2 (CD)
(CNTB) 가 . (CNT) 2

1		1	.
2	1 1		.
3		1	.
4		2 2	.
5		2	.
6		3	.
7		4	.
8		5	.
9			.
10	9		.
11	10	9	.
12			11
13		1	.

< >

CD : CNTL :

CSL : CNTB :

CSB : CNT :

GL : PX :

DL : GDR :

CPR : DDR :

PAD 1, 2, 3, 4 : SUB :

TFT 1, 2 :

E

L(,) LED()

가 EL LED 가

(LED 가 : , OLED) OLED 가 OLED
2

EL

OLED (, TFT) () OLED
1048 , 5550066 , 4 - 328791 , OLED
WO98/36407 8 - 24

OLED , 2 TFT 1 2 (TFT)(1 TFT
(,)가 M , 가 OLED :
) N x M N (

, 1 N (Tf) 1 () ()
1/60 가 , 1 2 Tf/N 가 1 1 (Tf)
1/2

가 , () M ()

(,) () , 1 (1 ,)

가 OLED () OLED 가 ,
1μs 가

, OLED 1 , TFT
 , OLED , OLED 가 1
 가
 ,
 ,
 , OLED 1
 ,
 OLED
 9 OLED 1 10 9
 () (SUB) (DL)
 (GL) (AR)()
 (DDR), (GDR), (CSS)
 (DDR) N P (TFT) N P
 (TFT) (CSS)
 9 (AR) (COML)
 (COML) (COMB) (COMT) (源)
 (COML)
 10 (PX) (DL) (GL)
 1 (TFT 1), 2 (TFT 2), (CPR)
 (OLED) (TFT 1) (GL) (DL)
 (TFT 2) (TFT 1) (CP
 R) (+)
 11 10 9 (TFT
 2) (CSL) (OLED) 1 () (AD)
 , (CPR) (-) (COMB) (COML)
 (DL) (DDR) () (GL) (GDR)
 (CSL) (CSLB) 8 (CSS)

10 11 , (PX)가 (GL) (TFT 1)가 (D)
 L) 가 (CPR)) . (TFT 1)가
 (TFT 2)가 , (CSL) 가 (OLED) 1
 가 . (CPR) .
 (CPR) (COML)
 (OLED) (CD)
 , (COML) 가
 ,
 12 OLED 11
 (CPR) (TFT 1), (TFT 2) (CPR) 9 ,
 (CSL) .
 , (PX)가 (GL) (TFT 1)가 (DL)
 가 (CPR) (TFT 1)가 (TFT 2)가
 , (CSL) 가 (OLED) 10 1 (CPR) (CPR)
 1) 가 (CSL) .
 (CPR) (CSL) .
 9 12 (OLED) 1 (,
 1 .)(AD)가 (TFT 2) ITO(indium tin oxide)
 , (PX) 1 (AD) .
 , 2 (, , 2 .)(CD)
 가 . , 2
 가 . 2 (CD) 2
 () ,
 .
 13 1 (SUB)
 (PSI), 1 (IS 1), (CPR)
)(GL), 2 (IS 2), (SD), 3 (IS 3), (PSV), 1
 (AD), (OLE), 2 (CD) .
 (PSI) (GL), (SD) ((CPR)
)가 가 (SD) 1 (AD) (OLE) 2 (CPR)
 D) 가 (L) (SUB) .
 , 2 (CD) 가 (CSL) 가
 ,
 ,

가 2 . 2 ,

2 , 2 2 2 .

가 가 가 .

(1)

, ,

,

1 , 1 ,

2 ,

2 2 가 , 2

2 .

(2), (1) ,

1 , 2 ,
3 , 2 4 .

(3), (2) , 3

(4), (1) (2) , 1 4 1 .

(5), (4) , 2 1

(6), (4) , 2

(7), (1) (2) , 3 4 1 2

(8), (2) (7) , 2

(9), (2) (7) , 2

가

, () ,
 , , .
 1 (SUB) 1 (GDR) 1 (DDR) .
 , (DL), (GDR), (CSL) (DDR) () (GL), (DDR) 1 가 , (SUB) 1 (PAD 1, PAD 2)가
 2 1 1 (GL(n + 1)), (GL(n)) (CSL) 1 (DL(m + 1))
) (GL(n + 1)) . ()
 (GL(n + 1)) , (PX) 1 (T (TFT 2))
 FT 1) , 2 (GL(n + 1)) , (DL(m + 1)) 1 1 (T (TFT 2))
 FT 1) (TFT 2) , (DL(m + 1)) 2 (T (TFT 2))
 2 (TFT 2) 1 (CSB) 가
 (CSL) , OLED(24) 1 (AD) 1 (CPR)
 (TFT 1) 2 (TFT 2) (GL(n))
 가 , (GL(n))
 2 1 (CPR) , 1 (TFT 1) 2 (TFT 2)
 (CPR) + , (GL(n))
 , (OLED) 1 (AD) 2 (CD) () 가
 , 1 (AD) 2 (TFT 2) 2 (CD)
 1 2 (CNTB)
 2 (CNTB) () , (PAD 1, PAD 2)
 , 2 (CD) (CNT) 2 (CNTL)
 (PAD 1, PAD 2) (PAD 4)
 , 1 (CSL) (CSB) (CSLL)
 (PAD 1, PAD 2) (PAD 3) 2 (CNTB)
 (CSB) , (封止) (SL)
 2 (CD) (CNT) 2 (CNTB) (CSB)
 (SUB) 1
 1 (TFT 1) (CPR) , 1
 (TFT 1) (CPR) 2 (TFT 2) (CSL) 1
 () () (OLE)

OLE) (OLED) (

(CNTB) (CNTL) (PAD 4) (CSB) 2 (CD) (CNTB) 2

(CNTB) 2 (CNTL) 2 (CD) (CNT) (CNTB) 2

B) 2 (CSB) (CNTL) (封止) 2 (SU) (CNTB)

2 (CNTB) 2 가

3 1 1 , 4 2 2 (I)

(I)가 (TFT 2) (TFT 2)가 (GL) () (AD)

가 (OLED) (OLE) 2 (CD) (L) 1 (AD) (AD) (TFT 2) (CNTB)

(OLE) (CD) (I) 2 (CD) 4 2 가 (CNTL) (PAD 4)

1 2 가

5 2 (CSL) 1 (CSB) (PAD 1)

PAD 3, PAD 3') 2 (CNTB) (PAD 4) , (PAD 2)가 1 (GDR)

(CSB) 2 (CD) (CNT) 2 (CNTB)

(SUB)

SLL) 2 (CSB) (PAD 3, PAD 3') (CNTL) 가 (C

가 (CNTB) (PAD 4) 가

가 (CSLL) 2 (CSB)

5 (CSLL) 가

2

(CSB) 2 (CD) (CNT) 2 (CNTB)

(SUB)

UV UV

(封止)가 가

6 3 (CSL) 1 (CNTB) (PAD 3) (GDR)

2 (PAD 2)가 (PAD 4) (PAD 1)

1 2 (CD) (CNT) 2 (CNTB)

(CSB) (SUB)

1

(CSB) 2 (CD) (CNT) 2 (CNTB)

(SUB)

7 4 (CSL) 1 (CNTB) (PAD 3) (GD

R) 2 (PAD 2)가 (PAD 4) M, (PAD 1)

1 3 (CD) (CNT) 2 (CNTB)

(CSB) (SUB)

2 (CSB) 2 (CD) (CNT) 2 (CNTB)

(SUB)

2 6

2 (CNTB) (CSB) (PAD 3) (CNTL) (CSLL)

(PAD 4) 가 (PAD 3) 가 (CNTL) 가

UV UV
(封止)가 가

2 4

(CSLL) 2

(CNTL)
2

4 가

8 5 2
(GDR)

(CNTB) 1 4
(PAD 1)
(CSLL)

(CSB) 2 (CD) (CNT)
(PAD 3) (GDR)

2 (CNTB)
(CSLL) (SUB)

가

1

(PAD 4) 2
가

(CNTL) 가
가

1 2

OLED

OLED

가 가

(57)

1.

2 1 1
2 2 2 2

2.

1 ,

1 ,

2 , 2
3 ,

4 ,

3.

2 ,

3 ,

2 4 2

4.

2 ,

1 4 1

5.

2 ,

3 ,

2 ,

2 4 2 ,

2 1

6.

2 ,

3 ,

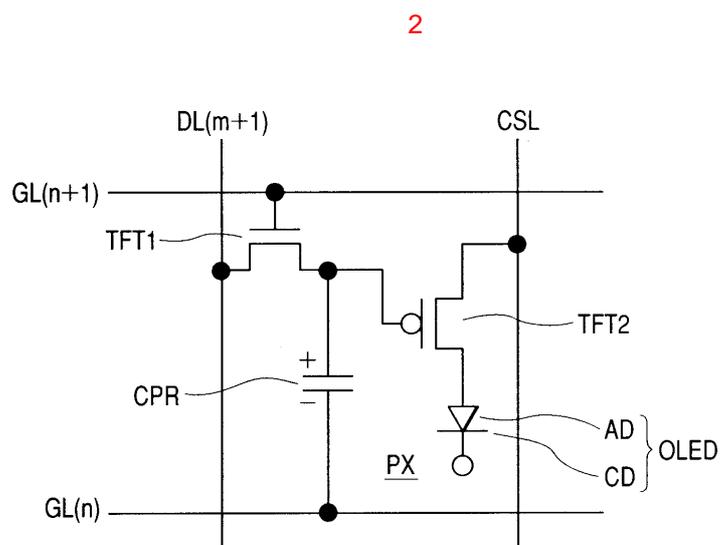
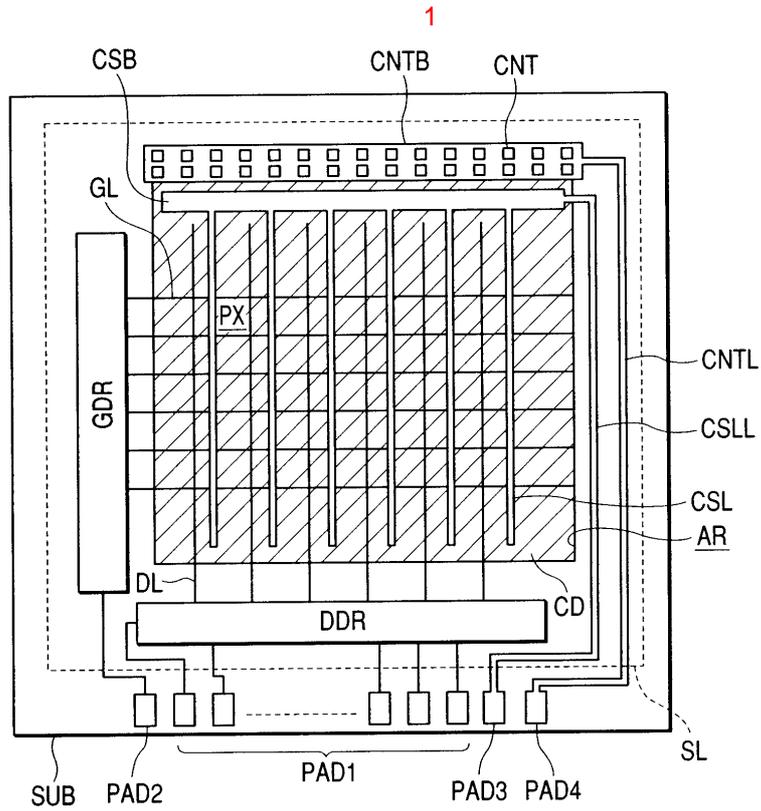
2 4 2 ,

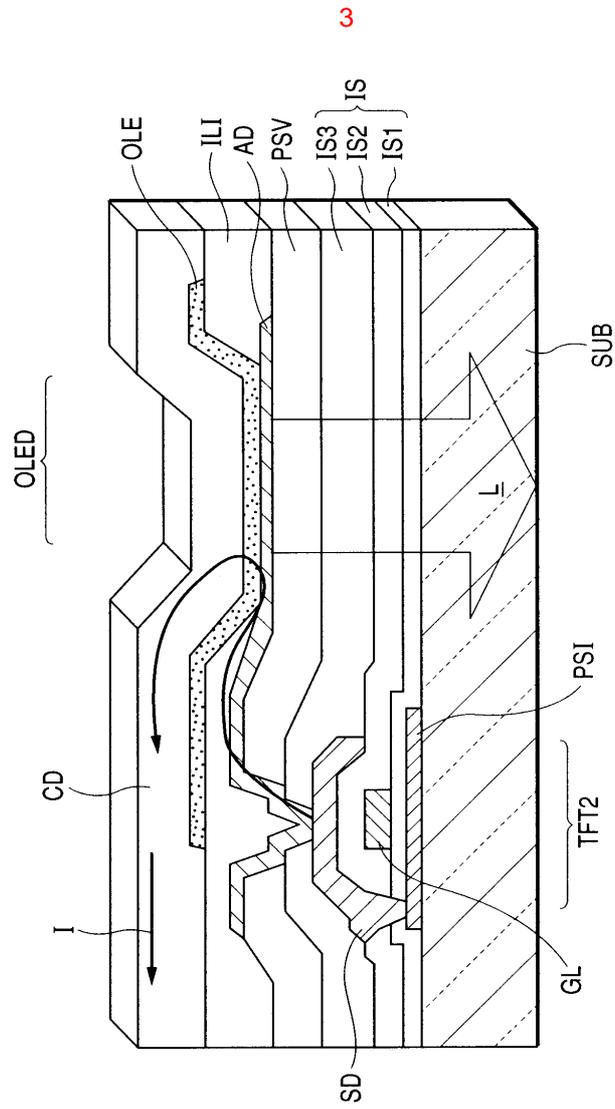
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7.

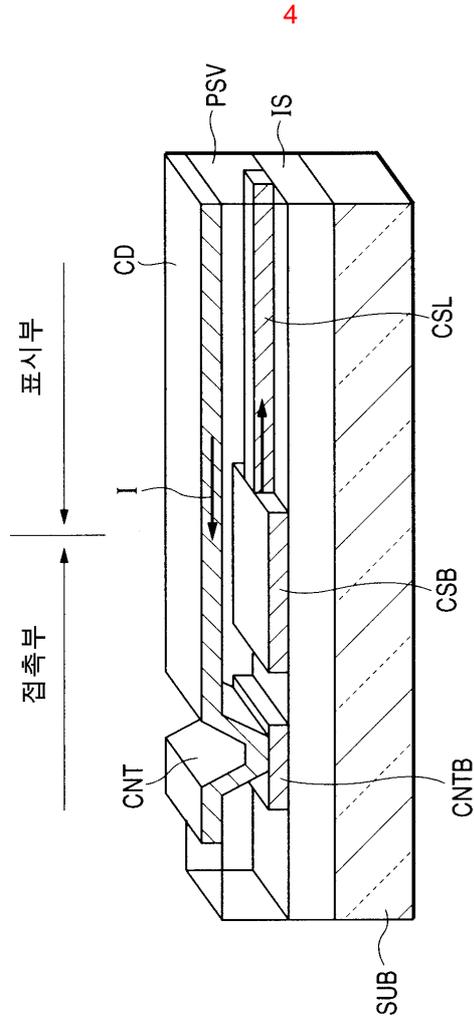
1 ,

1 3 , ,
 2 4 2 , ,
 3 4 , 1 2
 8.
 1 ,
 2
 9.
 1 ,
 4 , 3 3 , 2 ,
 2 4 2 2 ,
 2

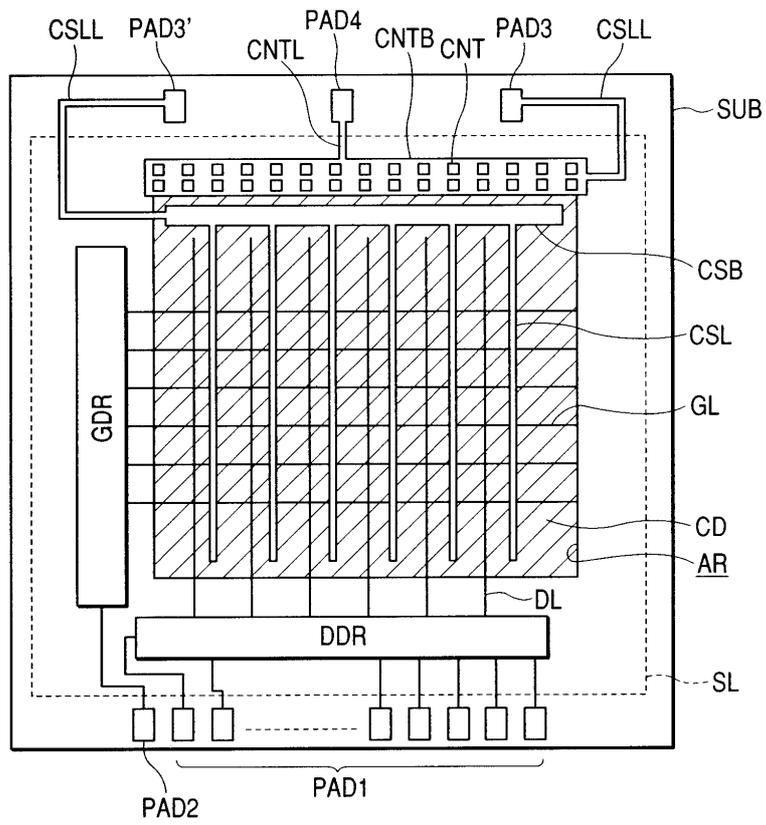




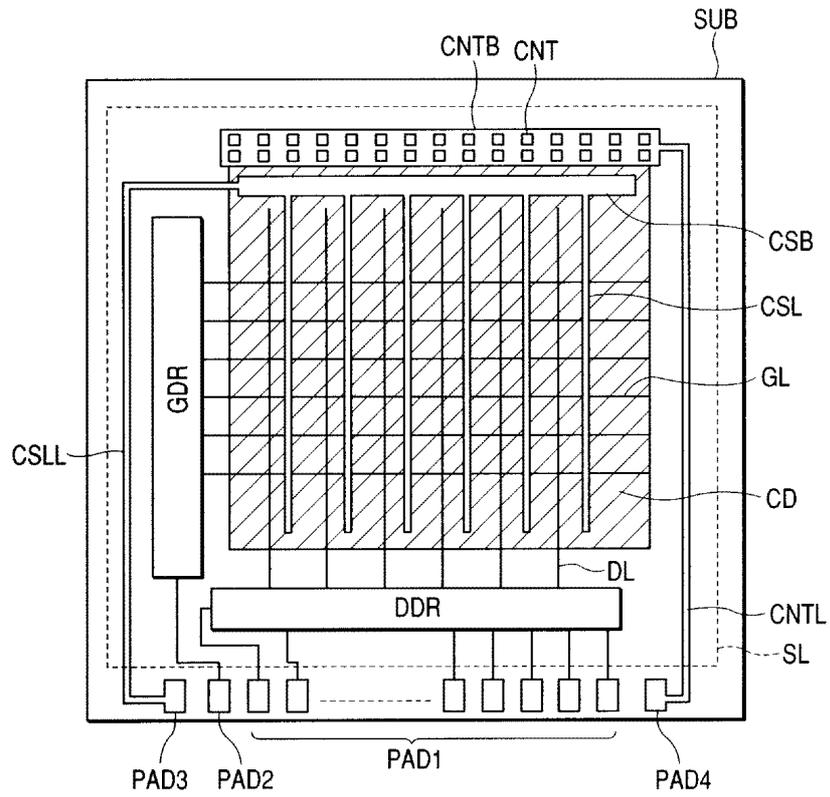
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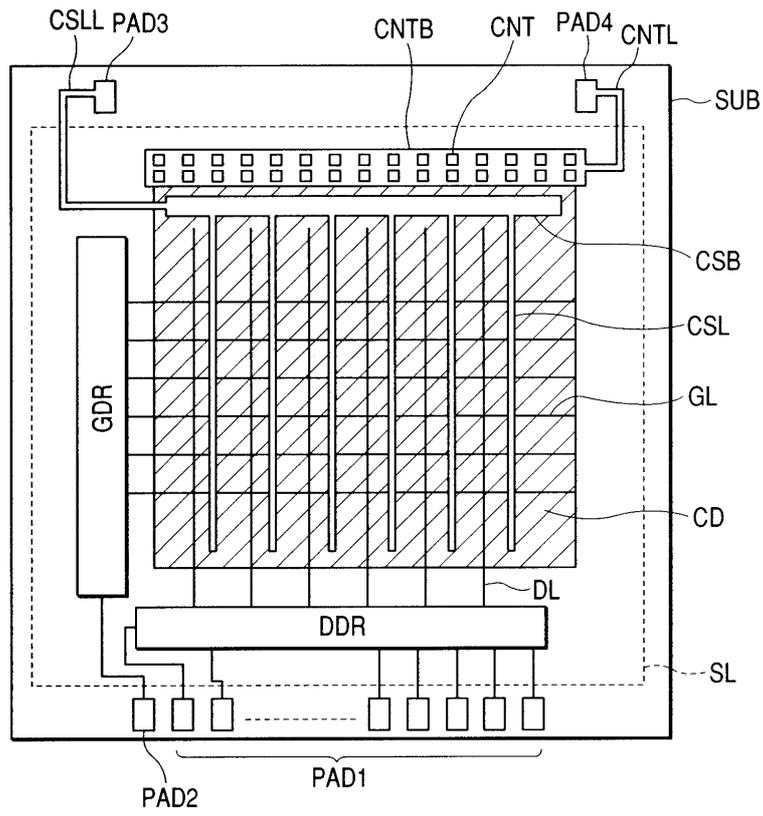
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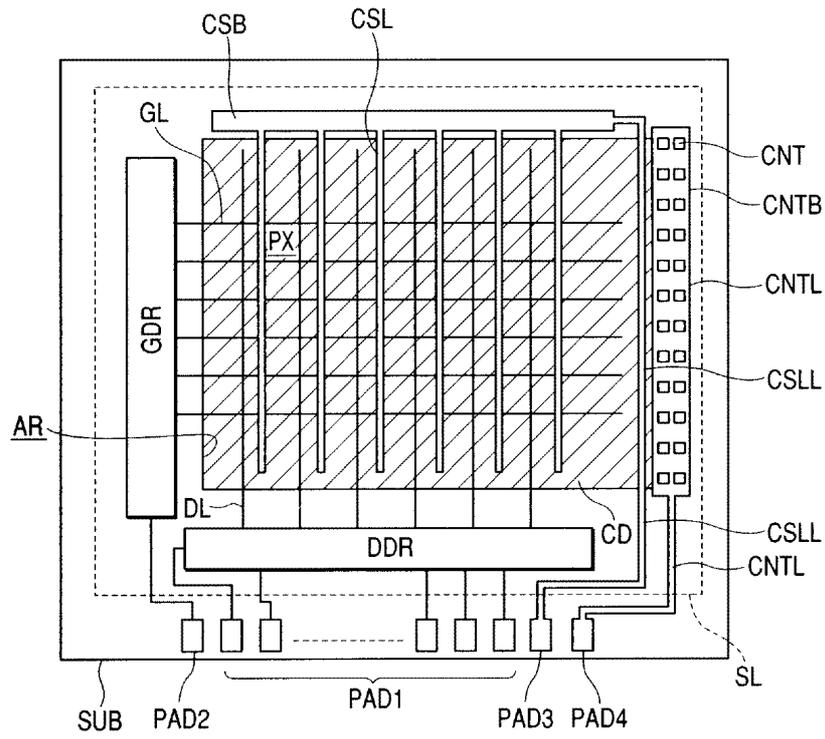


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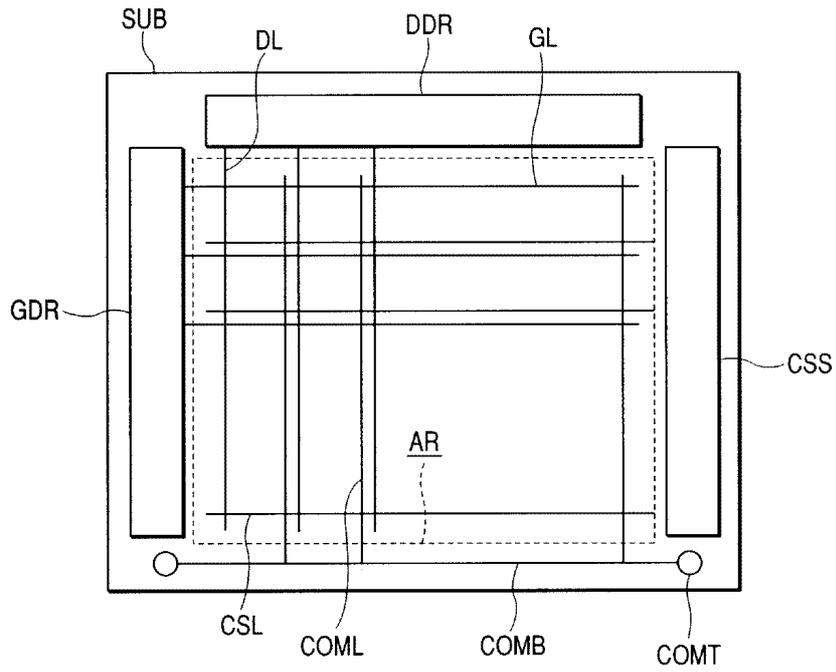


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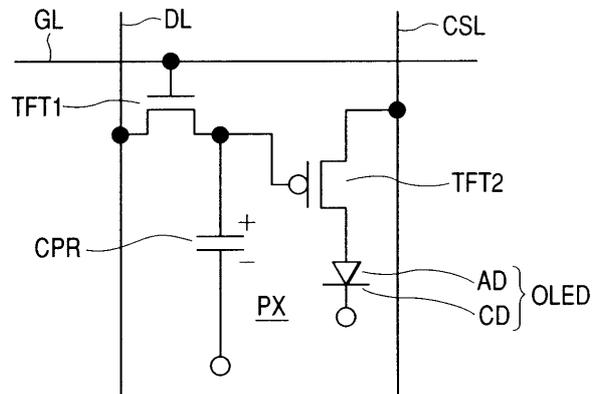


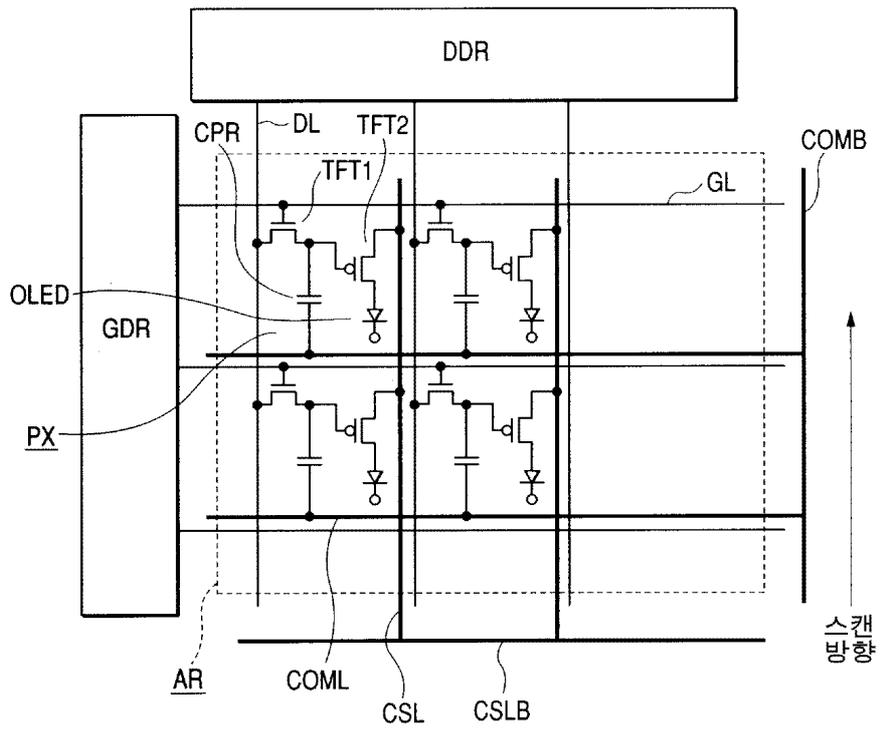


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专利名称(译)	显示设备		
公开(公告)号	KR1020020077136A	公开(公告)日	2002-10-11
申请号	KR1020020016700	申请日	2002-03-27
[标]申请(专利权)人(译)	日立HITACHI SEISAKUSHODBA		
申请(专利权)人(译)	株式会社日立制作所		
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IPC分类号	H01L51/50 H01L27/32 G09F9/30 H05B33/08 G09G3/32		
CPC分类号	G09G3/3233 G09G3/3225 H01L27/3276 G09G2310/0262 G09G2300/0842 G09G3/2003 G09G3/32 G09G3/3266 G09G3/3275 G09G2300/04 G09G2300/0426 G09G2310/0272 G09G2310/0275 G09G2310/0286 G09G2310/0289 G09G2330/04 H01L27/124 H01L27/1255 H01L27/3248 H01L27 /3262 H01L27/3265 H01L51/5228 H01L51/524 H01L51/5246		
代理人(译)	李钟IL		
优先权	2001092836 2001-03-28 JP		
其他公开文献	KR100493204B1		
外部链接	Espacenet		

摘要(译)

显示装置技术领域本发明涉及一种显示装置，更具体地，涉及一种改进构成像素的一个电极的电源结构并防止电极腐蚀的显示装置，从而实现高质量的显示。在本发明中，在由具有有源元件驱动的第一电极层的发光元件形成的显示装置基板SUB上，涂覆在第一电极层上的有机发光层和形成在有机发光层上的第二电极层CD，在第二电极层CD下方设置覆盖有绝缘层和保护膜的第二电极连接电极层CNTB，并且第二电极层CD通过接触孔CNT连接到第二电极连接电极层CNTB公开了一种具有配置的显示设备。 1

