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2003-0038522
2003 05 16

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10-2002-0069103
2002 11 08

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JP-P-2001-00344662 2001 11 09 (JP)
JP-P-2001-00344663 2001 11 09 (JP)
JP-P-2001-00344664 2001 11 09 (JP)
JP-P-2002-00003973 2002 01 10 (JP)

(71)

가 가
2 5 5

(72)

가 가 16-1-903
가 - 가 507
1-45-14-401
80-1

(74)

:

(54)

가
OLED , SL 가 Tr1 , Tr2
가 가 . , Tr4가
Vdd OLED 가 . , Tr3 , OLED .

1
 , , ,

1	1		.		
2	2		.		
3	3		.		
4	3		.		
5	1, 2		.		
6	3		.		
7			.		
8			.		
9			.		
10			.		
11			.		
12			.		
13			.		
14			.		
15			.		
16			.		
17			.		
18			.		
19			.		
20			.		
21			.		
22			.		
23	1	2	.		
24	1		.		
25	2	1	.		
26	3	2	.		

27 6 3 .
28 3 .
< >
10 :
DL :
OLED :
SC :
SL :
Tr :

, .
 , EL(Electro Luminescence) .
 ,
가 .
EL , 가 가 ,
11-219146 9 .
2 n 1, 2 Tr11, Tr12 , OLED ,
SC11 , SL , Vdd , DL .
Tr11 , DL OLED 가 2 Tr12 , SL 가 1 SC11
SL 가 1 Tr11 , 2 Tr12
가 ,
가 ,
가 .

[illegible]

/

< 1 >

LED, (10), 1, 2 SC1, SC2, 4, 3 Tr4, Tr3

(10) 1, 2 Tr1, Tr2

가 DL, OLED Vd

d, 가 SL DL, Vdd, SL

, 1, 2, 4 Tr1, Tr2, Tr4 n, 3 Tr3 p

1, 4, 3 Tr1, Tr4, Tr3 SL 1 Tr1

() DL Tr1 () 2

Tr2 2 SC2 2 Tr2

OLED, 2 SC2 4 Tr4

OLED 4 Tr4

Tr2 1 SC1 3 Tr3

1 SC1 3 Tr3 Vd

d

, Vdd, 3, 2 Tr3, Tr2, OLED가 4 Tr4

가

, 2 Tr2 2 SC2 SL 가 1 Tr1

, 가 Tr4, 4 Tr4가 OLED 가 4 V

dd 가

, Tr3, SL 가 1, 4 Tr1, Tr4, 3 Vdd

OLED, 2 Tr2 가

1, 가

< 2 >

LED, (10), 1, 2 SC1, SC2, 4, 3 Tr4, Tr3

, DL, Vdd, 1, 2 SL1, SL2 (10) 1, 2, 5,

6 Tr1, Tr2, Tr5, Tr6 1, 4 Tr1, Tr4 n, 2, 3,

5, 6 Tr2, Tr3, Tr5, Tr6 p

1, 3, 4 Tr1, Tr3, Tr4 1 SL1, 6 Tr6

2 SL2 1 Tr1 () DL

1 Tr1 () 5 Tr5 6 T

r6 () 5, 2 Tr5, Tr2 6 Tr6

() 2 SC2 2, 5 1 Tr2, Tr5

, 3 Tr3 2 SC2 1 SC1

[illegible]

, 4 Tr4 10 11 OLED
 10 7 OLED 가 , 4 Vee Tr4 가 , 11 O
 8 LED 가 , 4 Vee Tr4 가 ,
 CSL OLED 가 , 3 Tr3 , 4 Tr4가 Vee가 OLED
 OLED 가 , OLED
 OLED 가 , OLED
 OLED 가 , OLED
 3, 4 SL Tr3, Tr4 SL CSL /
 , 5, 6 r4 4 SL Tr3, Tr4 / Vee , 4 T
 < 5 >
 , OLED (110), OLED (120), EL (130), 12 (140) (100)
 , (140), 12 EL (130), (120), 13 (110) (100)
 , 13 OLED 가 12 OLED 가
 , 14 15 OLED 가
 14 10 Vff , OLED Tr4 Vee ,
 Tr3 Vff Vgg Vhh Vdd 3
 , 3 Tr3 p n , 4 Tr4 n Vff
 , p OLED, (10), 3 Tr3 Tr4 Vhh
 , CSL OLED, 3 Tr3 Tr4가 Tr3 , 4 Vg
 OLED Tr4가 OLED 가 가 Vff
 15 11 , OLED , Vdd
 , 11 (10)가 Tr4 Vee , CSL
 Vii , 4 Tr4 OLED , OL
 , 4 Tr4가 3 Vff Tr3 Vgg OL
 ED ED 가 가
 14, 13 3, 4 Tr3, Tr4 CSL /
 가 , 3 SL Tr3 / , (10)

EL

< 6 >

16 OLE
D, 2 Tr102, 1, 3 SC, 1 Tr101, Tr103, 가
SL, 1 Tr101 n, 2, 3 Tr103 /
p 가 DL, OLED
Vdd SL, DL Vdd
, 1, 2 Tr101, Tr102 SC (10)
1 Tr101 SL, 1 Tr101 (Tr102
) DL SC 1 Tr101 (Tr102 SC
Vdd, 2 Tr102 Tr103
, 3 Tr103 OLED 가 A
OLED OLED, 2, 3 Tr102, Tr103,
(,) Vdd
Tr101, 3 Tr103 DL SL 가, 1
, SC 2 Tr102 가, OLED
OLED 3 Tr103 Vdd OLED가
A
Tr103, 2 Tr102 SL, 1 SC Tr101, 3 가
OLED

17 3 Tr103 2 Tr102 3 Tr1
03 Vdd, 3, 2 Tr103, Tr102 OLED가
가 Vdd 16
6, A 가, 가
Vdd 가 Vdd, SC가 2 Tr102
Vdd, 2 Tr102

< 7 >

6, 2 Tr102 p, 7
n, 7 6 Vdd, 2, 3
Tr102, Tr103, OLED, 19 Tr103, Tr102,
OLED, 18, 19 Tr102 n
OLED, 18, 19 SC 2 Tr102
가 18 19 Tr101, 3 Tr103 DL SL
, 1 SC 2 Tr102 가

가 OLED 3 OLED Tr103 Vdd OLED가 6

A

Tr103 2 Tr102 SL 가 1 SC Tr101 3 가

OLED

A Tr102 SC 가 A 2

OLED SC

SC 2 A Tr102 가

SC

7 6 가 가

가 가

가 n SL 3 Tr103 p Tr103

가

20 OLED OLED가 Vdd Vdd

21 (10) SC1, SC2 3

OLED (10) 1, 2 SL1, SL2 (10) ,

Tr3 DL Tr101, Tr102, Tr105, Tr106 1 Tr101 n

1, 2, 5, 6 2, 3, 5, 6 Tr102, Tr103, Tr105, Tr106 p 1 SL

1 OLED 가 가

2 SL2

1, 3 Tr101, Tr103 1 SL1 6 Tr106

2 SL2 1 Tr101 () DL

1 Tr101 () 5 Tr105 Tr T

106 () 2, 5 Tr102, Tr105 2, 5 Tr102, Tr

106 () 2 SC2

105 , 3 Tr103 () 2 SC2 V

1 SC1 3 Tr103 () 2 Tr102

dd , 1 SC1 OLED OLED

A

1, 6 Tr101, Tr106 1 SL1 가 2 SL2가 가

r105 Tr105 5 Tr105 가 5 T

2 가 2 Tr102 가 2 Tr10

OLED 3 Tr103 Vdd OLED가 OLED

A

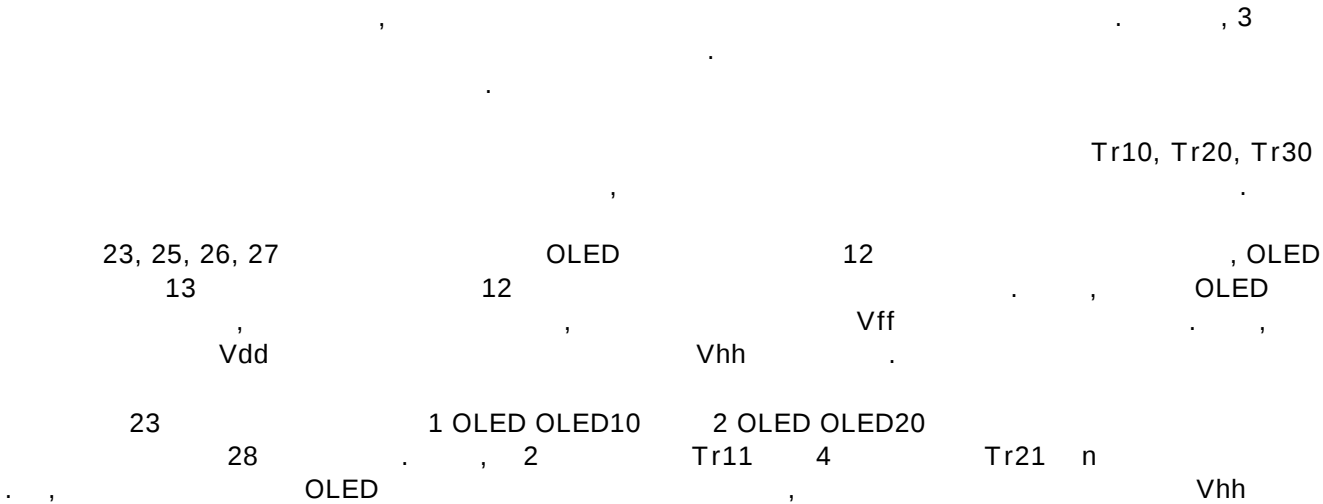
4, Tr106, 1, 3 SL1, 2 SL2가, 1, 4, 6 Tr101, Tr10
가, 2 Tr102
22, 16, 13
OLED
n Vdd, 16, 2 Vhh Tr102 Vff, 2 OLED Tr2
(OLED) , 2 Tr2 Tr2 Vhh 3
, 2 Tr102
EL
< 8 >
가,
가 가 가
23 1 2 Pix10, 2 Pix20
1 Tr11, 1 Pix10 1 Tr10, 2 가 ,
2 Pix20 3 Tr20, 4 Tr21,
2 C20, 2 OLED OLED20
Vdd 1, 2 OLED OLED10, OLED20 DL 2
Tr11, 4 Tr21 SL10, 2 S
L20 1, 2 OLED OLED10, OLED20 1, 2 Tr10, 2 Tr20 Tr10, Tr20
1 Tr10 n 1 Tr10 1 SL10
, () DL , () 2 Tr11
, 3 Tr20 n , 2 SL20
, () DL , () 4 Tr21
2 Tr11 p Vdd , 1 OLE
D OLED10 , 4 Tr21 p Vdd ,
Vdd , 2 OLED OLED20 1, 2 OLED OLED10, OLED20
1 C10 1 Tr10 () 2 Tr11
2 C20 3 Tr20 () 4 Tr21
, 1 Pix10 1 SL10
, 2 Pix20
21, 2 SL20 가 가 , 3 DL Tr20 , 4 Tr
, 가 DL 4 Tr21 가 Tr20
, 가 2 OLED OLED20 , 2 SL20 Vdd 가

3 Tr20 , 가 3 Tr20 () 4
Tr21 , 2 OLED OLED20
.
 , 4 , 2 Pix20 1 Pix10 가 가
Tr21 3 Tr20 () 가
 , 4 Tr21 .
 , 2 OLED OLED20 Vdd
 , 2 OLED OLED20 .
1 SL10 가 가 2 C20 1 SL10 가 , 가
2 SL20 3 Tr20 , DL 가
4 Tr21 . , 2 OLED OLED20
 , .
24
 . 24 , 1 SL10, 2 SL20 . 1, 2 OLE
D OLED10, OLED20 , 24
 .
1 SL10 가 가 1 OLED OLED10 , 가
가 . 가 , 2 SL20 가 가 2 OLED OLED20 ,
가 가 .1 가 , 1 SL10
가 가 1 OLED OLED10 , 1 SL10
가 , 1 SL10 가 2 OLED OLED20 , 2
SL20 .
1 가 , 가 가
1 .
< 9 >
25 1 가 . 25 23
1 가 1 가
 . 23 1 Pix10, 2 Pix20 , 25
1 Pix11, 2 Pix21 , 2 Pix21 2
C21 가 가 1 SL11 , 1 Pix11 1
C11 가 가 .
< 10 >
26 2 가 . , 1, 2 1, 3 Tr10, Tr20
n , 2, 4 Tr11, Tr21 p , 2, 4 Tr11, Tr2
1, 3 Tr10, Tr20 p , 2, 4
1 n 1, 2 .
 , DL , 1, 2 SL10, SL20
 . 2 SL20 가 가 , DL
가 4 Tr21 가 가 , 2 OLED OLED20
 . 2 SL20 가 가 3 Tr20 , 가 4
Tr21 .
1 SL10 가 가 , 4 Tr21 가 2
C20 , 4 Tr21 2 OLED OLED20
 . 2 SL20 가 가 , 3 Tr20 4 Tr21
가 2 OLED OLED20 .

< 12 >

< 13 >

- 13 -



(57)

1.

2.

1

가

3.

1

4.

2

5.

1

가

6.

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7.

1 , 2 ,
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8.

가 ,
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가 ,
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가 , , ,
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11.

가 , , ,
 , p ,
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12.

가 , , ,
 n , p ,
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1 , 2 ,
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13 ,

1 , 가
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가 , 가

1 24. 3 ,

가

20 25. ,

가 , 가 .

21 26. ,

가 , 가 .

22 27. ,

가 , 가 .

20 28. ,

가

21 29. ,

가

22 30. ,

가

23 31. ,

가

24 32. ,

가

33.

25

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가

34.

26

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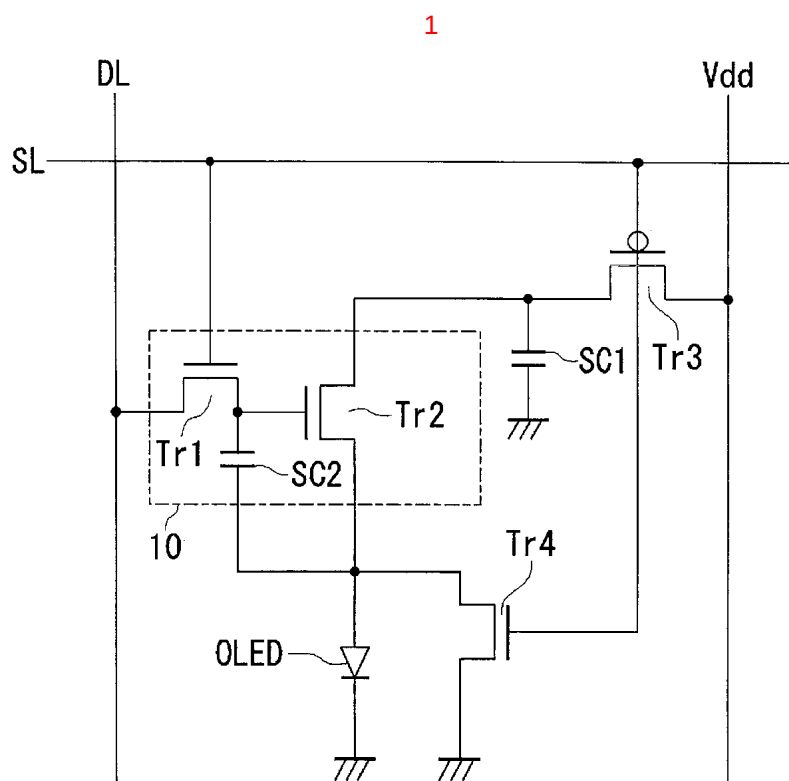
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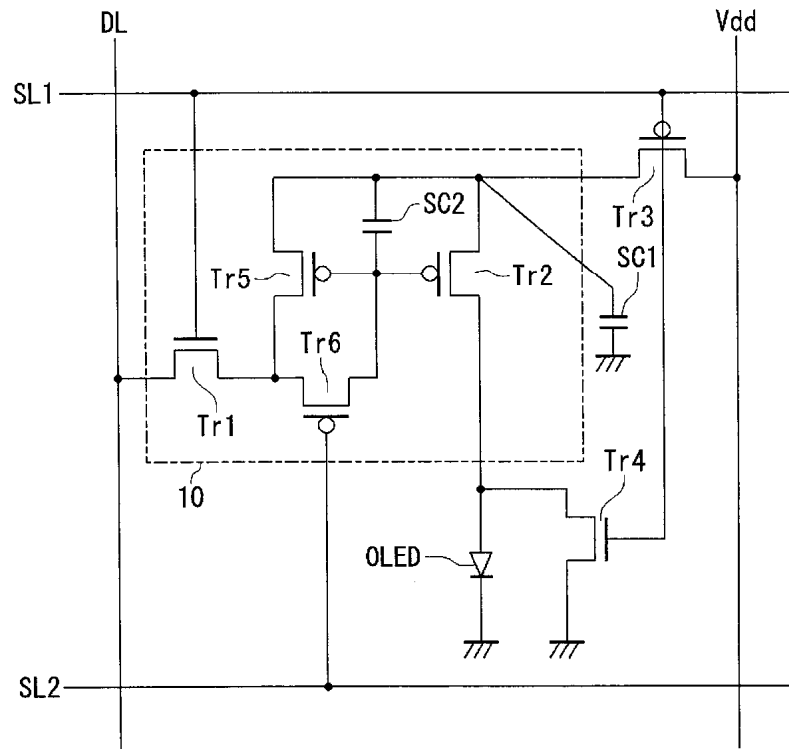
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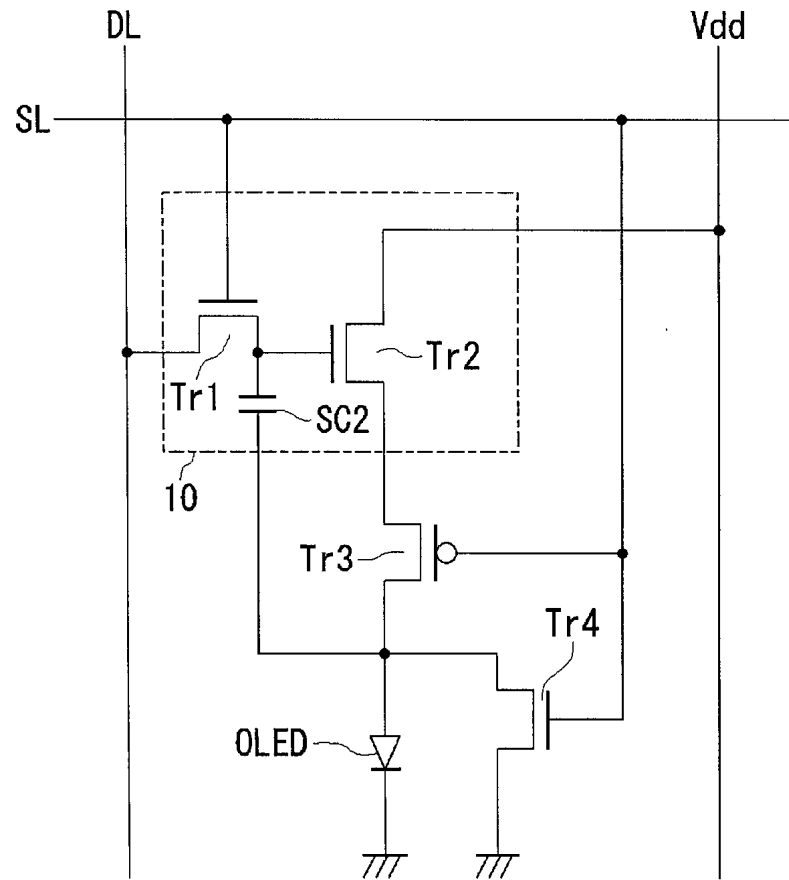
가



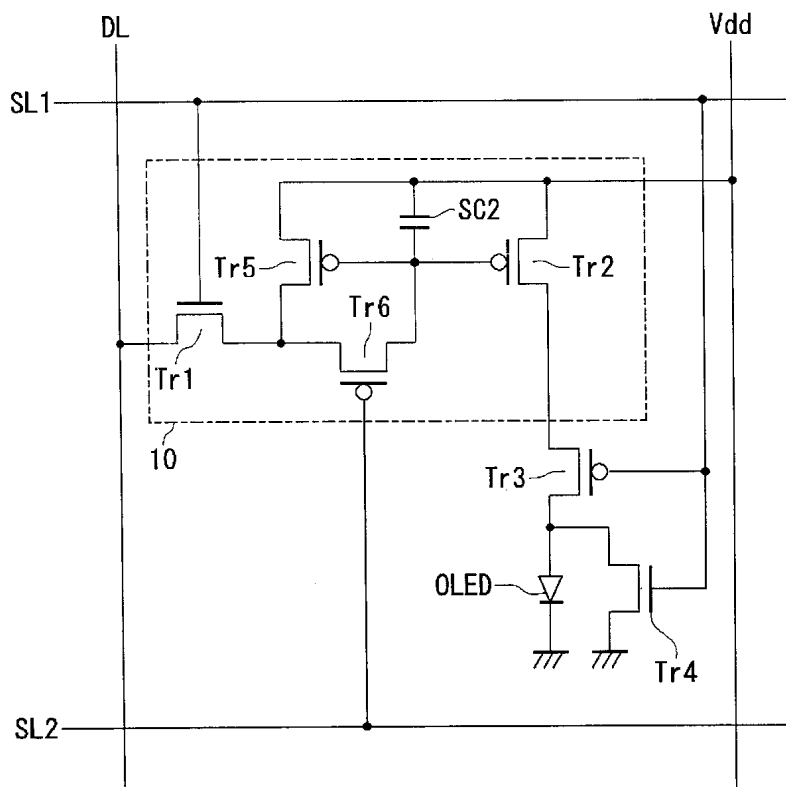
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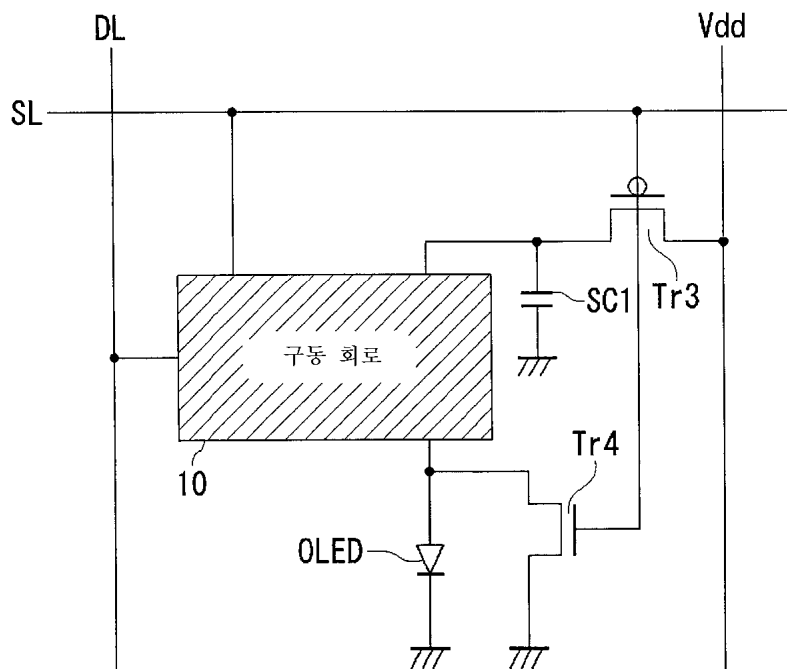
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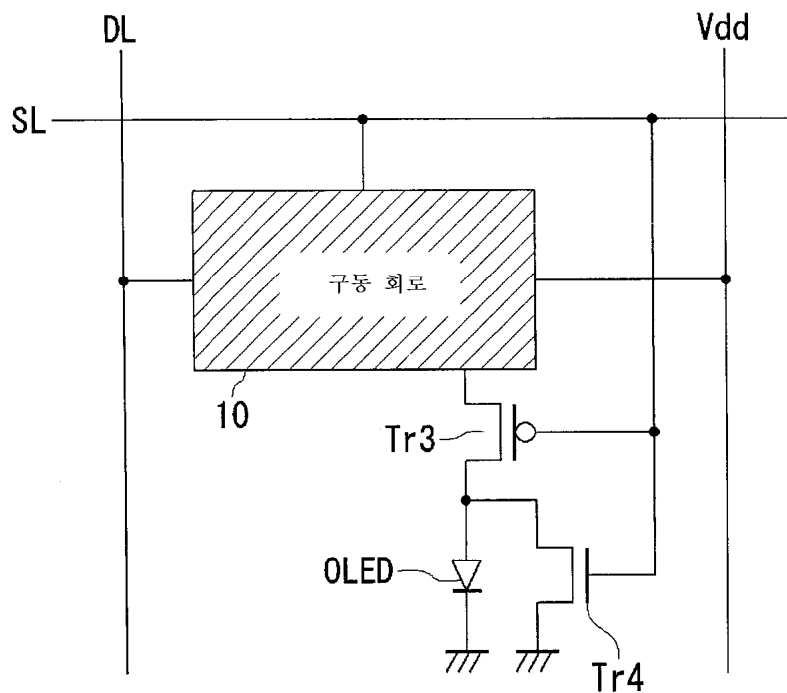
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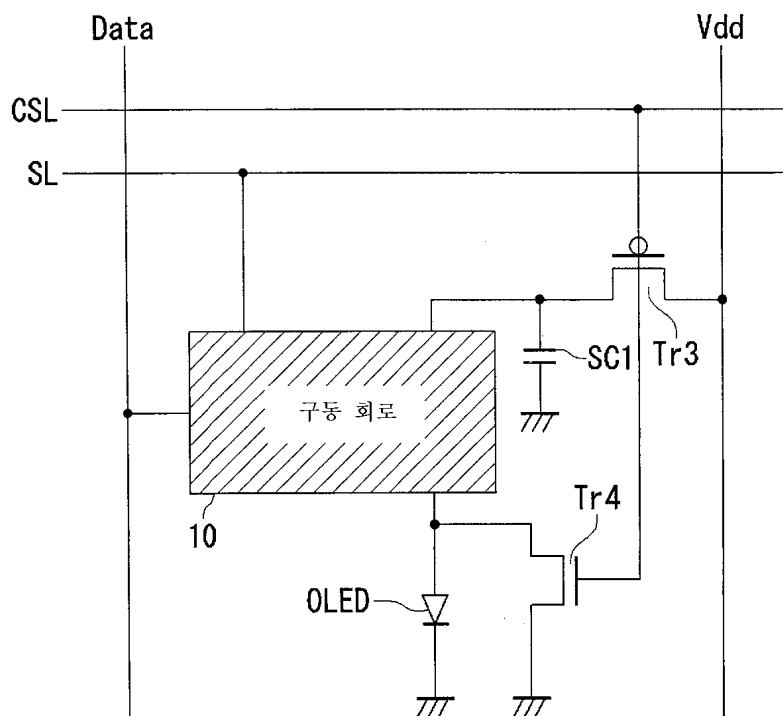
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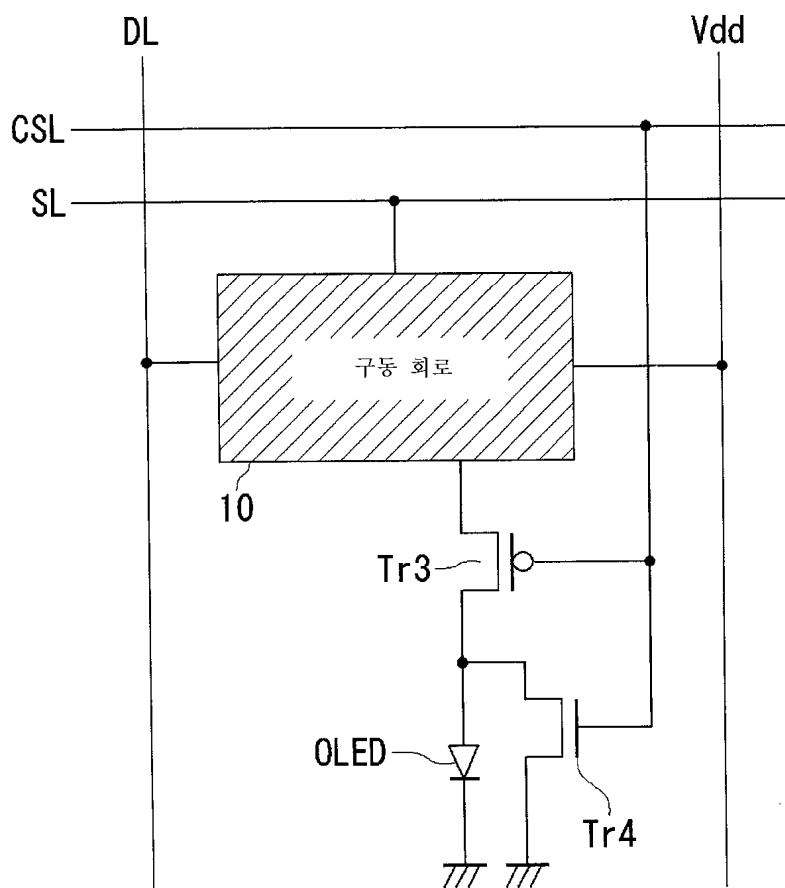
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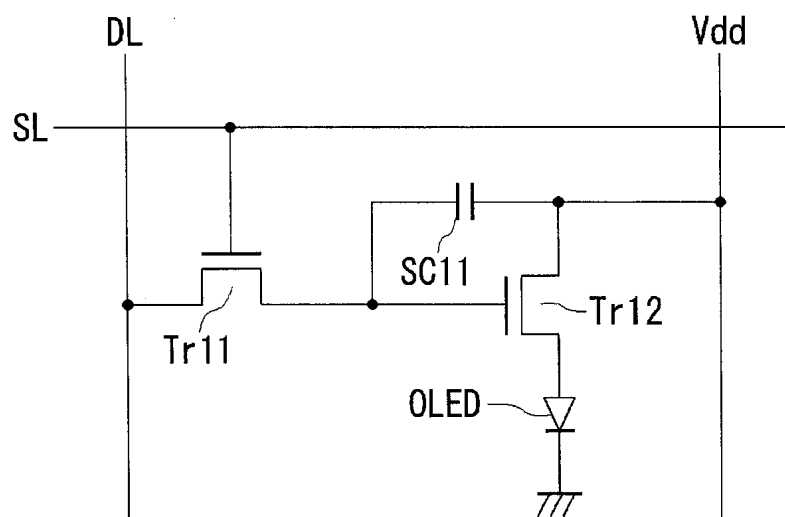
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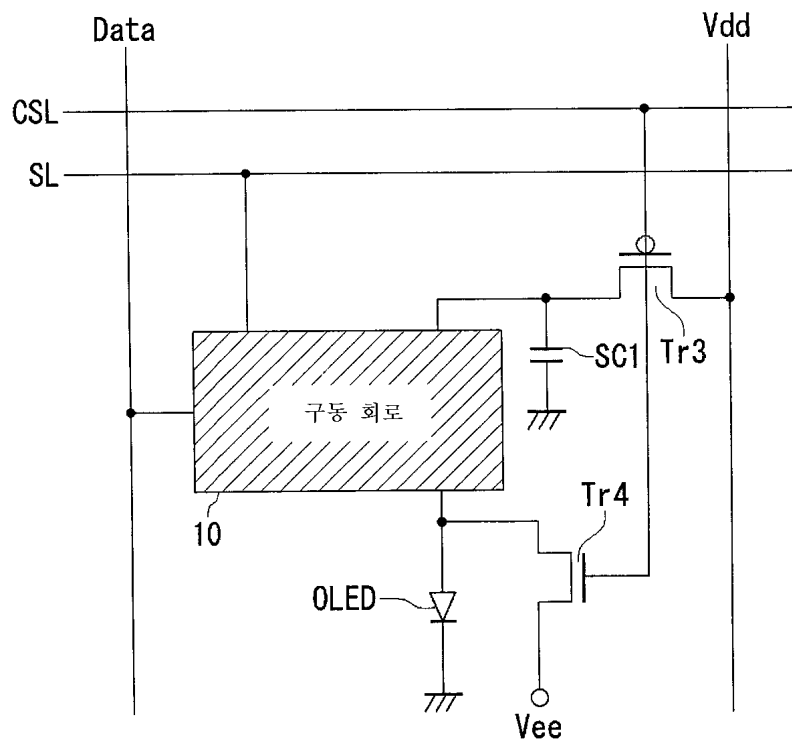
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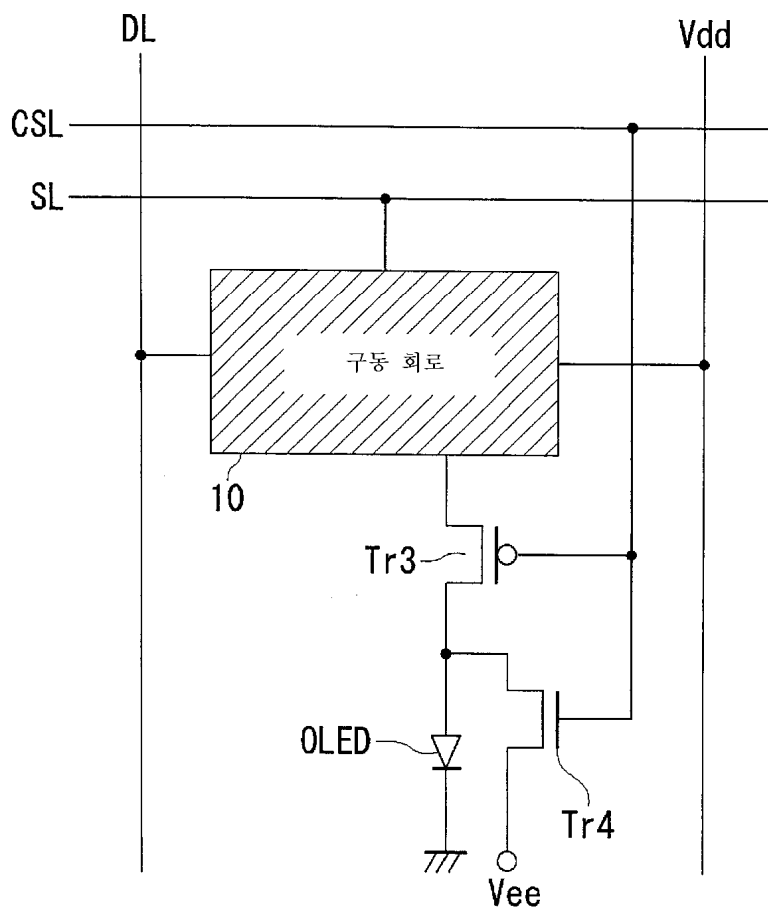
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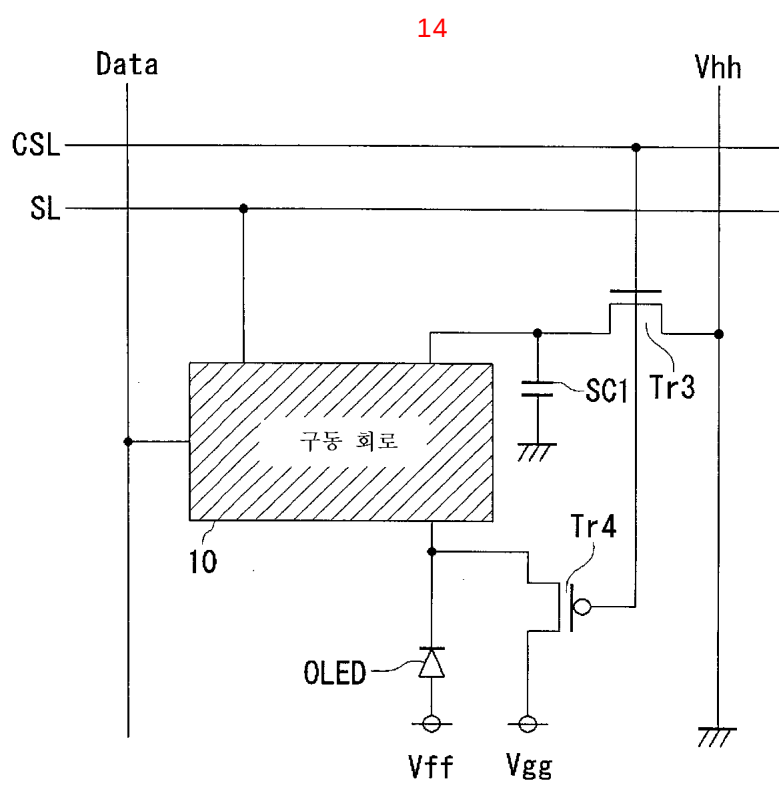
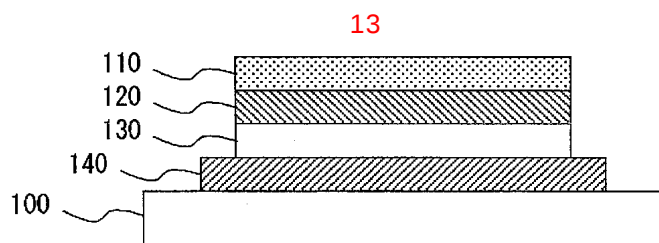
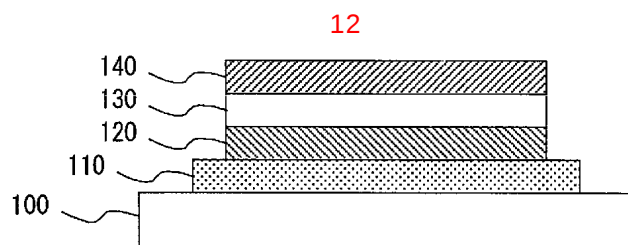


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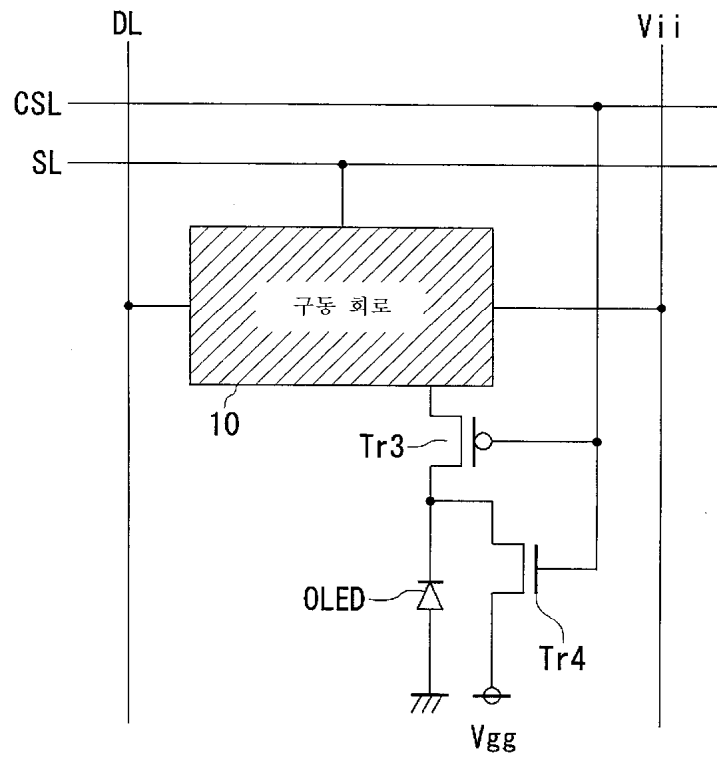


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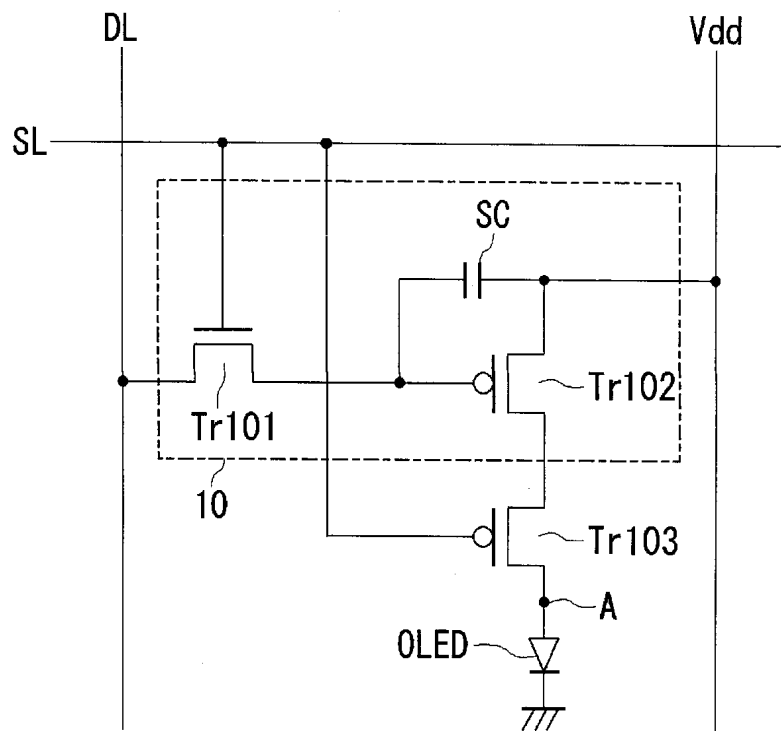




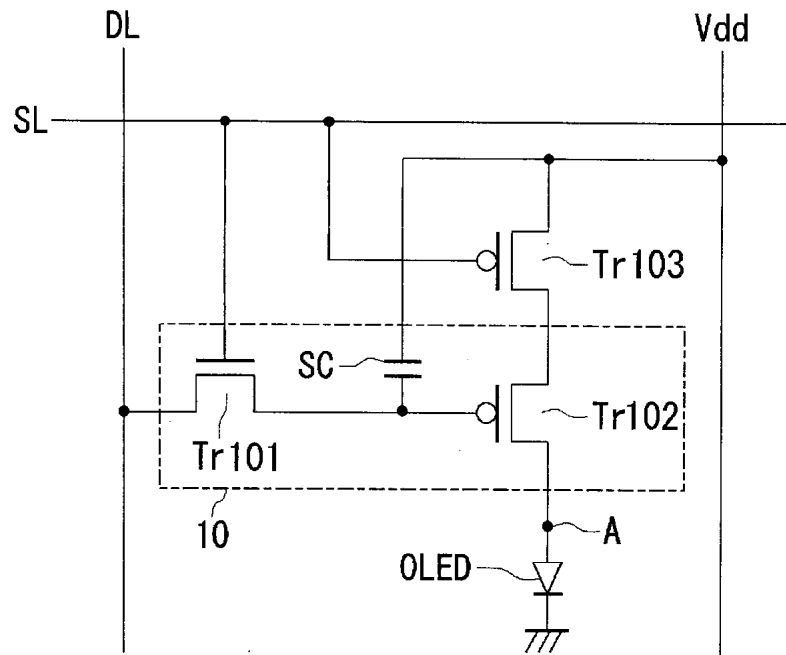
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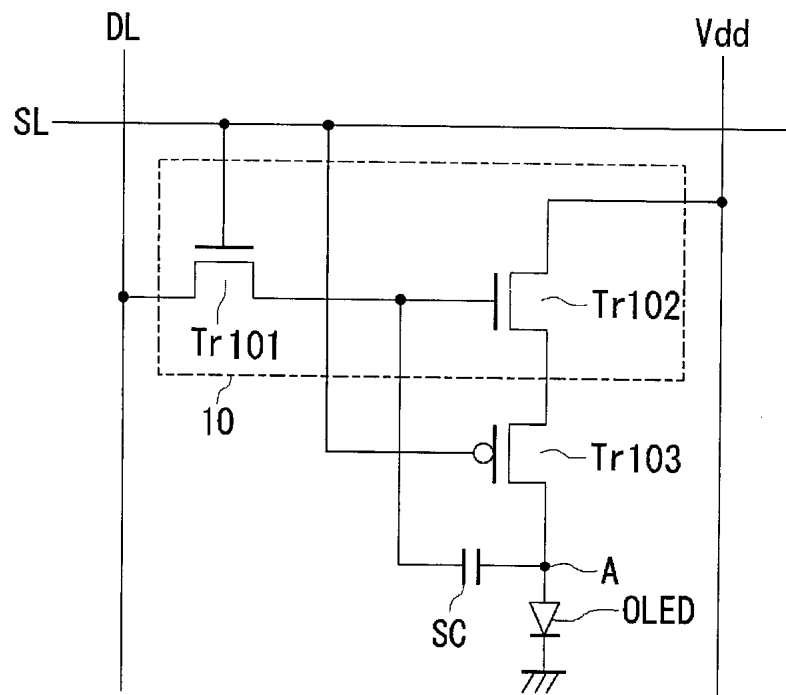
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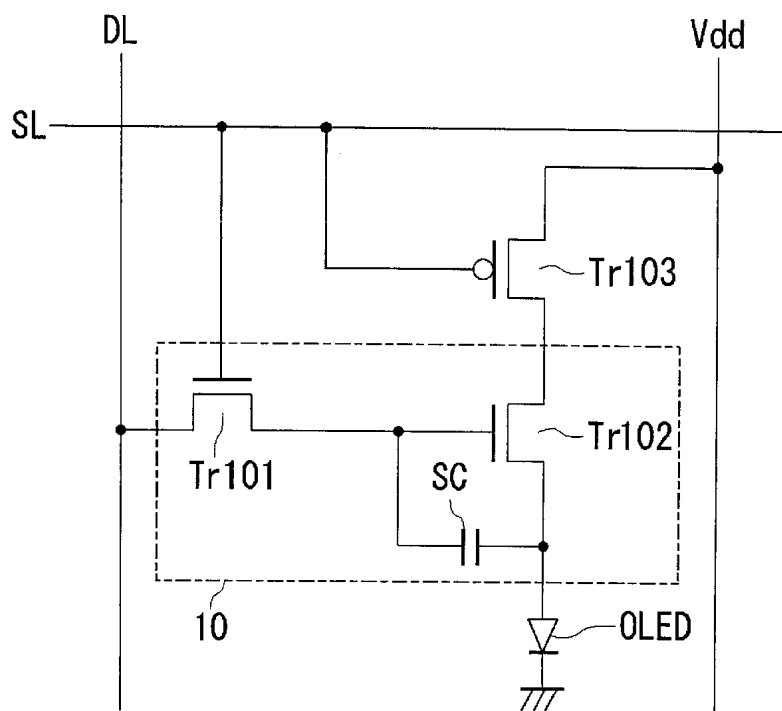
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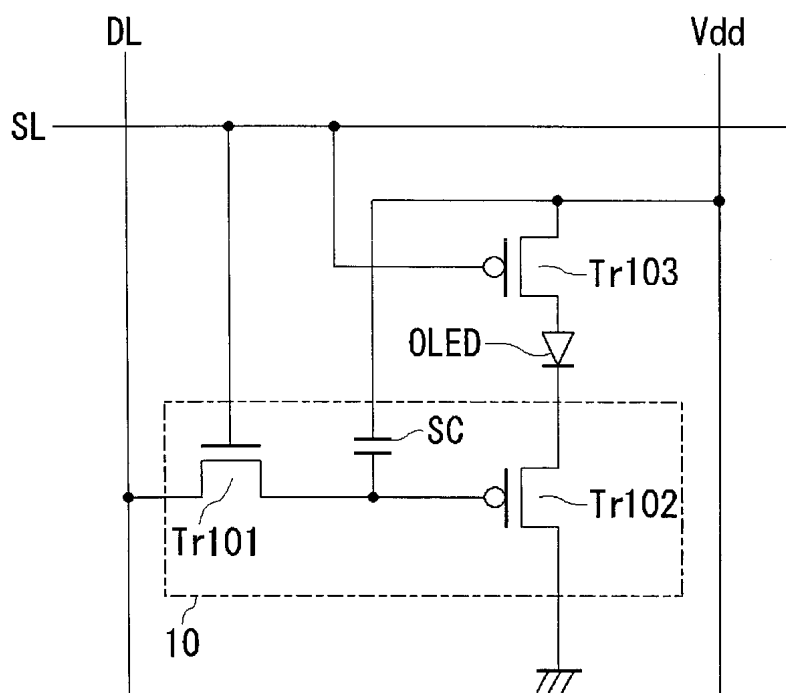
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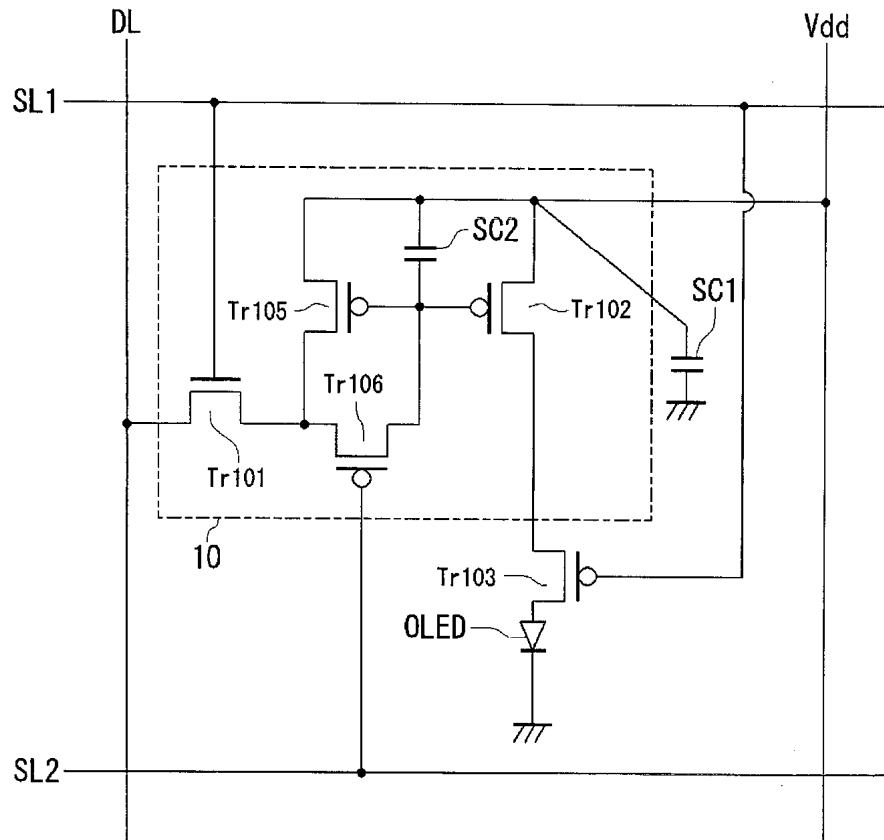
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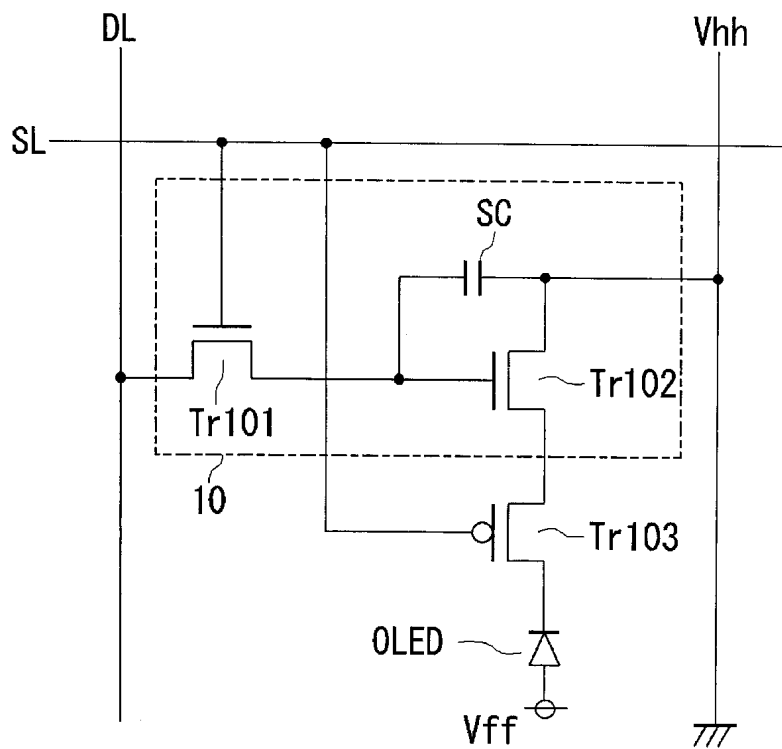
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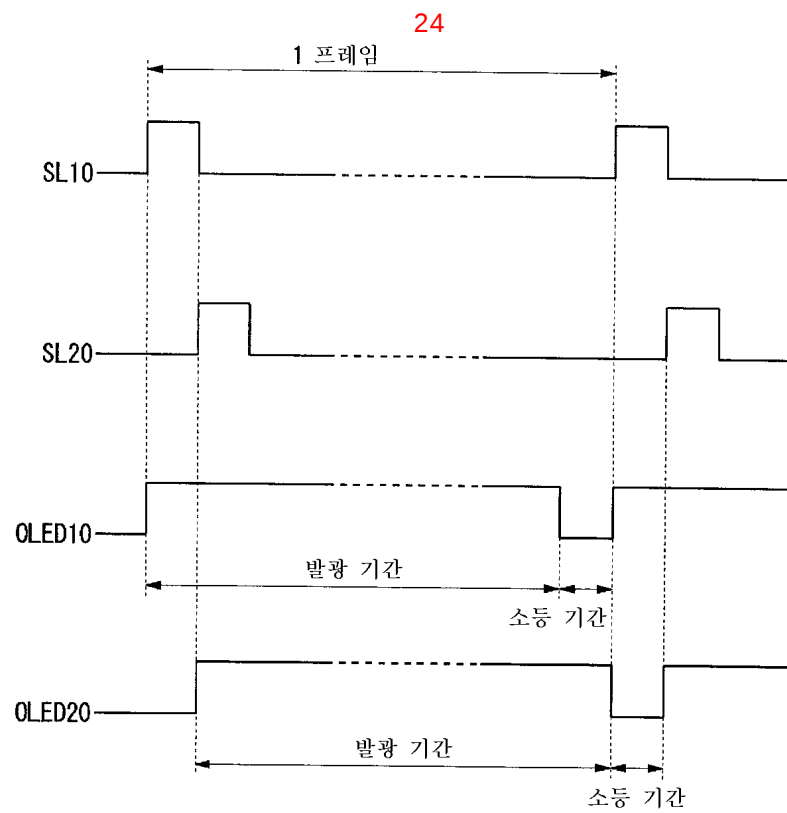
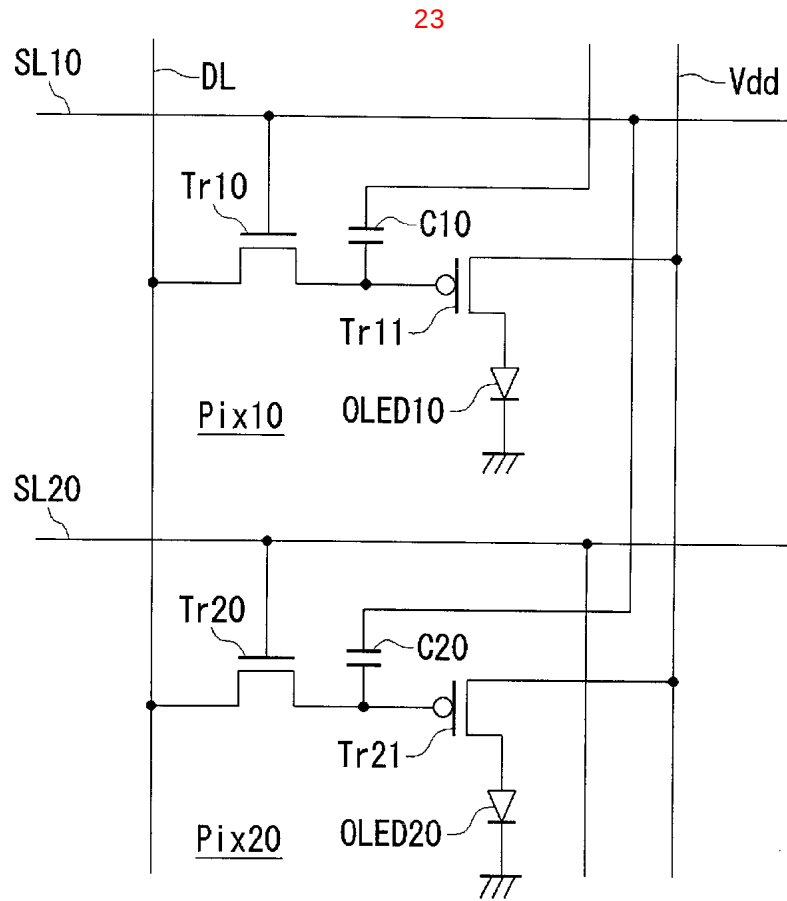


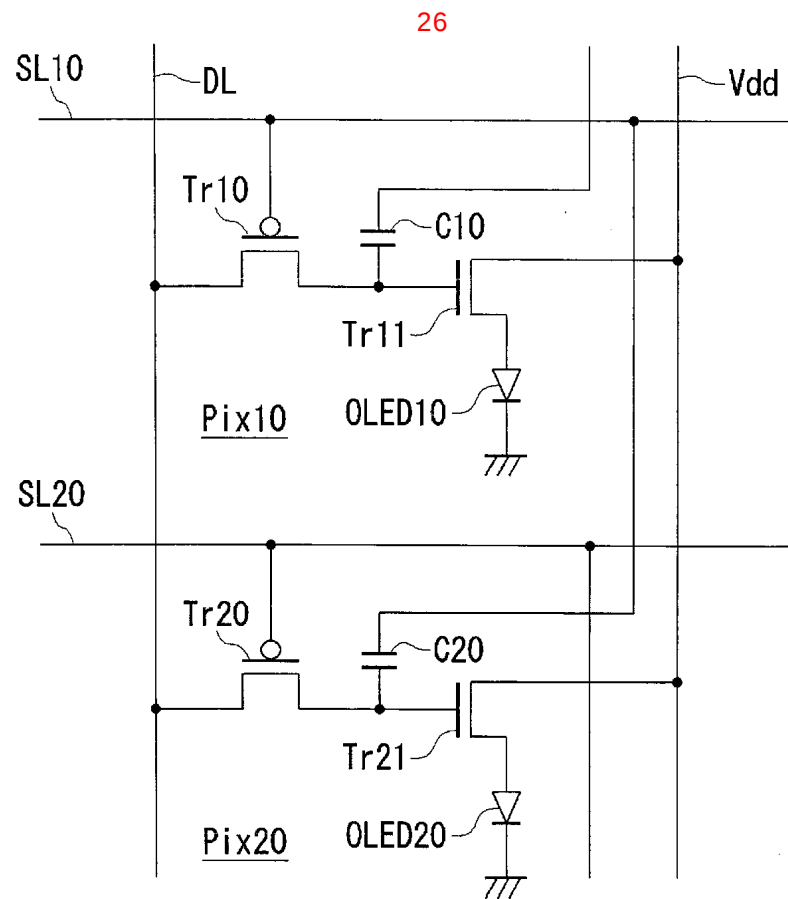
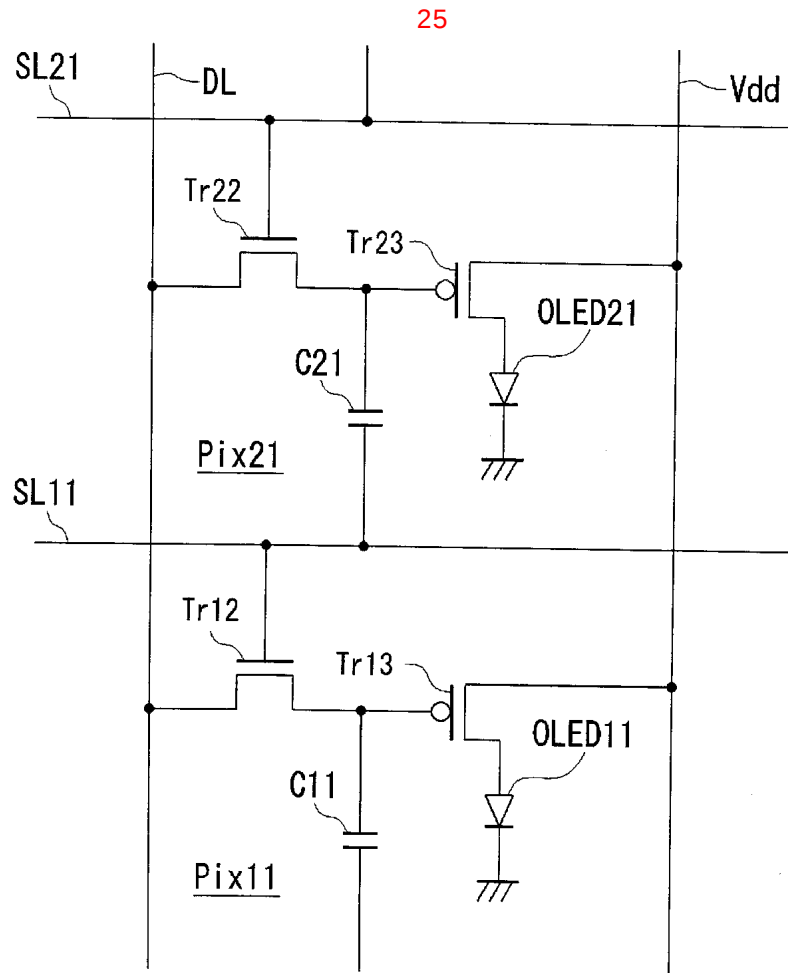
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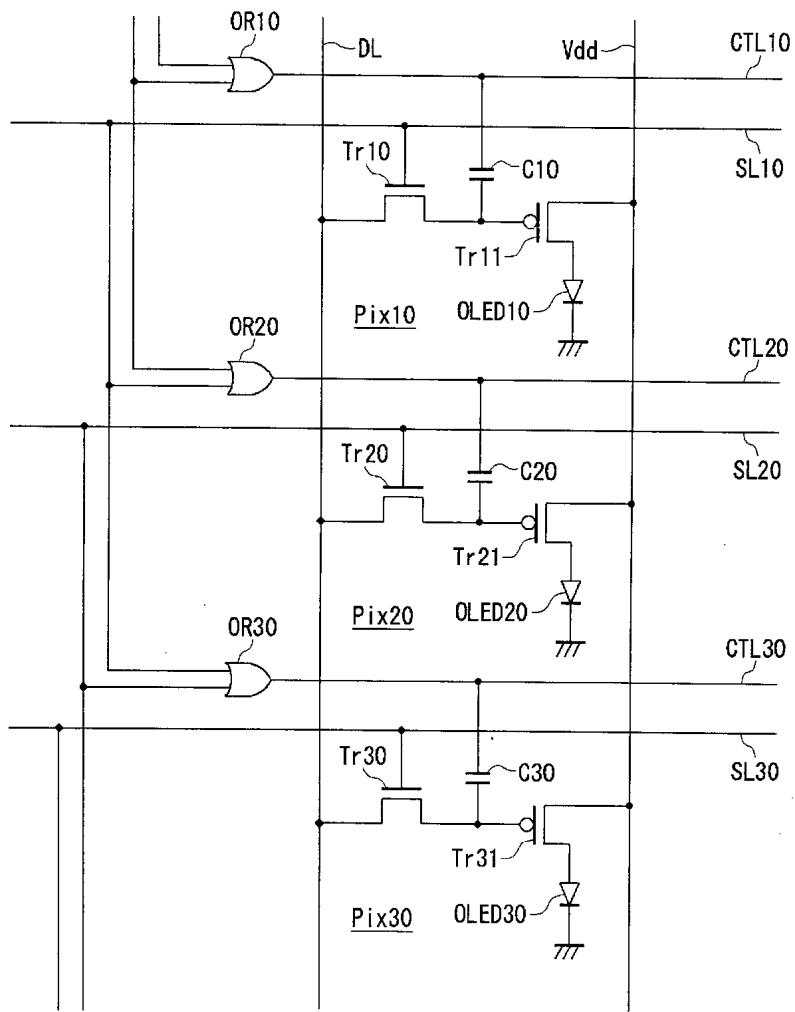
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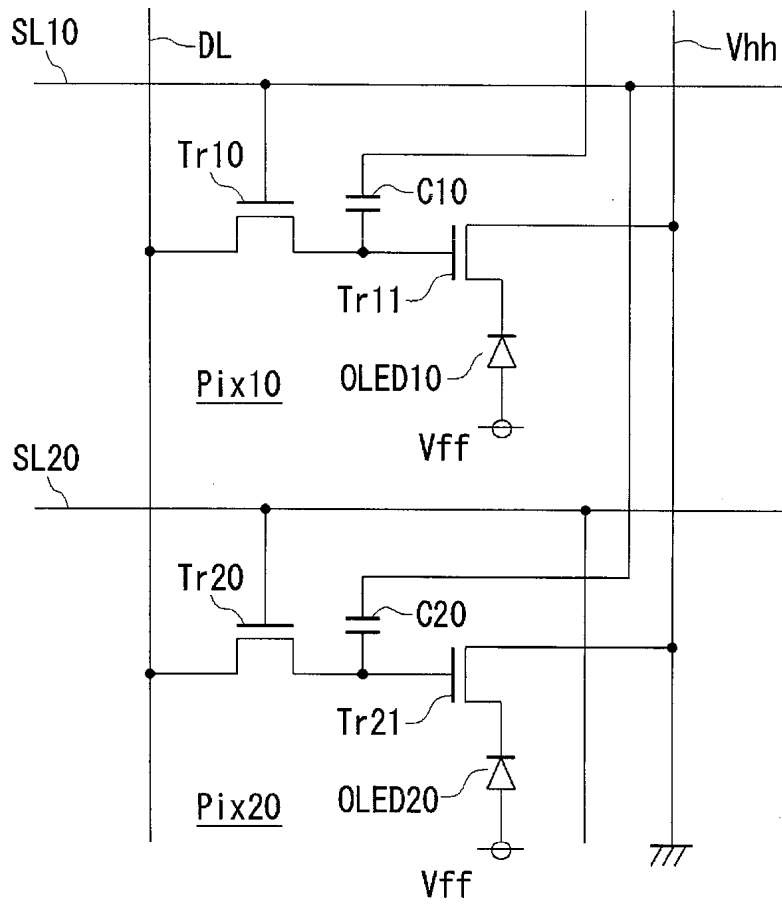




27



28



专利名称(译)	一种显示装置，具有初始化光学元件的亮度数据的功能		
公开(公告)号	KR1020030038522A	公开(公告)日	2003-05-16
申请号	KR1020020069103	申请日	2002-11-08
[标]申请(专利权)人(译)	三洋电机株式会社 山洋电气株式会社		
申请(专利权)人(译)	三洋电机有限公司是分租		
当前申请(专利权)人(译)	三洋电机有限公司是分租		
[标]发明人	NOGUCHI YUKIHIRO 노구찌유키히로 MATSUMOTO SHOICHIRO 마쯔모또쇼이찌로 TSUCHIYA HIROSHI 쯔찌야히로시 SANO KEIICHI 사노게이이찌		
发明人	노구찌유키히로 마쯔모또쇼이찌로 쯔찌야히로시 사노게이이찌		
IPC分类号	G09G3/00 G09G3/32		
CPC分类号	G09G2300/0842 G09G2330/021 G09G2300/0876 G09G3/3266 G09G2300/0852 G09G2300/0861 G09G2320/043 G09G2310/0262 G09G2300/0809 G09G3/3241 G09G2310/0251 G09G3/3233 G09G2310/0256		
代理人(译)	CHU，晟敏 LEE，JUNG HEE		
优先权	2001344662 2001-11-09 JP 2001344663 2001-11-09 JP 2001344664 2001-11-09 JP 2002003973 2002-01-10 JP		
外部链接	Espacenet		

摘要(译)

偶尔，当高亮度数据重新记录固定光学元件作为低亮度数据时，可以看到重影。如果扫描线SL对于亮度数据的内容是高的并且晶体管Tr1导通，则有机发光二极管OLED的亮度数据被设置在晶体管Tr2的栅极中。同时，固定晶体管Tr4导通到旁路，并且有机发光二极管OLED的阳极的电荷被发射到地电位。而且，同时，晶体管Tr3截止。因此，阻止了从电源线Vdd产生穿透电流。使用此，初始化有机发光二极管OLED的亮度数据。亮度，光学元件，初始化，二极管。

