

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G09G 3/36

(11)
(43)

10-2004-0058578
2004 07 05

(21)

10-2002-0084904

(22)

2002 12 27

(71)

.

20

(72)

287

105 406

1

111 607

(74)

:

(54)

.

,

,

가

.

6

1

.

2

1

.

3

.

4

1

.

5

1

가

.

6

7 6

8

< >

2,32 : 4,34 :

6,36 : 7,37 :

8,38 : 10,40 :

12,13,14,15,16,17,50,51,52,53,54,55 :

20,60 : 22,24,26,70,72,74 :

42,43,44 : 45,46,47 : -

56 : 611,612,613,61j :

(2) , (GL1 1 GLn) (6) , (2) (DL1)
DLm) (4) , (6) (4)
(8) , (4) (10)

(2) (GL1 GLn) (DL1 DLm) (GL)
(TFT) , (TFT) (7) (TFT) (DL) (VGL)
(7) , (VGH) (GL) (7)
- (7) 가

(7) 가 (Clc) , (7) 가 가
(TFT)

가 (7) (TFT)

(6) (GL1 GLn) (GSP, GSC, GOE) (6) GLn)
(8) (VGH)

(6) (GSP) (GSC) (GL)

(6) (VGH) (6) (GL) (VGH) (VGL)

(6) (6) (VGH) (GL) (VGH) (VGL)

(4) 1 (DL1 DLM) (12 17)

(4) 2 (Integrated Circuit : 'IC') (2)

IC(12 17) 2 6 IC(12 17)가 IC(12 17)

IC(12 17) i(i) (DL) IC(12 (D

17) (8) (SSP, SSC, SOE, POL) (8)

L1 DLM) (R, G, B) (10) IC(12 17) (8)

IC(12 17) (SSP) (SSC) (R, G, B)

IC(12 17) (SOE) (DL1 DLM)

IC(12 17) (POL)

(8) (V,H) (GSP, GSC, GOE) (SSP, SSC, SOE, POL) (8) (R,G,B)

(6) (4) (4) (10) (R, G, B) 가 (R1 Rj+1)

(4) IC(12 17) (10) 3 (20)가

(10) (VDD) (GND) j+1(j) 1 (R1 Rj+1) (R1 (VDD)

Rj+1) (10) 1 (Gam1 Gamj) (20) Gam1 Gamj)

(10) 1 (Gam1 Gamj) (20) 1 (Gam1 Gamj) 1 (Gam

1 IC(12 17) (Gam11,...,Gam32,...) (20) 1 (Gam1 Gamj) 1 Gam2 (Gam

2 Gamj) 2 (R11,...,R32,...) , Gam1 Gam2

2 (R11, R12, R13,...) Gam1 Gam2

가 , Gam2 Gam3 2 (R21, R22, R23,...) Gam2 Gam3

(10) (VDD) 가

(4)

(TFT) 4 (2)

(4 3)(22,24,26) (TFT) 1 (22)

(TFT) 2 (24) (TFT

3 (26) (TFT) (22,24,26)

(2)

(22,24,26) (22,22,26) 가
(22,24,26) 가 (22,24,26) 가 (22,24,26)
(22,24,26) 5 (TFT)
(Cgs) (22,24,26) (22,24,26)
(22,24,26) Cgs (DL) 가
(22,24,26) (7) 가 (22,24,26)
(DL)

i(i)

i

- ,
- ,

가 ,

가

-

1 ,
가 가 2

가 가

1 2 3 ,
5 , 가 4 ,
6 가

6 8

6

6 (32) , (GL1 GLn) (37) (36) , (32) (32) ,
(DL1 DLm) (38) , (34) , (36) (34) (40) , (37)
(Analog-Digital : 'A/D') (42,43,44) , (42,43,44) -
(45,46,47)

(32) (GL1 GLn) (DL1 DLm) (TFT) (GL)
(TFT) , (TFT) (VGH) (37) - (TFT) (DL) (VGL)
(37) , (37) (TFT) (GL) (37) ()
(37) 가 (Clc) , (37) 가 가
(TFT) 가 가 (37) (TFT)

(36) (GL1 GLn) (GSP, GSC, GOE) (GL1 GLn) (36)
(38) (VGH)

(36) (GSP) (GSC) (GL)
(VGH) , (36) (GL) (VGH) (VGL) ,
(36) (36) (VGH)

(34) 1 (DL1 DLm) ,
(34) 7 IC(50 55) (32) IC(50 55)
IC(50 55)가 (34) IC(50 55)

IC(50 55) i(i)) (DL) IC(50
55) DLm) (38) () (SSP, SSC, SOE, POL) IC(50 55) (38)
DL1 (R, G, B) (40)

IC(50 55) (SSP) (SSC) (R, G, B)
IC(50 55) IC(50 55) (SOE) (DL1 DLm) ,
IC(50 55) (R, G, B) (POL)

(32) () 3)(70, 72, 74)
(70,72,74) IC(50 55)

7 , (32) IC(50 55) 2i

(DL) ,72,74) IC(50 55) 가 6 (32) 3 (70)
 (DL) C(50 55) IC(50 55) (32) 6 (DL) (32) 2
 (42,43,44) (70,72,74) 1 (70) 1 (42)가
 4)가 DL) (72) 2 (43)가 (74) 3 (4
 (42,43,44) (70,72,74)
 (42,43,44) (37)
 A/D (45,46,47)
 A/D (45,46,47) (42,43,44) 1A/D (45) 1 (42)
 (47) 3 2A/D (44) (46) 2 (43) 3A/D
 A/D (45,46,47) (42,43,44)
 A/D (45,46,47) (38)
 P, GSC, GOE) (38) (SSP, SSC, SOE, POL) (V,H) (GS
 (36) (36) (GSP, GSC, GOE)
 (34) (34) (SSP, SSC, SOE, POL)
 (34) (38) (R, G, B)
 (38) A/D (45,46,47) (70,72,
 74) (56) A/D (45,46,47) (38) (56) 가 (7
 0,72,74) (70,72,74) 가 (38) 가 (C
 L) IC (50 55) IC (50 55)
 (70, 72, 74)
 (40) (R, G, B) 가
 (34) (Gam1 Gamj) k(k>j)
 IC(50 55) (60)가
 (40) (VDD) (GND) j+1 1 (R1 Rj+1)
 가 j 1 (R1 Rj+1)
 1 (Gam1 Gamj) (60) (Gam1 Gamj) (40)
 (60) 1 (Gam1 Gamj) 2 (Gam11,...,Gam3
 2,...) (60) 1 (Gam1 Gamj) 2
 2 (R11,...,R32,...) 1 (Gam1 Gamj) IC(50
 (R11,...,R21,...,R31,...) 1 (Gam1 Gamj) 2 (Gam11,...,Gam32,...)
 55) 1 (Gam1 Gamj)
 (60) 1 (Gam1 Gamj) (611, 612, 613, 61j)
 (611 61j) (RW11,RW22,RW33,...) 1 (Gam1
 (RW11,RW22,RW33,...) (611 61j)
 Gamj) (611 61j) (RW11,RW22,RW33,...) (CL)
 1 (Gam1 Gamj)
 (611 61j)

(32) IC(50 55) (GLI) (DL) 가 (37) 가
가 (42,43,44) (GL1) (37)
(42,43,44) A/D (45,46,47) A/D
(45,46,47) (56)
(56) (42,43,44)
3 1 (44) (42) 4V 가 2 (43) 5V
(38) (56)
(611 61j) (38) (70,72,74)
1 (Gam1 Gamj) (RW11,RW22,...)
(38) 1 (70) 1 2 IC(50,51) 1V
3 4 (38) 3 (74) 5 6 (38) 2 (72)
IC(52,53) IC(54,55) 1V
(38) 3 (74) 5 6 (70,72,74) 5V
(RW11,RW22,...) (611 61j)
(70,72,74)
(70,72,74) (TFT)
(70,72,74)
가 가

(57)

1.

2.

 $i(i \quad)$

3.

2

,

i

4.

2

,

,

-

,

,

5.

4

,

,

가

,

6.

5

가

7.

5

-

8.

1

,

가

가

2

9.

8

,

10.

8

가

가

11.

10

1

2

3

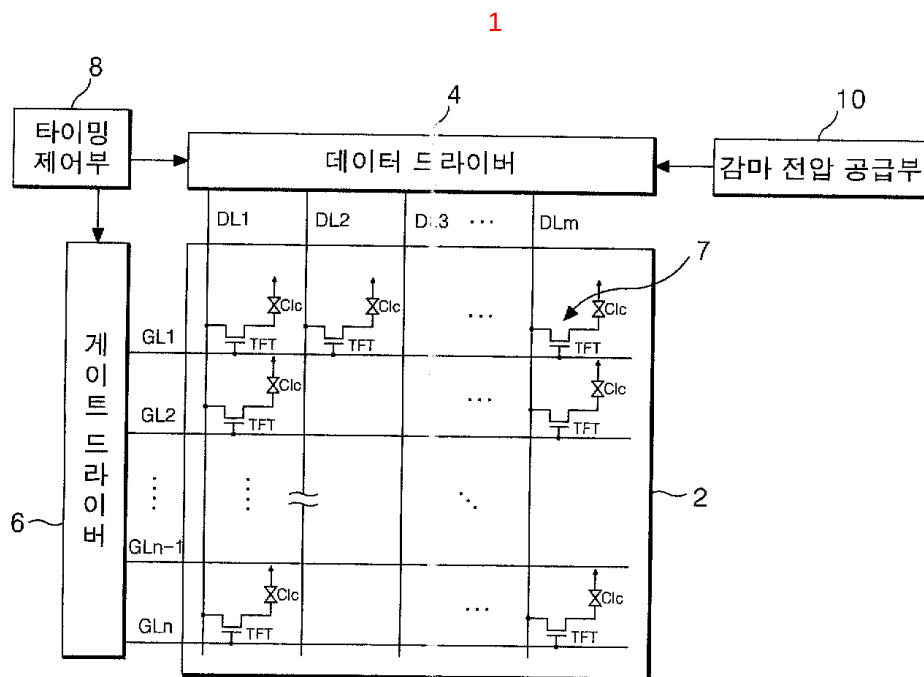
4

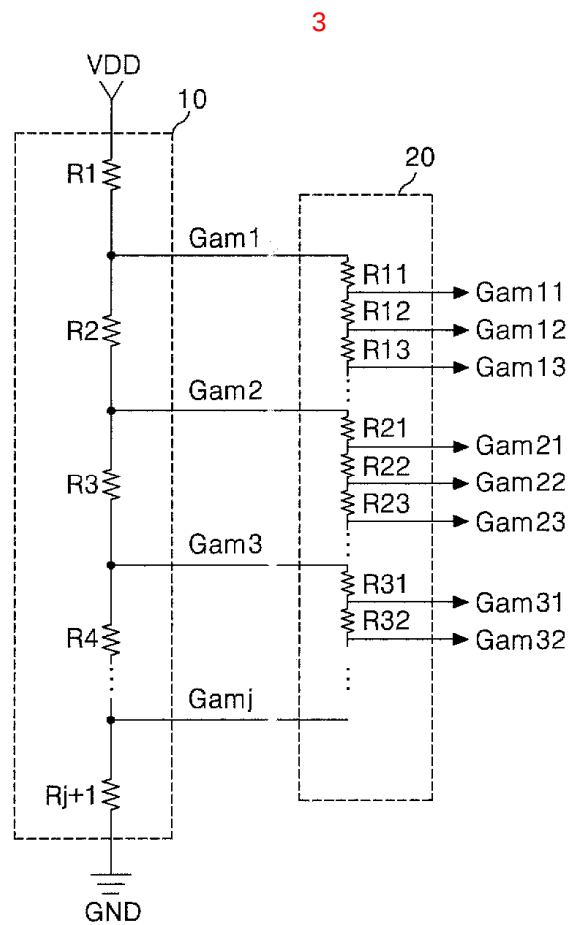
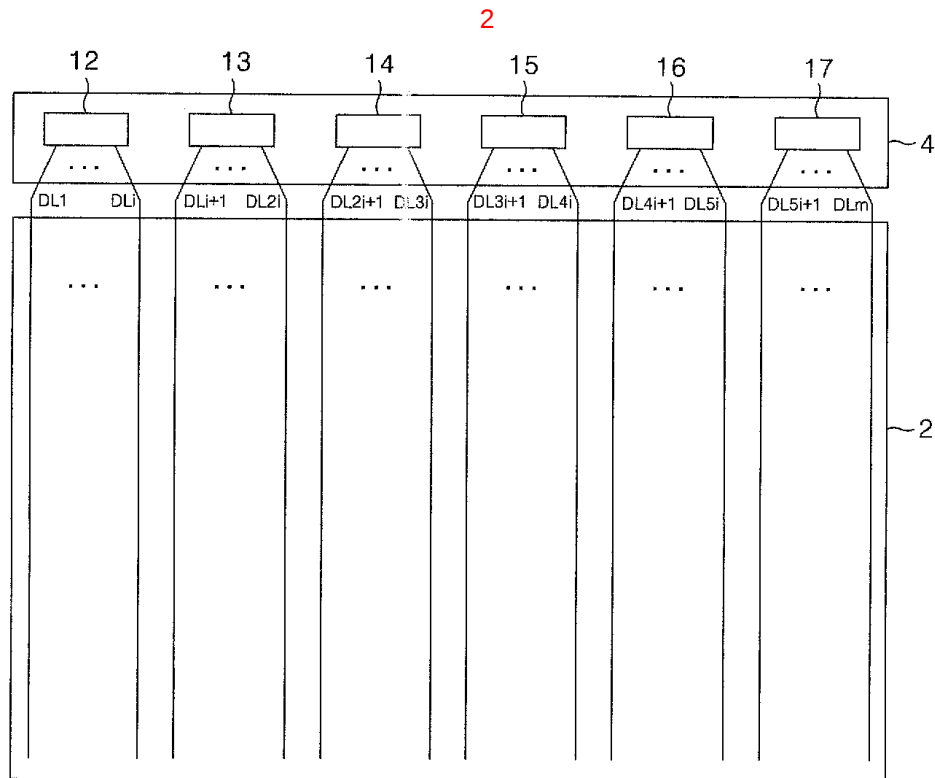
5

가

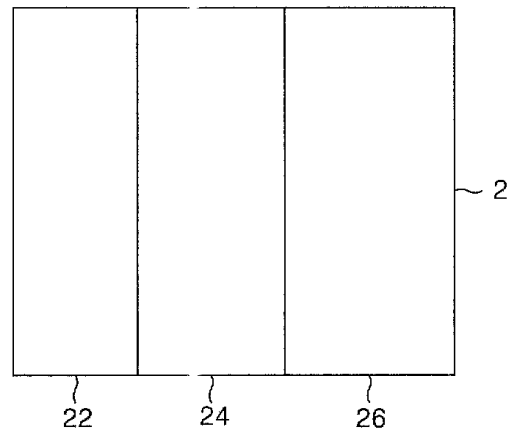
6

가

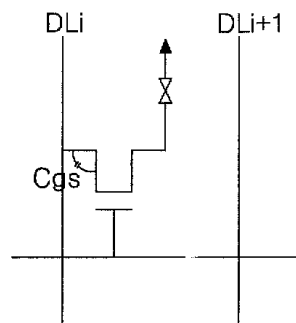




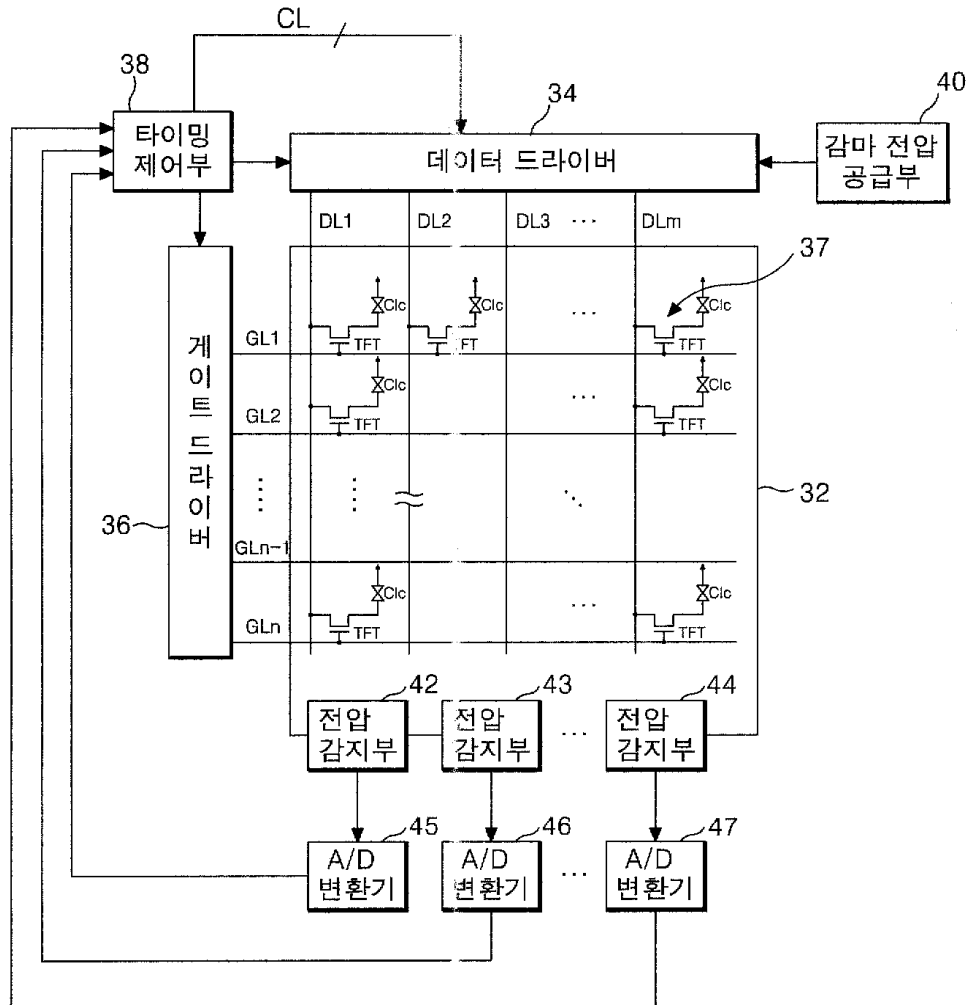
4



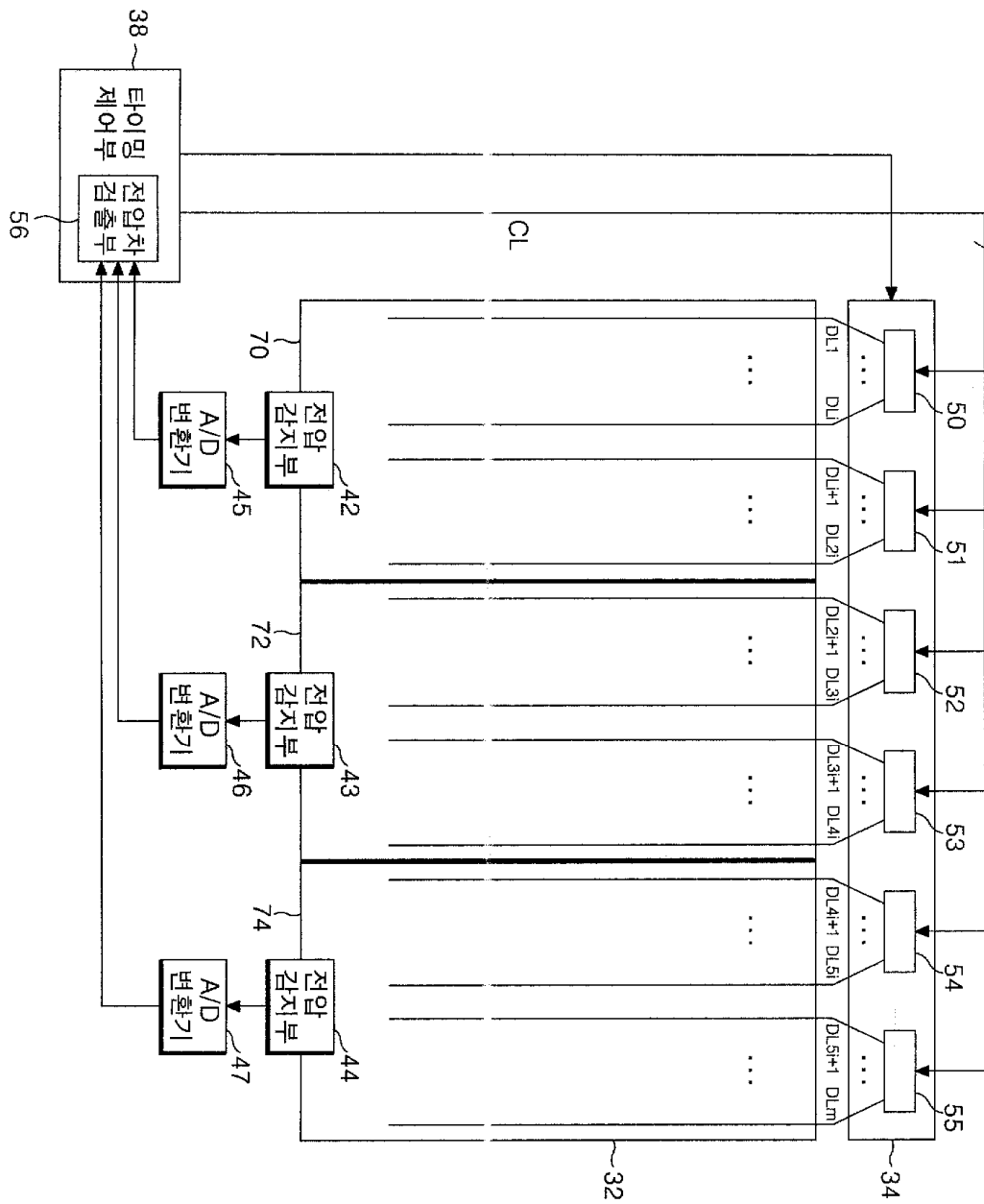
5



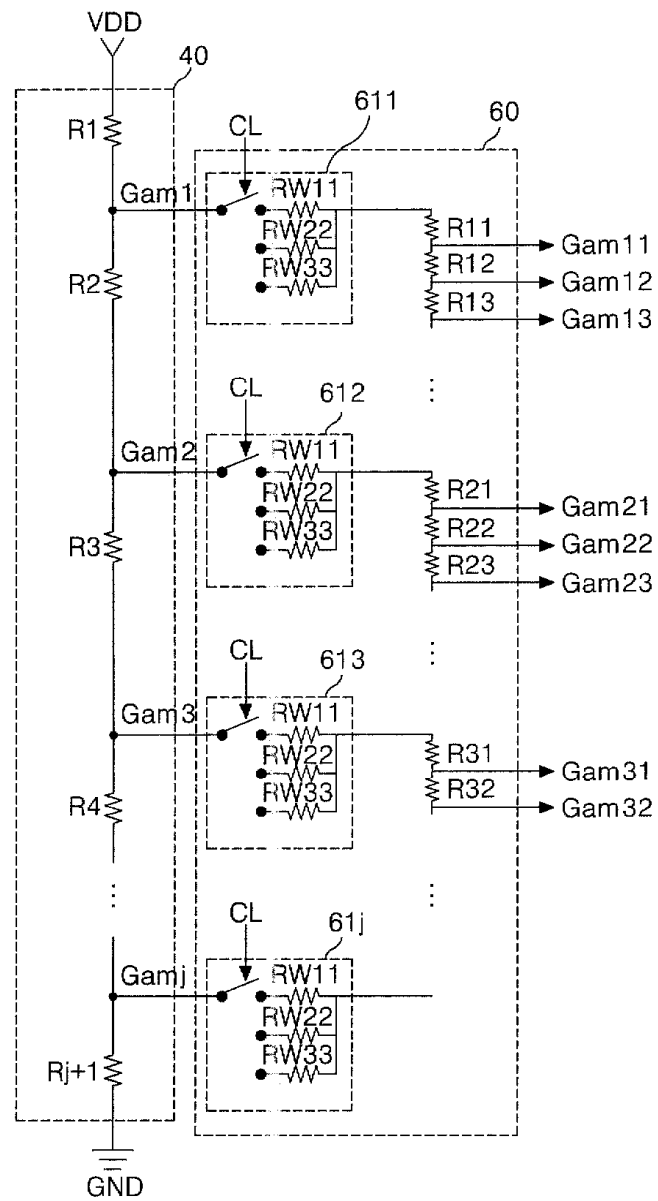
6



7



8



[illegible]