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(12)

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1 106 102

(74)
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(54)

1 1 2 1

2

1

2 1

3 4 2

5 2

6

7

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- 2,12 : 4,14 :
- 6,16 : 8 :
- 10 : 18,30 :
- 32 : 101,130 :
- 102,132 : 106,134 :
- 108,136 : 110,138 :
- 112,148 : 114,116,140,146 :
- 118,142 : 120,144 :

,

.

가 . 가

1 .

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

(2) (GL1 GLn) (DL1 DLm)

(TFT) , (TFT)

(6) . (GL1 GLn)

(DL1 DLm) (4) 가 1 (R,G,B) 1

(TFT) (GL1 GLn) (DL1 DLm)

) 가 (Clc) , (DL1 DLm)

) (Clc) () .

(DL1 DLm) (GL1 GLn) (DL1 DLm)

m n (DL1 DLm) (m) .

) , , m (2)
 (DL1 DLm)
 (Integrated Circuit : 'IC')가

m (DL1 (DL1 DLm) DLm ,
 (4)

1 1 2 1
 i(i-1) 1 i+1 2
 1 m(m-1)/2 , 2 m
 1 2 j(j-1) 1
 1 2 , 2
 2 1 2 1 , 1
 1 2 1
 1 1/2 1 , 1 1/2 2
 1 1/2 2 , 1 1/2 1
 1 2 가 1
 2 2 가 1
 2 n/2(n-1) 1 , n
 i(i-1) 1 i+1 2
 2

1 2

1 2

1 2

j(j) 1

1

2

1

2

2

2

1

1

2

2

2

1

1

2

,

,

N

P

n/2(n)

1

n

2

1

1

2

2

1

1

1

1

1

1

2

1

2

1

2

1

2

1

가

가

1

1

2

(SSC)

1

(SSC)

2

(SSC)

2

(SSC)

1

1

2

1

2

1 2 1 .

2 2 1 , 2 가 1 1

(SSC) 1 , (SSC) 2 .

(SSC) 2 , (SSC) 1 .

2 7 .

2 1 .

2 DL1 DLm/2 , 1 (12) , (12) 1 ((

(16) , (14) , (12) (GL1 GLn) (

(16) (14) (16) (18)

(16) (18) (GL1 GLn)

(14) (18) (GL1 GLn) 가 1 (R,G,B)

1 (DL) 2 (DL1 DLm/2) (14) 1 1

3 (14) (DL) (, 2 (1H) () 1/2 (1/2H) (DA) 1

(DL) ((2 (D1,D3,D5,...)) (1H) () 1/2 (1/2H)

(D2,D4,D6,...)) 2 (DB) 1

(14) 1 1 (DL) ()

(DL) (14) 1 (DL

1 DLm/2) 가 1 (DL1 DLm) IC

IC가 , (14)

(18) , (18) (16)

) (18) (18)

(18) (12) (C1,C2) 1

2 (18) (SSC) (SSC) (C) (C

1,C2) (14) 1 2 , 3 1

(18) (SSC) 1 (C1) 1

(18) (SSC) 2 (C2) 2

(12) (10) (8) (10)

(8)

(10) 2 (D) (GL) 1 (TFT1)

1 (TFT1)

1 (TFT1) (GL1 GLn) 2 (D1

Dm) (TFT1) (C1c) 가 (C1c) 1

(C1c)

()

(8) (20) (20) (C1,C2) (20)

1 (DL) (DL1 DLm/2) (20)

(20) m/2 1 (DL) 2 m/2 (D) (DL)

m 2 (D)

(20) 2 (TFT2) 3 (TFT3) 2

(TFT2) (TFT2) 1 (C1) 2 (D) (DL) 3

(TFT3) (TFT3) 2 (C2) 2 (D) 1 (DL)

(TFT3)

(18) 1 가 3 가 1 2 1 2

(C1,C2) (DL1 DLm/2) (14) 1 1/2 1/2

1 (DL1 DLm/2) (16) 1

1 (TFT2)가 1/2 1 (C1) (High) 1 가 2

(TFT3) (C2) (Low) 2 가 3

'i(i) (GLi)' (GLi) (GLi) (GL1 GLn) (GLi)

가 i (GLi) 1 (TFT1) (TFT1)

1 (DA) 2 1/2 1 (DL) (DA)가

2 (D1,D3,D5,...) (TFT2) 2 (D1,D3,D5,...)

5,...) 1 (TFT1) (DA) 2 (D1,D3,D

2 (D1,D3,D5,...) (DA) 1 1/2

1 (TFT3)가 1/2 2 (C2) (High) 2 가 3

(TFT2) (C1) (Low) 1 가 2

1 (DB) 3 1/2 1 (DL) (DB)가

2 (D2,D4,D6,...) (TFT3) 2 (D2,D4,D6,...)

6,...) 1 (TFT1) (DB) 2 (D2,D4,D

2 (D2,D4,D6,...) (DB) 1 1/2

1 (18) 1 가 4 가 1 2

1 2 (C1,C2) (14) 1 1/2
 (DB) 1 (DL1 DLm/2) , 1 1/2
 (DA) 1 (DL1 DLm/2) , (16) 1

1 1/2 2 (C2) (High) 2 가 3
 (TFT3)가 - , 1 (C1) (Low) 1 가 2
 (TFT2) - , 1 (GLi) 가 i
 (GLi) 1 (TFT1)가 -

, 1 1/2 1 (DL) (DB)가 ,
 (DB) 3 (TFT3) 2 (D2,D4,D6,...) (D2,D4,D
 6,...) 1 (TFT1) , 1 1/2
 2 (D2,D4,D6,...) (DB) 2 (D2,D4,D
 6,...) 1

, 1 1/2 1 (C1) (High) 1 가 2
 (TFT2)가 - , 2 (C2) (Low) 2 가 3
 (TFT3) -

, 1 1/2 1 (DL) (DA)가 ,
 (DA) 2 (TFT2) 2 (D1,D3,D5,...) (D1,D3,D
 5,...) 1 (TFT1) , 1 1/2
 2 (D1,D3,D5,...) (DA) 2 (D1,D3,D
 5,...) 1

5 2 5 2

5 DL1 DLm/2 2 (12) , (12) 1 ((GL1 GLn) (DL1 DLm/2) (14) , (14) (16) (16) (30))
 , (16) , (14) (14) (16) (32) (30))
 , (16) (30) (GL1 GLn)

(14) (18) 가 1 (R,G,B)
 1 (DL1 DLm/2) (GL1 GLn) (14) 1 1
 (DL) 2 , (30))
 (30) (30) (30) (16)

) (32) 1 2 가 (14) , (30) (30) (32)
 (32) (32) (30) (SSC) (C1,C2
) 1 2 (SSC) (SSC) (14)

(32) (32) (SSC) 1 3 1 (SSC) (SSC) (32)
 (32) (32) (SSC) (SSC) 2 (C1) 1 (C2) 2

, (32) 4 (SSC) 1 (C1)
 1 (SSC) 2 (C2) 2

2 1 2 (32) 가
 2 1 1 2 (18)
 2 (32) 1 2

(TFT) 6

6 (TFT) (101)
 106) (106) (108) (110) (110)
 (110) (118) (120) (110)
 (120) (TFT) .)

(106) (108) (110) (114,116)
 (110) (114,116) (114) (114) (108) (114)
 (116) N P (116) (114,11)

6 (106) (108) (110)
 (106) (114,116) (102) (108) (108) (110)
 (112) (108) (110)

4,116) (TFT) (108) (110) (11)
 (108) (110) (114,116)

7 (TFT)

7 (TFT) (130)
 134) (134) (136) (138) (138)
 (138) (142) (144) (138) (138)
 (144) (TFT) .)

(134) (136) (138) (140,146)
 (138) (140,146) (140) (140) (136) (140)
 (146) N P (146) (140,14)

6 (134) (136) (138)
 (134) (140,146) (132) (138) (138)
 (148) (136) (138)
 (138) (140,146) (TFT) (136)

가

1.

1

2

1

1

2.

1

$i(i-1)$

1

$i+1$

2

3.

1

1

$m(m$

$) / 2$

,

2

m

4.

1

1

2

5.

4

1

2

$j(j$

$)$

1

6.

5

1

2

2

,

2

7.

6

1

1

1

,

1

2

2

2

8.

7

1

2

1

9.

8

1

2

$1/2$

1

,

1

$1/2$

10.

8

1 1 1/2 2 , 1 1/2
1

11.

8 ,
1 2 1 가 1
2

12.

8 ,
2 2 2 가 1
2

13.

1 ,
.

14.

4 ,
1 2

15.

14 ,
N P
.

16.

14 ,
.

17.

14 ,
.

18.

n/2(n) 1 ,

n 2 ,

1

2

19.

18

i(i 1) 1 i+1 2

20.

18

2

21.

18

1 2

22.

21

1 2

23.

22

1 2 j(j) 1

24.

23

1 2 , 1

25.

23

2 2 , 2

26.

23

1 1 2 2 - 2 - 1

27.

18

28.) 1 ,
 n/2(n) 1 ,
 n 2 ,
 1 ,
 1 2 ,
 2 ,
 1 ,

29. ,
 28 ,
 1 , 1

30. ,
 29 ,
 1

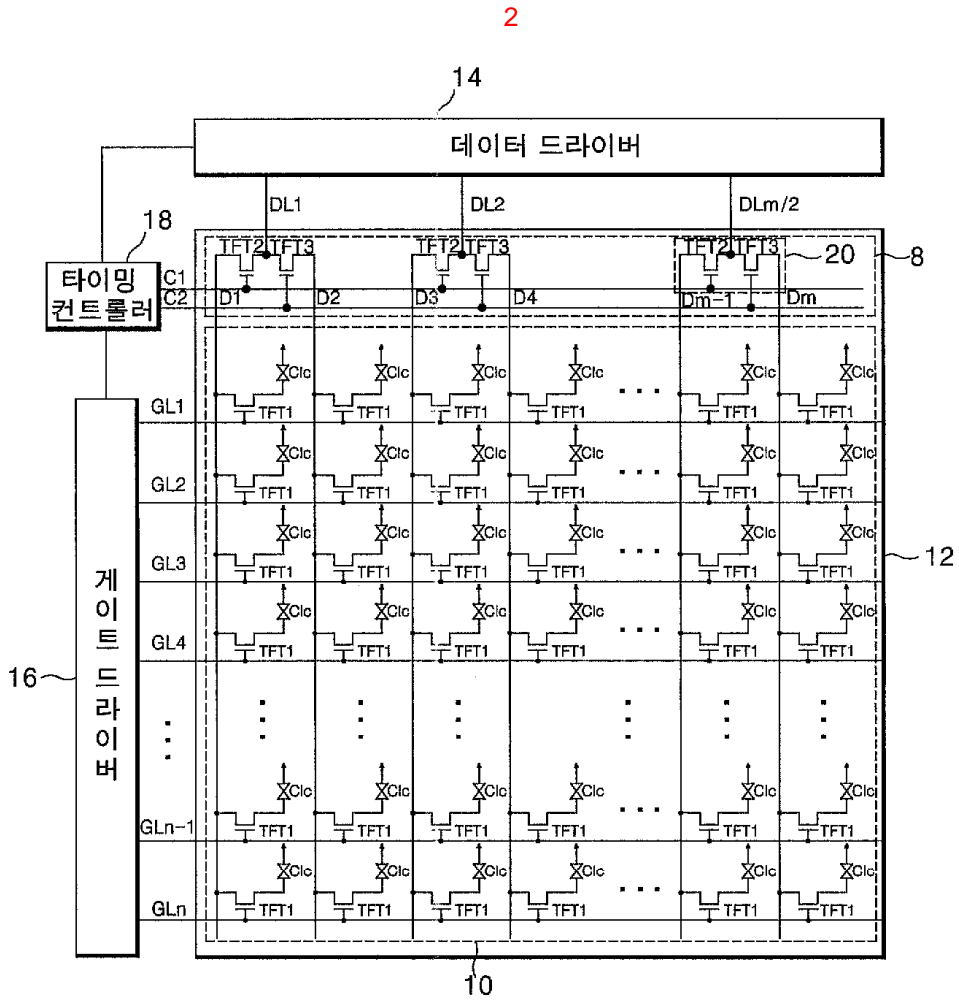
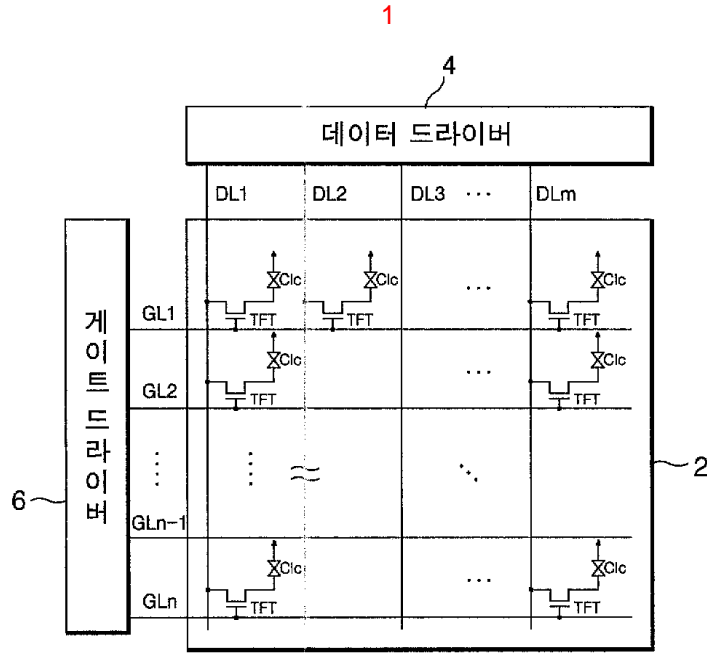
31. ,
 29 ,
 1

32. ,
 28 ,
 1 2 , 1 2

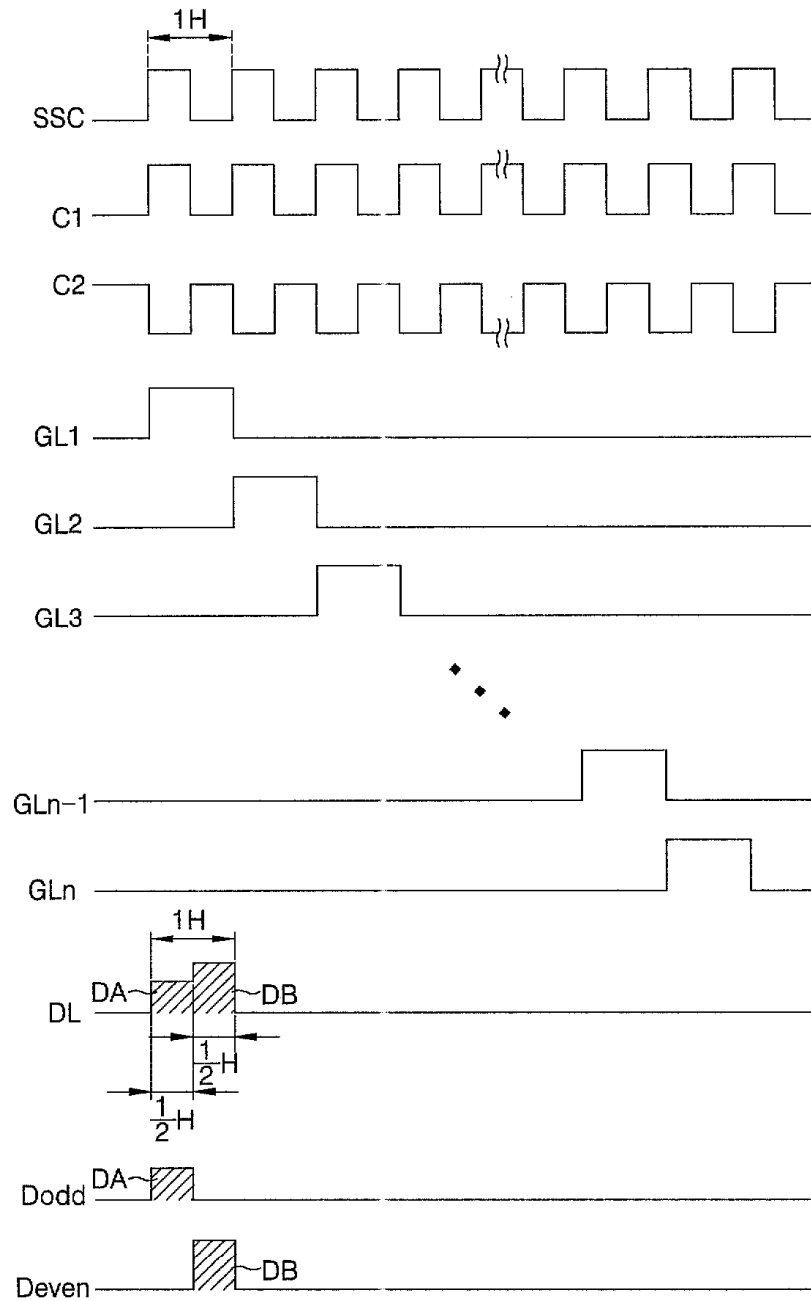
33. ,
 32 ,
 1 2 1

34. ,
 33 ,
 2 1 가 , 2 가 1
 2 2 , 2 가 1

- 32 **35.** ,
 (SSC) 1 , (SSC) 2
- 32 **36.** ,
 (SSC) 2 , (SSC) 1
- 28 **37.** ,
 1 2 1 2
- 37 **38.** ,
 1 2 1
- 38 **39.** ,
 2 1 가 , 2 가 1 1
- 37 **40.** ,
 (SSC) 1 , (SSC) 2
- 37 **41.** ,
 (SSC) 2 , (SSC) 1



3



4

