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(12)

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(A)

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(43)

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(22) 2003 11 12

(30) JP-P-2002-00329712 2002 11 13 (JP)

(71) 가 가
1 1 1

(72) 1 1 1 가 가

(74)

:

(54)

(10) (DS) (YD, XD) (10) , (YD, XD)⁽¹⁰⁾

1

, , EL

1 EL

2 1

3 1

4 1 EL

5 1

6 1 EL

7 1 EL

8 3 D/A

9

< >

1 :

2 : DC/DC

10 : EL

11 :

12 :

13 :

20 :

21 :

22 : D/A

23 :

30 :

DS :

YD, XD :

가, EL

, EL

가

EL

가

가

EL

EL

D/A

D/A

가,

, D/A

EL

가

EL

EL

가

EL

EL

EL

가
가

EL

가

가

가

가

가

가

EL

1

EL

2

1

EL

EL

PNL
TCP

1

PCB

EL

PNL

PCB

EL
PX,

PNL

PX

m

Y(Y1 Ym),

DS

Y

n

X(X1 Xn),
PX 1

Y1 Ym

(R),

YD
(G),

(B)

PX RGB 가 EL (10),
 Y (11) Vsig X (12), Vsig (12) EL (11), Vsi
 (11) EL (10) DIDD (13) (13) (11) ,
 N EL (10) VDD, VSS P (13)
 , EL (10)가 VSS (13) (13)
 VDD (13) X VDD (11) (11)
 P N YD Y (12)
 PX
 PCB SG DATA
 EL PNL 가 DATA
 IC (1),
 가 DC/DC (2) (1) 가
 CTY CTX CTX (1) CTY CK
 H, LT CTY DATA (1) STH, YD
 CTX XD
 PCB TCP EL PNL
 TCP IC XD VSS , n
 X1, X2, X3, ...Xn (3) DVSS
 YD () m Y
 XD 2 STH CKH
 (1) (20) DATA LT
 (21), DATA Vsig D/A (22), D/A (22
) VREF(V1 V_k) X1, X2, X3, ...Xn RF, D/A (22
 3) Vsig
 R0 Rk RF 3 AVDD (3) 가 (3)
 VREF(V1 V_k) (30) , V1 (30) , V_k
 D/A (22) (21) DATA Vsig
 V1 V_k (DAC) (23) D/A
 D/A Vsig X
 PX DC/DC 가 (2) VDD DVSS 가 가
 X Y 가 Vsig가 (12) (11) N 가 (12)
 , X (12) Vsig (12) Y 가
) P X Vsig (12) P (12) (13)
 , (12) P - Vgs가 . P

(10) I_{ds} , V_{gs} , V_{sig} , EL (10) I_{ds} , EL
 가

(13) P, V_{DD} , EL (10) 4, V_{SS} , DIDD, V_{sig} 가
 가, V_{sig} 가

(3) V_{DD} , EL (10) V_{SS} , V
 DIDD, I_{e1} , Re, AMP, AMP가, Re, Ve

RF, (30) 가, V_k 가, (3) V_e' , V
 V_e' , V_e' 가, DIDD, I_{e1} , V_k , V_k , V1, 4, (30)
 V_{sig} , V_k 가, 5, V_k 가, V1

EL, I_{e1} , 6, $V_k(V_e', V_e)$ 가
 (13) DIDD, I_{e1} , DIDD, I_{e1} , 가, P, V_k , I_{e1}
 가, DIDD, I_{e1}

7, V_k 가, EL (10), I_{e1} 가, I_{e1} ,
 EL (10) 가, EL (10), DIDD, I_{e1}

DIDD, 가

DIDD, EL, 가, 가

9, 가, , D/A, (22)가

RF가, 가, 8, IREF(11, Ik),
 1, AVDD, AVDD, k+1, (3) 가, 1,
 AVDD, D/A, (22), k, W,
 W, 2W, 4W, 8W, 16W... $2^{k-1}W$, 1, Ik, D/A, (22)
 RF가, 11, Ik가, (3)

Ve' , 가 .
 , RF가 D/A (22) ,
 EL , , ,
 (3) .

, DIDD DIDD , EL 가 .
 , DIDD

(57)

1.

(YD, XD) , (YD, XD)

2.

1

(YD, XD)

D/A

D/A
 (RF) ,
 (RF)

3.

2

(RF)

(R0 Rk)

4.

2

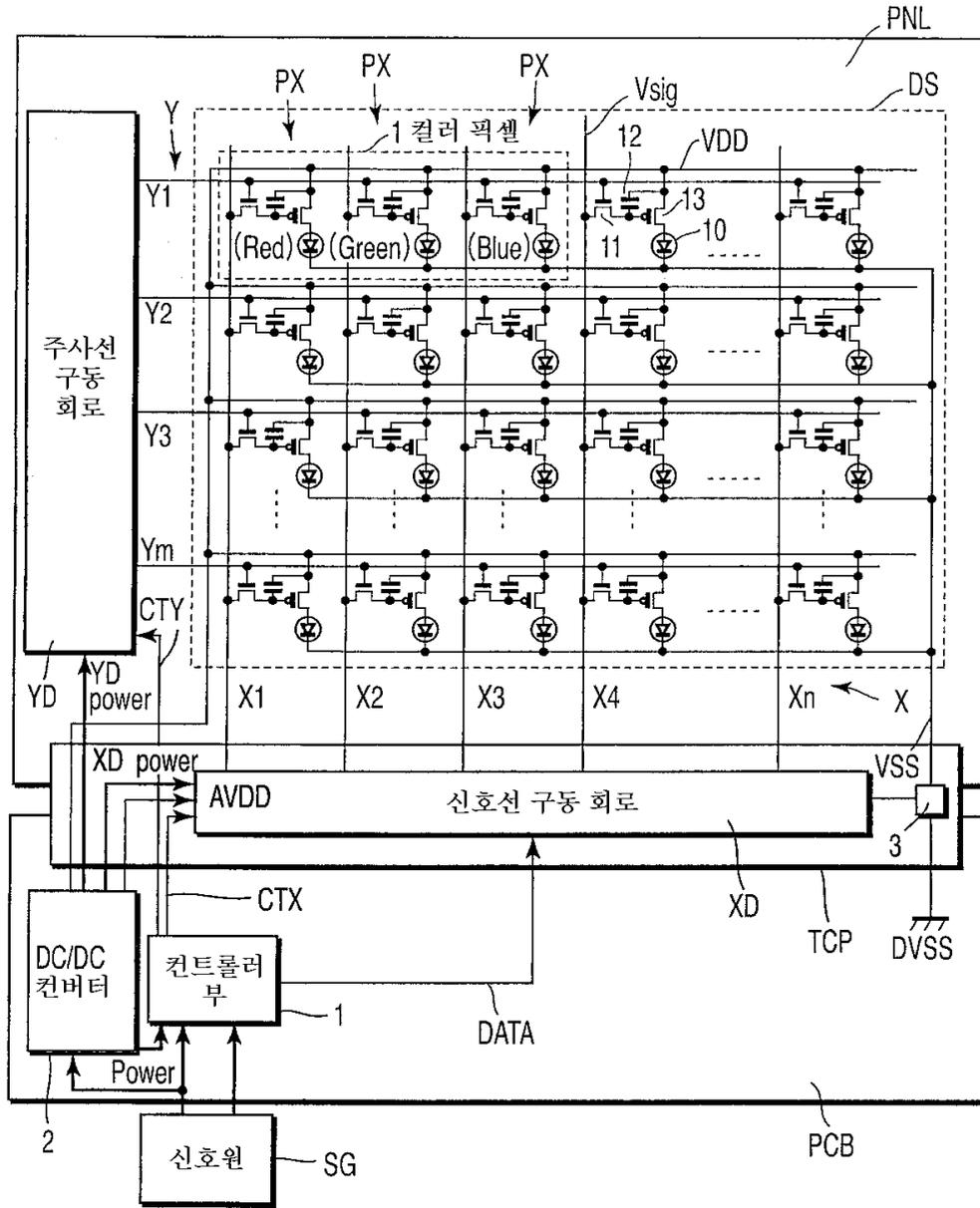
(RF)

5.

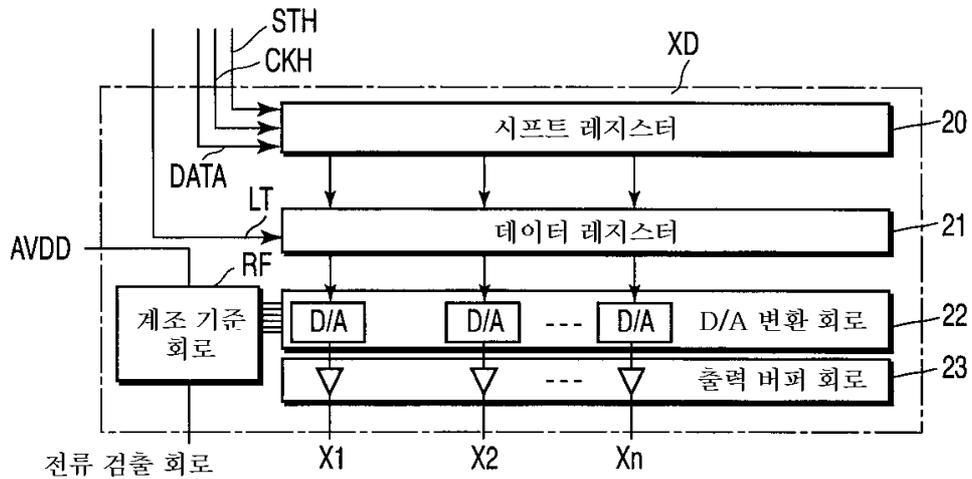
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EL

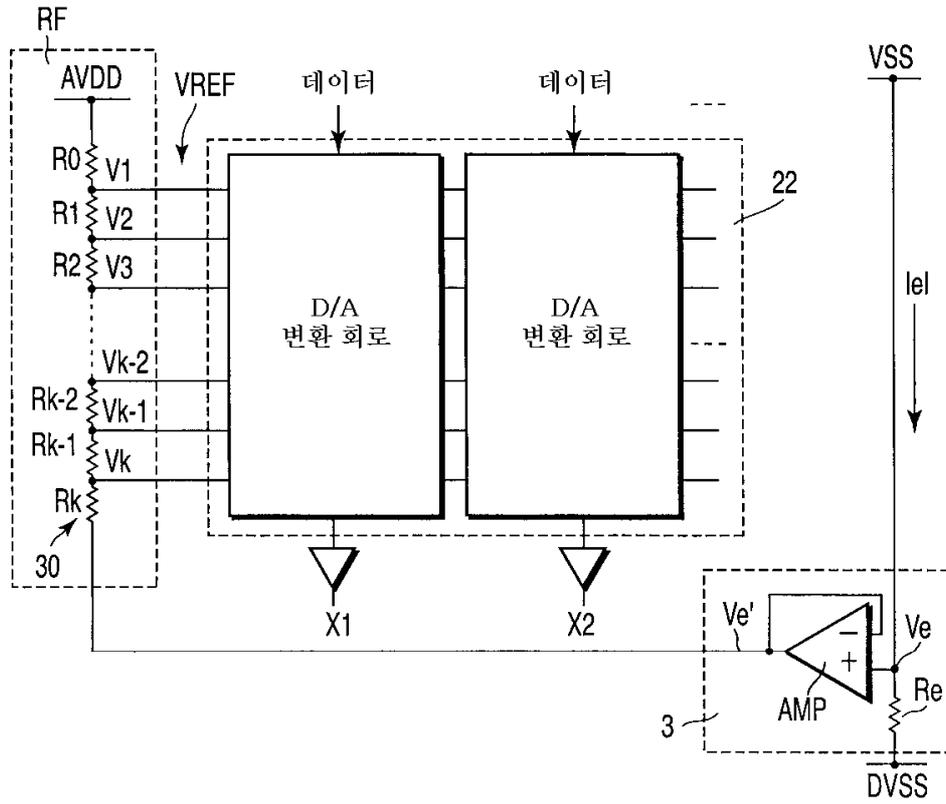
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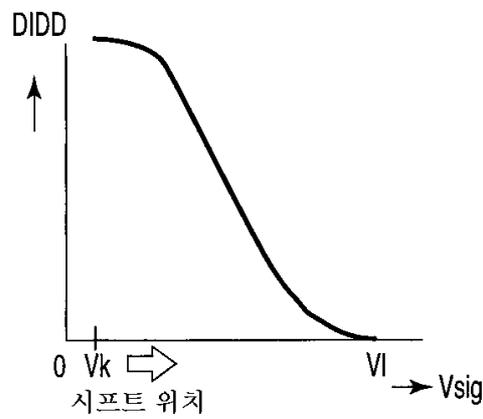
2



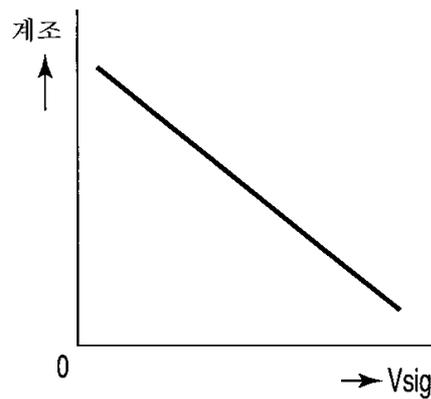
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4

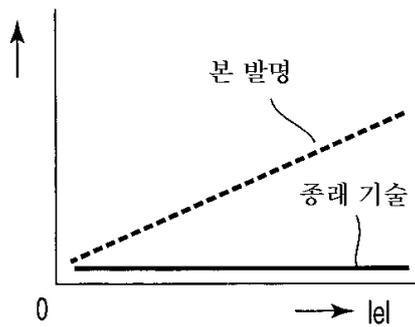


5

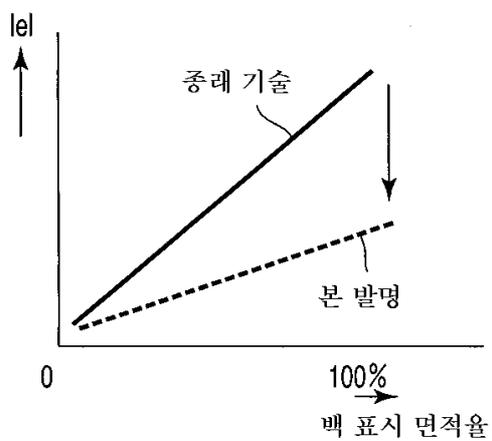


6

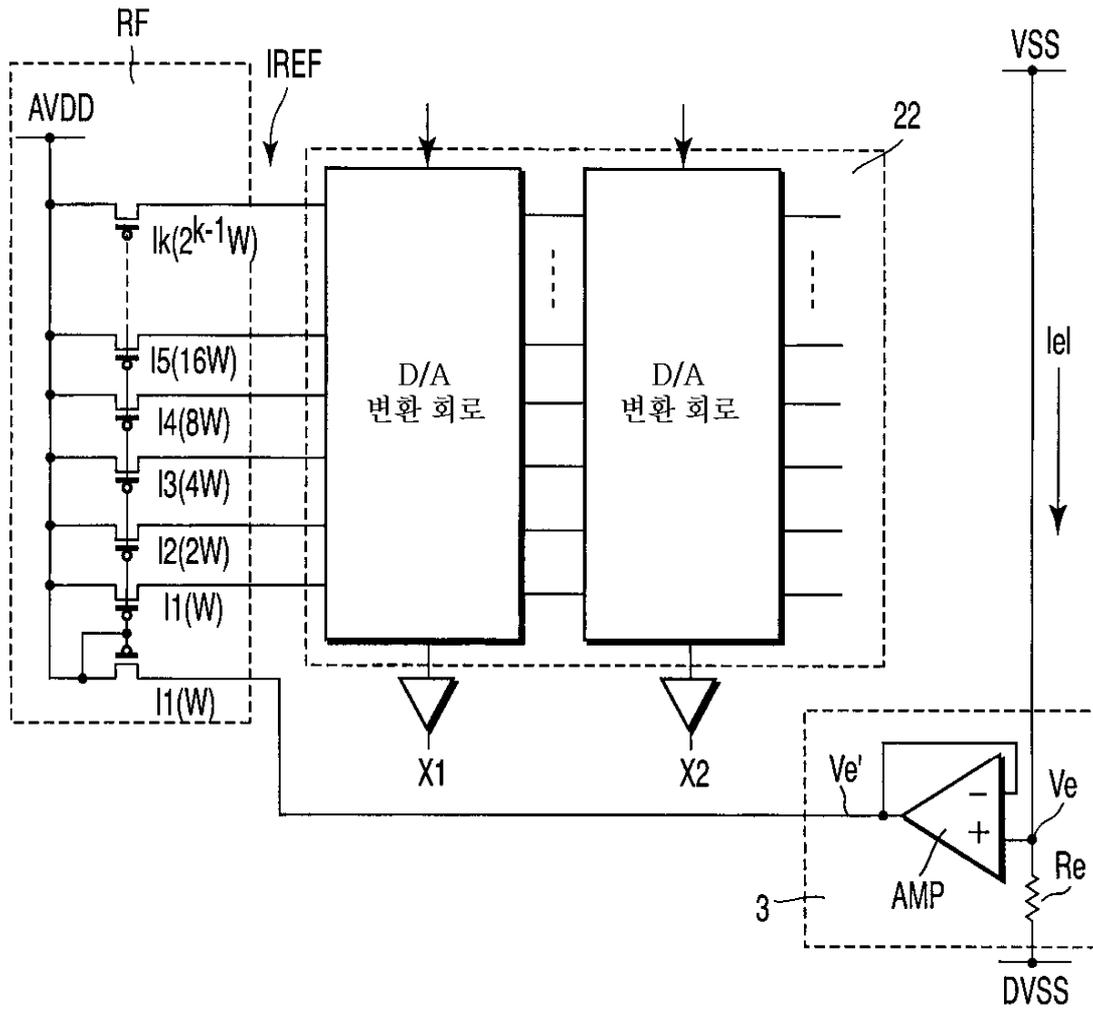
최고 계조의
계조 기준 전압



7



8



9

