

(19) (KR)  
(12) (A)

(51) 。 Int. Cl.<sup>7</sup>  
G09G 3/36  
G09G 3/20

(11)  
(43)

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(86) PCT/IB2002/005131

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(30) 0130177.9 2001 12 18 (GB)

(71) -5621 1

(72) -5656 6

-5656 6

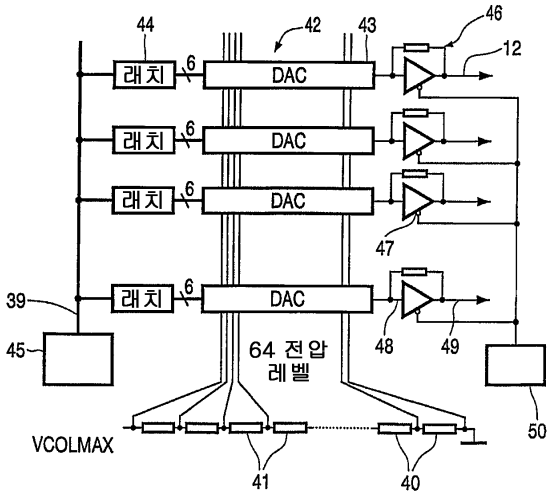
(74)

:

(54) ,

(47) ,

(buffer)(46)  
(timing circuitry)(50)



가 - (turned on) - (turned off)

가 , 가

5,130,829

( )

30V  
가

(fluctuate)

가 , -10V

(biasing)

20V

가

10V

(white state)

(black state)

(oscillating voltage)

'4

(capacitive coupling effects)  
(waveform)

가  
가  
(buffer)

(quiescent power requirement)

3.5mW

가

가

가

가

가

(power supply)

(timing circuitry)

가

가

가

(switched off)

가 가

가

가

가

가

(pauses)

가

-

1 1 ,

2 1 ,

3 1 가 (equivalent electrical circuit diagram),

4 1 ,

5 1 ,

6 (sub-divisions) ,

7 2 ,

8 2 ,

9 2 .

) 1 4 . (10) , (12) (2)

(32) (30) (34) , (34) , (12)

(14) 가 (refresh)

(on-state) 가 (16) (off-state)

(30) 30V

2 (10) , (14) (12) . (14)

(14) (14A) 가 (10)

(16) (22) (20) (20) (14)가

(grey-level) (kickback) 가

3 (23)( 가 (equivalent circuit) (24) , (25) )

(26)가 (16) (20)

(27)

4 1 n (41)

(40) (switching matrix)(42) (12) , (latch)(44) (43)

(39) RAM(45) n

8) (12) (46)가 (12) (47), (4)

(49) (49) (48) (43) (47), (4)

49) (47) (50) ,

(46) (47) (48) (49) (46)

(16) (12) (12)가 (16) (10) (14)

(20) (25)× (26) (26, 27)가 (26) (TFT) × (26)

(27)) (26) 가 (27) (equilibrium)

(leakage) (14) (20) TFT

(50) (47) (46)

(46) (47)

5 (27) (52), (54) (27) (52) (

27)가 (54) (56) (58) (56) (

56) (56)가 (58) (46)가 (12) (58) (12)

(12)

60Hz (refresh rate) 240 (line time) 가 70μs

(56) 17μs (58) 53μs

(56) (46) (58) (56) (46)가 (12)

6 (50)가 1 4

(52) (60) (power down phase)(62) (60)

(56) (58) (46)

6 60Hz 240

6 (T<sub>F</sub>) (60)(AP) (62)(PDP) (60)

16.8ms 2가 (T<sub>F</sub>) 6(a) 4.8ms (60) 240

20 $\mu$ s (54) (54) (56) (58) 5 (56) 5 $\mu$ s  
 (54) (58) 15 $\mu$ s (58)

6(b) 70 $\mu$ s (54)(T<sub>L</sub>) 20 $\mu$ s (60)(AP) 50 $\mu$ s  
 (62)(PDP) (54) 가 가 (56) 15 $\mu$ s  
 (58)

5 $\mu$ s (56) 3.6 $\mu$ A 가  
 TFT(14) (58) (27)가  
 TFT(14) 0.4 $\mu$ A 가

1.2 $\mu$ A 5.5V 6.6 $\mu$ W  
 3.5mW 1mW

(56) (58) (58) 가 (56)  
 (60) 1.2 $\mu$ A

1 4 7 (46) (12) (46)  
 (43) (46) (46) (latch)  
 RAM(45)

6 4 가 64 가  
 (12) (12) (46) (load)가 가  
 8 (80) 가 가  
 (80) 가 (80) PID(proportional-integral-differential)

가 Degrauwe 'Adaptive Biasing CMOS Amplifiers'  
 (IEEE Journal of Solid-State Circuits, Vol SC-17, No 3, June 1982, pp.522 )

9 (90)  
 (BC) (94) (BC) 3 (92) (BC) 2 V<sub>C</sub>  
 V<sub>P</sub> 가 가 가 가  
 8) 가 (96) 가 (9)

(80)

(80)

(45)

가

(57)

1.

(buffer)-

(bias current)

2.

1

(drive period)

(voltage maintenance period)

(timing circuitry)

3.

2

가

가

4.

1

3

5.

1

4

(digital to analogue conversion means)

6.

5

가 -

(switch matrix)

7.

1 4

8.

(image frames)

가

9.

8

10.

8 9

가 - (switched off)

11.

12.

11

