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(12) (A)

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(22) 2003 06 05

(71) . 20

(72) 1 1055 1403-1201

(74)  
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(54)

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3 2 .  
4 3 .  
5 3 .  
6 2 .  
7 8 6 .

&lt; &gt;

2,22 : 4,24 :

6,26 : 8,28 :

10,30 : 12,32 :

14,34 : DC/DC 16,36 :

18,38 : 20,40 :

42,110 : 50 : /

52,82 : 54 : /

56,86 : 58,84 :

60,88 : 62,90 : /

64,92 : 66,94 :

68,96 : 70,100 :

72,102 :

가 (Active Matrix)

(Thin Film Transistor; 'TFT')가

1

1

, (D1 Dm) n (D1 Dm) mxn (G1 Gn) (Clc) TFT가 m  
 (2) , (2) (4) ,  
 (G1 Gn) (8) , (20) (6) , (4)  
 (6) (10) , (12) (4)  
 / ( 'DC/DC' )(14) , (18) (2)  
 (16) .

(20) / (Vsync, Hsync), (DCLK), (DE) (R,G,B)  
 (10) .

(2) (Clc) (D1 Dm) (G1 Gn) (G) (Clc)  
 (D1 Dm) (Cst) (Clc) (Clc)  
 , (Clc)  
 (8) (4)  
 (4) (10) (CS) (R,G,B) (D1 Dm)  
 (6) (10) (CS) (G1 G)  
 n) 가 (2)  
 (10) (20) / (Vsync, Hsync) (DCLK)  
 (6) (6) (4) (CS)  
 (6) (CS) (Gate Start Pulse : GSP), (Gate S  
 hift Clock : GSC), (Gate Output Enable : GOE) (4)  
 (CS) (Source Start Pulse : GSP), (Source Shift Clock :  
 SSC), (Source Output Enable : SOC) (Polarity : POL) (4)  
 (10) (20) (R,G,B) (4)  
 DC/DC (14) DC/DC (12) 3.3V (2) (VGH), (VGL)  
 (Vcom)  
 (16) (18) ( ) (18) (18)  
 (16) ( ) (2)  
 (2)  
 (18)가  
 (2)

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가

2 8

2

2

가 m, (D1 Dm) n mxn (G1 Gn) (Clc) TFT  
 (24), (22), (G1 Gn) (D1 Dm) (26), (24)  
 (24) (28), (42) (30), (32) (38)  
 (22) DC/DC (34), (Dimming)  
 (36), (42)  
 (40) 1 / (Vsync1, Hsync1), 1 (DCLK1), 1 (DE1)  
 1 (Ri,Gi,Bi) (42)  
 (22) (Clc) (D1 Dm) (G1 Gn) (G)  
 (Clc) (D1 Dm) (Clc) TFT (Clc)  
 (Cst)가 (Cst) (Clc) (Clc)  
 (Clc)  
 (28) (24)  
 (24) (30) (CS) (Ro,Go,Bo)  
 (D1 D)  
 m)  
 (26) (30) (CS) (G1  
 Gn)  
 (24) (30) (42) 2 / (Vsync2, Hsync2) 2  
 (DCLK2) (26) (24) (CS)  
 (Gate Shift Clock : GSC), (Gate Start Pulse : GSP),  
 (24) (CS) (Gate Output Enable : GOE)  
 (Source Shift Clock : SSC), (Source Start Pulse : GSP), (S  
 (Source Output Enable : SOC) (Polarity : POL)  
 (30) (42) 2 (Ro,Go,Bo)  
 (24)

DC/DC (34) DC/DC (32) 3.3V (22) (VGH), (VGL)

(Vcom)

(36) (42) (Dimming) ( )

(38) (36) (38) ( )

(42) (Dimming) (22) (38) (36)

( )

(42) (40) 1 (Ri,Gi,Bi) 2 (Ro,Go,Bo) ,

(42) (Dimming) (36) (42)

(40) 1 / (Vsync1, Hsync1), 1 (DCLK1), 1

(DE1) 2 (Ro,Go,Bo) 2 / (Vsync2, Hsync2), 2

(DCLK2), 2 (DE2)

, (42) 3 1 (Ri,Gi,Bi) 2 (Ro,Go,Bo)

(70) , (70) (Dimming)

(72) 2 / (Vsync2, Hsync2), 2 (DCLK2), 2

(DE2) (68)

(70) 1 (Ri,Gi,Bi) (Y) , (Y)

2 (Ro,Go,Bo) (50), ( )

52), / (54), (56), (58), (64) (66)

.

/ (50) 1 (Ri,Gi,Bi) (Y) (U,V) , (Y)

(U,V) 1 3

1

$$Y=0.229 \times Ri + 0.587 \times Gi + 0.114 \times Bi$$

2

$$U=0.493 \times (Bi - Y)$$

3

$$V=0.887 \times (Ri - Y)$$

(56) (Y) , (Histogram) (56)

(Y) 4 ( ) ,

(56) (Y) ( ) ,

(72) , (56) 가 ( )

(38) 가 .

(58) (YM) (56) (58) , (66)  
 (YM) .  
 (66) 가 (66) 4  
 가 (58) (58) (66) (YM)  
 5 (YM) 가  
 . , (66) 가  
 . , (66) (64) .( (66)  
 (64) (66) .)  
 (52) (56) (58) (Y) (U,V)  
 . , (52) (YM) (UD,VD) / (54)  
 .  
 / (54) (YM) (UD,VD) 2 (Ro,Go,Bo)  
 . , 2 (Ro,Go,Bo) 4 6 .

$$R = Y + 0.000 \times U + 1.140 \times V$$

$$G = Y - 0.396 \times U - 0.581 \times V$$

$$B = Y + 2.029 \times U + 0.000 \times V$$

3 (56) 1 (70) (Ri,Gi,Bi) (Y) (U,V) / (50) 1 (Y)  
 (52) .  
 Y) (Y) (56) (Y) ( ( (56) (72)  
 (38) , , ) . , (58)  
 . (56) (58)  
 .  
 (58) (66) .  
 YM) / (58) (54) . ( )  
 2 (UD,VD) (YM) / (54) 4 6  
 (Ro,Go,Bo) . , 2 (Ro,Go,Bo) (YM) 가 2  
 (Ro,Go,Bo) , (YM) (22) . ,  
 가 .

(Dimming) (72), (60) / (Dimming) (56) (36),  
 (60) (56) (Dimming) (56) (Dimming) (38)  
 가 (56) 가 (Dimming) (D  
 imming)  
 / (62) (Dimming) (Dimming)( )  
 (36) (Dimming) (36) (Dimming)  
 ( ) (38) (38) (36) (  
 ) (22) , (38) (60) 가  
 (22)  
 , (68) (40) 1 / (Vsync1, Hsync1), 1  
 (DCLK1), 1 (DE1) , (68) 2 (Ro,Go,Bo)  
 2 / (Vsync2, Hsync2), 2 (DCLK2), 2 (DE2)  
 (30)  
 (Y)  
 (Color) (Y) (U,V) (YM) (Ri,Gi,Bi)  
 UD,VD) 1 (Ri,Gi,Bi) (Ro,Go,Bo) , 1 (Y,V, U) 2  
 (Ro,Go,Bo) (Color) (Ri,Gi,Bi) / (Y,V, U) 2 (Ro,Go,Bo)  
 가 1 (22)  
 6 (110) (40) 1 (Ri,Gi,Bi) (Gi) 1  
 (Ro,Go,Bo) (110) 1 (Ri,Gi,Bi) 2  
 (36) (110) (40) 1 / (Dimming) (Vsyn  
 c1, Hsync1), 1 (DCLK1), 1 (DE1) 2 (Ro,Go,Bo)  
 2 / (Vsync2, Hsync2), 2 (DCLK2), 2 (DE2)  
 , (110) 1 (Ri,Gi,Bi) 2 (Ro,Go,Bo)  
 (100) , (100) (Dimming)  
 (102) 2 / (Vsync2, Hsync2), 2 (DCLK2), 2 (DE2)  
 (96)  
 (110) 가 1 (Ri,Gi,Bi) 1 (Gi)  
 (110) (86), (82), 2 (Ro,Go,Bo)  
 (84), (92) , (94)  
 (86) 1 1 (Gi) (8  
 6) 1 (Gi) 4 (Histogram)  
 , 1 (Y) 60% 1 (Gi)  
 .( , ) , 1 (Gi가 1  
 (Gi) , (Magenta)



[illegible]

) , (88) (Dimming) (86) (38)

, (88) (86) (38)

8) (22) CRT(Cathode Ray Tube) . (3

/ (90) (Dimming) (Dimming)( )

(36) (Dimming) (36) (Dimming)

) ( ) (38) (38) (36) (36) (Dimming)가

(22) (38)

(102) (22)

(22)

, (96) (40) 1 / (Vsync1, Hsync1), 1

(DCLK1), 1 (DE1) , (96) 2 (Ro,Go,Bo)

2 / (Vsync2, Hsync2), 2 (DCLK2), 2 (DE2)

(30)

가

가

(57)

1.

1 1 2 1 ;

2

2.

1 , 1 , 1 2

3.

1 , 가 1 ,

4.

3 ,

5. 3 , 가 ,

6. 3 , 가 ,

7. 6 , 가 ,

8. 6 , 가 ,

9. 1 가 1 2 1 ; ,  
1 2 2  
; 2 가 2

10. 9 , 1 가 ,  
가 1 ,  
가 1 2  
가 ,  
가

11. 10 ,

가 ,

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10 12. ,

가

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10 13. ,

가

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13 14. ,

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13 15. ,

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10 16. ,

가

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16 17. ,

가

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16 18. ,

가

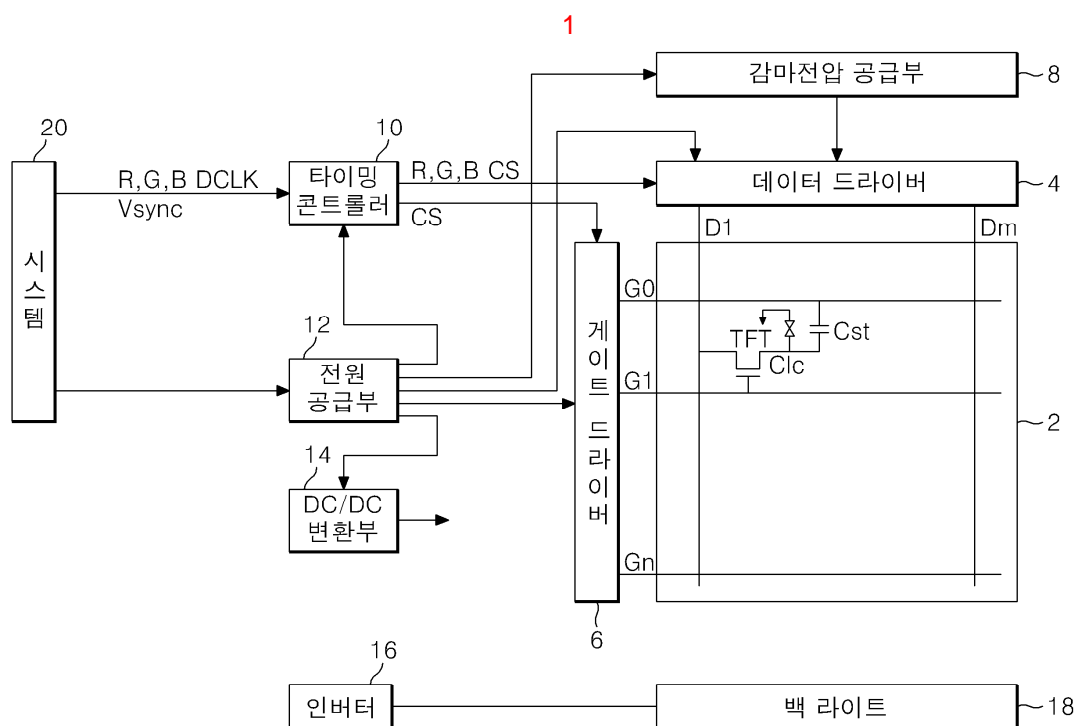
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16 19. ,

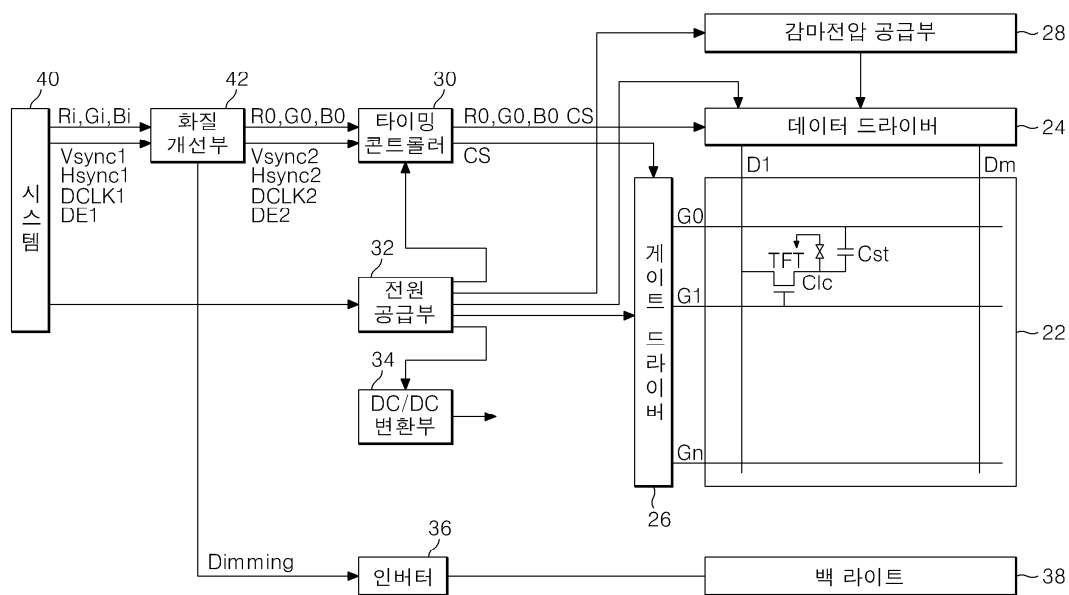
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16	20.			,
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21	24.			,
			가	.
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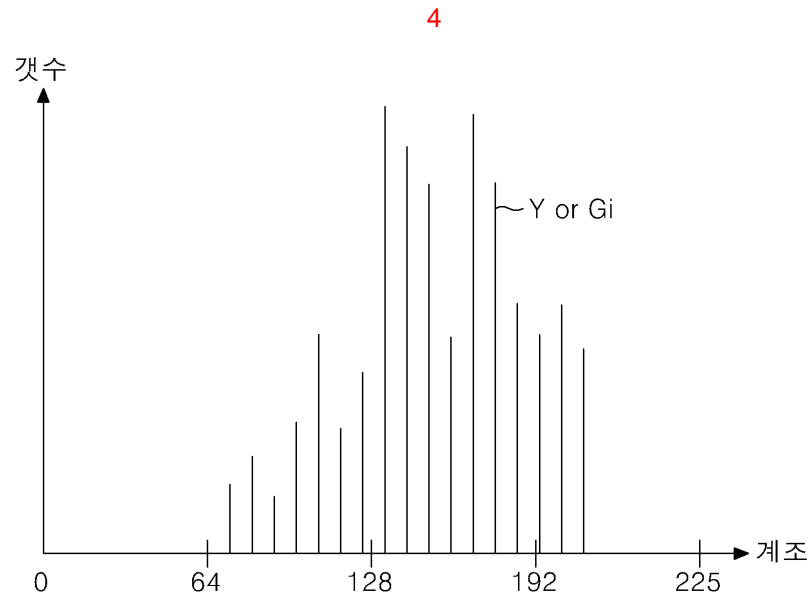
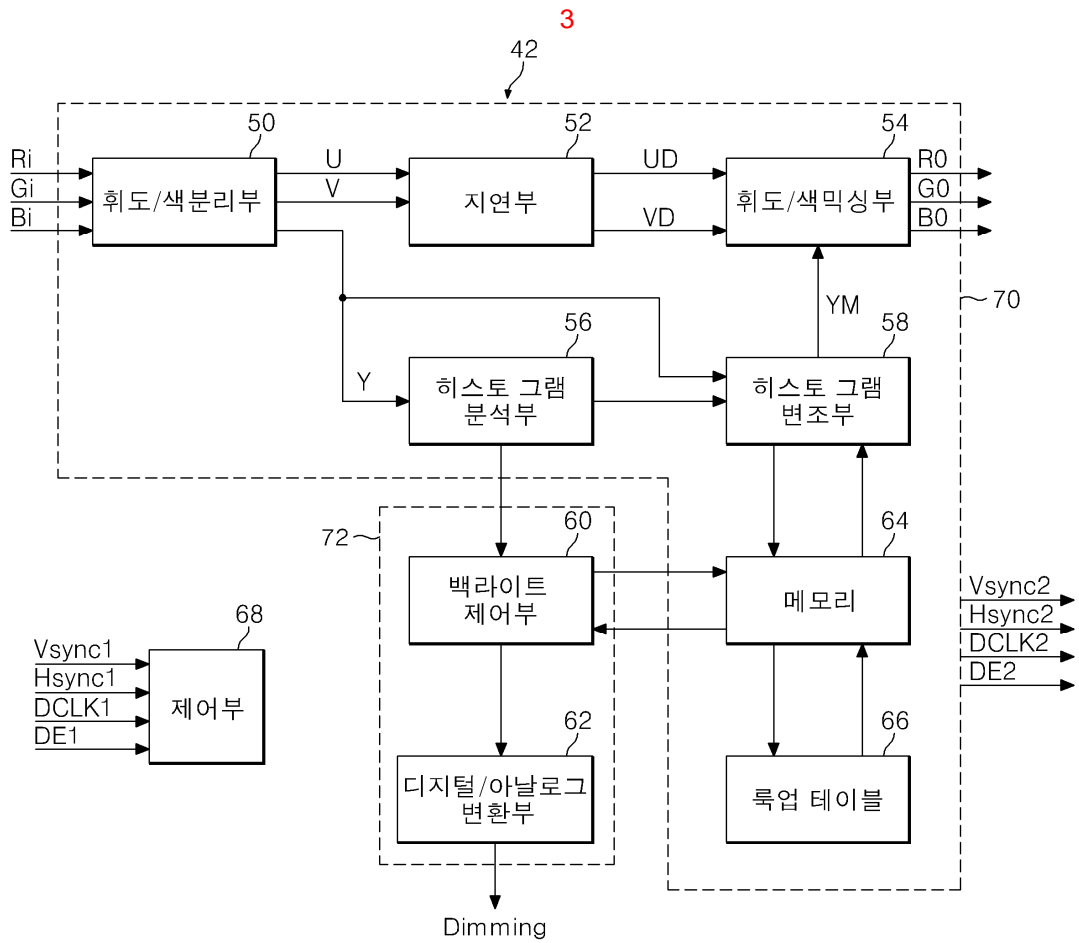
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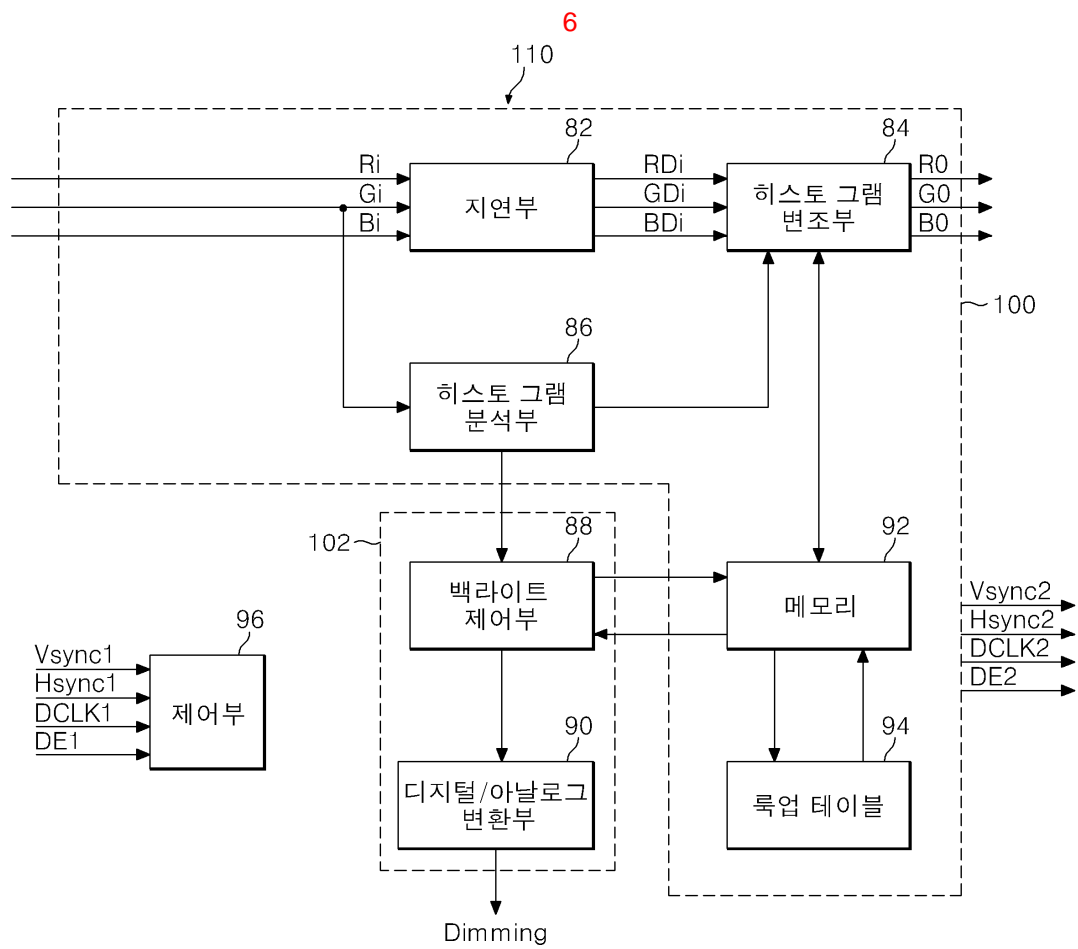
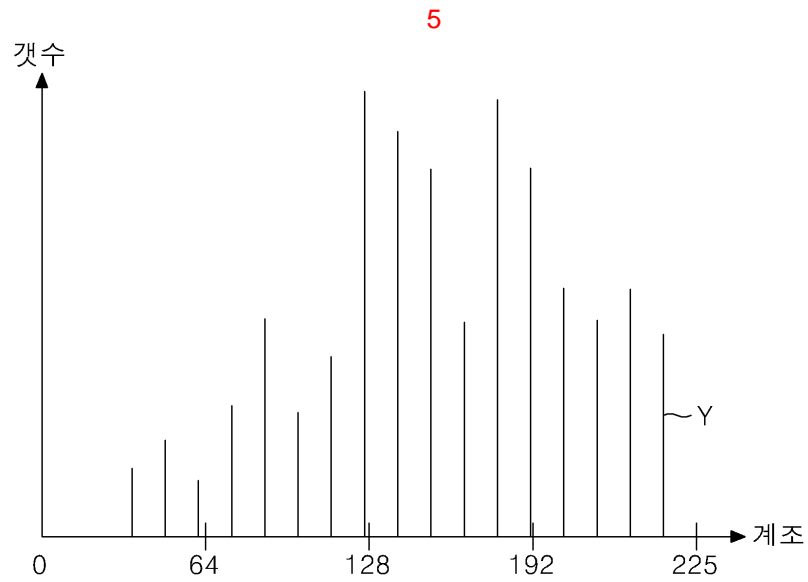
가



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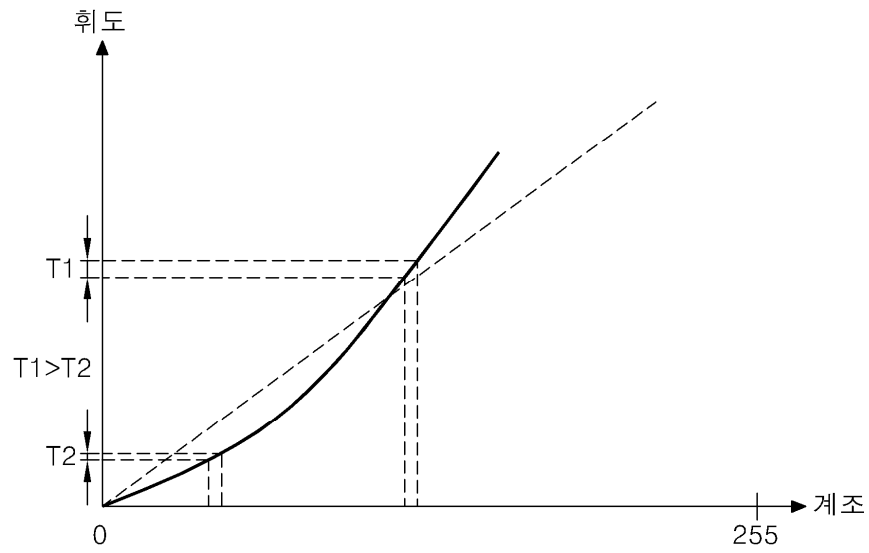




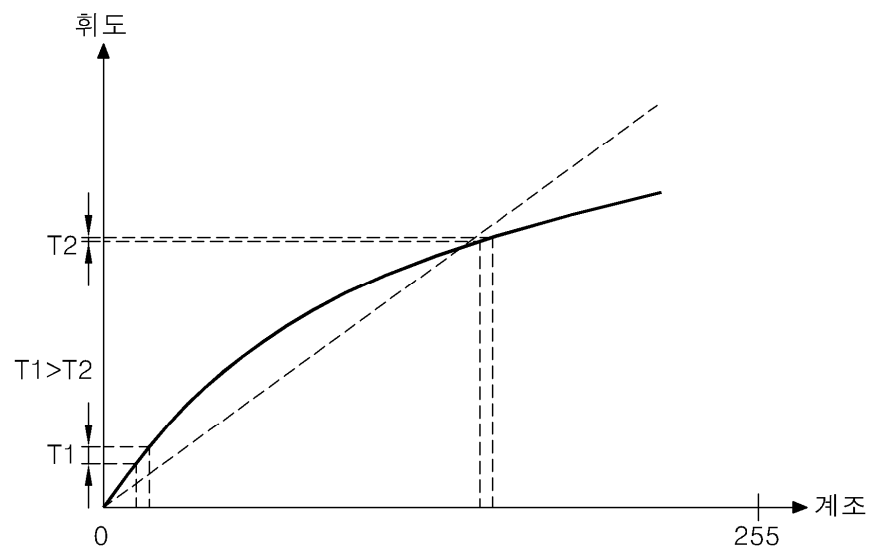




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专利名称(译)	用于驱动液晶显示器的方法和设备		
公开(公告)号	<a href="#">KR1020040107559A</a>	公开(公告)日	2004-12-23
申请号	KR1020030036289	申请日	2003-06-05
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	KIM KIDUK 김기덕		
发明人	김기덕		
IPC分类号	G09G3/34 G09G3/36		
CPC分类号	G09G2320/066 G09G3/3406 G09G2320/0646		
代理人(译)	KIM , YOUNG HO		
其他公开文献	KR100542767B1		
外部链接	<a href="#">Espacenet</a>		

#### 摘要(译)

本发明涉及一种液晶显示器的驱动装置，该驱动装置改善了呈现图像的对比度，其视觉对应于输入数据。该液晶显示器的驱动装置包括液晶面板;用于向液晶面板提供数据的数据驱动器;和背光，用于照射逆变器的液晶面板中的光，用于驱动背光的图像增强部分：控制逆变器的亮度，它根据第一数据控制逆变器，它产生第二数据，它对第一数据进行伽马校正对应于分析的亮度，它使用绿色第一数据分析第一数据中的帧单元的亮度，并且使用定时控制器重新定位第二数据并提供给数据驱动器。

