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G09G 3/36 (43) 2004 07 02

(21) 10-2003-0040127
(22) 2003 06 20

(30) 1020020083324 2002 12 24 (KR)

(71) .
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(72) 240 402

3 807 1510

(74) :

(54)

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2,22 : 4,24 :
6,26 : 8,28 :
10,30 : 12,32 :
14,34 : DC/DC 16,36,82 :
18,38,84 : 20,40 :
42,80 : 50 : /
52 : 54 : /
56,90 : 58 :
60,94 : 62,96 : /
64,100 : 66,98 :
68 : 70,102 :
72,88 : 91,92,93,9i :

가 (Active Matrix)
(Thin Film Transistor; 'TFT')가

1 .

1, (D1 Dm) n m×n (G1 Gn) (Clc) TFT가 m
 (2), (2) (D1 Dm) (4),
 (G1 Gn) (8), (20) (6), (4)
 (6) (10), (12) (2)
 / ('DC/DC')(14), (18)
 (16) .
 (20) / (Vsync, Hsync), (DCLK), (DE) (R,G,B)
 (10) .
 (2) (Clc) (D1 Dm) (G1 Gn) (G)
 (Clc) TFT (G)
 (D1 Dm) (Clc) (Clc) . , (Clc)
 (Cst)가 (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) (4) (CS)
 (6) (CS) (Gate Start Pulse : GSP), (Gate
 Shift Clock : GSC), (Gate Output Enable : GOE) , (4)
 (CS) (Source Start Pulse : GSP), (Source Shift Clock
 : SSC), (Source Output Enable : SOC) (Polarity : POL) .
 (10) (20) (R,G,B) (4) .
 DC/DC (14) (12) 3.3V (2)
 DC/DC (14) , (VGH), (VGL)
 (Vcom) .
 (16) (18) () (18) (18)
 (16) () (2) .
 (2) .
 , (18)
 . (18)가
 (2) ,
 , (18)가
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가 m (22) , (D1 Dm) n (D1 Dm) (G1 Gn) (Clc) TFT
 (24) , (G1 Gn) (26) , (24)
 (24) (28) , (42) (26) 2 (32)
 (22) (30) , (34) , (38) (Dimming)
 (36) , (42)
 (40) 1 / (Vsync1, Hsync1), 1 (DCLK1), 1 (DE1)
 1 (Ri,Gi,Bi) (42)
 (22) (Clc) (D1 Dm) (G1 Gn) (G)
 (D1 Dm) (Clc) TFT (Clc) (Clc)
 (Cst)가 (Cst) (Clc) (Clc)
 (28) (24)
 (24) (30) (CS) (Ro,Go,Bo)
 () , (D1 D)
 m)
 Gn) (26) (30) (CS) (G1
 가 (22)
 (DCLK2) (30) (42) 2 / (Vsync2, Hsync2) 2
 (26) (26) (CS) (24) (CS)
 (Gate Start Pulse : GSP),

(Gate Shift Clock : GSC), (Gate Output Enable : GOE),
 (24) (CS) (Source Start Pulse : GSP), (S
 ource Shift Clock : SSC), (Source Output Enable : SOC) (Polarity : POL)
 (24) (30) (42) 2 (Ro,Go,Bo)
 DC/DC (34) DC/DC (32) 3.3V (22)
 (Vcom) (VGh), (VGL)
 (36) (42) (Dimming) ()
 (38) (36) (38) ()
 (42) (Dimming) (38) (36)
 () (22) (38)
 (42) (40) 1 (Ri,Gi,Bi)
 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

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

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

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

(56) (Y) 4 (Histogram) (56)

(56) (Y) (56)

(72) (56)

(58) (YM) (58) (66)

(66) 가 (66) 4

5 (58) (YM) (58) (66) (YM)

(66) 가 가 (66)

(64) (66) (64) (66) (66) (66)

(66) (66) (38)

(52) (56) (58) (Y) (UD,VD) / (U,V) (54)

(52) (YM)

/ (54) (YM) 4 6 (UD,VD) 2 (Ro,Go,Bo)

(Ro,Go,Bo)

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

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

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

$$\begin{array}{ccccccc} & & (70) & & , & & (50) \\ 3 & & (R_i, G_i, B_i) & (Y) & (U, V) & & 1 \\ & (56) & (U, V) & (52) & & & (Y) \\ & & & & & & \\ & (Y) & & (56) & (Y) & & , \\ Y) & (& , & , &) & & (56) \end{array}$$

(58) (72) (56)

(58) (58) (66) (54)

YM) / (54) 4 6

2 (UD,VD) (YM) / (54) (YM) 2

(Ro,Go,Bo) (Ro,Go,Bo) (YM) 가 2

(Ro,Go,Bo) (22)

가

(72) (56) (Dimming) (36)

(66) (72) (60) / (62)

(60) (56) (Dimming) (Dimming)

(66) (56) 가 (Dimming)

(Dimming) (56) 가

(Dimming) (Dimming) (Dimming)

(36) (38) (36) (36) (60) 가

(22) (38)

(68) (40) 1 / (Vsync1, Hsync1), 1

(DCLK1), 1 (DE1) (68) 2 (Ro,Go,Bo) 1

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

(30)

(Y)

(38) 6 (38)

(38) 6 (38)

7 7 2

7 m (D1 Dm) n m×n (G1 Gn) (Clc) TFT가

(22) (22) (D1 Dm) (26) (24) (24)

(G1 Gn) (28) (80) 2

(24) (26) (30) (32) (84)

(22) DC/DC (34) (91,92,93,...,9i ; i)

(82) (Dimming 1 Dimming i) (82) (80)

(40)	1	/	(Vsync1, Hsync1),	1	(DCLK1),	1	(DE1)
1	(Ri,Gi,Bi)		(42)				
(22)			(Clc)		(Clc)		(24)
	(28)			(24)		(24)	
Dm)	(Ro,Go,Bo)						(D1
	(Clc)	(26)		(G1	Gn)		
	(30)	(80)	2	/	(Vsync2, Hsync2)	2	
(DCLK2)		(26)	(24)		(CS)		
(24)	(30)	(80)	2	(Ro,Go,Bo)			
	DC/DC	(34)	(32)	3.3V			
	(VGH),		(VGL)	(Vcom)			
(82)	(80)		(Dimming 1	Dimming i)			
)	(84)		(82)	(91	9i)		
ng 1	(Dimming 1	Dimming i)	(91	9i)	가	(91	(Dimmi
	(91	9i)	(Dimming 1	Dimming i)		(22)	
	(84)	(91	9i)	(82)			(91
)	(22)	(22)	1	(91	9i)		
(22)		(22)	1	(91	9i)		
2	i	(9i)					
22)	(i	)					
(80)	(40)	1	(Ri,Gi,Bi)				
(80)	(22)	i					(Dim
ming 1	Dimming i)						
	(80)	(40)	(Dimming 1	Dimming i)	(82)		
CLK1),	1	(DE1)	2	/	(Vsync1, Hsync1),	1	(D
ync2, Hsync2),	2	(DCLK2),	2	(Ro,Go,Bo)	2	/	(Vs
				(DE2)			
	(80)	8					
8			(80)		8	3	
8		(80)	1	(Ri,Gi,Bi)	2	(Ro,Go,Bo)	
	(102)		(102)		(Dimming 1	Dimming i)	
		(88)	2	/	(Vsync2, Hsync2),	2	(DCLK2),
	(DE2)		(68)				2
	(102)	1	(Ri,Gi,Bi)	(Y)		(Y)	
	2	(Ro,Go,Bo)			(102)	(22)	i
(102)	/	(50),	(52),	/	(88)	(90),	(58),
(106)		(98)		(54),			
/	(50)	1	(Ri,Gi,Bi)	1	3	(Y)	(U,V)

(90) (Y) 4 (Histogram) (90)
 (Y) (90) (22) i (22)
 (91 9i) i (90) (22)
 (22) (()
 (88) (90) (88) 가 (88)
 .)
 (58) (90) (58) (98)
 (YM) (YM)
 (98) 가 (98) 4
 가 (58) (98) (YM)
 5 (YM) 가
 (98) (98) (100) .((98)
 (100) (100) (98) .) , (98)
 (100)
 (98) (84) () 가 ()
 (98) ()
 (52) / 2 (56) (58) (Y) (U,V)
 6 (Ro,Go,Bo) (YM) (UD,VD) 4
 3 1 (102) (Y) (U,V) / (50) 1
 (90) (Ri,Gi,Bi) (52) (Y)
 (Y) (90) (Y) (((Y)
 90) (88) (56)
 (58)
 (58) (98) ((YM) / (54) 4 6
 (UD,VD) (Ro,Go,Bo) 2 (Ro,Go,Bo) (YM) 가 2
 (Ro,Go,Bo) (22) 가
 (88) (90) (()
 (98) (Dimming 1 Dimming i) (Dimming 1 Dimm
 ing i) (22) (91 9i) (88)

[illegible]

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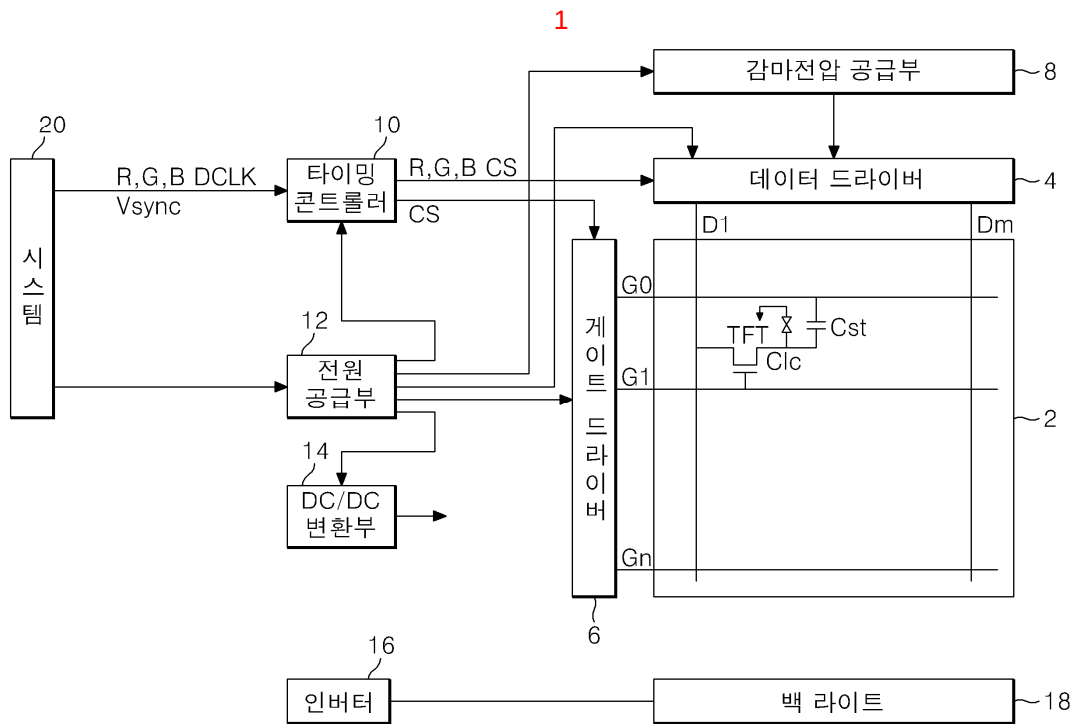
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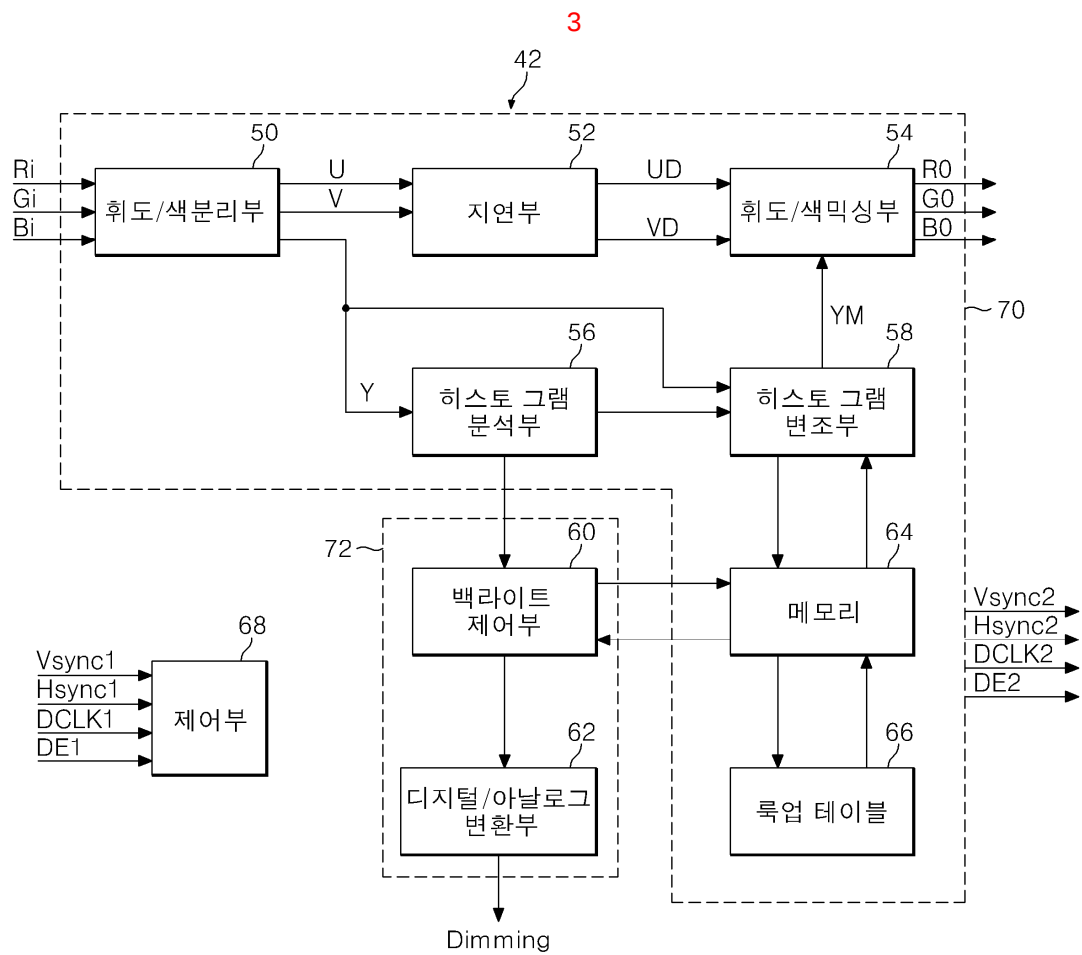
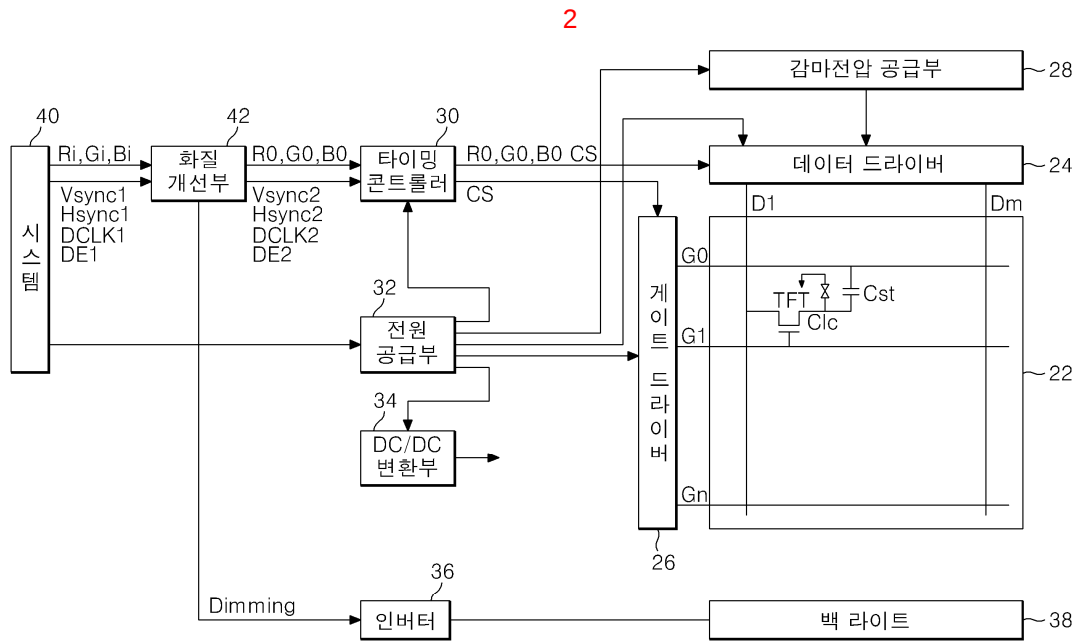
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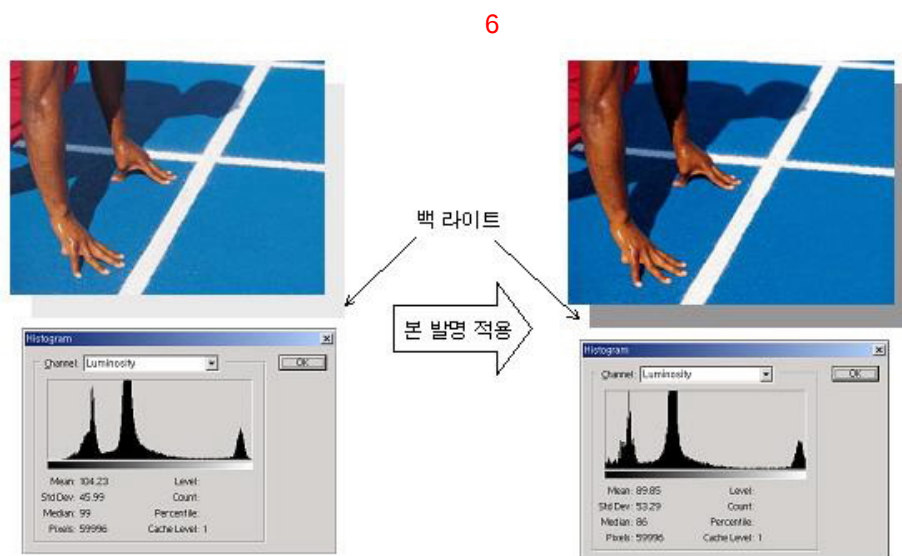
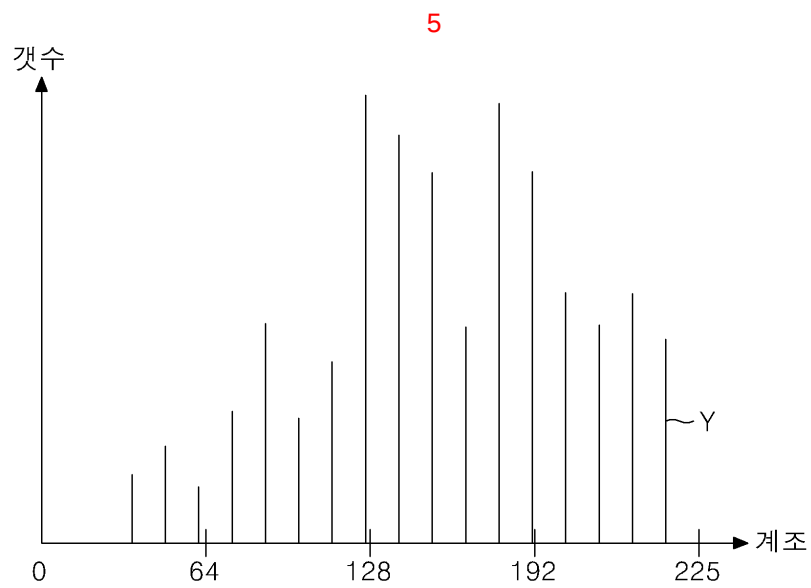
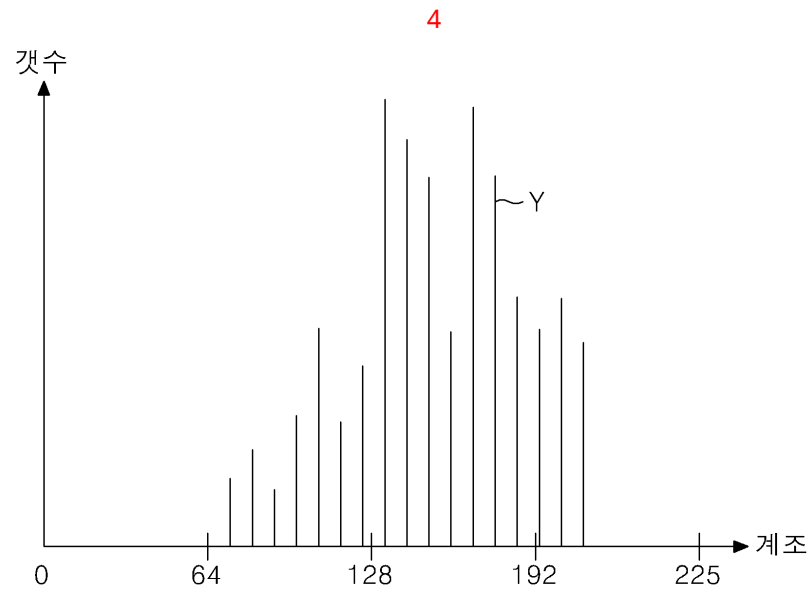
24

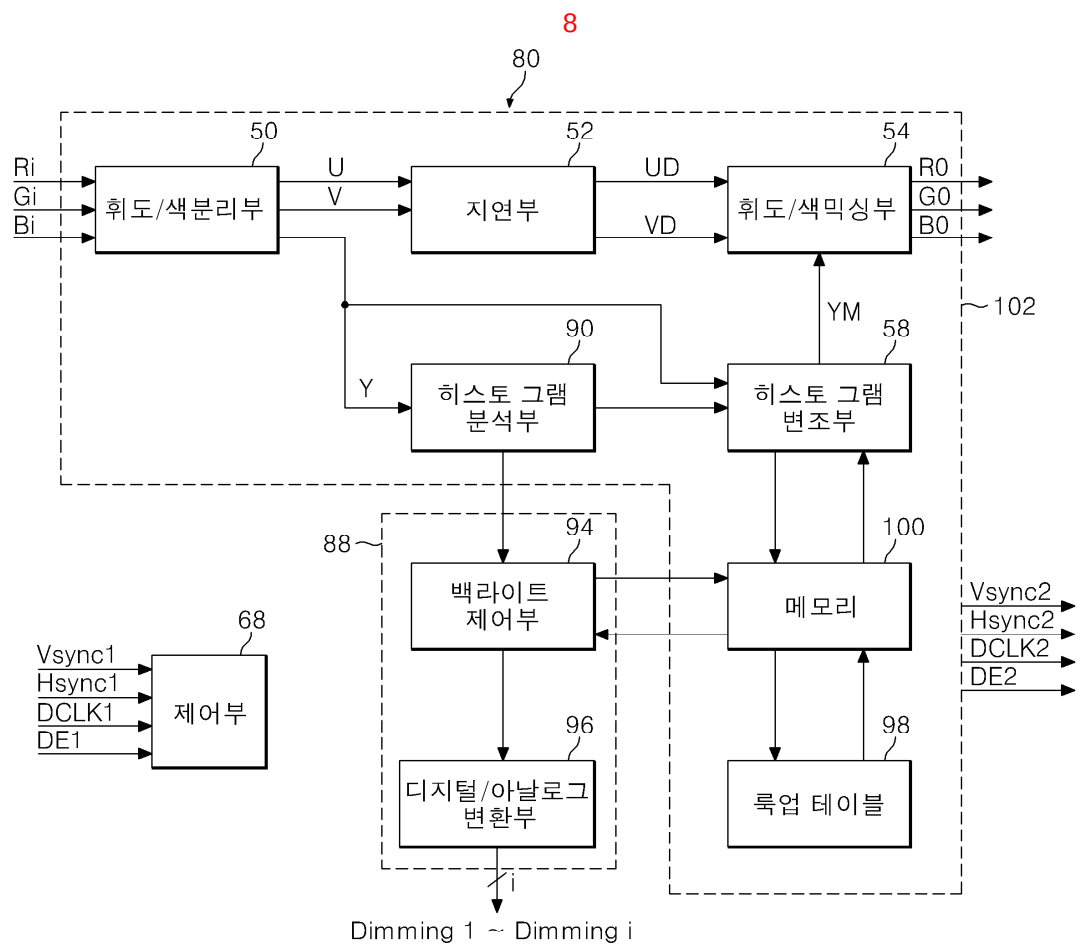
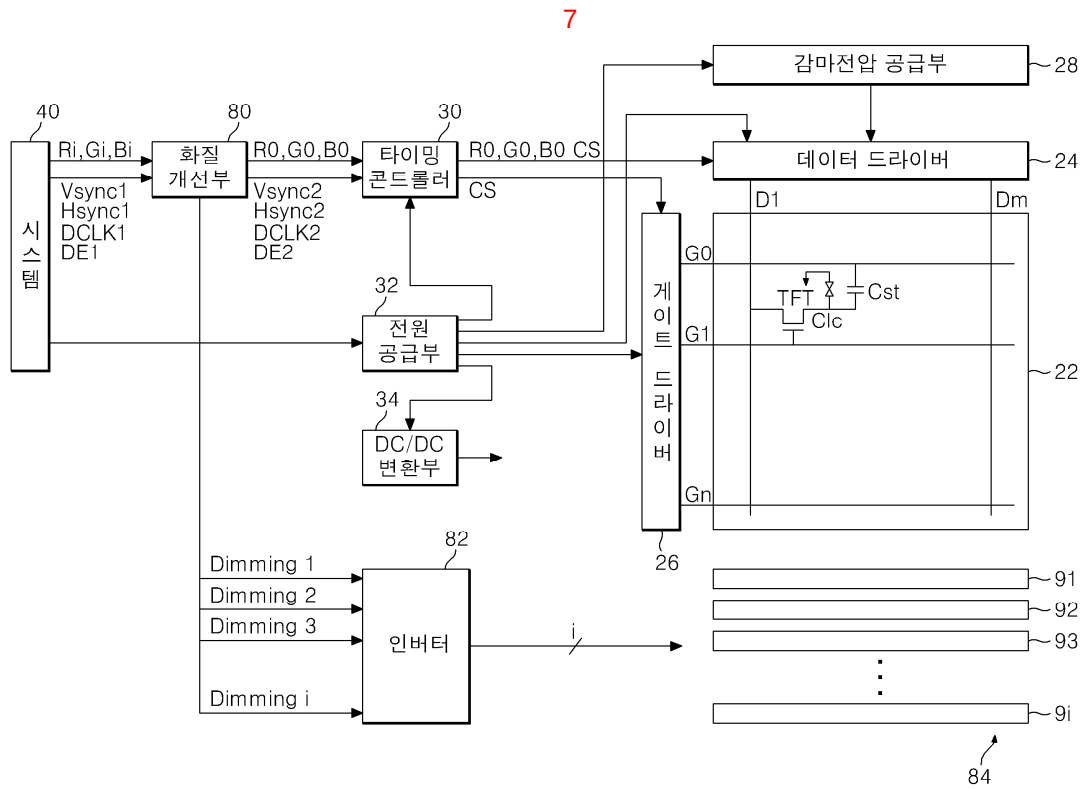
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专利名称(译)	用于驱动液晶显示器的方法和设备		
公开(公告)号	KR1020040057882A	公开(公告)日	2004-07-02
申请号	KR1020030040127	申请日	2003-06-20
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	PARK MANHYO 박만효 SOHN MINHO 손민호		
发明人	박만효 손민호		
IPC分类号	G09G3/36		
代理人(译)	金勇 年轻的小公园		
优先权	1020020083324 2002-12-24 KR		
其他公开文献	KR100949492B1		
外部链接	Espacenet		

摘要(译)

本发明涉及一种液晶显示器的驱动装置，其部分地强调亮度，对应于输入数据信息并改变显示图像的亮度。本发明的液晶显示器的驱动装置配备有图像增强部分：用于创建其中对比度被扩展的第二数据，它对应于分析的亮度，它使用提取的提取的亮度分量来分析亮度。来自定时控制器外部的第一数据的亮度分量，用于向数据驱动器提供第二数据，用于向液晶面板提供光的背光，其对应于驱动电流和用于向其提供驱动电流的逆变器。背光源。

