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(72) 2 266 519-1601

(74)
:

(54)

가

4

1

2 PVA

DCC /

3a 3b

DCC

4
 5a 5c 4
 6a 6b DCC
 7 64- DCC DCC
 8 128- DCC DCC
 9
 10a 10c 9
 < >
 100 : 200 :
 300 : 400 :
 410, 512, 514 : 420, 520 :
 430, 530 : 440, 540 :

(Liquid Crystal Display)

가 가 가 TV 가 가 TV 가

1 DCC(Dynamic Capacitance Compensation)

1 (A,R,W) (10) (20)
 (Gn) (Gn-1)가 가 (30)
)(G'n) 가

가 가

(,)

,
 , PVA(Patterned Vertical Alignment, PVA) 가
 , PVA (fringe field) () ()
 , PVA 가 (DCC)
 2 PVA DCC /
 2 , 7 8 PVA (rising time)
 DCC , PVA DCC 가 TV
 3a 3b DCC
 3a 3b , (DCC)
 , DCC 가 ,
 , 가
 ,
 ,
 1 , 1 ,
 1 , 2 2
 , 2

1, 1, 1, 2, 2, 1, 1, 2

4, 4, (300), (400), (400), (100), (200), (200), (300), (100)

(100), (110), (110), TN(Twist Nematic)

c) (Cl), PVA, (Cst), (100), (110), TN(Twist Nematic)

(200)가 (S1, S2, S3, ..., Sn)가 (110)

(100), (200), (110) FPC(Flexible Printed Circuit) (110)가 (200)

(300), (400), (D1, D2, ..., Dm)가 (Gn')

Gate Clk, STV) (400), 1 (200), (Vsync, Hsync, DE, MCLK)가 (LOAD, STH)가 2 (300)

(Gn-1) (400), (410), (Gn)가 (G'n) (420), (430), (Gn), (440), (420), (LUT)

(300), (400), (G'n), (Gn), (G'n-Gn), (G'n), (G'n-Gn)

(Gn-1)가 (Gn-1)가 (Gn)가 (Gn)가 (Gn)가 (Gn')

(G'n)

(430) (410) (G'n-Gn) x (Gn)

(440) (Gn-1) (420) (G'n-1-Gn-1)

(410) SDRAM 가

(420) (410) (G'n) (G'n) (430)

(440) (G'n) (G'n) (G'n) (Gn) (420)

(430) (G'n-Gn) (G'n) (G'n-Gn) (Gn) (420)

(440) (G'n) (G'n) (G'n-Gn) (G'n) 가 8

24 (410)가 32 (300) , RGB (410) 8 가 8

, RGB (Gn'-Gn) 8 , 24

, RGB 가 x (Gn'-Gn) y (, y x

) 3,3,2 , 3,2,3 (410) 2,3,3 . RGB

MSB

(500)가 (Stand-alone)

5a 5c 4 n-2

5a , n-2 (Gn-2)가 (410) (420)

(440) (420) n-2 (G'n-2) (430)

(430) n-2 (G'n-2) (G'n-2-Gn-2) (G'n-2) n-2 (Gn-2)

n-2 (G'n-2) (G'n-2) n-2 (300) n-2 (440)

5b , n-1 (Gn-1)가 (410) (420)

) (410) n-2 (Gn-2) (420)

(420) n-2 (Gn-2) n-1

(440) (Gn-1) n-1 (G'n-1) (430)

(430) n-1 (G'n-1) (G'n-1-Gn-1) (G'n-1) n-1 (410) (Gn-1) (440) n

-1 (G'n-1) DCC (300) n-1

5c , n (Gn)가 (410) (420) (420)

(Gn) n (420) n-1 (G'n) (Gn-1) (Gn-1) n (430) (440)

n (430) n (G'n-Gn) (G'n) n (410) n (440) n (Gn)

DCC (G'n) (300) n (G'n)

6a 6b DCC DCC , 6b

6a DCC

6a , 1 , 1

, 2 1 2

6b , 2 ,

7 8

7 64- DCC DCC

16.5ms

7 DCC , 64 , 10 60 가

, DCC , 64 , 2

가

8 128- DCC DCC

16.5ms

8 DCC , 128 , 10 120 가

, DCC , 128 , 2

가

(Gn) (Gn' - Gn) (Gn) , (Gn')

9

9

9 (300) (500) 4 (100), (200),

2 (500) (Gate Clk, STV) (300) 1 (200) (Vsync, Hsync, MCLK)가 가 , 3 (LOAD, STH)

) (500) 1 (512), 2 (514), (520), (530)
 (Gn-1) (540) , (G'n) (Gn)가 가 (Gn)

(300) (500) (G'n) (Gn) (G'n) (G'n) (G'n-Gn) ,
 (Gn-1) (Gn-1)가 (G'n) (G'n)가 (Gn)가 (Gn')

) (G'n)

(, 1 (512) (Gn) (520) ,
 () 1 (512) (Gn-1) (Gn) (Gn)가 (Gn) SDRAM .

2 (514) (430) (G'n-1-Gn-1) (G'n-Gn) (540) 2 (G'n-1-Gn-1)
 (514) (G'n-Gn)가 (G'n-Gn) SDRAM .

(520) (530) (540) (G'n) 1 (512) (G'n)

(530) (540) (G'n-Gn) (G'n) (G'n-Gn) 2 (Gn) (514)

(540) (G'n) (G'n) (G'n-Gn) (G'n) (G'n)

10a 10c 9 n-2

10a , n-2 (Gn-2)가 1 (512) (5
 20) 0) (540) (520) n-2 (G'n-2) (53

n-2 (530) n-2 (G'n-2) (G'n-2) n-2 (Gn-2) (540)
 (G'n-2) (G'n-2) (G'n-2-Gn-2) 2 (300) (514) n-2 ,
 (G'n-2) n-2 (Gn-2) n-2

;

2

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2.

1

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3.

1

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PVA(Patterned Vertical Alignment)

4.

1

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,

;

1

;

1

;

,

1

2

5.

1

,

,

1

;

1

;

1

1

;

2

;

1

2

2

6.

1

,

,

1

x

;

x

x

1

;

1

y

,

y

;

x x

1

y

2

7.

6 , x y .

8.

- (a) ;
- (b) 1 ;
- (c) 1 ;
- (d) ;
- (e) 2 ;
- (f) 2 .

9.

8 , (d) .

10.

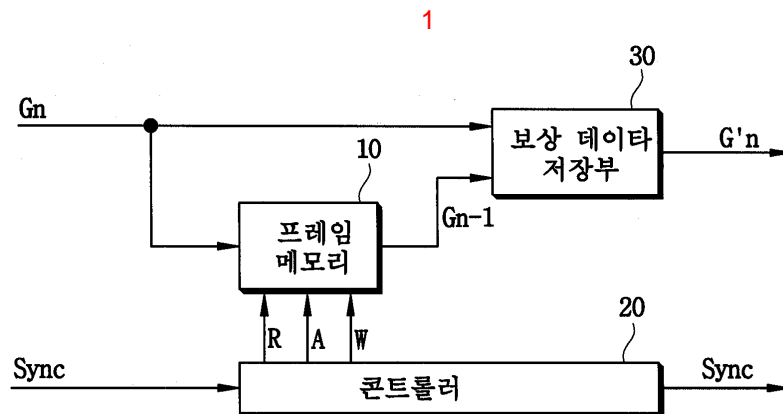
1 , 1 , 2

11.

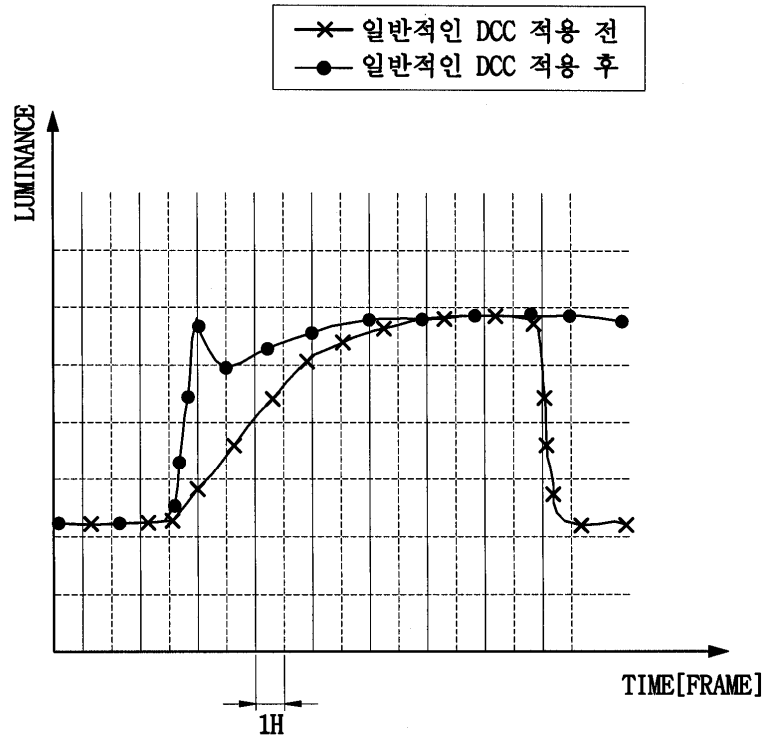
10 , 1 .

12.

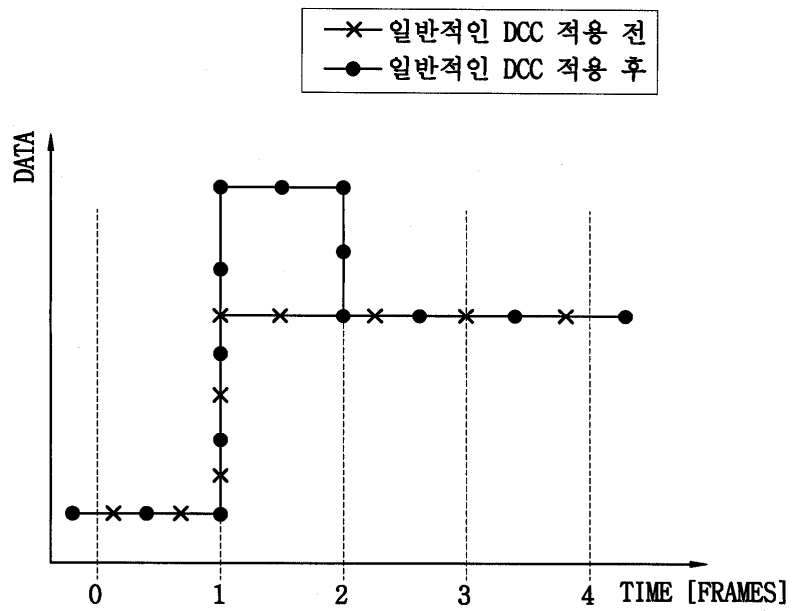
10 , 2 .



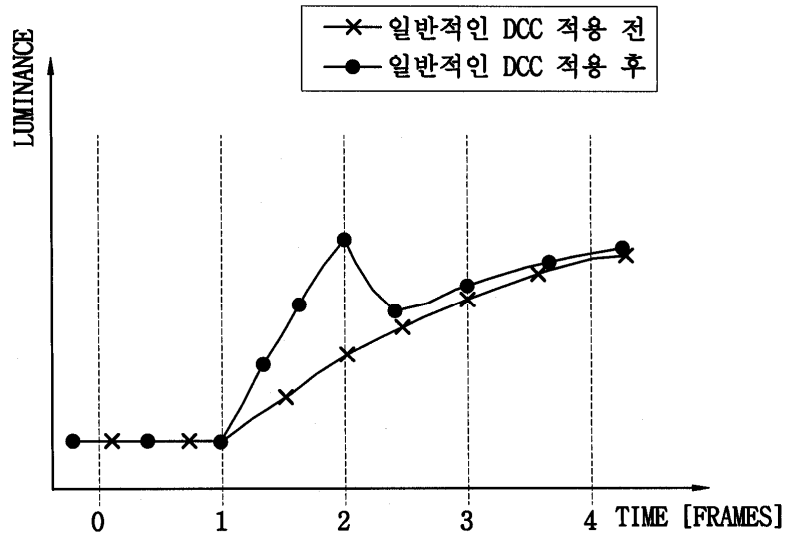
2



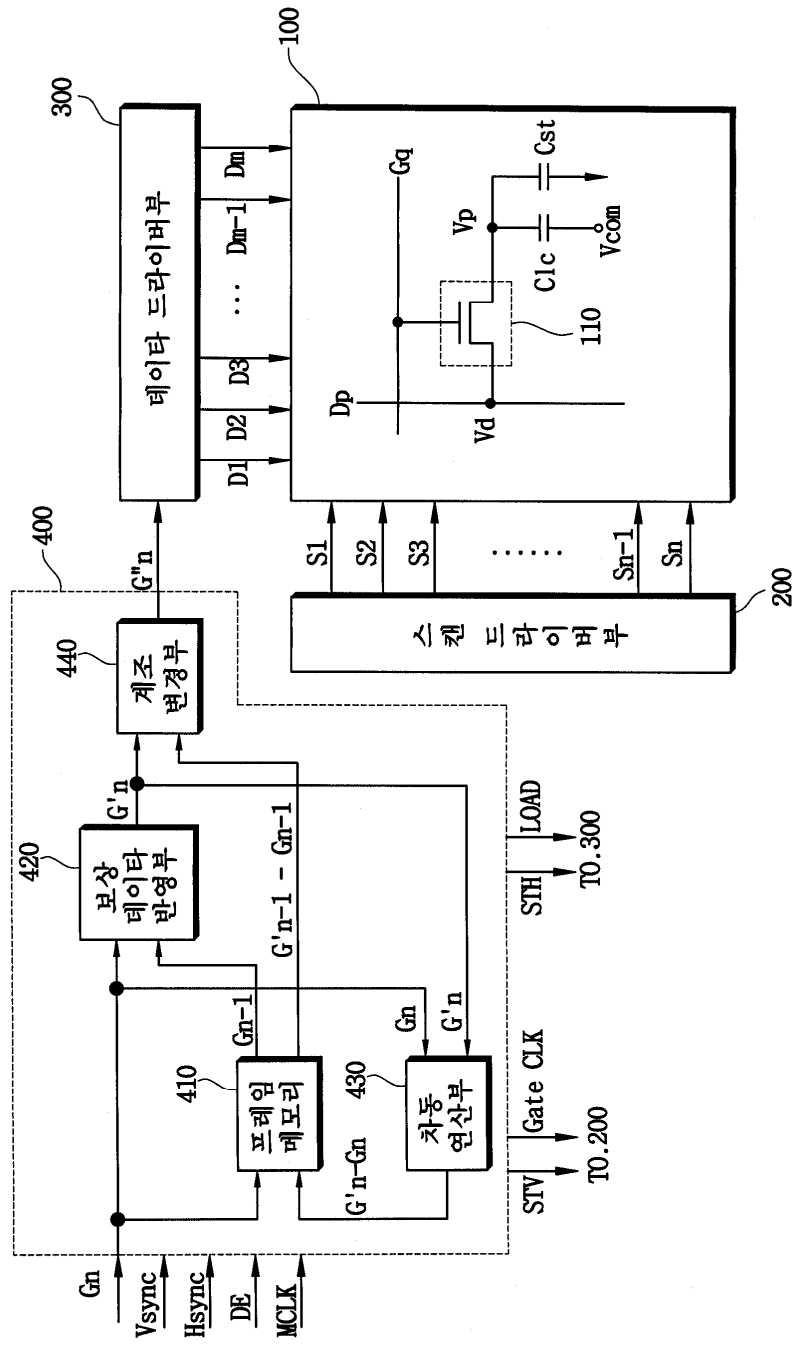
3a



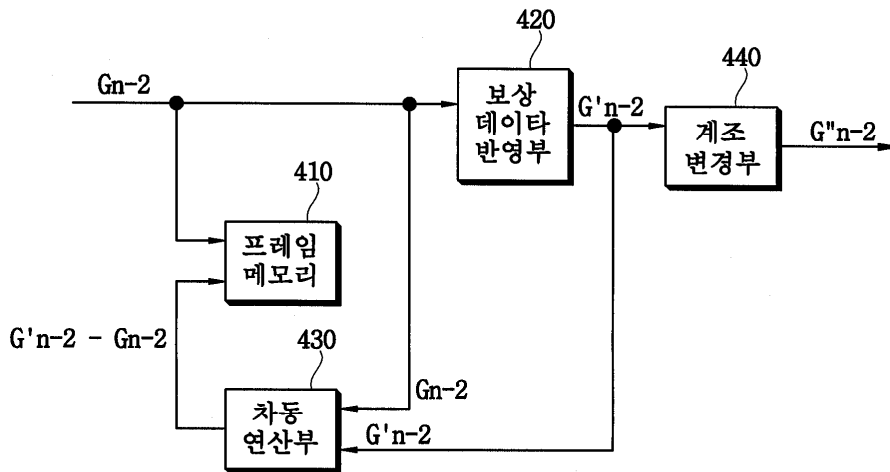
3b

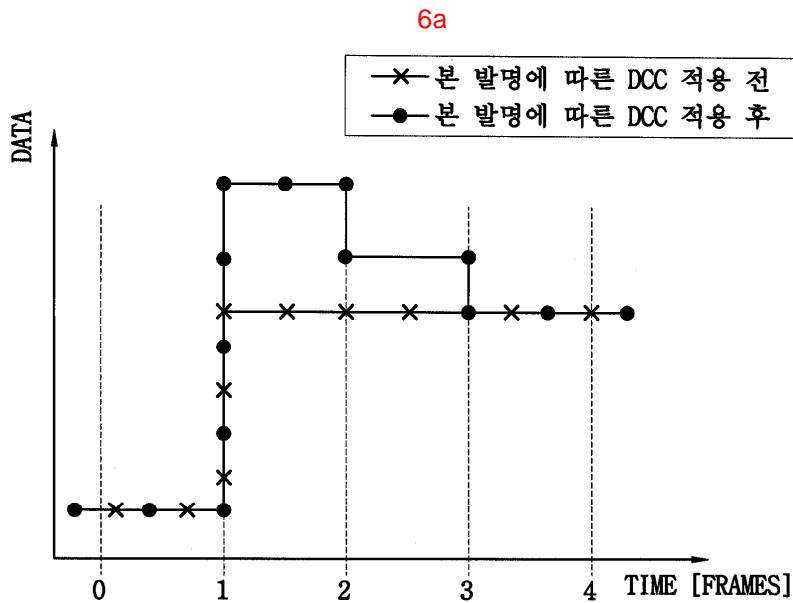
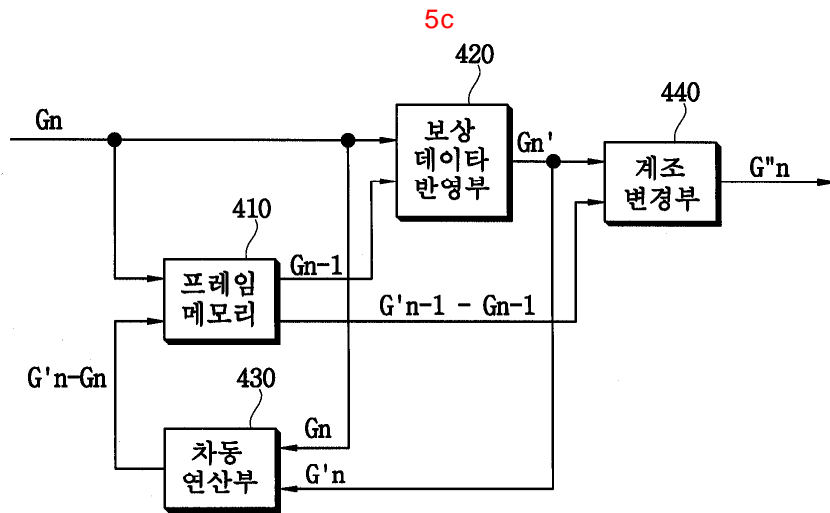
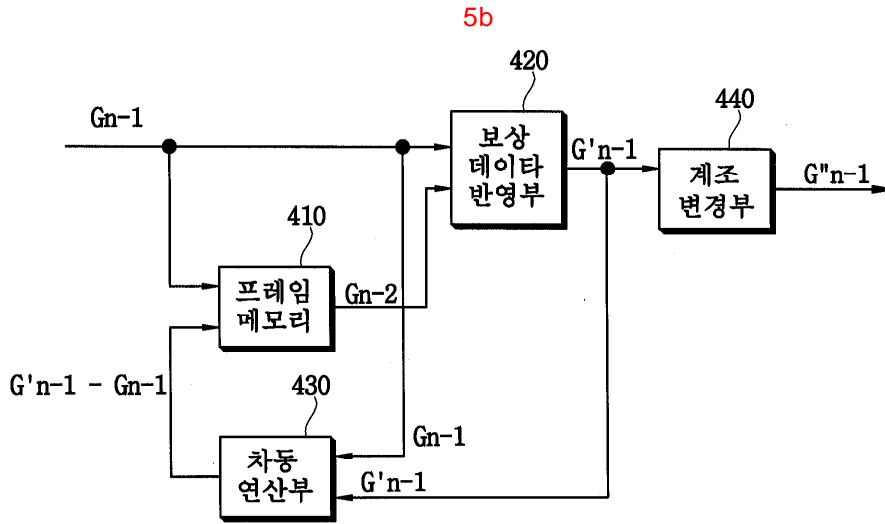


4

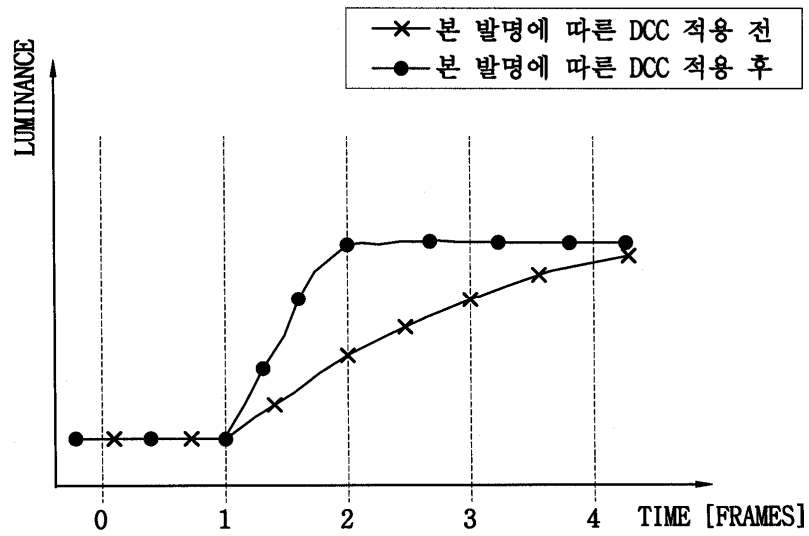


5a

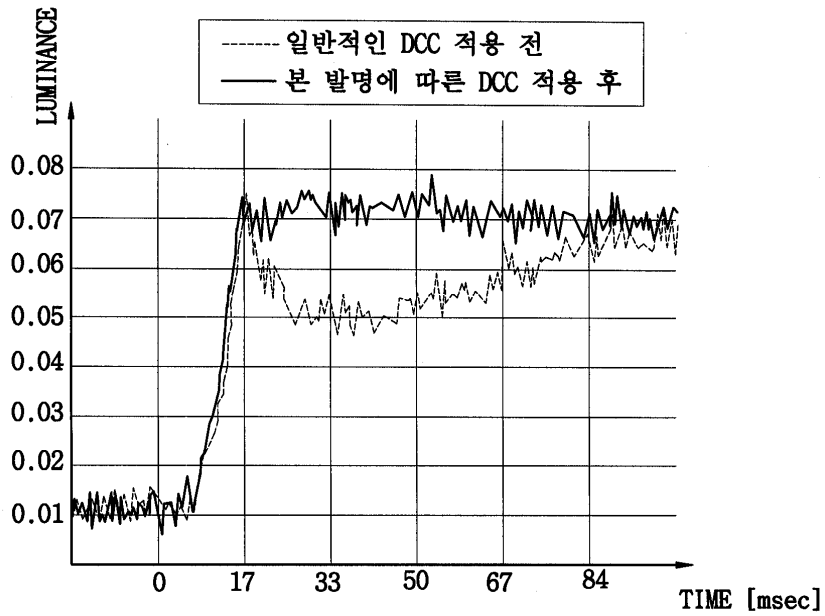




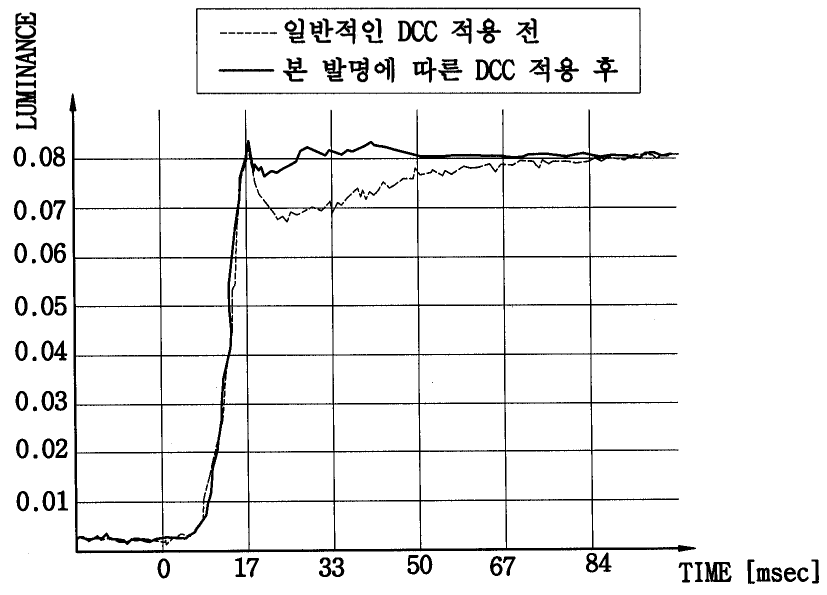
6b



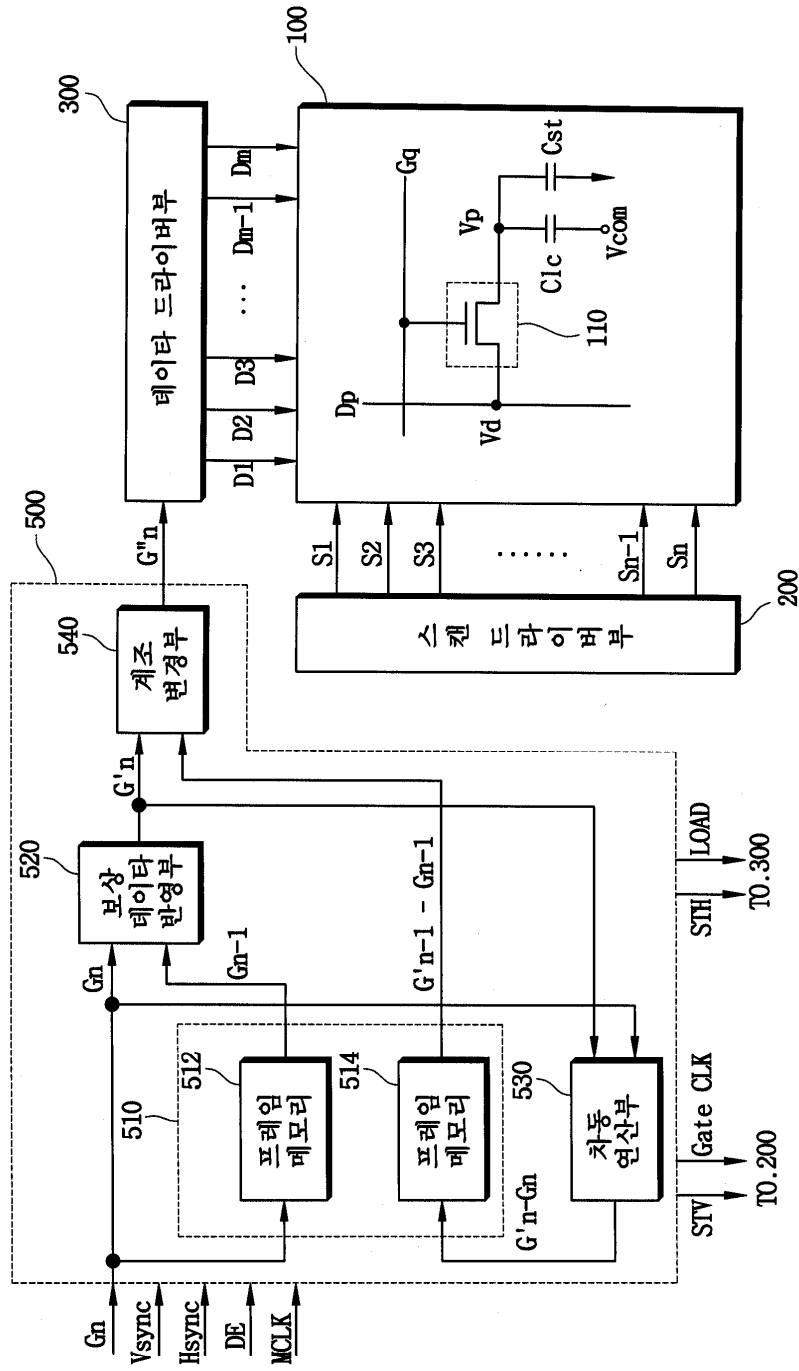
7

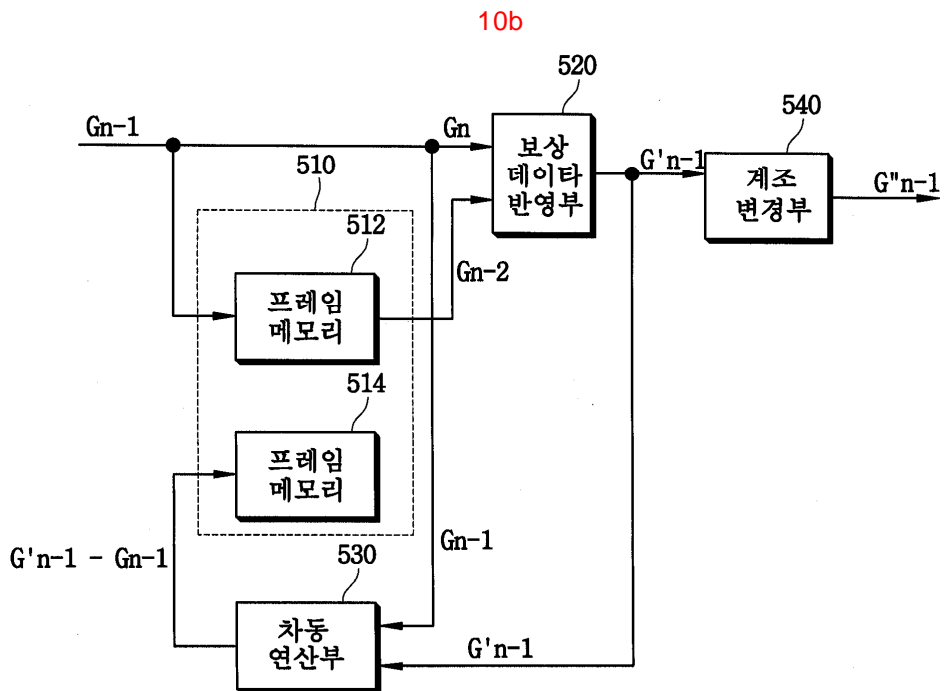
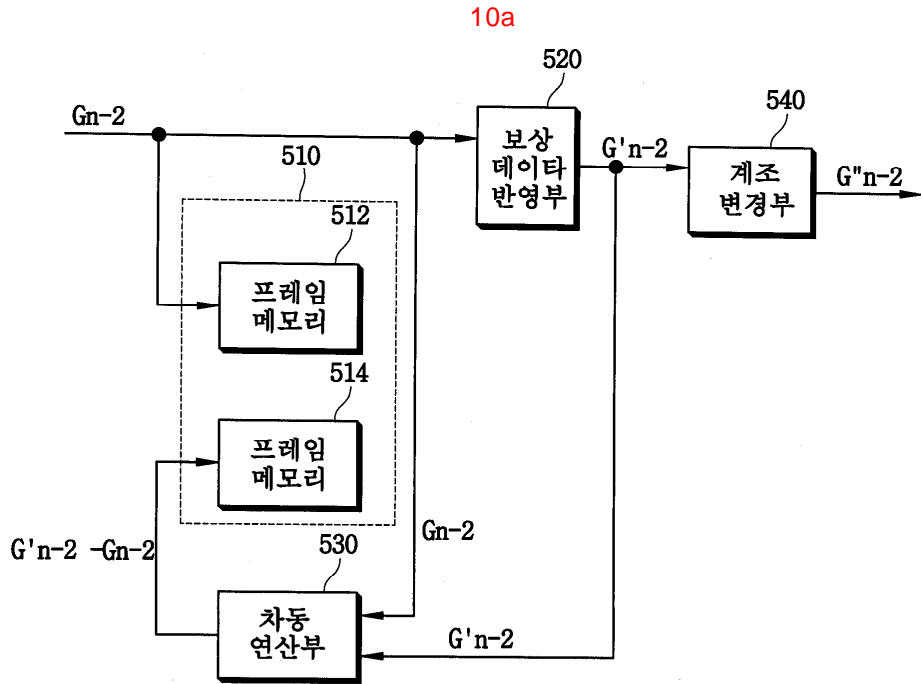


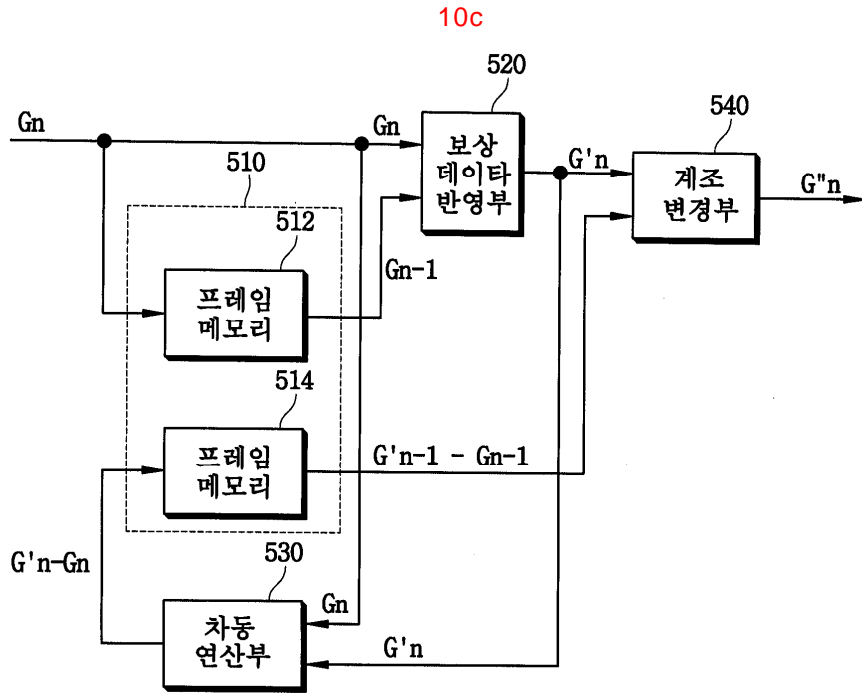
8



9







专利名称(译)	液晶显示器，驱动方法，		
公开(公告)号	KR1020050003919A	公开(公告)日	2005-01-12
申请号	KR1020030045449	申请日	2003-07-04
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	LEE SEUNGWOO		
发明人	LEE,SEUNGWOO		
IPC分类号	G09G3/20 H04N5/66 G02F1/133 G09G3/36		
CPC分类号	G09G3/2092 G09G3/3648 G09G2360/18 G09G2340/16 G09G2320/0252 G09G2320/0285		
代理人(译)	PARK, YOUNG WOO		
其他公开文献	KR100951902B1		
外部链接	Espacenet		

摘要(译)

公开了一种用于加速液晶响应速度的液晶显示器及其驱动方法和驱动装置。考虑到当前数据和先前数据以及当前数据和原始补偿数据，定时控制单元考虑原始补偿数据之间的差分数据输出最终补偿数据。扫描驱动器部分连续输出扫描信号。数据驱动器部分输出数据信号最终补偿数据。传送配备有垂直配向模式的液晶的液晶面板的扫描线是扫描信号，传送数据信号的数据线，以及形成在扫描线和数据线之间的开关元件。响应于扫描信号在基础中布置液晶数据信号并显示图像。因此，改善了采用垂直取向模式的液晶的液晶显示器的上升时间。以这种方式，可以加速液晶的响应速度。液晶，响应速度，高速，过冲，差分，上升。

