

2003 04 10
10 - 0379535
2003 03 27

2002 - 0057733
2002 07 12

(74)

•

(54)

DAC
 , 1 2 가
 , 1,2 ; 1
 DAC; DAC 2 ;
 1,2 MUX; MUX
 가 .

2

LCD, IC

1

2

3

21. 1

22. 2

23. DAC 24.

25. MUX 26.

DAC

ersion System),

(Line Inversion System)

가

(Frame Inv

가

가

Low voltage)

(+)(High voltage)

(-)(

가

(+)

(-)

가

가

(Sub - pixel Pattern) (Check Pattern),
가 (Windows Shutdown Mode Pattern)

가

1

al to Analog convertor) Low Voltage DAC High voltage DAC(Digit

DAC IC

1 Vivid Semiconductor, Inc.,(USP 5,754,156) IC

DAC가 high voltage DAC low voltage DAC
P N P N
(Multiplexer)

1

, 2 (11) DAC High voltage , 2 (12)
DAC Low voltage

MUX

DAC

가

High Voltage DAC Low Voltage DAC가 2
High Voltage Low Voltage
가

DAC

1 2
1,2

2

1

1,2

DAC; DAC

MUX; MUX

가

2

3

DAC High Voltage DAC Low Voltage

DAC

2 (21)(22) , 2 (22) on 1, DAC(23) , (24) , DAC(23) DAC (IN0)(IN1) (Polari ty signal) (26) MUX(25) , MUX(25)

, DAC(23) High voltage DAC Low Voltage DAC DAC(23) , DAC(23) High Voltage DAC Low Voltage DAC DAC(23)가 Low Voltage DAC (24) Low Voltage DAC High Voltage DAC

DAC
(24)

in2) DAC(23) (Vin1) (R₁) , (Vout) (Vout) (R₂) (R₃) (R₄) (Vout)

$$V_{out} = -(R_2/R_1)V_{in1} + ((1+R_2/R_1)/(1+R_3/R_4))V_{in2}$$

$$(R_2/R_1) = (R_4/R_3)$$

$$V_{out} = (R_2/R_1)(V_{in2} - V_{in1}) \quad (R_2/R_1) = 1$$

$$, V_{out} = V_{in2} - V_{in1}$$

, Vin2 10V 가 , Vout = 10 - Vin1 , (Dynamic output range)가 0.
2 ~ 9.8V IC 3

, $V_H + V_L = 10V$ $V_L = 10 - V_H$ 가 .

DAC(23) High Voltage DAC(23) 가 V_H ,
(24) 가 V_L 가 .

DAC(23) Low Voltage DAC(23) 가 V_L ,
(24) 가 V_H 가 .

Vin1 Vout MUX(25)

.

가 .

가 (High region Low region) DAC
가 .

,DAC가 .

, 30% 가 가 .

(57)

1.

1 2 가 ,

1,2 ;

1 DAC;

DAC DAC (R1) (Vin1) , (Vin2)
2 (Vout)

1,2 MUX;

MUX 가

.

2.

1 , 1,2 가

.

3.

1 , 1,2 on 가

.

4.

1 DAC, DAC High Voltage Low Voltage High Voltage Low Voltage

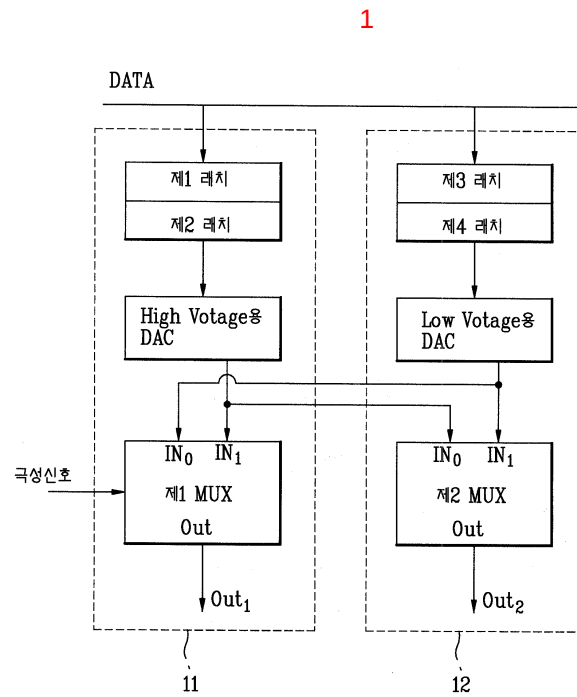
5.

1, (Vout) (R₂) (R₃) (R₄)

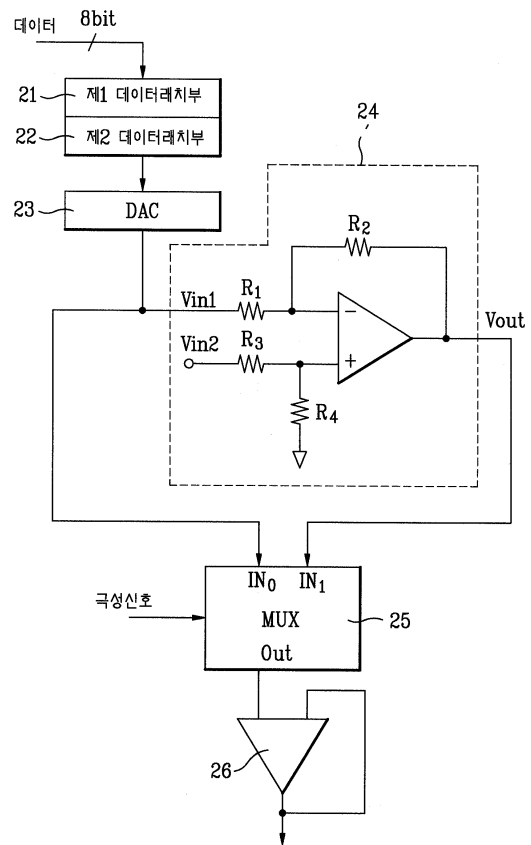
6.

5, (Vout)

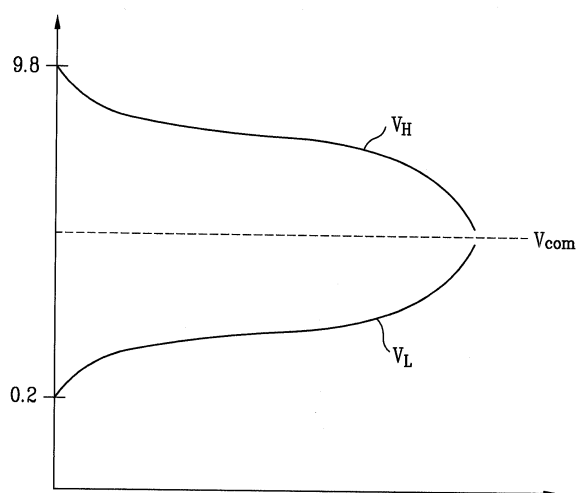
$$V_{out} = V_{in2} - V_{in1}$$



2



3



专利名称(译)	液晶显示装置的驱动电路		
公开(公告)号	KR100379535B1	公开(公告)日	2003-04-10
申请号	KR1020010000729	申请日	2001-01-06
[标]申请(专利权)人(译)	海力士半导体有限公司		
申请(专利权)人(译)	SK力士有限公司		
当前申请(专利权)人(译)	SK力士有限公司		
[标]发明人	AHN KWANGSOO		
发明人	AHN,KWANGSOO		
IPC分类号	G09G3/20 G02F1/133 G09G3/36		
CPC分类号	G09G3/3688 G09G3/3614		
代理人(译)	金勇		
其他公开文献	KR1020020057733A		
外部链接	Espacenet		

摘要(译)

液晶显示器的驱动电路本发明涉及一种液晶显示器的驱动电路，其中源驱动是通过使用一种DAC的点反转方法实现的，第一DAC，用于将锁存数据转换为模拟信号并输出第一极性的信号值，第二DAC用于接收DAC的转换信号，用于通过极性信号选择性地输出第一和第二极性信号值之一的MUX，用于缓冲MUX的输出信号并将源驱动信号施加到液晶单元的缓冲器，它包括。 2 指数方面 LCD，源驱动IC

