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2005 01 06

(21) 10-2003-0042830
(22) 2003 06 27

(71) . 20

(72) 2 573 2 521

707 1701

(74)

⋮

(54)

1 , 1 2 + 1 2 N
가 , , , , , , , , ,
2 N+1 2 1 1 1
2 가 , , , , , , , , ,
2

3a

1a

1b 1a 가

2

3a 1

3b 3a 가

4

1

가

5

1

TFT11:

P11:

D11 D1m:

Vcom11 Vcom1n:

G11 G1n:

111:

113A,113B:

(In-Plane-Switching: IPS)

(Liquid Crystal Display Device)
(cell-gap)

가

가

가

가

가

가

가

(gray inversion)

(color shift)

(contrast)

1a

(flicker)

(cross talk)

2

2 가 . , , 가

, (V DATA) / 가 . / 가 ,

, $(V_{G1} \vee V_{G3})$ 가 , (Vp) 가
- $(\neg Vp)$.

, $(V_{G1} \vee_{G3} V_{G3}) \text{가 } (Vp)$ 가

$$\frac{(V_{DATA} - V_{COM})}{(V_{CEL})} \text{ 가 } \frac{(V_{DATA} - V_{COM})}{(V_{CEL})} \text{ 가 } \frac{(V_{COM})}{(V_{CEL})} .$$

(Vcom)

(Source Integrated Circuit)

3a (G11 G1n) (D11 D1m) (P11)
) (G11 G1n) (D11 D1m) (P11)
) (P11) (111) 가 가 (TFT11)
) (TFT11) (D11 D1m) (G11 G1n) (P11) (111)
 , , N+1 , N
 (TFT11) , N N+1
 T11) 가 (G11 G1n) 가 , (TF
 , (D11 D1m) (TFT11) (TFT11)
 , (111) , 가 (111)
 , (P11) (111) (113) (111) (D11 D1m)
 (P11) (113) (Vcom11 Vcom1n)
 (Vcom11 Vcom1n) (G11 G1n)
 (...Vcom11, Vcom13, ...) ,
 (...Vcom12, Vcom14, ..., Vcom1n)
 (113A) (...Vcom12, Vcom14, ...) 2
 (113B) (...Vcom11, Vcom13, ...) 1
 가 1 2 (111) 가 (113A, 113B)
 , , (111) (111) 가 (P11) 가 가 (TF
 T11) (111) 가 가
 (111)
 3b 3a 가
 3b , (P11) (G9 G1n) (D11 D1m)
) (TFT11) , (C1c) , (Cst) (Vcom10 Vcom1n)

5 1

5 , 가 , , , 가

，
가

，
，
N
가
N+1

5 가

, (flicker), (cross talk)
가 .

가 가 ,

가 가 ,

(57)

2. 1 , 1 2

3.

4.

1 , 2

5.

1 , 1 2 가 2 . 1

6.

1 4 , 가 1 2

7.

1 , 1 2 1 N 가
 , , 2 2 가
 N+1 , 1 2 1 N 2

8.

7 , 1 가

9.

7 , 2 가

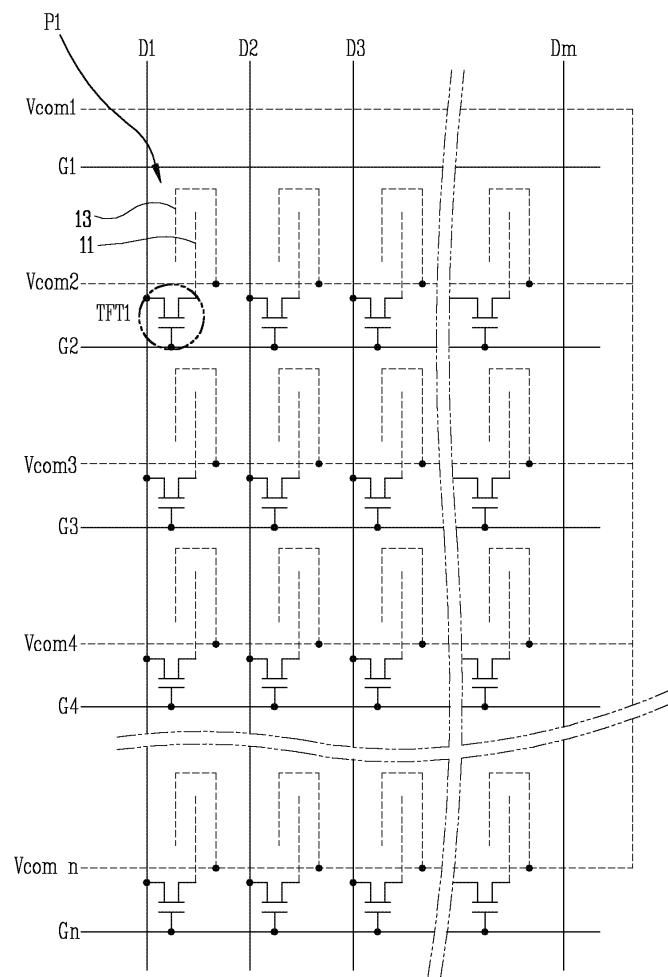
10

7 , 가

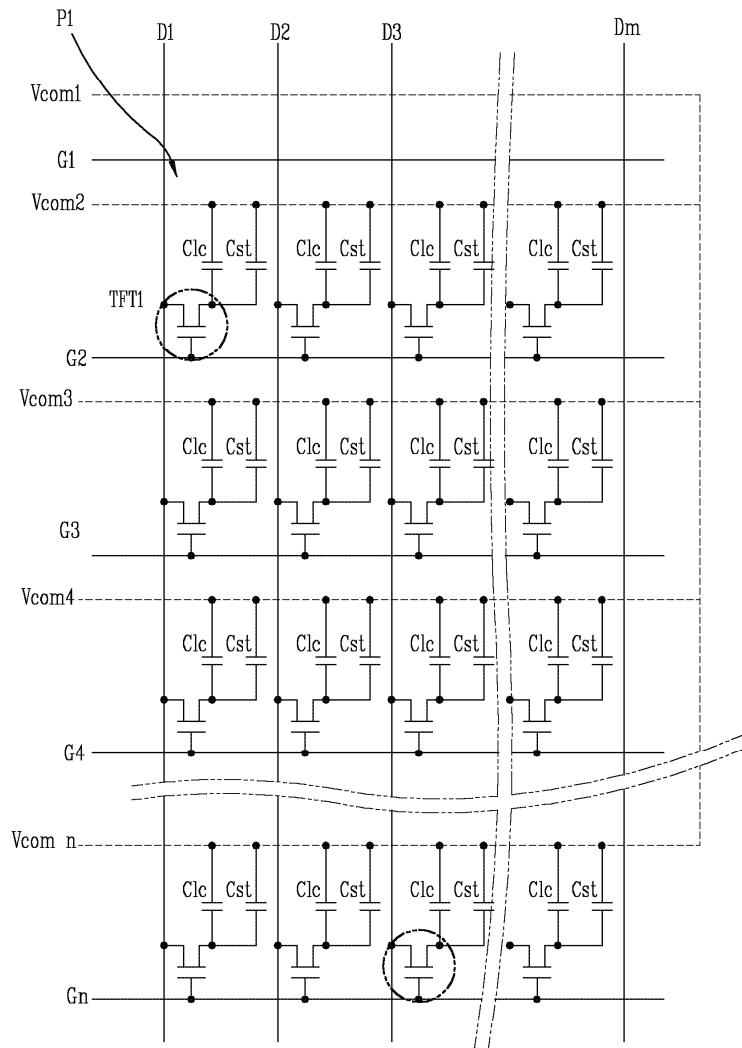
11

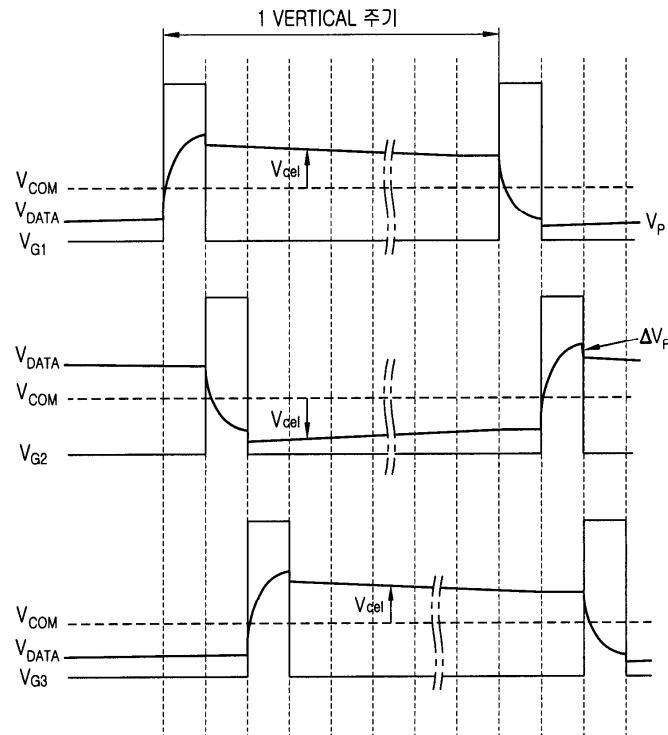
10 , (Line Inversion Type)

1a

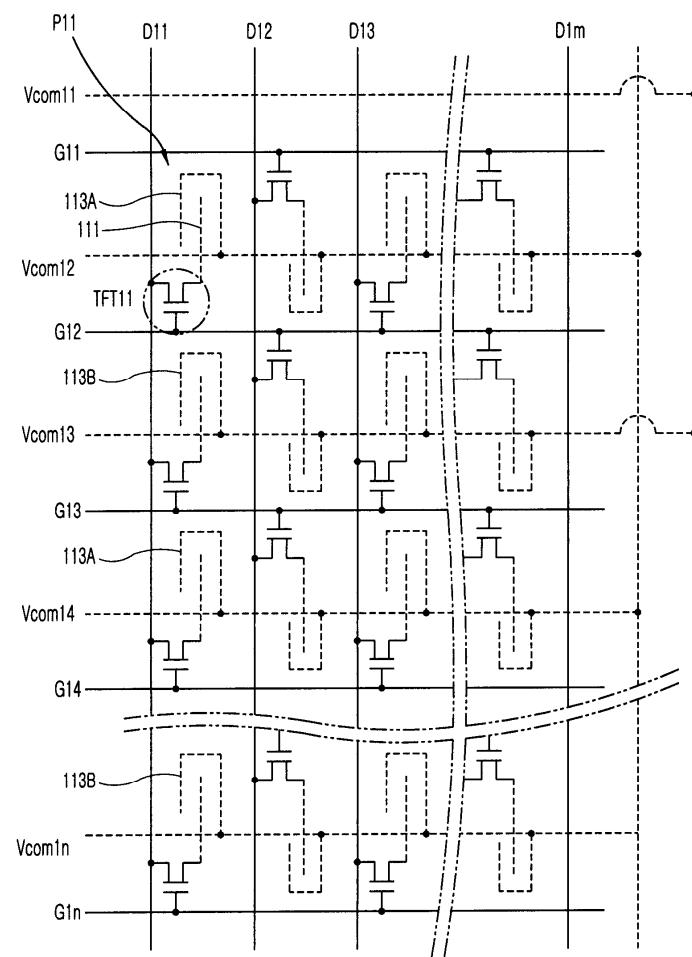


1b

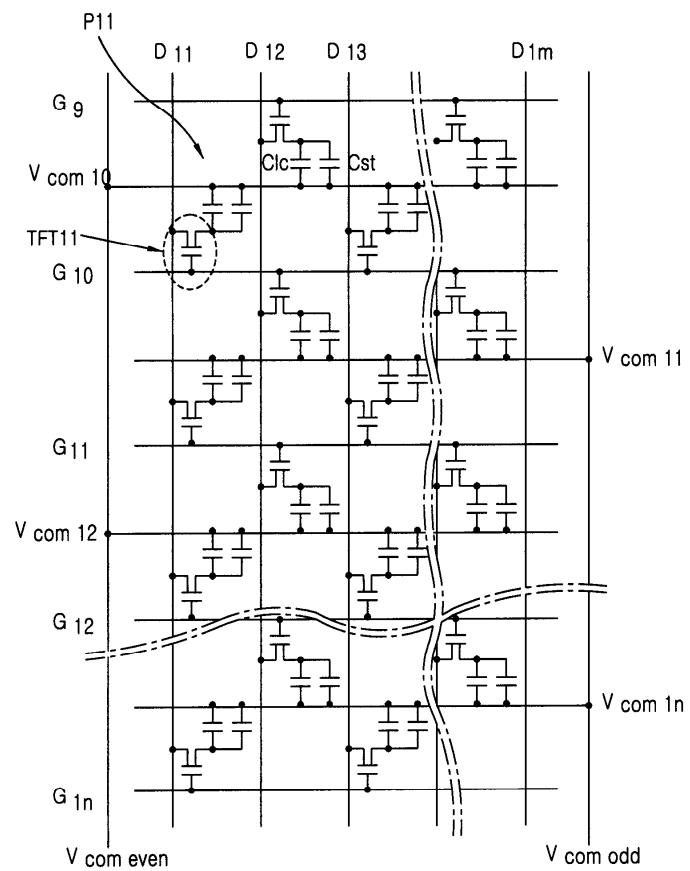




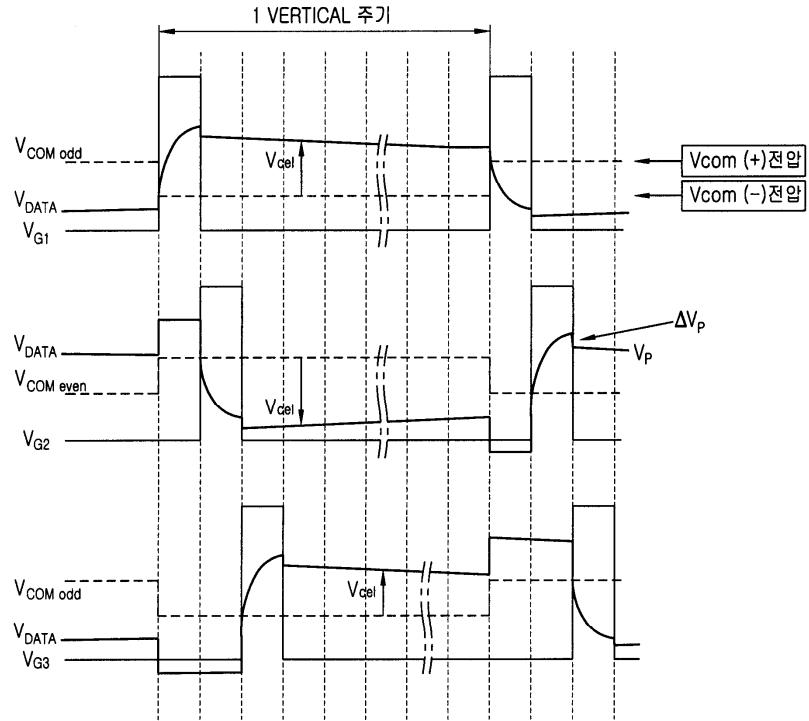
3a



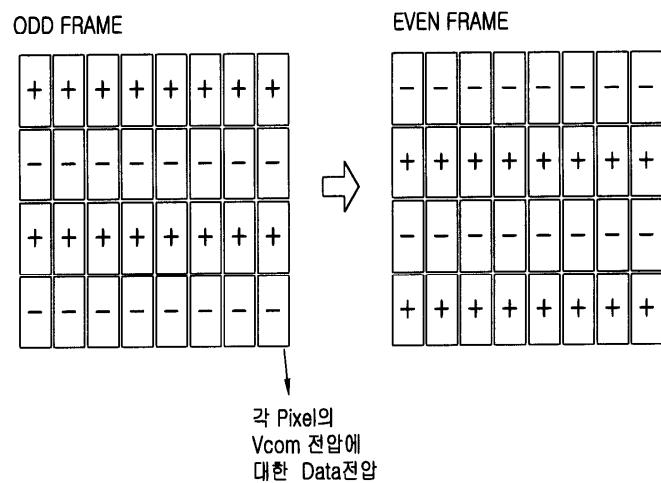
3b



4



5



专利名称(译)	液晶显示器		
公开(公告)号	KR1020050001249A	公开(公告)日	2005-01-06
申请号	KR1020030042830	申请日	2003-06-27
[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 KYONGSEOK 김경석 LEE JAEKYUN 이재균		
发明人	김경석 이재균		
IPC分类号	G09G3/36 G02F1/1368 G02F1/133 G02F1/1343 G09G3/20		
CPC分类号	G09G2300/0434 G09G3/3614 G09G3/3648 G02F1/134363		
代理人(译)	PARK , JANG WON		
其他公开文献	KR100652215B1		
外部链接	Espacenet		

摘要(译)

用途：提供由面内电场驱动的面内切换模式LCD装置，通过增大施加到液晶的电压差来降低功耗。

