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2002 - 0093569
2002 12 16

(21) 10 - 2002 - 0031302
(22) 2002 06 04

(30) JP - P - 2001 - 00171887 2001 06 07 (JP)

(71) 가 가 가 4 6

(72) 1 5 - 1 가 가

1 5 - 1 가 가

가 1 5 - 1 가 가

가 1 5 - 1 가 가

가 가 가 292 가 가

(74)

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(54)

, 1 , , 1 , 2 , ,

2

, , , ,

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14

3

15

3

1 :

2 :

3 :

4 :

5 :

6 :

7 :

8 :

9 : TFT (Thin Film Transistor)

10 : Cadd

11 :

, 가 , , EL, 가

JP - A - 6 - 161390 , , , , 가

가 , JP - A - 6 - 161390 (Non - Overlap) ,

JP - A - 11 - 64821 , , , ,

1 2

JP - A - 10 - 221676 , 가 V , , V
H 1 V , , V
1 V n NAND 2 V , NAND 2 V
n - 1 , 2 V n NAND

, NAND 1 V n - 1
 , 1 V 2 V
 , 1 V 2 V NAND
 가
 , 1 , 1 × 1
 가 가 가 , Cadd
 가 , 가 Cadd , Cadd Cad
 d 가 , 가 Cadd 가 , Cadd
 , 가
 , 가
 , 가
 , 가
 , TFT ON, OFF
 , 가 , 1 , 2
 가 가 , 1 , 가
 , 가
 , 가
 , 가

1 (a) 1 (b)
 가 (1) , 가 ()
 가 (2) , (3) , (3) (4) (4)
 (5) , (6) (1) TFT(9)(Thin Film Transistor)가
 (8) , (11) (7) 가 (8)
 (3) (5) (4) (3)
 (2) (7) (2)

) , 1 x 1 , 1 (1 가
 가 . , 가 . ,
 (2) , 1
 (8) (n - 1) (6) Cadd(10)

2 Cadd 가 가 가
 (1) Cadd , (n - 1) 가 가 가
 , 가 ,

3 162 1
 1 50% 가 ,
 200mV 가 . , , 가 ,
 () , () . 가
 , , 가

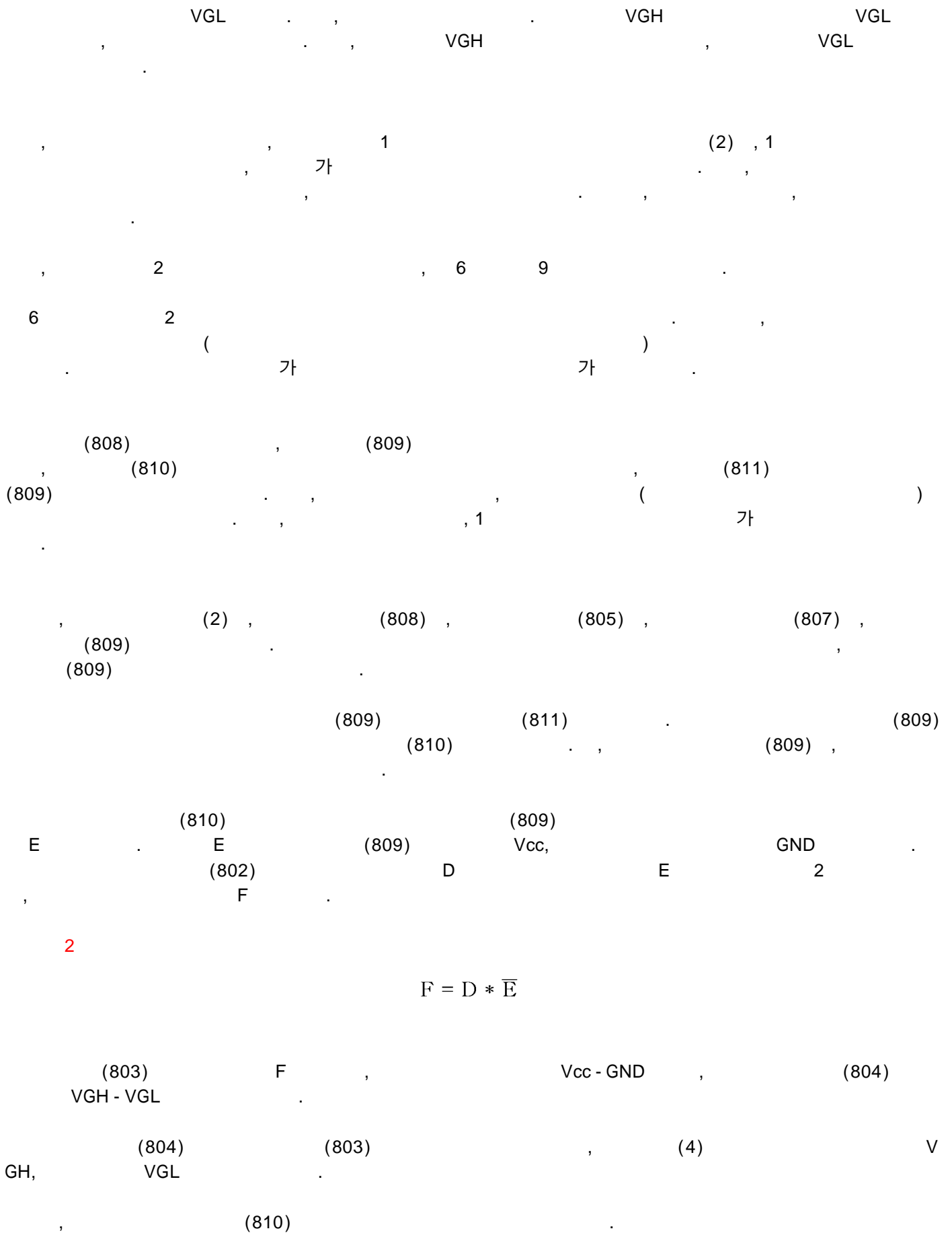
4 1 (801)
 , (802) , (803) , ()
 804) , (805) , (806)
 , (807) (2) , (805)
 (806) , (807) 1 ,

가 (802) (806) (805) ,
 , 가 , (805) 가
 , , 1 ,
 (802) A (807B) 1
 , C .

1

$$C = A * B$$

(803) Vcc - GND , (804) VGH - VGL
 ,
 VGH, (804) VGL (803) , (4) VGH ,



7 (810) (810) (1101) (1102) (1101) (101)

(808) (1101) a m m a
Vcc , m < a GND 5 (810) E 가 1 (810)

A , 1 , 1
B , 1 , 1
C , 1 , 1
C , C , , 1

8 , , 1 (1H) , a 10

(806), (805),
가 9 (1001) F
(1002) D (810) E 2
가 9 E가
가 F가

2 (2)
가
10 15 3

가 가 11

10 1 (n 1) 10 , 20 1
가 , DC 가 ,

3 12

(1604) (1605)
(1606) (1604)

(n=SCN). (2), (806), (805), (1604)
 (1604) SS SE, SCN
 n 1
 (1604) (1606) (1604)
 SS SE n (1605)
 (1604)가 (1604)가 ()

SE, (1605) (806), (805), SS
 n (1605) (805)
 GND, Vcc G, (80)
 n(n 1)
 6) GND H Vcc G H
 3 GND, Vcc I

3

$$I = G * \bar{H}$$

13 (1605) (1605) (1701),
 (1702), n (1703), (1704)
 G (1701) (1702)
 (1701)
 (805) (1701)
 LP < SS, LP > SE Vcc, SS LP SE SS, SE
 G H n GND
 (1704) (806) n (1703) (1703)
 (1703)가 0 Vcc, n
 GND H

G, H 3 (1
 605) I

14 2 , 3 (1605)

I J 4 (1601)
 K

2.

1 , , , , .

3.

1 , 가 , , .

4.

3 , 1 , 1 , 1 , , , , , , .

5.

4 , , , , .

6.

3 , 가 , , .

가

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7.

6

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8.

1

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1

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1

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2

,

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가

가

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9.

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가

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가

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가

1

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1

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2

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10.

9 ,

11.

가

가

가

1

1 , 가

12.

11 ,

1 , 1 ,

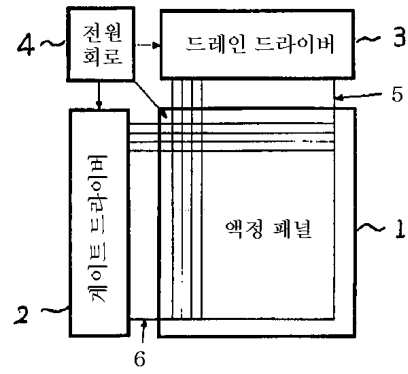
1 , 1 ,

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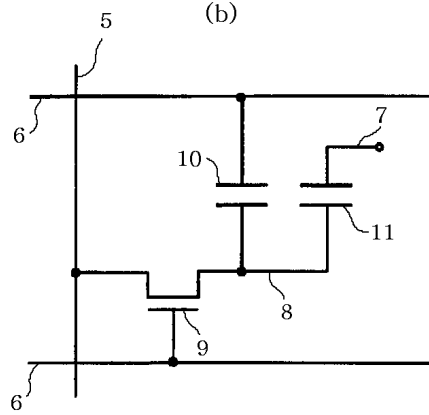
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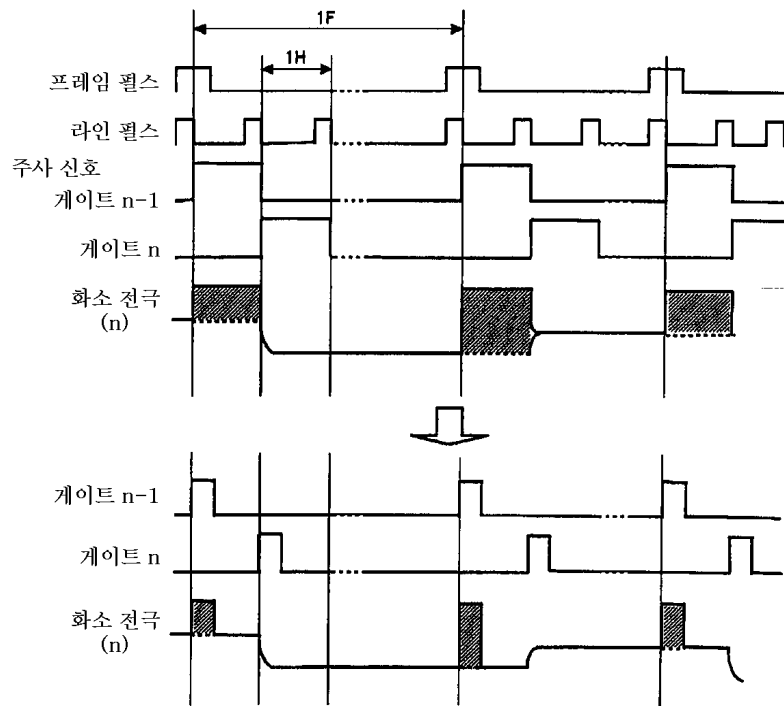
(a)



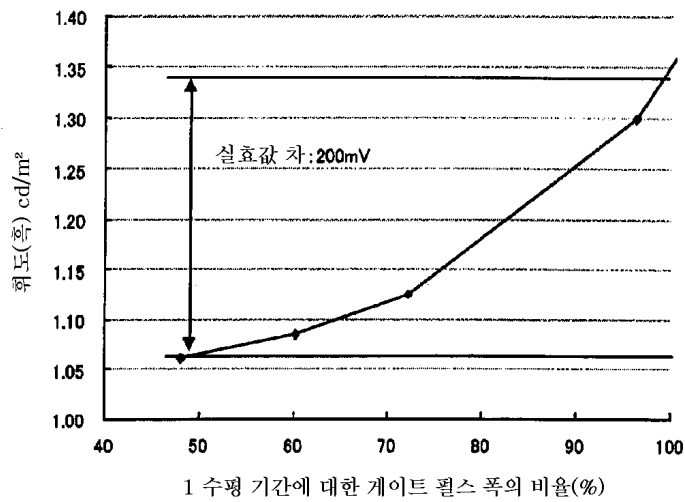
(b)



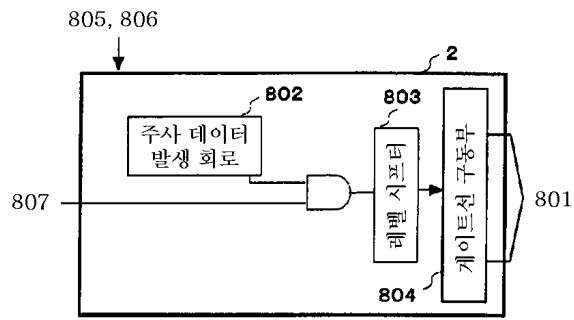
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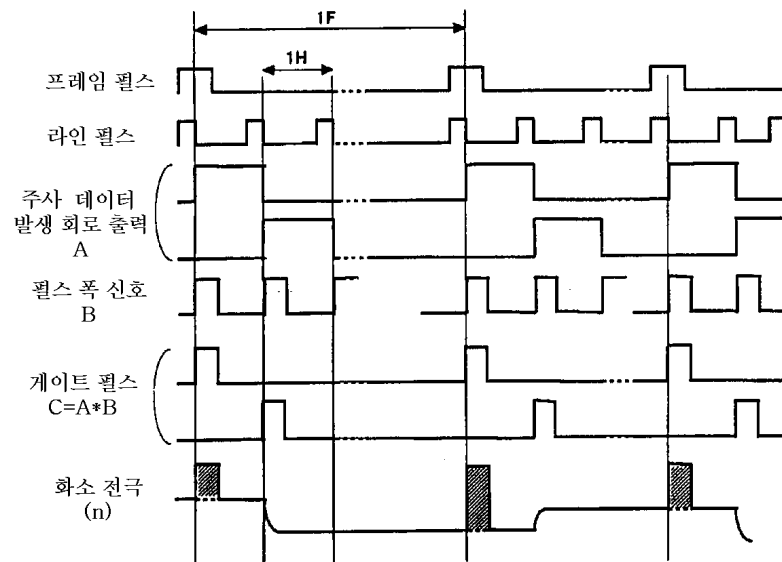
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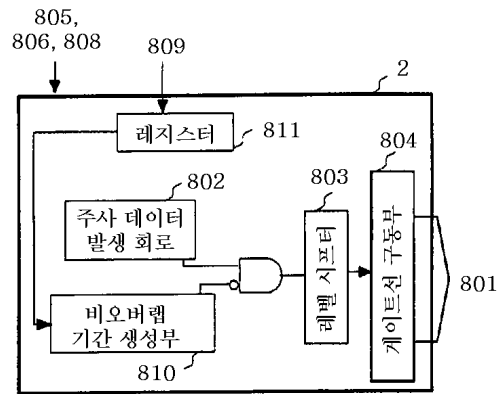
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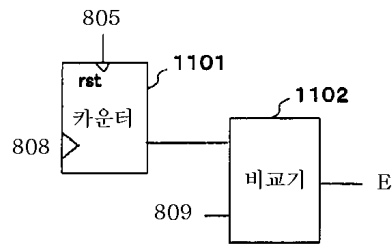
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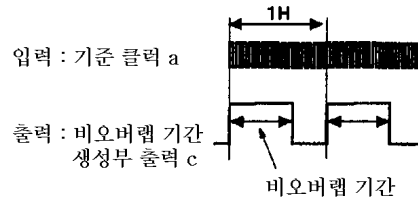


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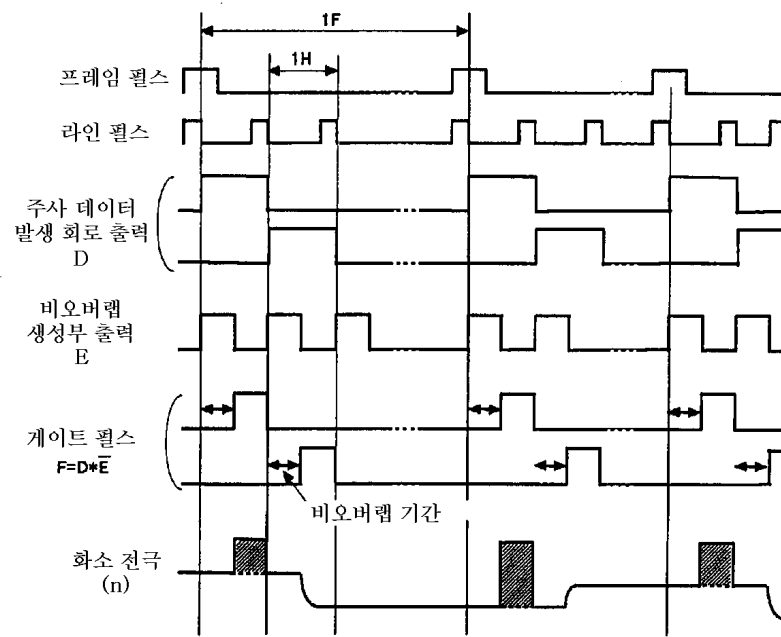


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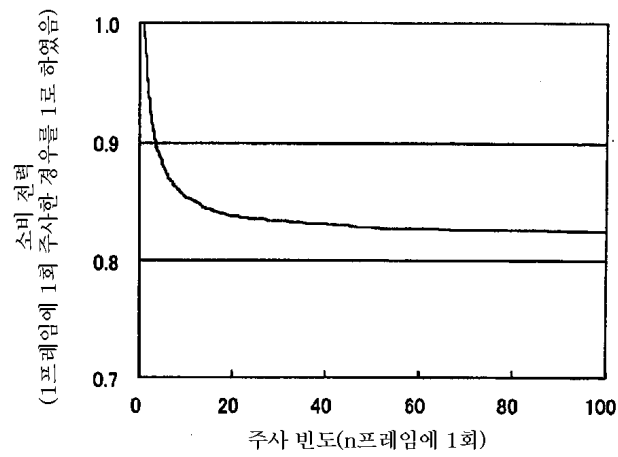
예) 비오버랩 기간 : 10클럭



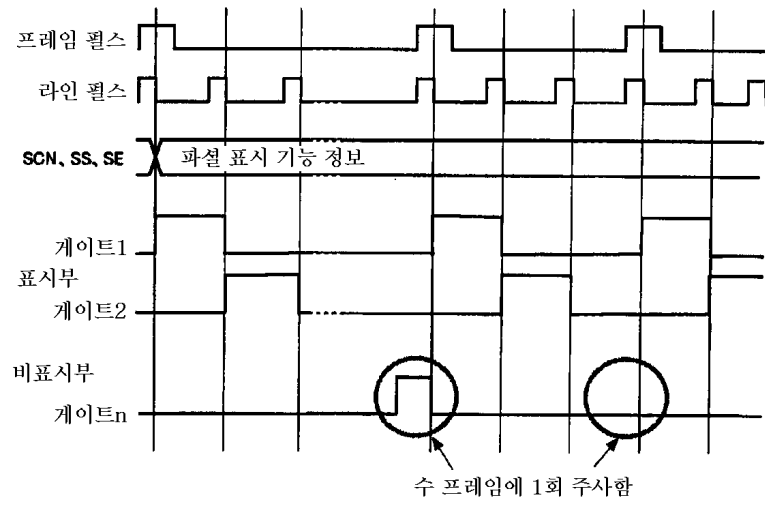
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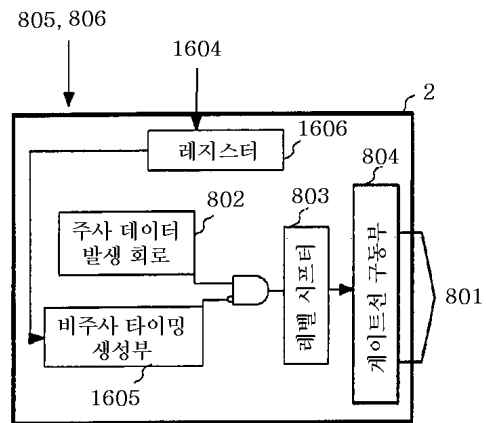
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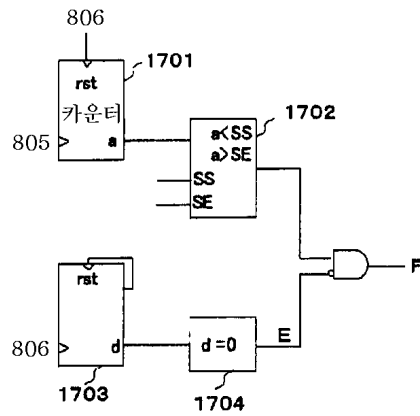
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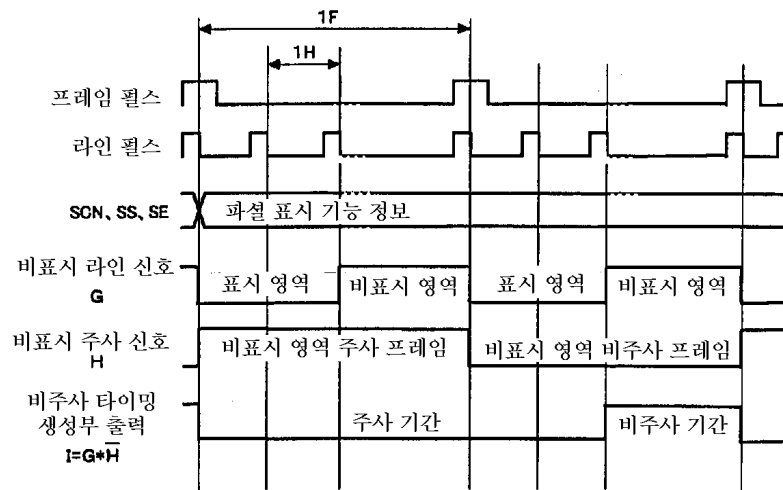
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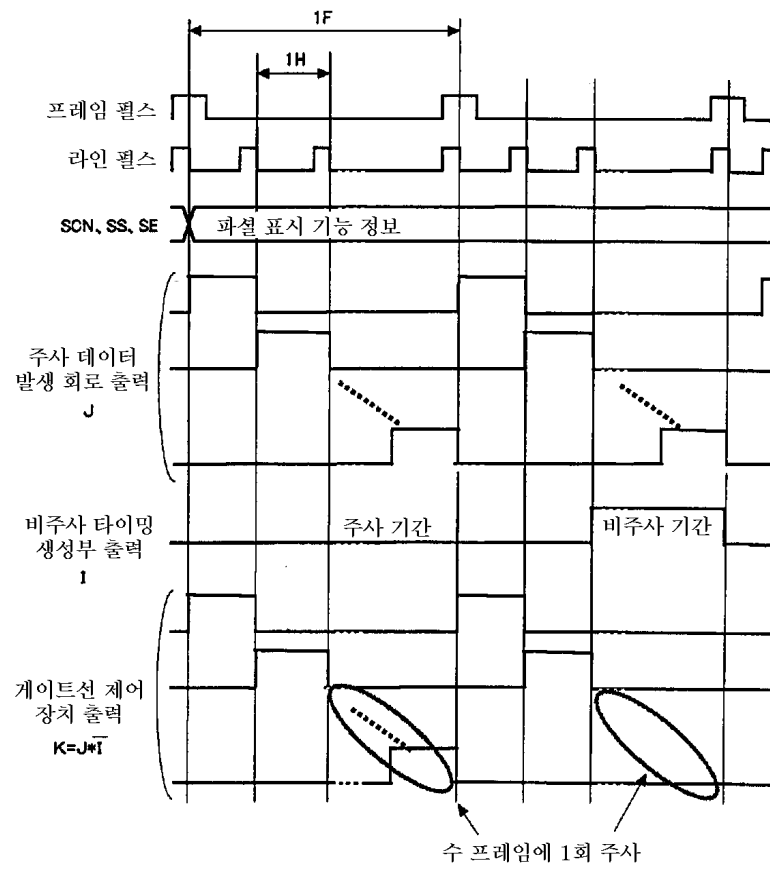


13



14





专利名称(译)	显示装置和显示驱动电路		
公开(公告)号	KR1020020093569A	公开(公告)日	2002-12-16
申请号	KR1020020031302	申请日	2002-06-04
[标]申请(专利权)人(译)	日立HITACHI SEISAKUSHODBA		
申请(专利权)人(译)	株式会社日立制作所		
当前申请(专利权)人(译)	株式会社日立制作所		
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发明人	아까이아끼히토 구도야스유키 오오까도가즈오 구로까와가즈나리 히가아쯔히로		
IPC分类号	G09G3/36 G09G3/20 G09G3/00 G02F1/133		
CPC分类号	G09G2310/065 G09G3/3659 G09G2330/021 G09G3/3677		
代理人(译)	CHANG, SOO KIL		
优先权	2001171887 2001-06-07 JP		
其他公开文献	KR100551649B1		
外部链接	Espacenet		

摘要(译)

目的：提供一种栅极线驱动电路，该栅极线驱动电路可以调节扫描信号的脉冲宽度，以减少在向高级施加栅极脉冲期间液晶施加电压的变化现象，并且可以通过以下方式调节非显示部分的扫描频率：降低功耗的部分显示功能。构成：栅极线驱动电路的特征在于，用于调整扫描信号高宽度的非重叠时段由参考时钟的数量设置和规定，并且可以调整。

