

(19)
(12)

(KR)
(A)

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(43)

2003-0043571
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(71) 가 가 가 가 4 1-1

(72) 가 가 가 가 4-1-1 가 가

가 가 가 가 4-1-1 가 가

가 가 가 가 4-1-1 가 가

가 가 가 가 4-1-1 가 가

(74)

:

(54)

2 가

3 가

4 1

5 1

6

7

8 2

9 2

10

11 3

12 3

13 가

14

15

16

17 TFT

18

19 1

20 2

21

22

10 :

11 :

12 :

13 :

14 :

1
2

가

1
1
(13) (14) (10), (13) (11), (14) (12), 가
(13) (14) (13) (14) (14) (11)
(13) 1 (12) 가 1

2 가
(13) 가 가 2 (a) 1 A
(13) 가 가 2 (b) 1 B
(11) 가 B (11) 가 A 2
() A (12)
(12) (11)
(14) 3 가 (11)

3 (a) 1 A (13) 가 가 3
(b) 1 B (13) 가 3 (c)
) 1 A (14) (12) (12)
3 (d) 1 B (14) (12)

3 (a) 3 (b) A B T
3 (c) 3 (d) (12)가

[3 (d)] A [3 (c)] B (11)
T 가 . ,

4 (12) 1 .
4 (12) X 가 , (21-1 21-X) , () (22)
)가 (14) 가 (14)
(11) 가 . 가 .
, (11) 가 가 (14) (21-1) (22)
(11) 2 가 (14) (21-2) 1
(22)가 , (11) 3 가 (14)
(21-3) 2 (22)가 (21-X) X-1 가 , (11) X 가
(14) (22)가 . (11) X 가
, (11) 가 , (14) (11) (12)

5 (12) 1 .
5 (21-1 21-X)가 (X-1) () (23)가 , (23)
(11) 가 , (14) , 4 가 ,
(11) (12)

6 (12) . 6
가 , (21-1 21-X) (OUT1 OUTX)
(4 (22) 5 (23)

7 (12) .
7 (a) 7 (d) (21-1, 21-2, 21-3, 21-X) (OUT1, OUT2, OUT3, OUTX)
(OUT3) , 7 (b) (OUT2) (OUT1) T1
, (OUT1) T1 (22 23) , 7 (c) T1
7 (d) , (OUTX) (OUT1) 2xT1 (X-1) x T1 가 ,

8 (12) 2 . 8 , 4
) , 1 (12)가 (10) 가 (12)가 (10)
(12) (12) (14) 가 .
8 (12) , (22) () (32)가 , (12)
(32) (32) 10 , (12)

, 8 (12) , (32) ,
9 (12) 2 . 9

5 (23) 10 (32) () (32)가 (32) 9 5 (32) (12) 9 (12)

11 (12) 3

11 (12) (21-1 21-X) (21-2 21-X)
 () (51) AND (41), (가) 2 AND (42), OR (43)
 , 2 AND (42) AND (41)

가 HIGH 2 AND (41) (51) 가
 가 LOW 2 AND (42) (51)
 AND (42) (51) (倍數) (51)가 (41) (51) 2
 (OUT1 HIGH LOW (12)

12 (12) 3

12 (12) (21-1 21-X) (21-2 21-X)
 () (71) AND (61), (가) 2 AND (62), OR (63) 2
 , 2 AND (62) AND (61)

가 HIGH 2 AND (61) (71) 가
 가 LOW 2 AND (62) (71) 가
 AND (62) 2 (71)가 , 2 AND (61) 1 (62) (71)가 , 2
 (12) (OUT1 HIGH LOW (12)

13 가

13 (100) (110), (111), (112),
 (113) (114) (100) (111), (110),
 (111) (113) (111)
 (112) (112) (113) (113)
 (112) (113) (112) (114)
 (113) (114)

(111) (121), (122), LP (123) (124)
 , 가 (121) (112) (122) (113)
 (123) (112) LP (114) (123) LP
 (124) (112)가 D/A LP
 (112) (114)

(122) (114) (126) (113) 가 가 A
 (113) 가 B LP (123) LP (123)
 (112) LP (114) (122) LP LP

(112)

14 (122)

(122) (131, 132), (133) JK (134) (131, 132)
 (126) A B (133) JK (134) JK (134) JK
 (134) A B (134) B , JK (134) JK
 A B , 가 .

3) (ENAB) , LP , LP JK (134) LP (12 (1
 21) 가 , LP (123) (RE) (CLK) (121) (1
 1 ()가 , (CLR) LOW

LP (123) ASIC ,
 LP (123) (CLK) (RE)
 (LP) (ENAB) (LP) (ENAB) LOW
 (CLK) , 가 LOW 가 , (ENAB) LOW
 LOW LP , 가 LOW 가 , (ENAB)

15 13 14

15 (a) LP (123) (RE) , LP , LP가
 15 (b) , 15 (c) (112) 가 LP가
 15 (c)

15 (d) 13 A , 15 (e) 13 B
 . B , 15 (c) A
 가 . B NEXT가 가

B , 15 (d) A , 15 (e)
 (122) , 15 (f)
 LP (123) LP LP가
 LP (112) 가 LP
 , 15 (h) (h) 15 (h)

15 (h) , A 15 (c) B 15
 (e) , A , A B (d) B 15
 , A B

가

가

TFT , TFT

가 , TFT IC(

)가 IC()가 , IC

가 , IC

16

24), (225), (221), 가 (222), 가 (223), (2

224) 16 IC(226), IC(227), (228) (229)

(225) (221) (229)

가

가 (IC) (229) 16

, TFT

17 TFT

17 (231), 가 (232), 가 (233), IC(2

36), IC(237), (238) (239) 17 , TFT (23

9) , 가 ,

가 IC IC 가

18

18 (241), (242), (243), (244), D

/A (245) (246)

(ICLK) (241) (242)

B (241) (242) RG

LP) 가 (242) (

(243) (243)

245) (244) D/A (245) D/A (

DA 가 DA DA

D/A (245) DA

(246) , 가 D/A (245)

TFT

(241) (242) R, G B

(OCLK) (242) (242) O

R, OG OB (241) (OCLK)

19 (242) 1

19 (242) (250-1, 250-2, 250-3, ...) (251)
 (250-1, 250-2, 250-3, ...) (241)
 RGB (251) (241)
 (OCLK) RGB OR, OG OB (OCLK)

20 (242) 2

20 (242) (250-1, 250-2, 250-3, ...) / (252)
 / (252) (241) (OCLK)
 (250-1, 250-2, 250-3, ...) RGB , O
 R, OG OB , 20 (252)
 (242) (243)

(241) (OCLK) (241)
 (ICLK) (OCLK) (ICLK) (OCLK) 가 (241)

21 (241)

21 (261) (262) LP (261) (ICLK)
 가 가 (OCLK) (262)
 (OCLK) (262)

22

22 , 22 (a) RGB , 22 (b) 21 (261)
 RGB , 22 (d) (c) (OCLK) OR, OG OB
 (OCLK) (b) , 22 (e)
 OR, OG OB

가

가 가

가 가

(57)

1.

가

2.

1 ,

3.

2 ,

4.

2 , 2

5.

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가

6.

5 ,

7.

6 , 가

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6 , 2

9.

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10.

9 , 1 2 1
2 , 1 2 2

11.

10 , 1 , 2

12.

11 , , , , ,

13.

12 ,

14.

,
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1 ;
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2

15.

14 , .

16.

14 , ,

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17.

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2

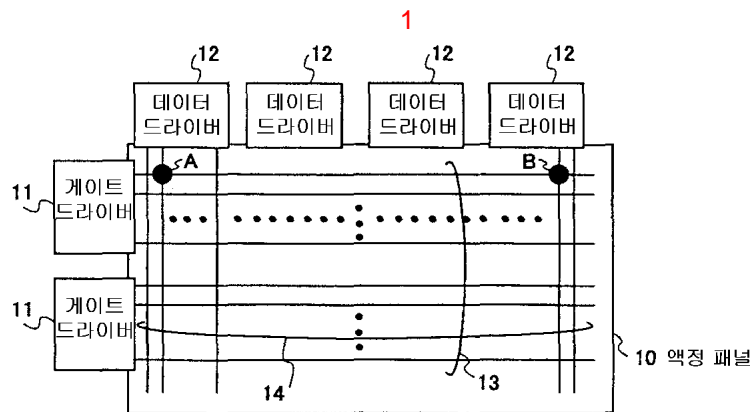
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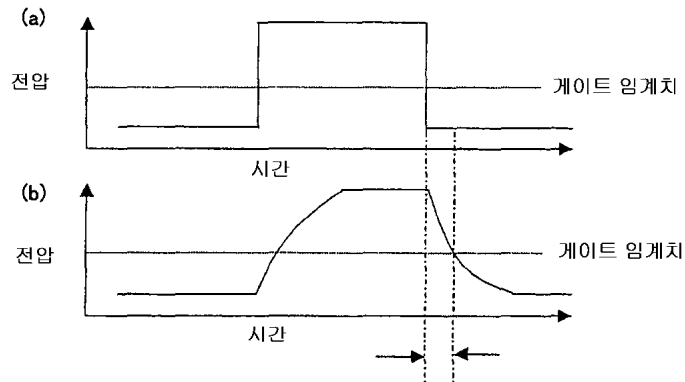
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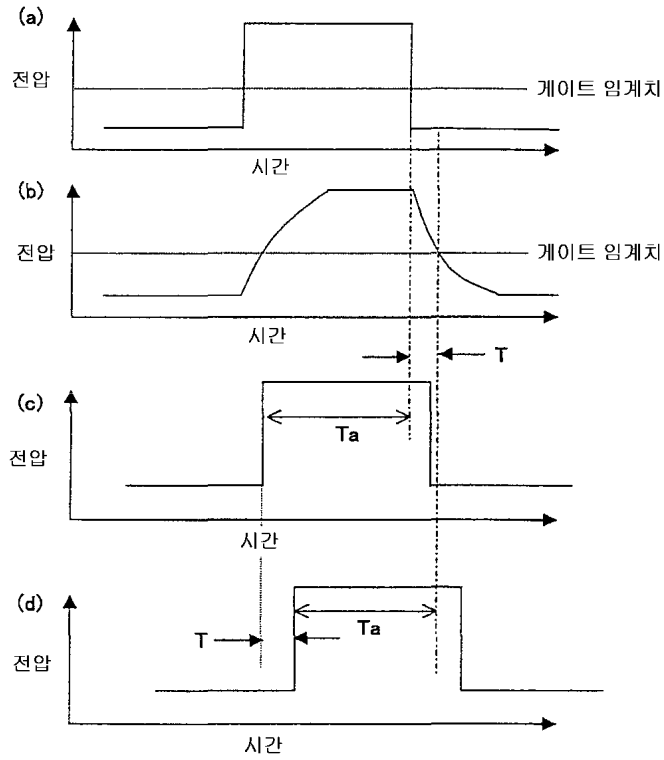
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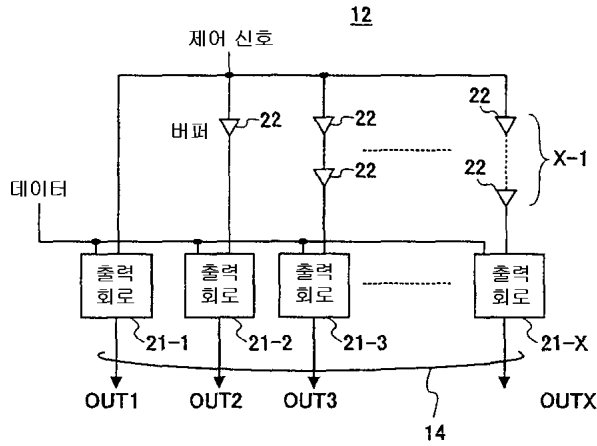
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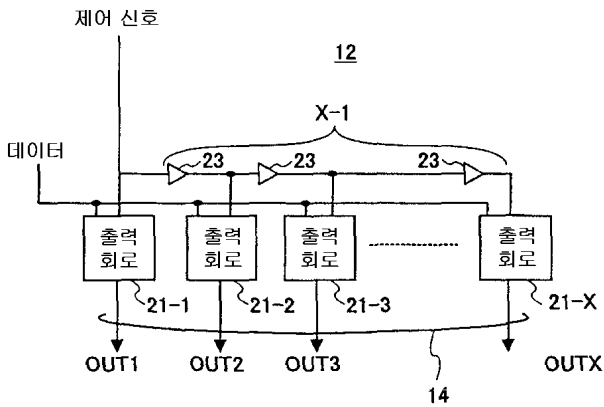
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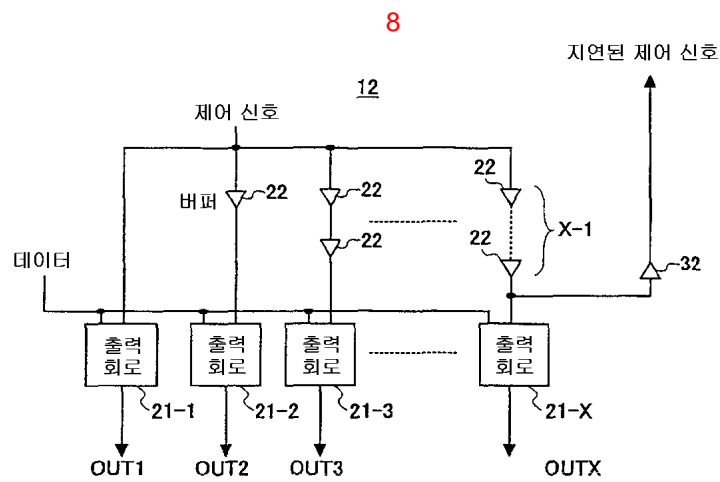
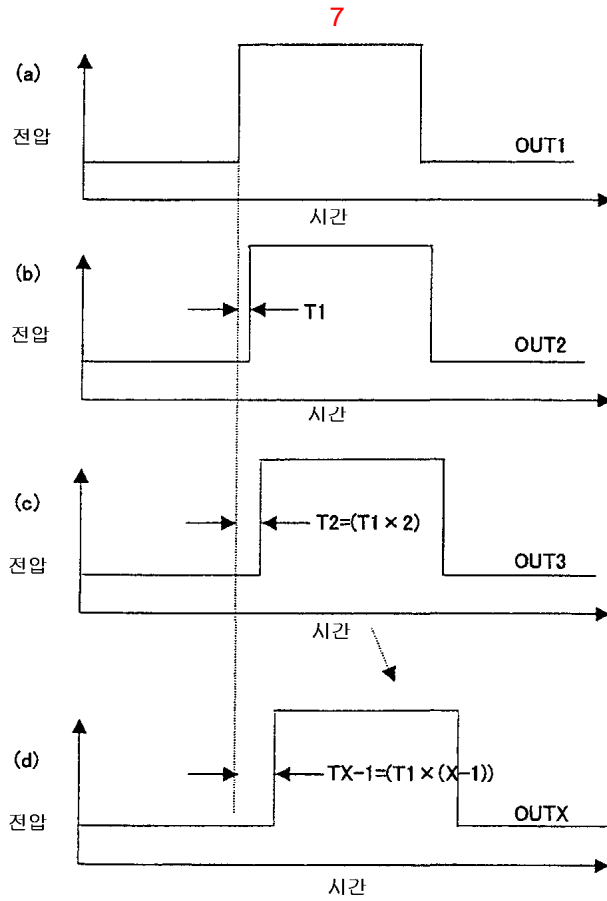
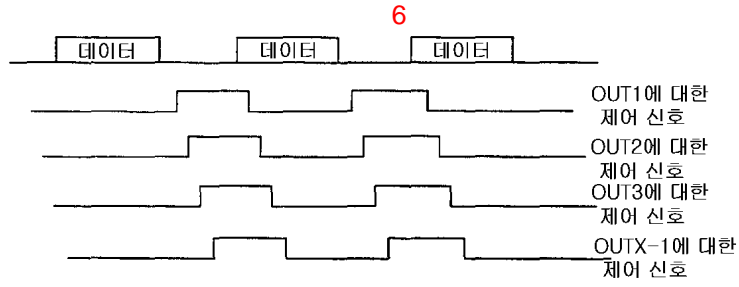


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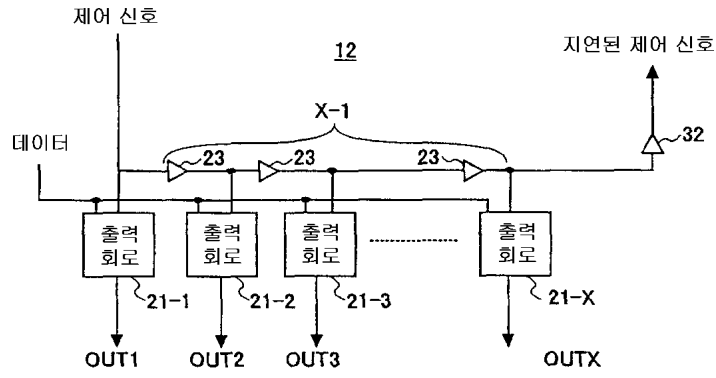


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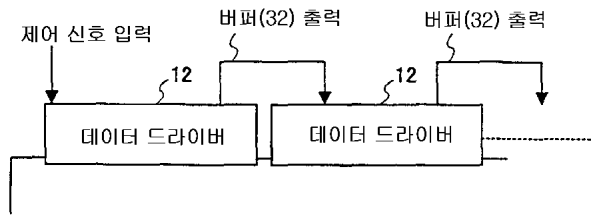




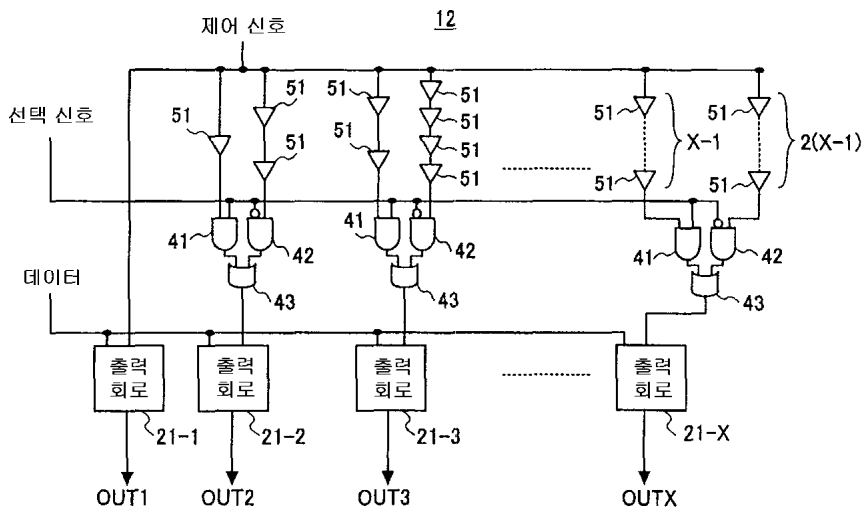
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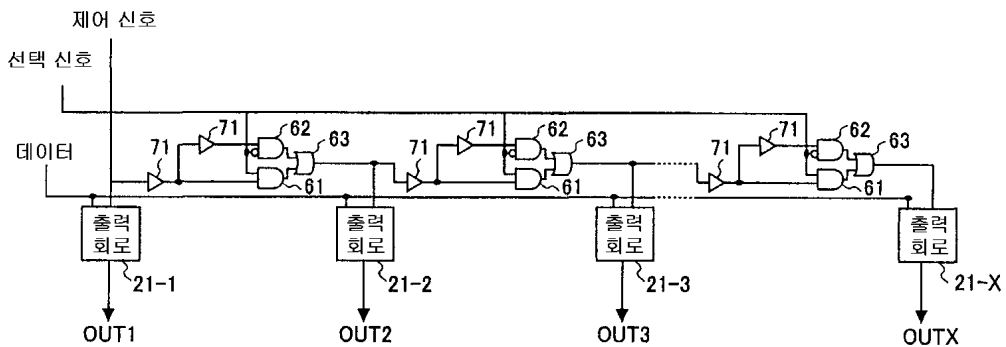
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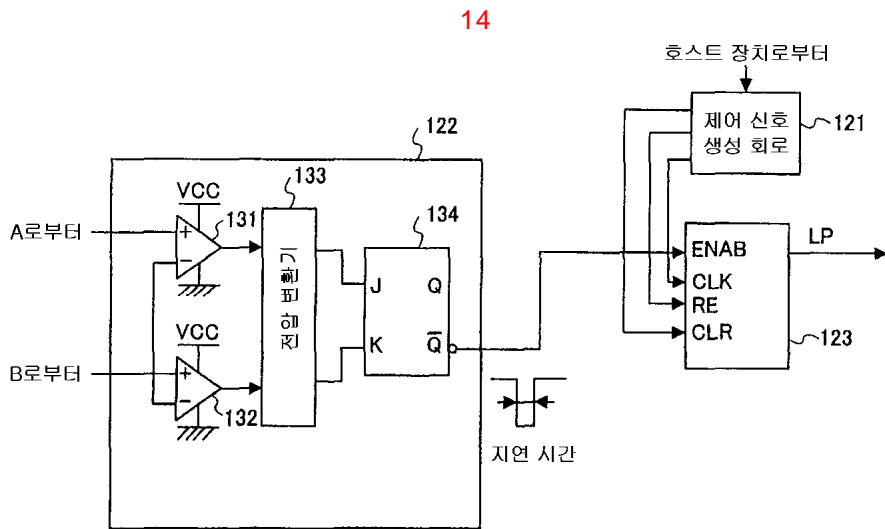
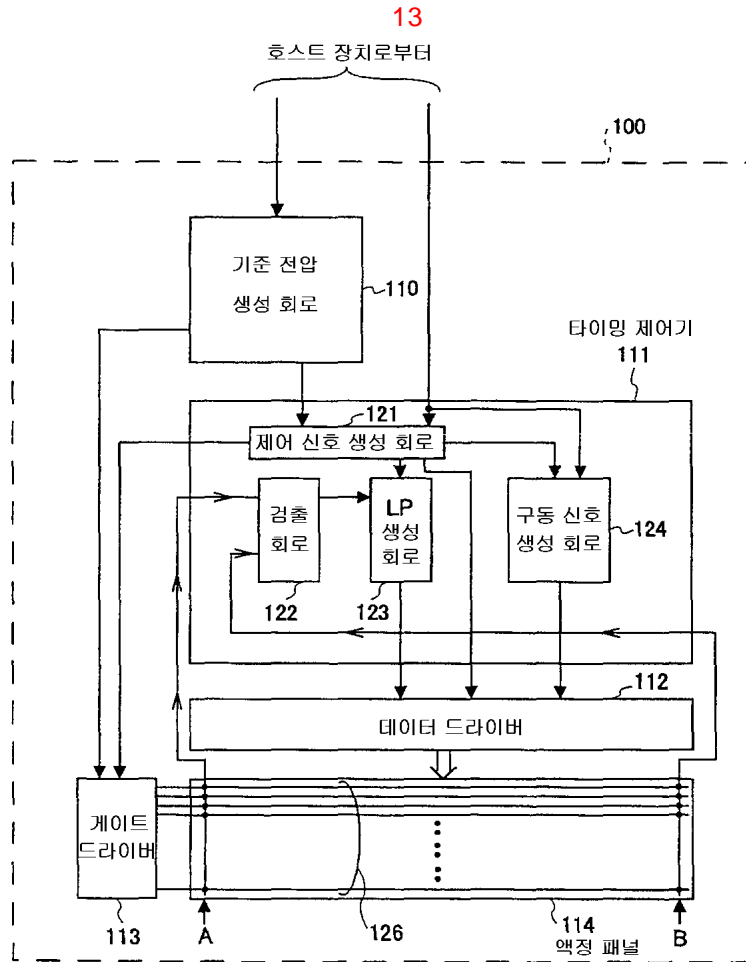


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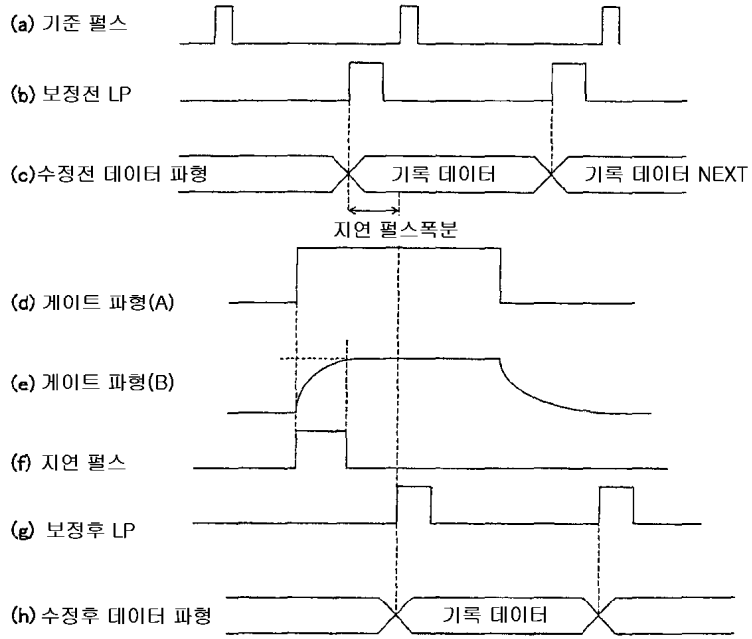


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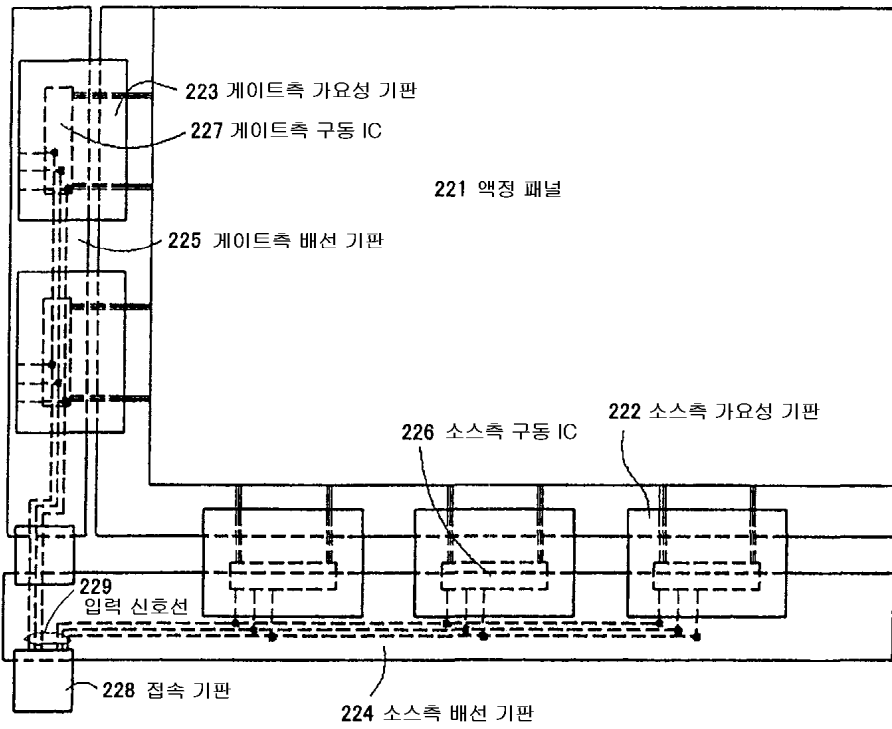




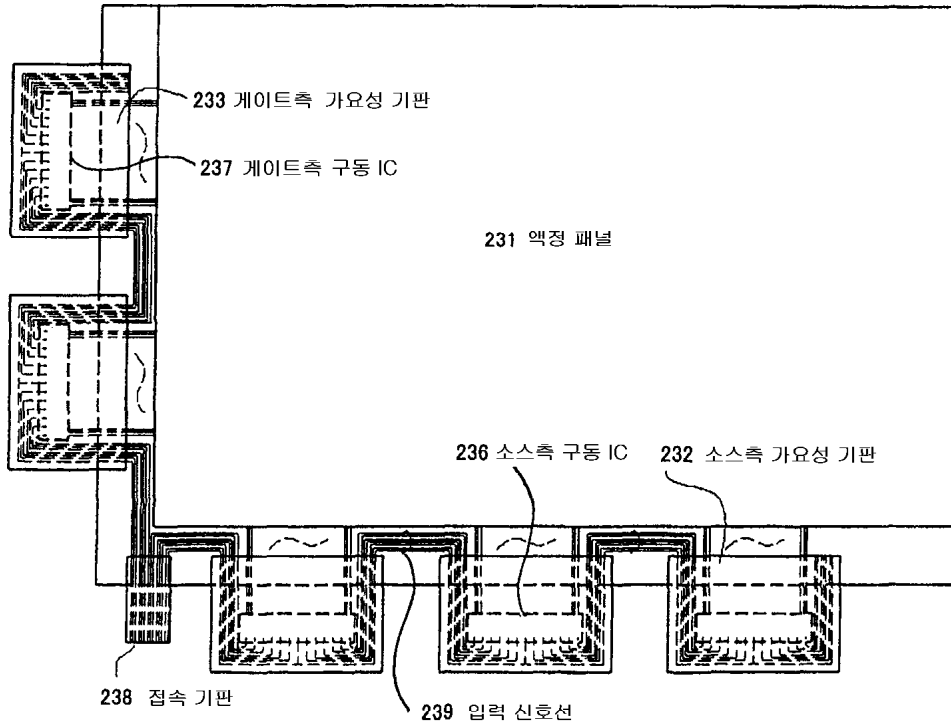
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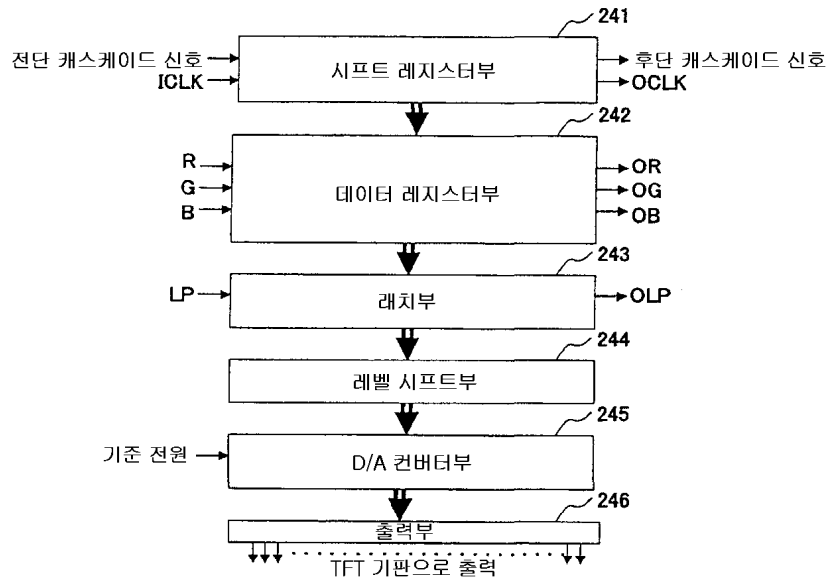
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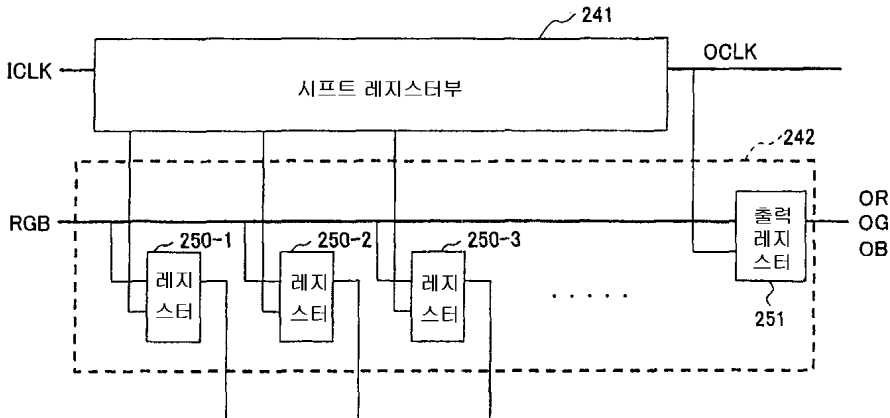
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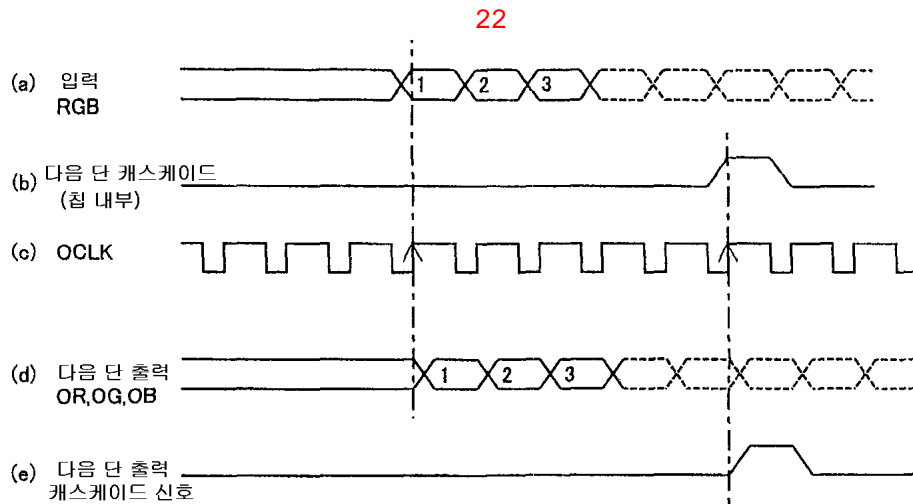
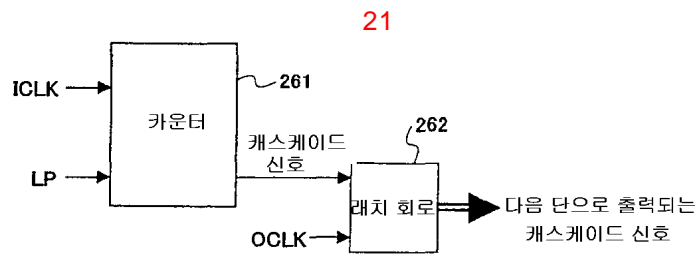
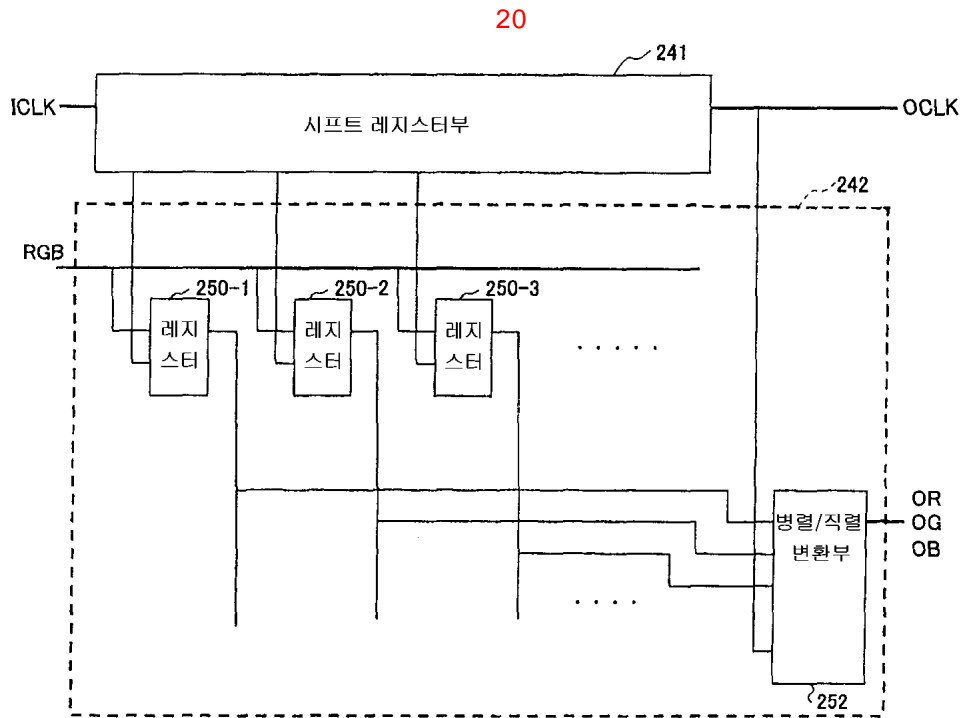


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专利名称(译)	液晶面板驱动电路和液晶显示装置		
公开(公告)号	KR1020030043571A	公开(公告)日	2003-06-02
申请号	KR1020020014907	申请日	2002-03-20
[标]申请(专利权)人(译)	夏普株式会社		
申请(专利权)人(译)	夏普株式会社		
当前申请(专利权)人(译)	夏普株式会社		
[标]发明人	SEKIDO SATOSHI 세키도사토시 KATAGAWA KOICHI 가타가와고이치 HIRAKI KATSUYOSHI 히라키가츠요시 FURUKOSHI YASUTAKE 후루코시아스타케		
发明人	세키도사토시 가타가와고이치 히라키가츠요시 후루코시아스타케		
IPC分类号	G09G3/36 G09G3/20 G02F1/133		
CPC分类号	G09G2320/0223 G09G3/3688		
代理人(译)	金泰HONG SHIN JUNG KUN		
优先权	2001360961 2001-11-27 JP		
其他公开文献	KR100704210B1		
外部链接	Espacenet		

摘要(译)

本发明的目的是提供一种确保足够的数据写入时间的液晶显示装置的驱动电路。根据本发明，液晶面板驱动电路包括多个输出电路，其连接到液晶面板的多条数据总线并输出液体驱动电压。并且液体驱动电压被输出到单位延迟，该单位延迟依次从多条数据总线的头线到输出电路的终点线。

