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(B1)(51) 。 Int. Cl.⁷
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(24)2004 03 24
10-0424426
2004 03 12(21) 10-2001-0027111
(22) 2001 05 18(65)
(43)10-2002-0003275
2002 01 12

(30) 2000-146603 2000 05 18 (JP)

(73) 가 가

가 4 6

가 가
3681

(72) 2003-1

가 460

486

1215-216

579

(74)

:

(54)

가
1

2

2

1

.

1

2

.

1		1			
2	1				
3	2				
4	3		가 50%가	(fi)	가 50% (f
o)가					
5	2				
6	5	DLL			
7	6				
8	6				
9	5		가 50%가	(fi)	가 50% (f
o)가					
10		1			
11	10			1	
12	11		(CLL 2)		
13					
14		1			(Y)
15	10		(22)		
16	10		(25)		
17					
18	10		(51)		
19	10		(51)		
20		FPC			
21		1			
22					
23		2			
24		3			
25		3			
26		3			
27		3	(CL 2)		
28		4	(CL 2)		
29		4	(CL 2)		
30		5			
31	30				
32					
< >					
1 ~ 10 : D 21 ~ 26 :					
31 ~ 32, 235A, 235B, 236A, 236B :					
41, 41 : , 51 :					
52 :					
61, 62, 63, 64, 351 : 71, 72 :					
100 : 110 :					
120 :					
130, 130a, 130b, 130c :					
131 : 132 :					
133 : 134 :					
135 : (1) 136 : (2)					
137, 311, 237A, 237B : 138, 238A, 238B :					
139 : 140 :					
150 : (FPC)					
200 : 210 :					
211 : 212 :					

213 : VCO 214 : m
 200 : DLL 221, 222 : 2
 239 : 310 :
 312, 350 : 320, 322 :
 321, 323 : 324 :
 333 : 331 : (CLL 2)
 SUB 1 : R :
 DEL : HIZ :
 PIX : TFT :
 G : ()
 D, Y : () CST :
 CL : EOL :

()
 STN(Super Twisted Nematic) TFT(Thin Film Transister)
 ()
 ()

(IC) (6-13724)
 (IC) 6-3685
 [, 74 (1999 8), 31 ~ 34]
 32(a)

()
 ()
 CMOS MOS 가 (V
 th) 가 (, High
)가 가 32(b)
 가 가 가

(140)
 (140) (120) (140) (140) (140)
 (140) (140) (140) (LSI)
 (110) 1
 (130) (140) (110) (100) (G) High (FLM) (CL 3)
 1 (100) (G) (TFT)가 1
 2 1 (130) (130) 2 i
 (130) (130) o
 CL 2i (130) (130)
 (130) (200) CL 2o (CL 2i) 가 50
 0% (, High Low)(CLL 2)
 (133) (1)(135) (132)
 (133) (132) (131) (134) (CLL 2)
 (2)(136) (131) (137) (CL 1) (1)(135)
 (137) (139) 64 (2)(136)
 (138) (137) (138) (D)(Yi)
 (100) (137) (138)
 (139) (V0 ~ V4) (V5 ~ V9)
 64 64
 3 2 (200) (200) (, , PLL .)
 3 PLL (210) (211) (212) (,
 , VCO)(213) m (214) (214) (fo)
 PLL (210) (210) (fi) m (fo) (fo)
 (INC) (210) (fi) (fo) (fo)
 (DEC) (211) (INC) (DEC)
 (212) (DEC) (INC) (INC) (DEC)
 (Emitter) (Multivibrator) VCO (213)
 (fi) (fm) (fo) 가
 4 3 PLL 가 50%가 (fi) 가 50
 % (fo)가 (fi) 2 (fm) m (214)가
 4 VCO (213)가 (fi) 2 (fo)가 VCO
 4 가 50%가 (fi) (fo)가 VCO
 (213) (fi) 2 (fm)가

(fm) 2 (fo)가 (fo) (fm)
 () High Low Low High 가 (fm)
 (fo) 가 50% 가 50% (fm)가 3 PLL
 , VCO (213) (214) (200) 가 50% (fo)
 m 2 (200) () DLL .
 5 5 (200) PLL 가 가 가
 DLL 가 가 DLL (220) 2 (221, 222) (EOR) (310)
 5 6 5 DLL (220) 7 6
 , 8 6 DLL (220) (312) (IN) OUT 2(DW
 N) High , OUT 3(UP) LOW (311) (312) +1 (310)
 (HIZ) (DEL) 가 (310)
 가 (IN) OUT 2(DWN) Low , OUT 3(UP) High
 (312) (311) (312) -1 (310)
) (HIZ) (DEL)
 , (IN) OUT 2(DWN), OUT 3(UP) Low
 (312) (fi) 180 ° (ft)가
 , 9 OUT 2 5 50%가 (fi) 가 50%
 (fo)가 DLL (220) 50%가 (fi) 180 °
 9 (ft)가 (fi) 2 221 180 ° (ft) 2 222 2
 가 (fi) 가 2 High Low Low High 가
 (fi)) ()) 2 가 50% (EOR)
 2 (221, 222) 2 (fo)가
 (fi) 3 (200)
 , 5 (200)
 가 (200) (133) (134) 가 10
 2 (133) (134) (134)
 . 10 () AA) (133) ()
 BB) (134) (133) (21, 22, 23) (31)
 10 (134) (24, 25, 26) (32, 33) (41, 42) (51)
 , 10 (130)
 11 10 1 12 11
 (CLL 2) (21, 22, 24, 25)
 , 11 (CLL 2) (D1) D
 12 () (1)

(CLL 2) (D2) (3)
(B) (D1) (2)
(A) .
가 .
(A, B) 2
(130) (CLL 2)
(CLL 2) (D1) (4)
(D2) (5)
(4) (5) () (41)
(74 (1999 8)
31 ~ 34)
가 가 2 가 가
(CL 2) 가
1
가 .
10 (130)
13
(130)
13 (130) 36 (6 ×4(R, G, B
)×2=36) (130)
(130)
13
가 10 가 (21, 22)
1 (110) (13) (130)
3 (×6 = 18) 가 (9 가 High 9 가 Low 가
3 가 18 가
(110) (2
POL) 18
(130) (21) 3 ((×6 = 18) 가
9 가 High 9 가 Low 3 가
(2) 1 (2 POL)가 [0]
(2 POL)가 [1]

[1]

		A
0	0	0
0	1	1
1	0	1
1	1	0

(100)

(가, n)

14 (130) (Yi, Yi + 1)/

14 235A, 235B 2 (1)(135) 236A, 236B

2 (2)(136)

, 237A, 237B 2 (137) 237A

237B

238A, 238B 2 (138) , 237A

237B

(239)

(Yi) (Yi+1) 가

(239) (Yi) (238A) (Yi + 1)

(238B) 가 (Yi) (239) (Yi) (Yi + 1)

(Yi + 1) (238A) (D) (238B)

(235B) 10 (Yi) (235) 10 (E) (D) (Yi)

(D) (Yi)

(E) (Yi)

(22) 가 10 (D) (E)

(22) (61, 62) (61) (2 M) [1]

[0] (3) (2)

(D) (62) (2 M) [0] [1] (E)

2) (3) (M) (61) (M)

(D) 가 (3)((2)) (3))

(E) (2)(

가 (22) 15

(24) (21) (D, E) (21)

(24) 2 (21)

(25) (M) 2 (D, E) (41)

(4) (5)

16 (25) 16 (25) (M)가 [0] (D) (E)

(D) (E) (M)가 [1] (E)

(24) (21) 가

(6) ~ (8) (CLL 2)

(M) 2 (D, E)

(23) (63, 64)

(7), (8) (J, K)

(J, K) 가 (24) 2 (D, E)

(10) (CLL 2) (26) (J, K) (42) (9) (9) (10)

(51)

17 (CLL 2)

12 가 (41)

(CLL 2) (130) (1 ~ 3) 가

(51) (CLL 2)

18 17 (51) (n) (C)

18 (CLL 2) n 17 (90°)가

LL 2) 19 17 (51) OUT 1 90°

19 (ft) 6 8

20 (130) FPC (150) (130) FPC (150) (320) (SUB 1)

20 (321) (SUB 1) (322) (SUB 1) (323) (41)

(130) (324) 21 (51) (332)

(331) (331) (332) (333)

21 (130) 22 (323)

(R) (321) (322) (323)

() (130) (324) (331) (332)

22 (331) 가 (331) 가

(41) 가 (332) (R) 가

(331) (CLL 2) (332)

(CLL 2) 가 (331) 가

[2] 23 2 (200) (134) 1 (51)

(200) (130) (130) (CLL 2)

(CL 2) (200) 1 (130) (130) (200)

(CLL 2)가 가

[3] 24 3 (200) 25

(130) 가 가

() (52) 가 가

(, CMOS High)가 MOS (Vth)가
)
가 가 (CL 2) 가 (130) (CL 2) (130) 가 (CL 2) (130) 가
가 (130) (CL 2) 가 가 (CL 2) 가 (CLL 2)
,
(CL 2)

(CL 2) 74 (1999 9 8) 31 ~ 34) ,

가 가 가 가 가 가 가
(CL 2)

가 가 가 가 가 가 가
(CL 2)
(CL 2)

正轉) 26 (130) (9
0 °) 26 (130) (CL 2)
26 (130) (130) (1) 90 °
(130) (130) (1)

[4] 27 (CL 2)

1 (CL 2) L (CL 2) H
2 가 가
, 130a, 130c) 가 (27 130c) 27
가

28 4 (CL 2) (130a, 130b, 130c) (CL 2) (CL (T)) (CL 2)
(CL 2(B)) (CL 2(T)) (CL 2(B))
가 가
, 28 (CL 2(T)) (CL 2(B)) 3

[illegible]

1.

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 ,
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 가
 가 1 1 2 ;
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 1 2 2 1
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2.

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3.

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 가
 , 2 , 2 1 1
 , 2 가 , ,
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6.

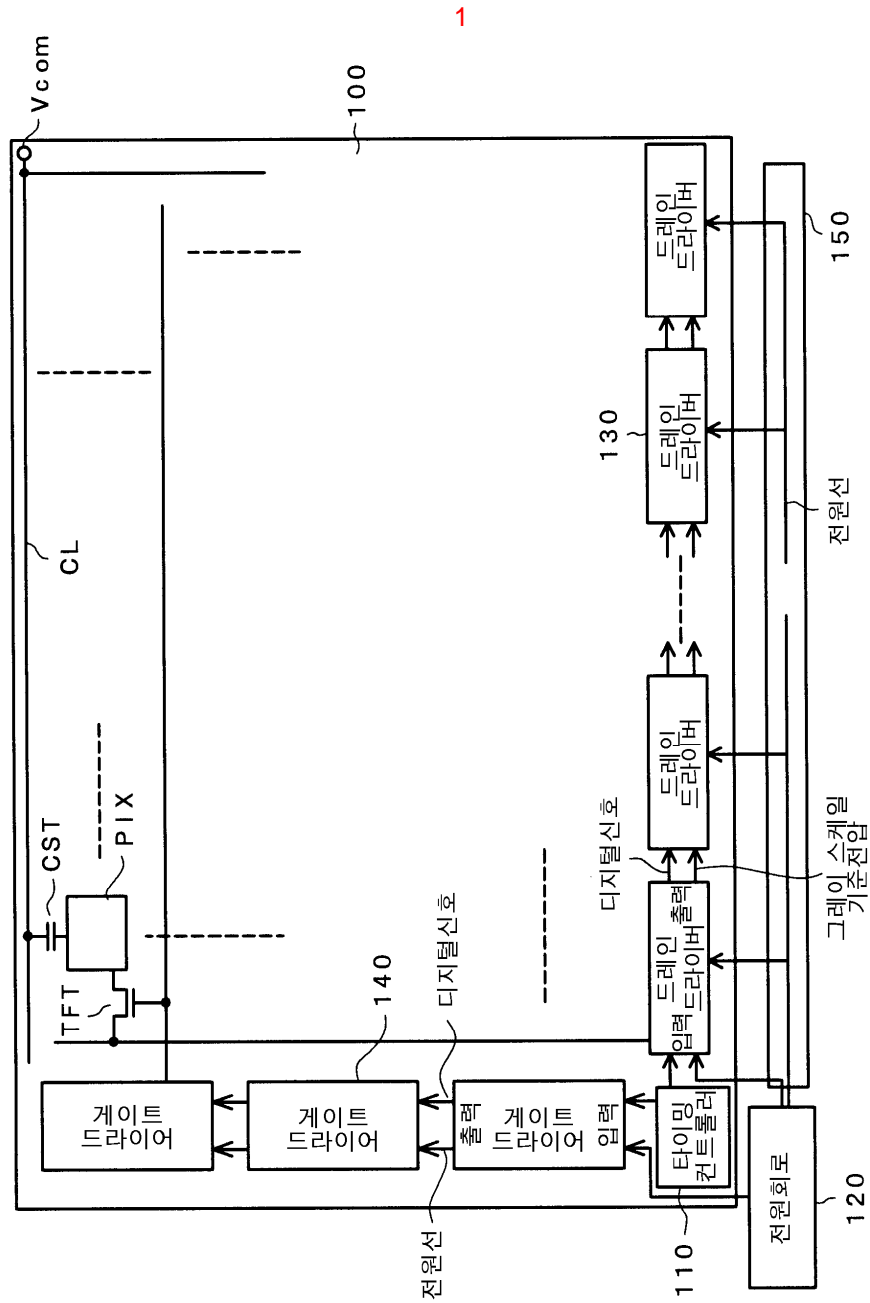
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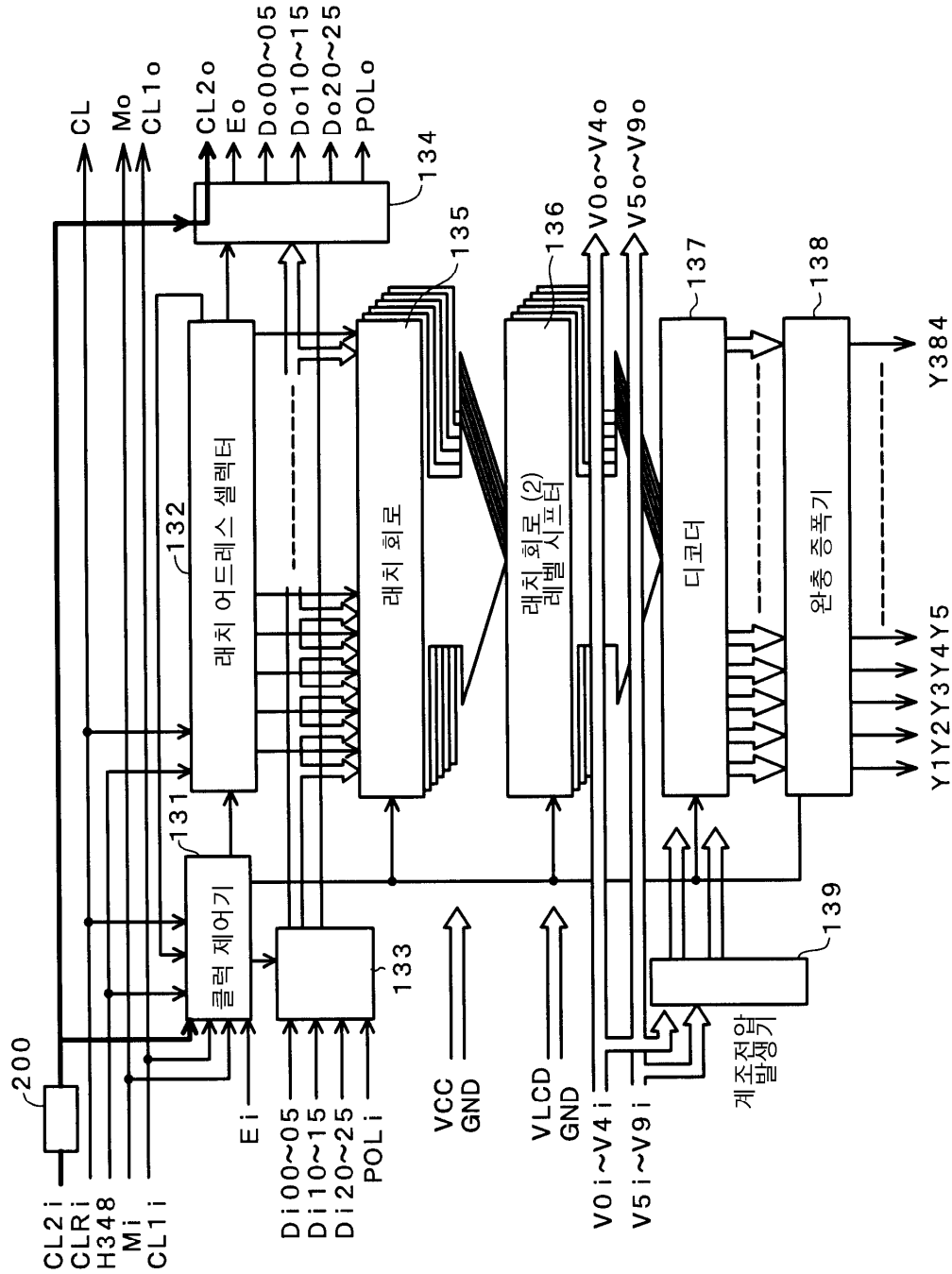
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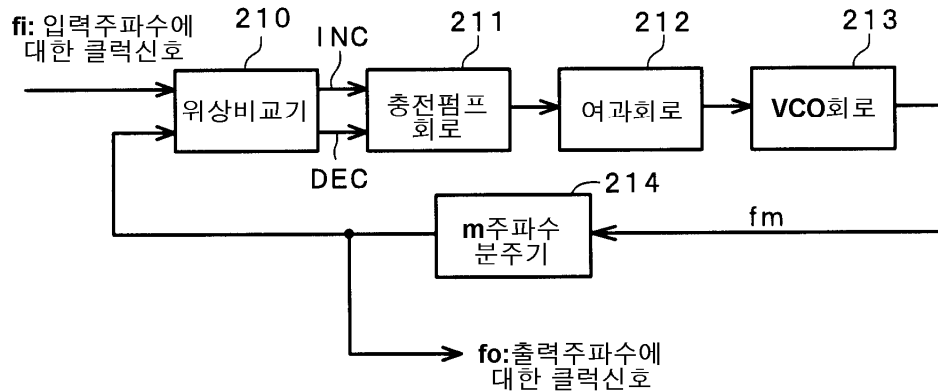
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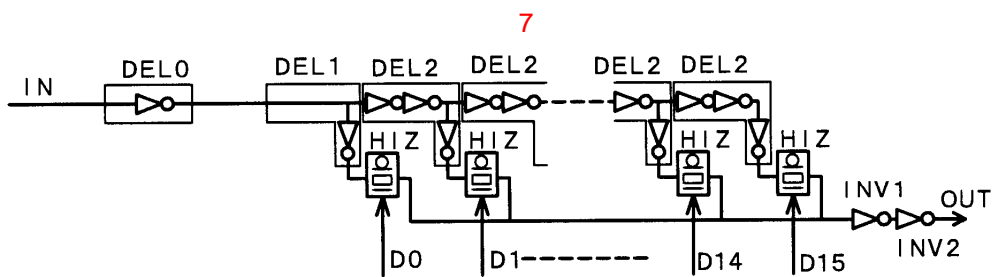
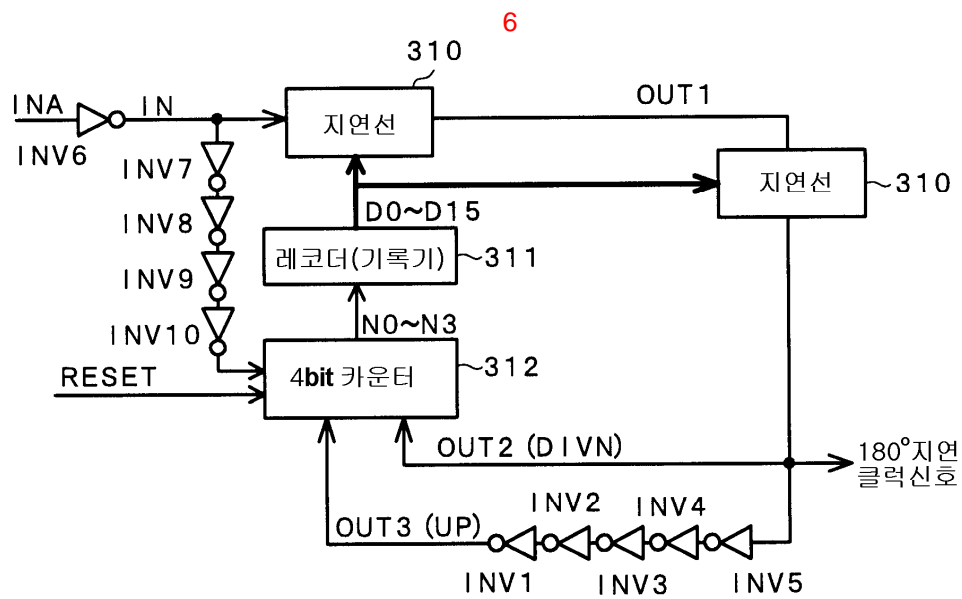
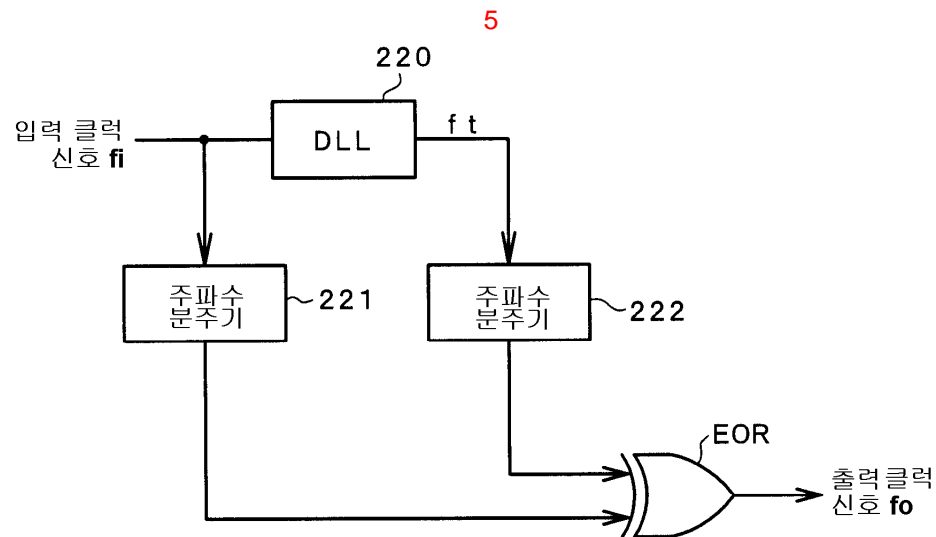
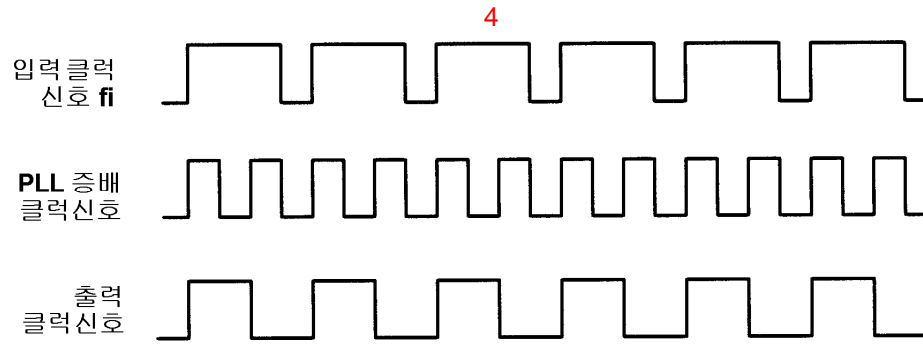


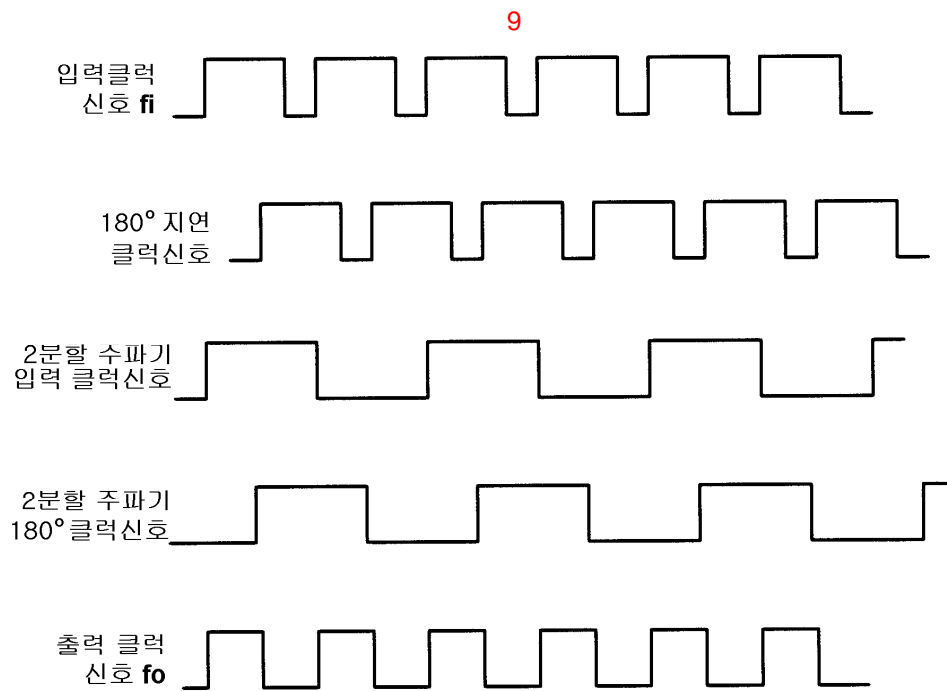
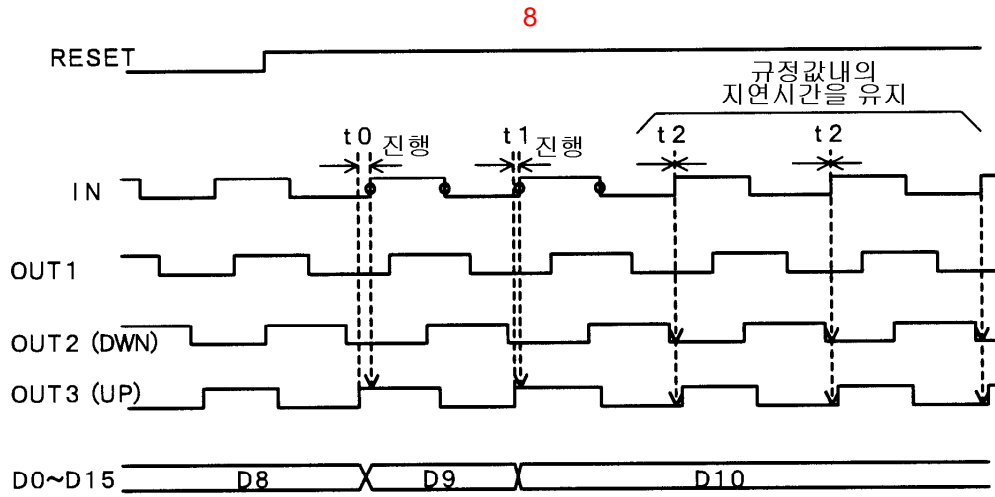
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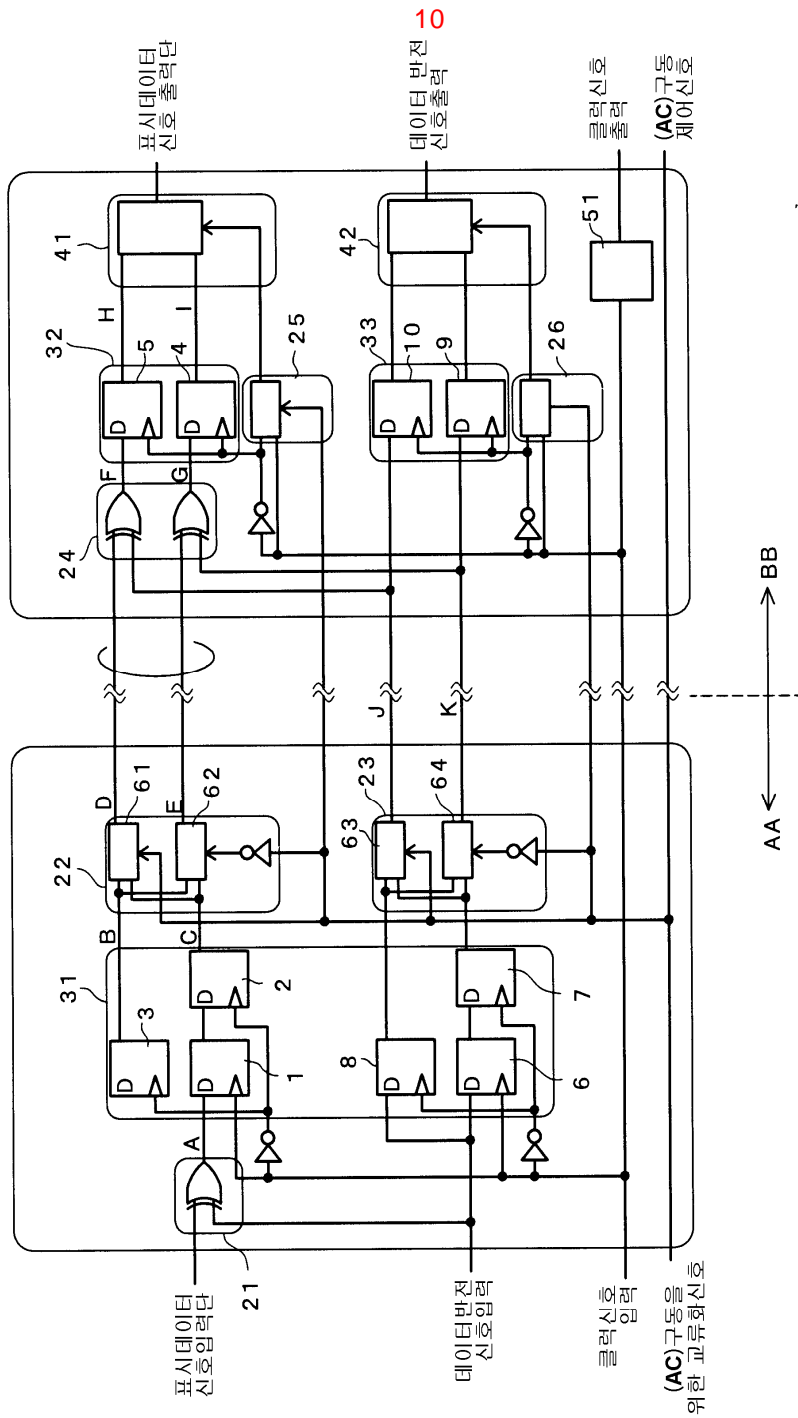


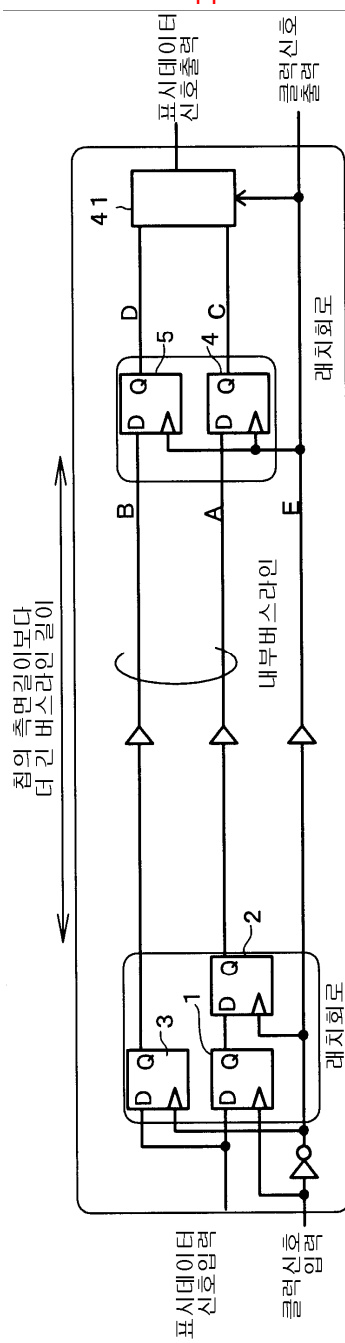
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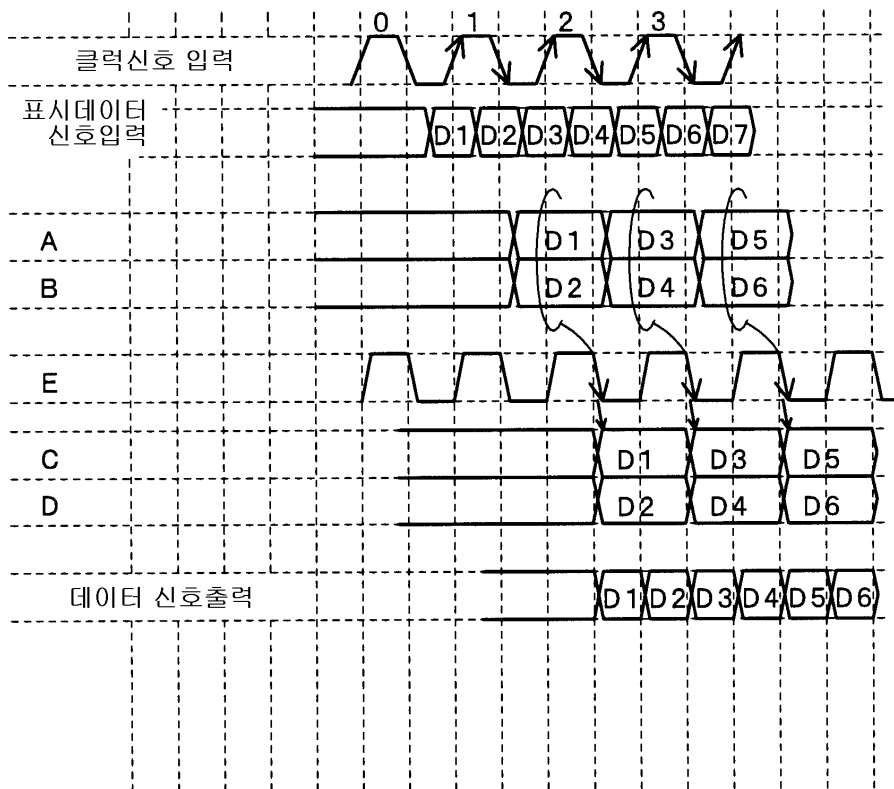


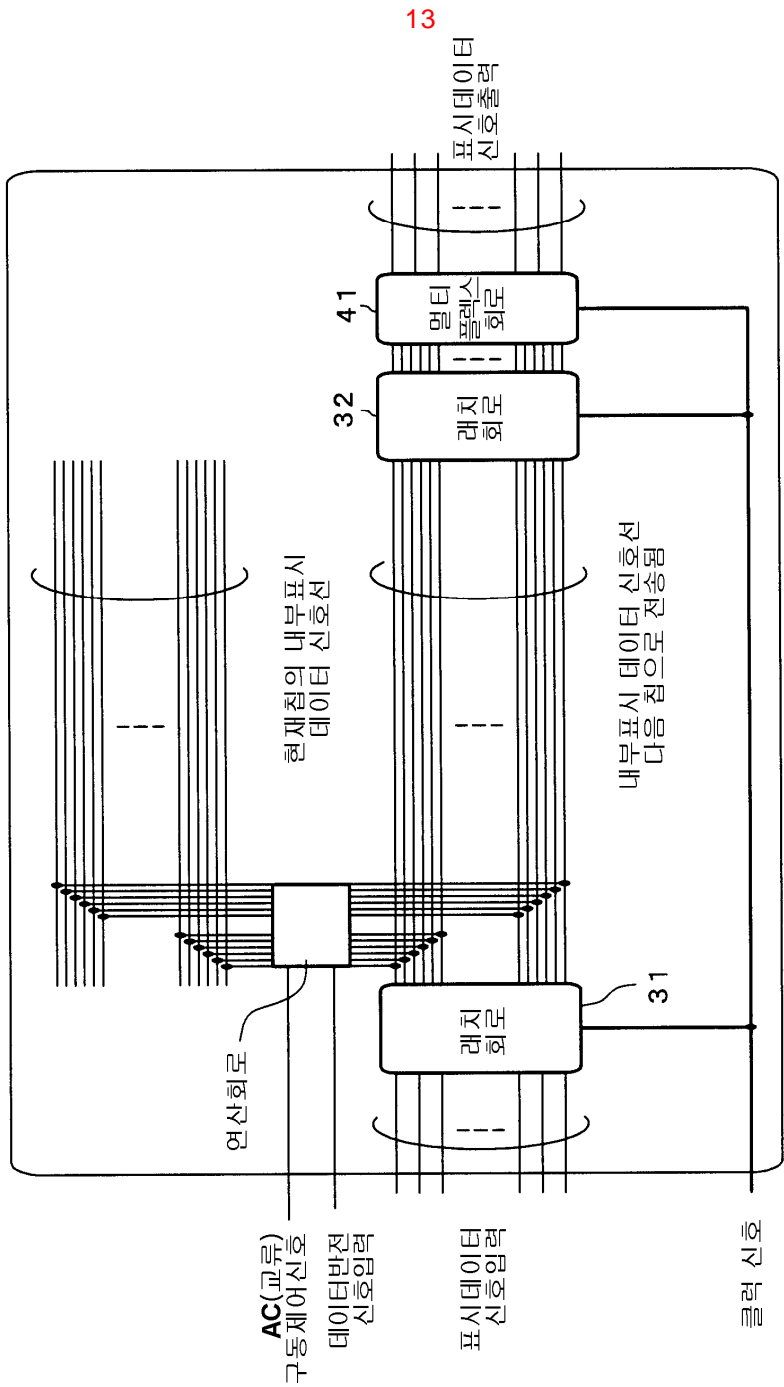


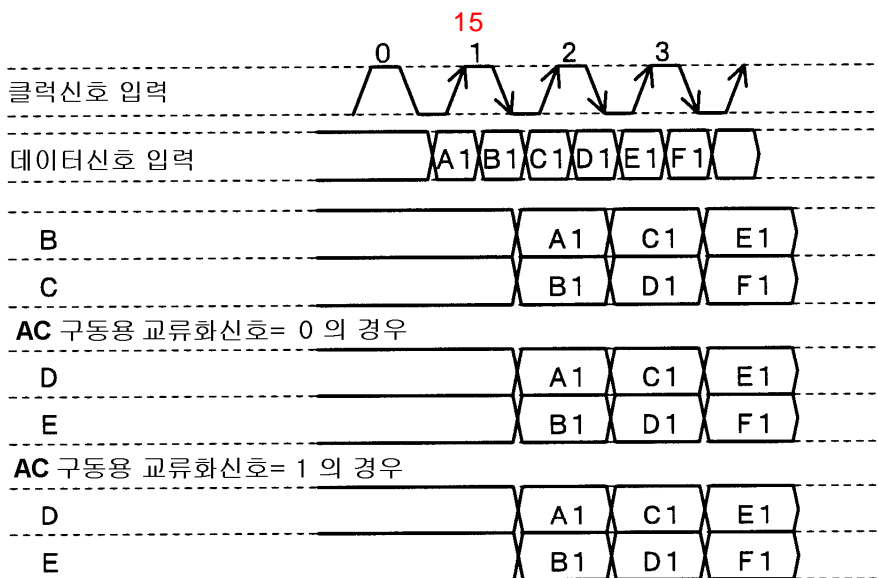
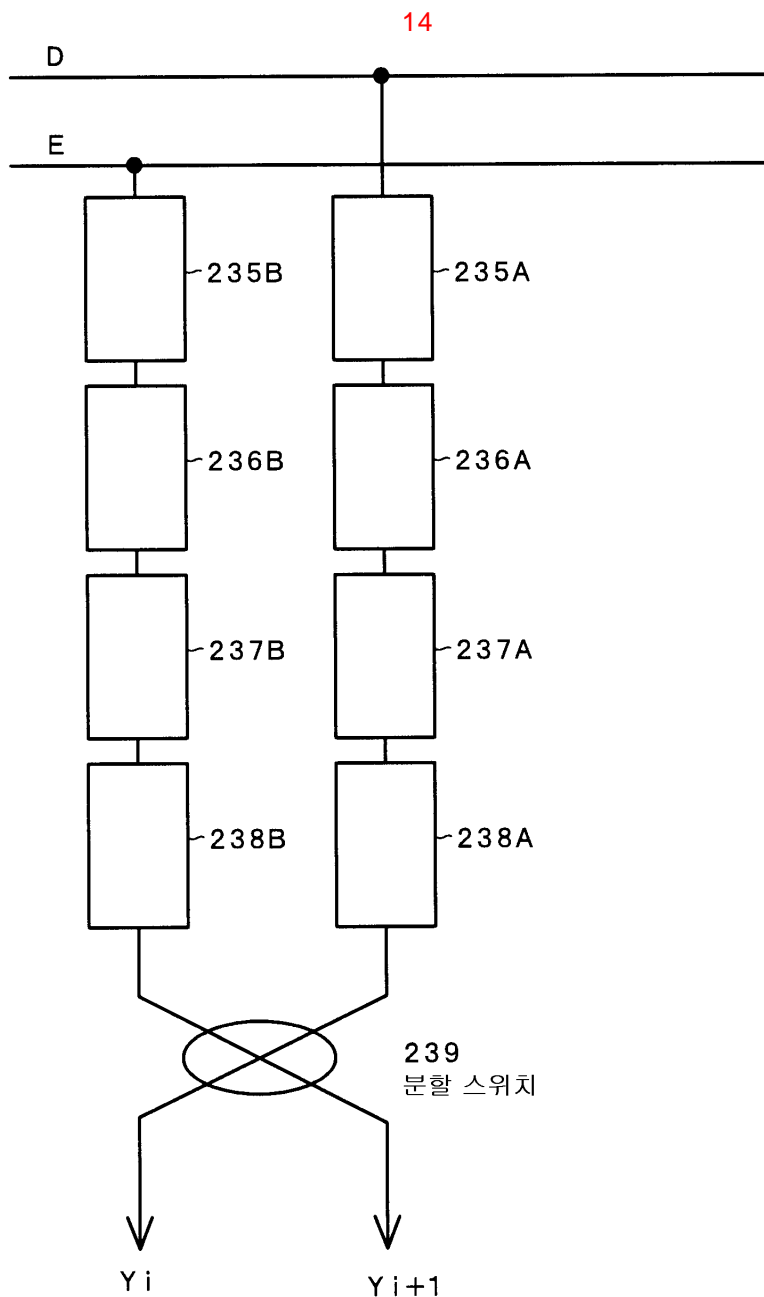


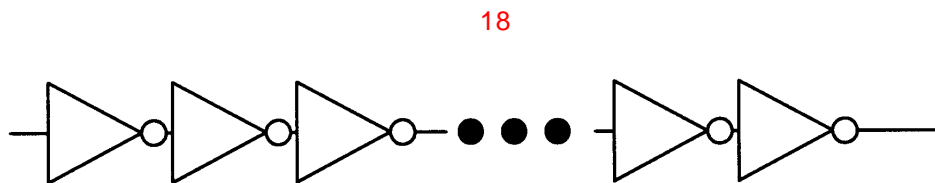
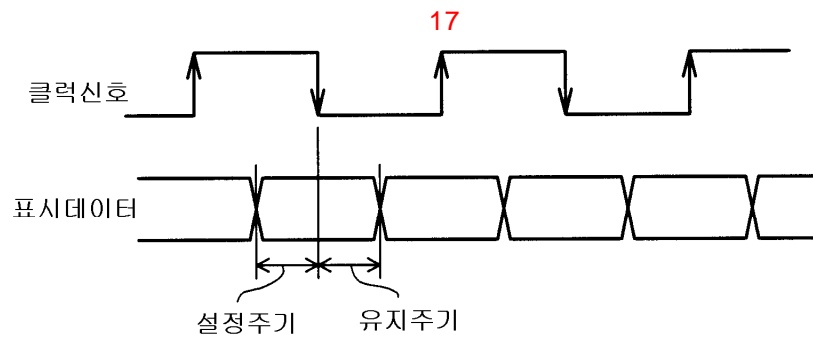
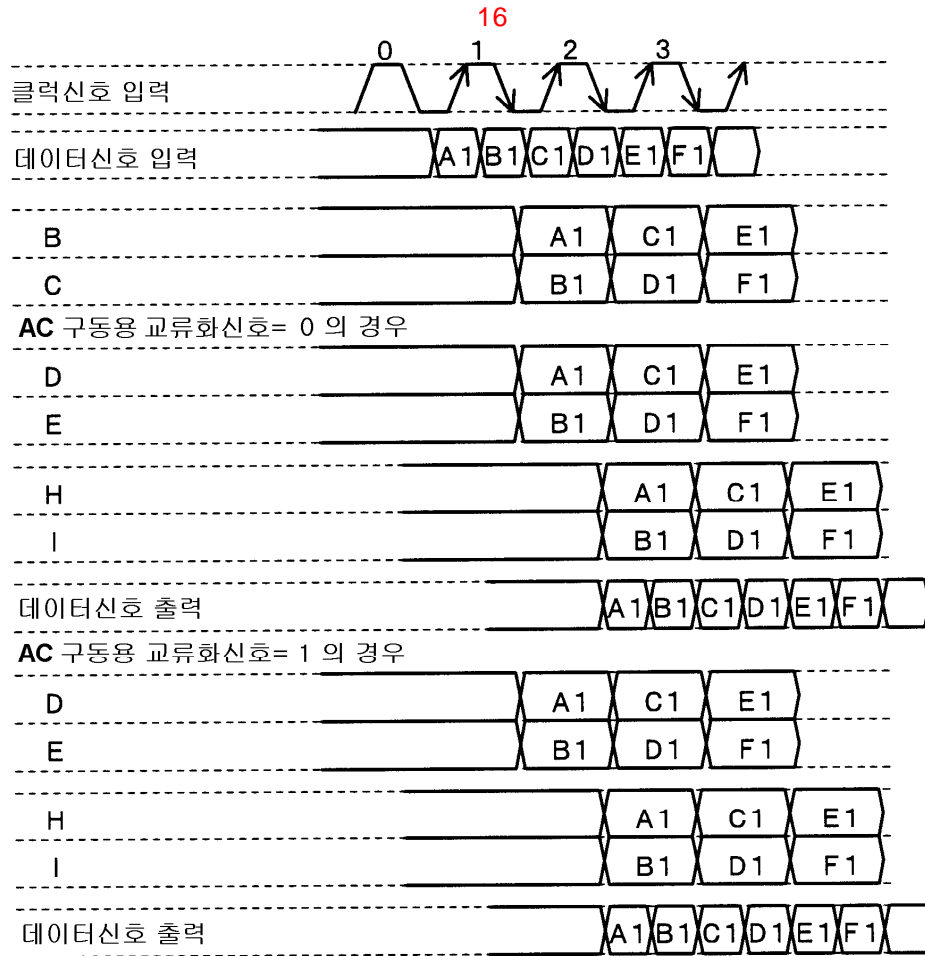


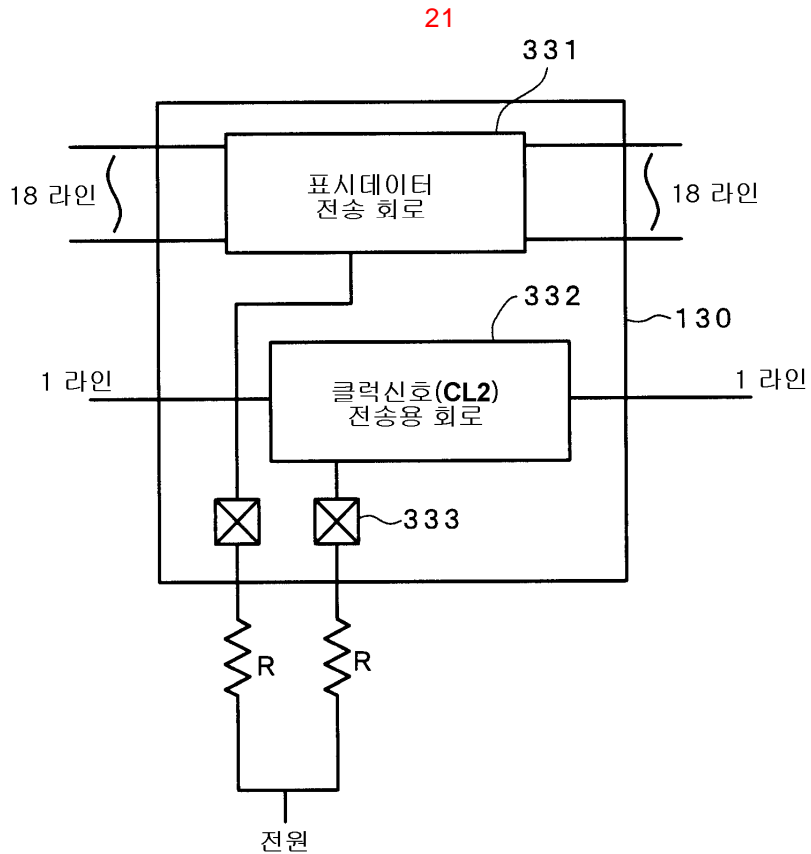
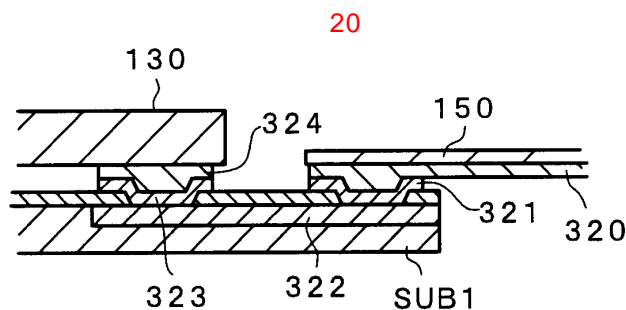
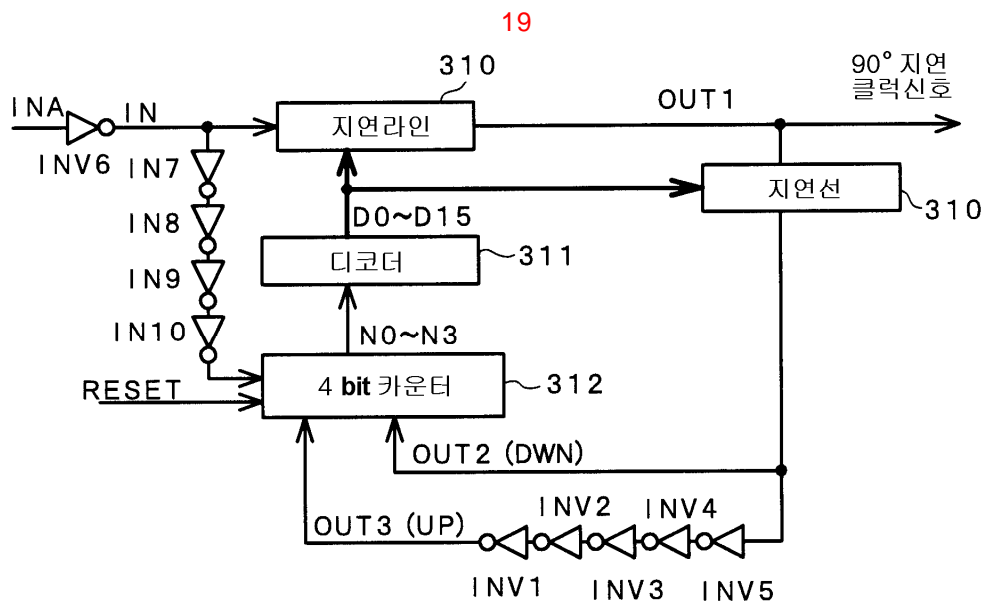
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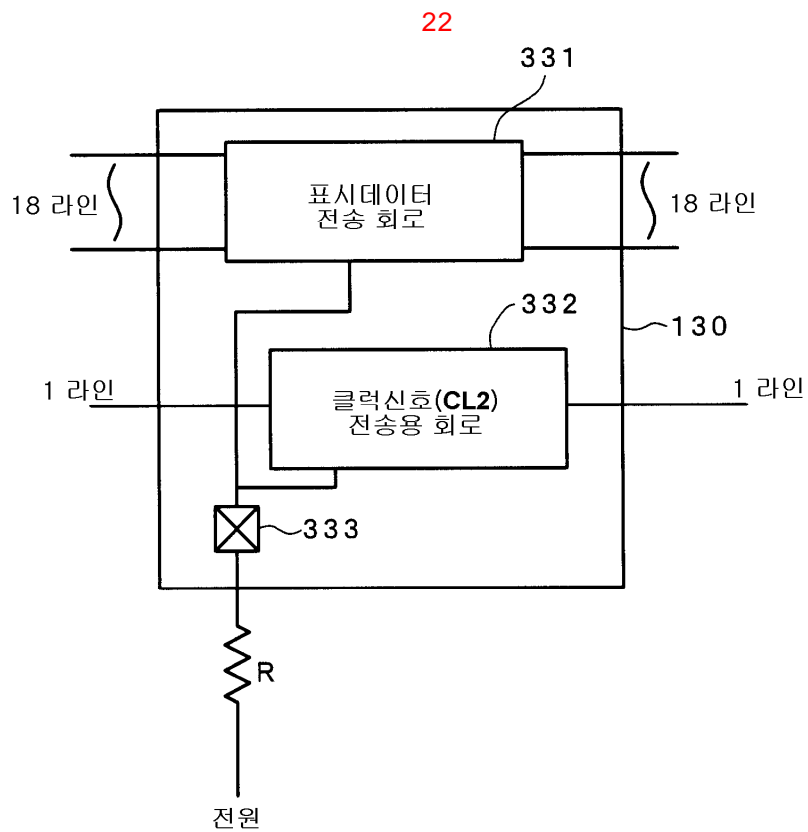




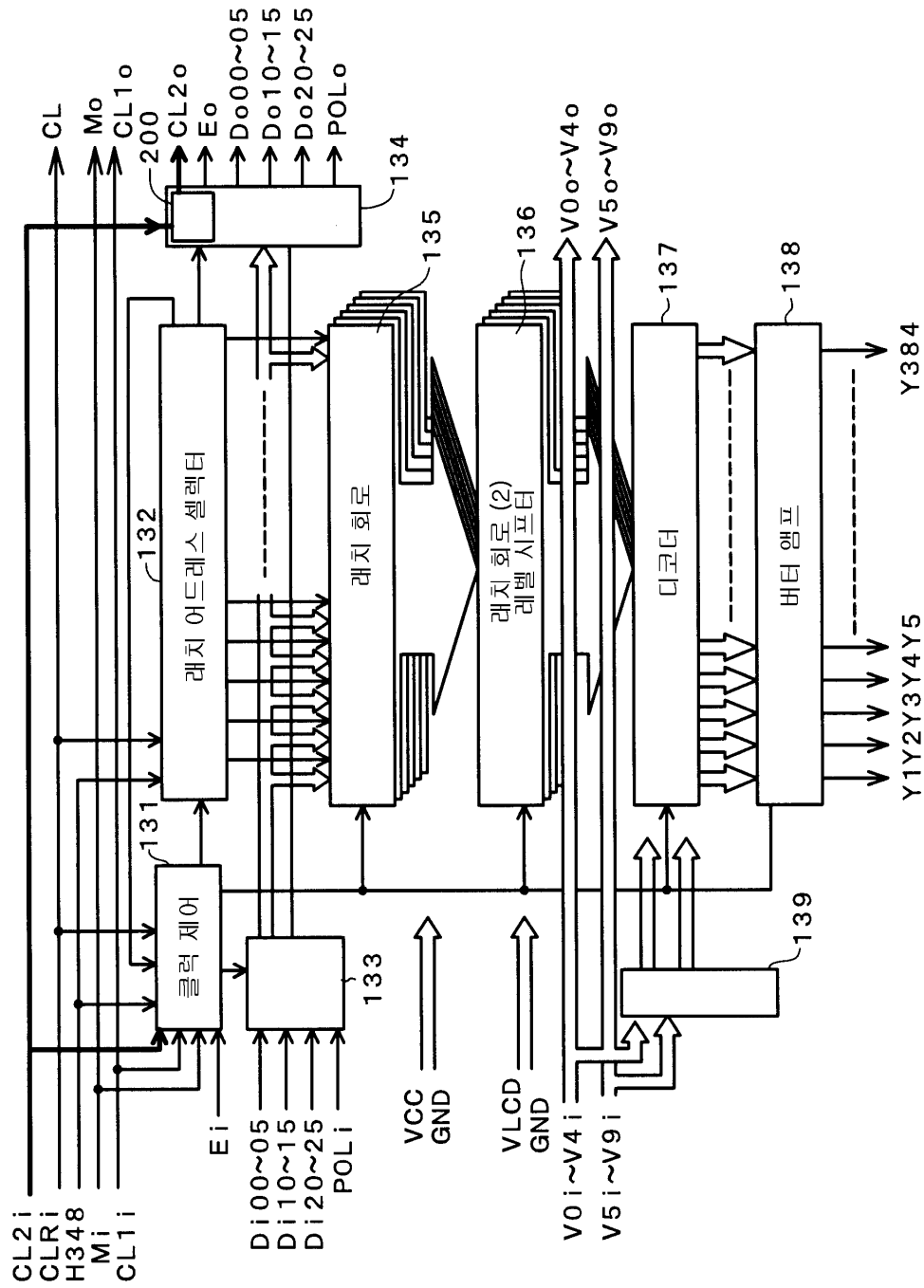




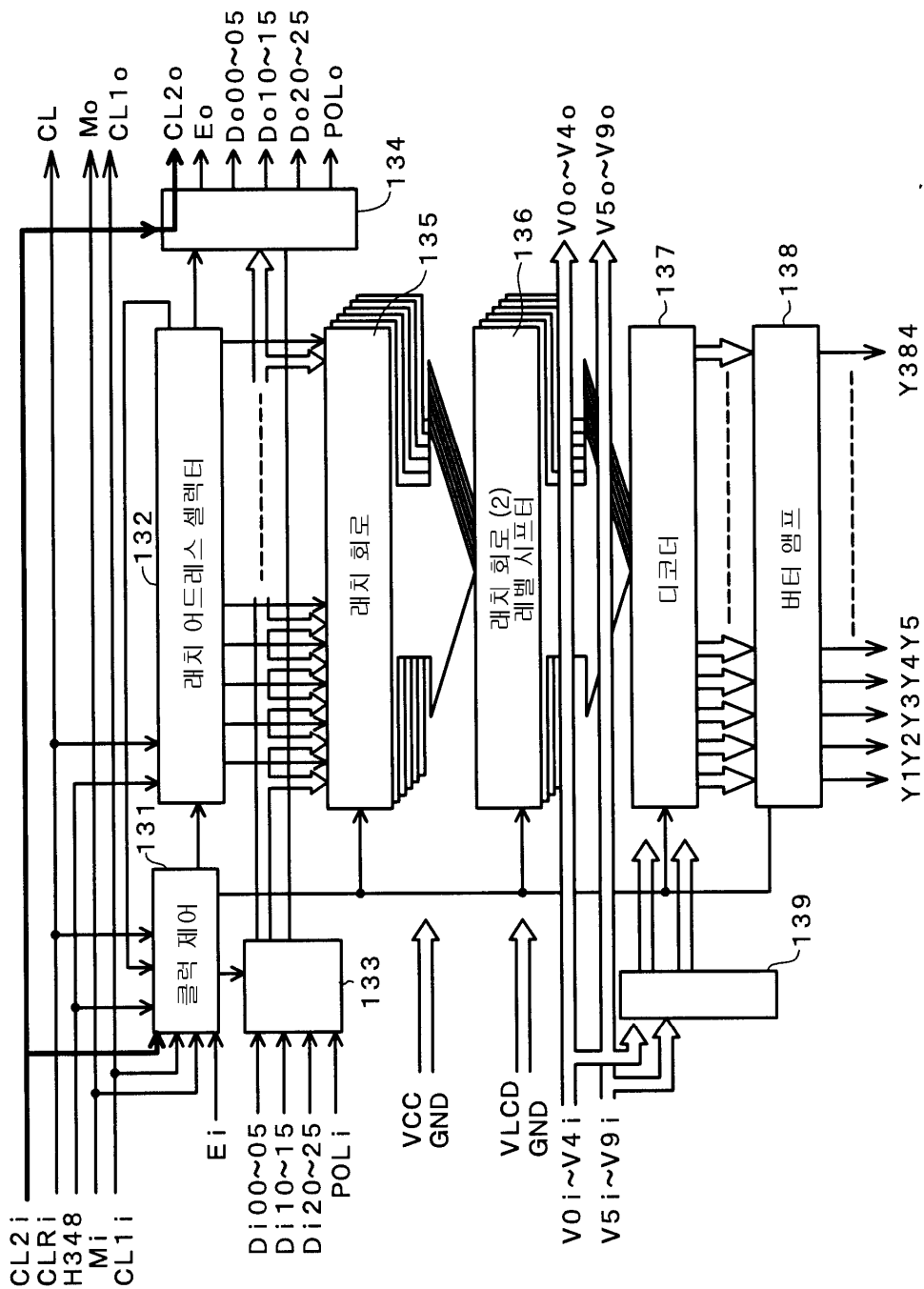




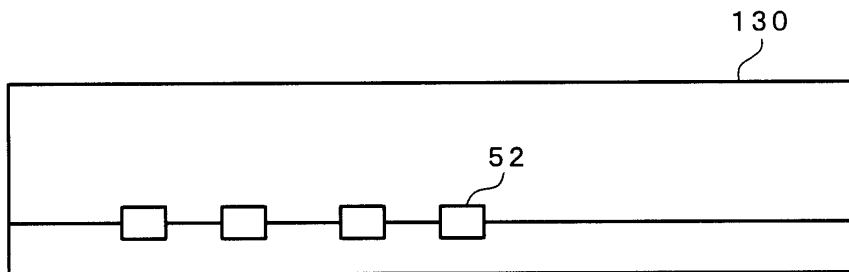
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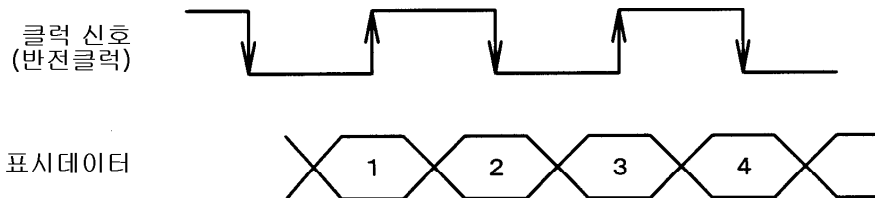
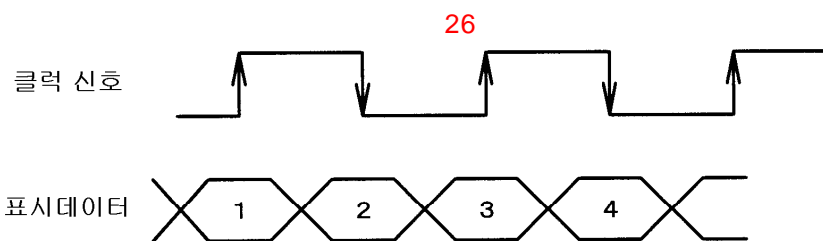


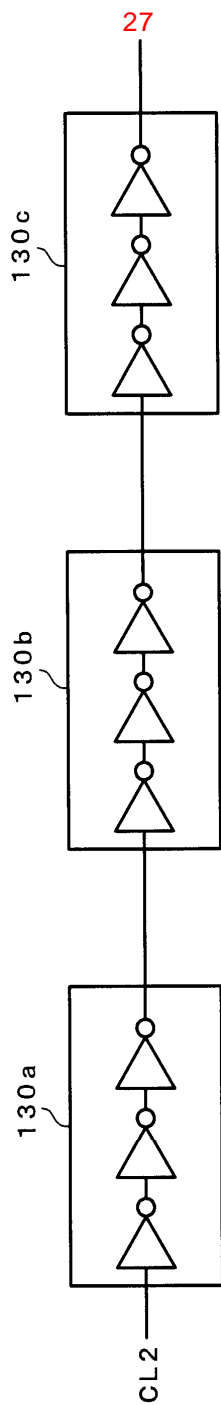
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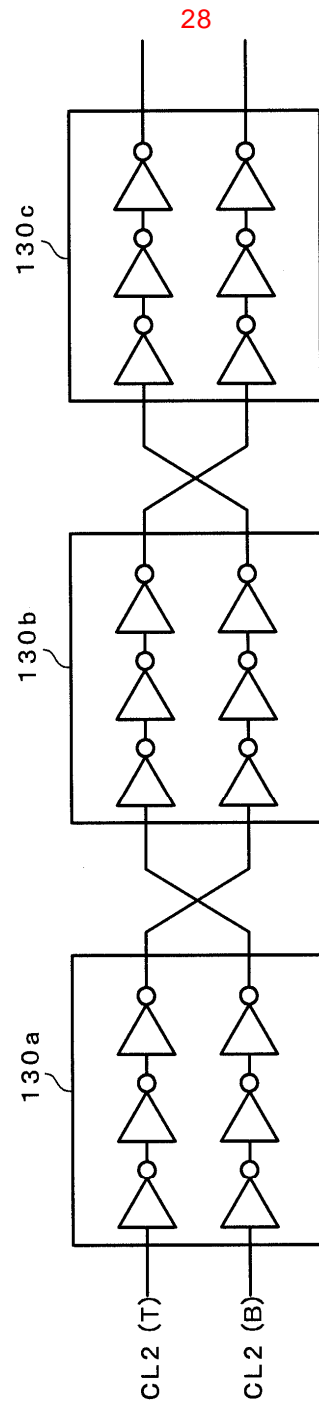


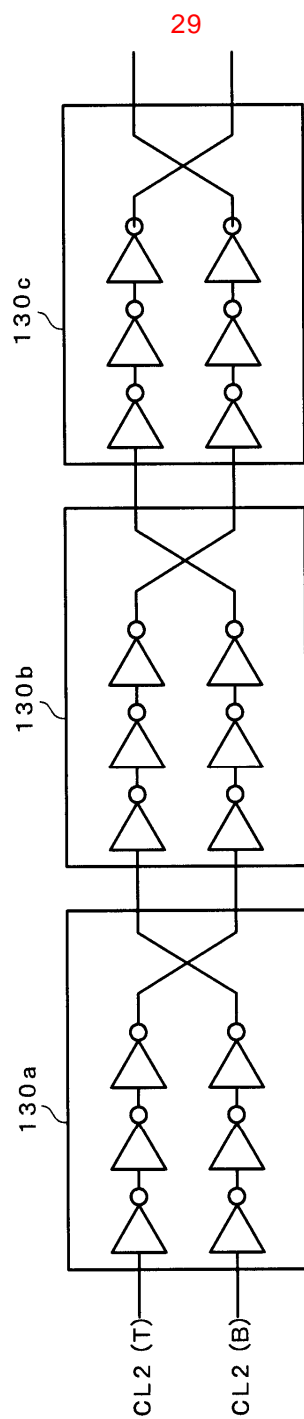
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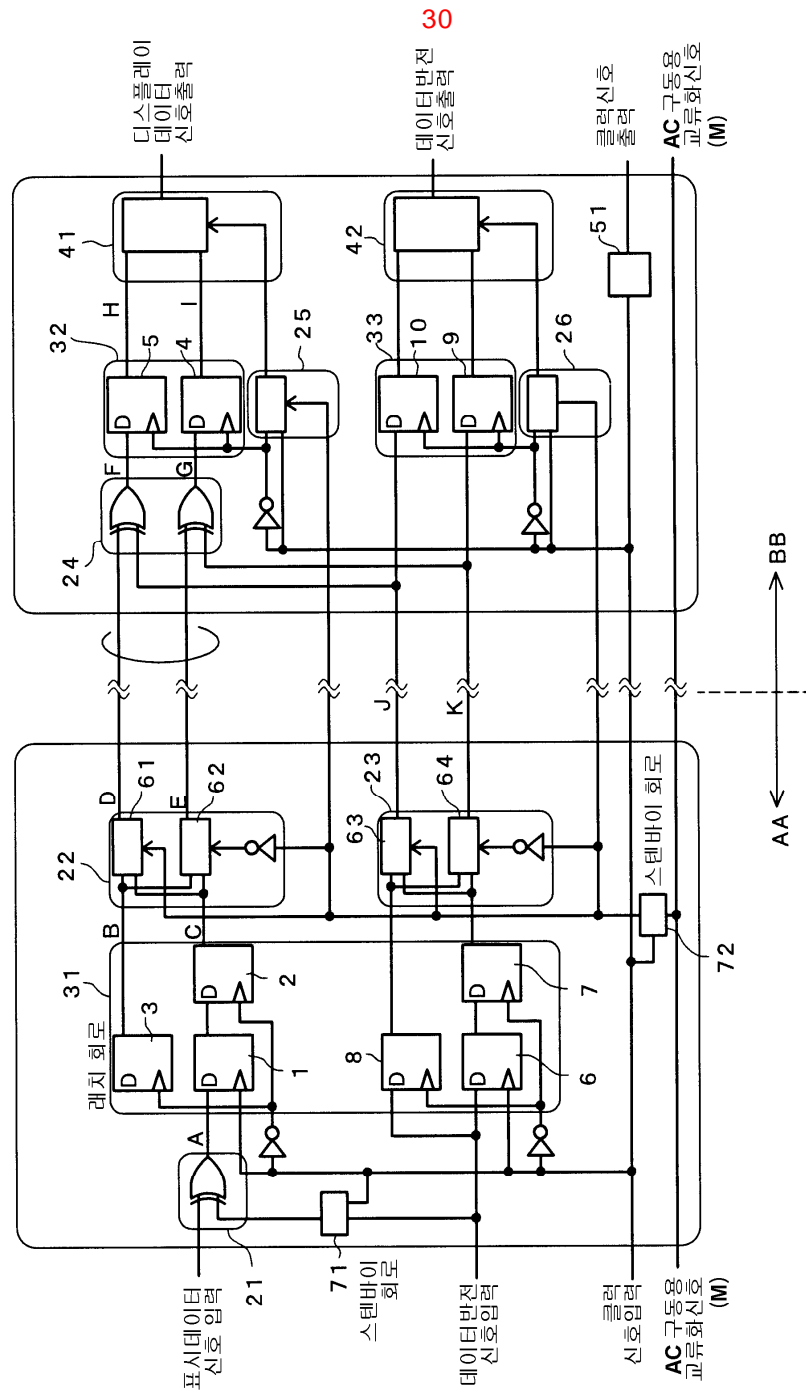


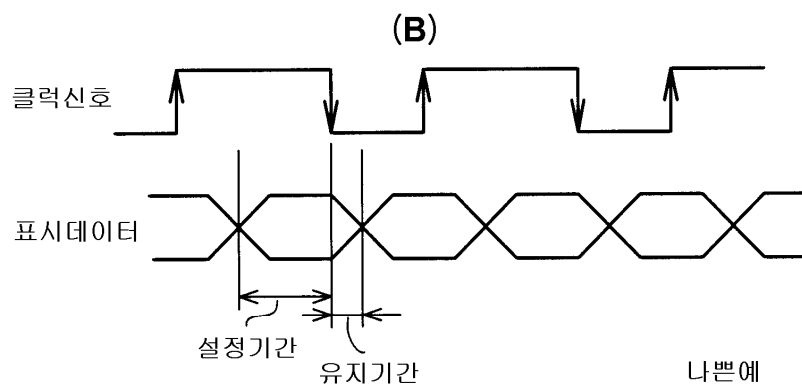
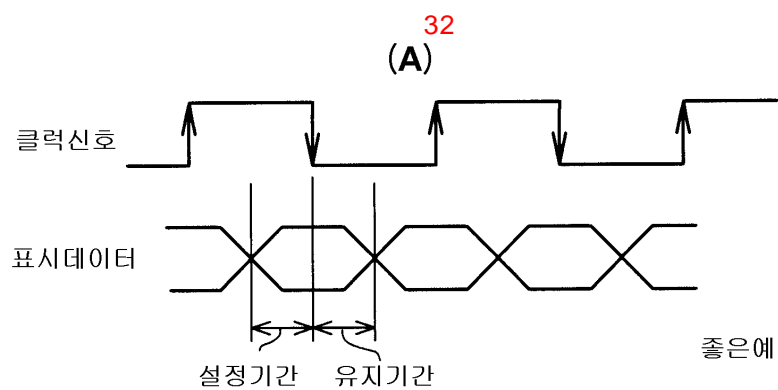
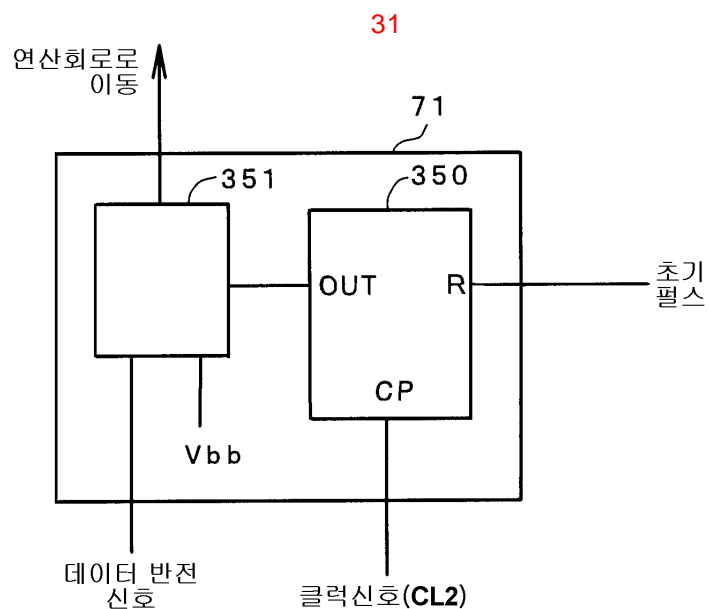












专利名称(译)	液晶显示器		
公开(公告)号	KR100424426B1	公开(公告)日	2004-03-24
申请号	KR1020010027111	申请日	2001-05-18
[标]申请(专利权)人(译)	日立HITACHI SEISAKUSHODBA 日立器件工程株式会社		
申请(专利权)人(译)	株式会社日立制作所 히타치디바이스엔지니어링가부시키키가이샤		
当前申请(专利权)人(译)	株式会社日立制作所 히타치디바이스엔지니어링가부시키키가이샤		
[标]发明人	KUJIOKA TAKAHIRO 쿠지오탁타카히로 ITOU SHIGERU 이토우시게루 GOTOU MITSURU 고토우미츠클루 NAKAYASU YUZOU 나카야스요우조우 SAITOU YOSHIYUKI 사이토우요시유키		
发明人	쿠지오탁타카히로 이토우시게루 고토우미츠클루 나카야스요우조우 사이토우요시유키		
IPC分类号	G09G3/20 G09G5/18 H04N5/66 G02F1/133 G09G3/36		
CPC分类号	G09G5/18 G09G3/2011 G09G3/3688 G09G2370/08		
代理人(译)	李钟IL		
优先权	2000146603 2000-05-18 JP		
其他公开文献	KR1020020003275A		
外部链接	Espacenet		

摘要(译)

液晶显示装置技术领域本发明涉及一种液晶显示装置，该液晶显示装置能够补偿输入到液晶驱动电路的时钟信号的冲击比的变化，并且通常输入视频信号以提高显示质量，和。液晶驱动电路在内部时钟信号从第一电平到第二电平的切换定时或在从第二电平切换到第一电平的定时，将输入到液晶驱动电路的视频信号输入到总线，并且内部时钟信号是时钟信号，具有通过时钟补偿电路输入到液晶驱动电路的外部时钟信号的第一电平周期和第二电平周期，一。 11

