

(19) (KR)
(12) (A)

(51) 。 Int. Cl. 7
H04N 5/45

(11)
(43)

2002 - 0000531
2002 01 05

(21) 10 - 2001 - 0036034
(22) 2001 06 23

(30) 09/603,173 2000 06 23 (US)

(71) . . .

92648 46

(72) 46161 1000 860

46268 4509

(74)

:

(54)

1 (Ymain) 2 (Ypip) 가

1 2 (Ymain, Ypip) (301) , 1,
2 (Ymain, Ypip) (301)

2

1a PIP(Picture In Picture)

1b POP(Picture Out Picture), (side by side)

2

3a

3b

4

5 4

6 SVM

< >

100 :

150 :

500 :

600 :

(picture) (sharpness) (peaking)

(transversal) 가 가

NTSC, ATSC(Advanced Televisi

on Sysem Committee)

NTSC

가
가
re Out Picture) . POP
가
(OSD)가
, OSD

PIP(Picture In Picture)
(implicion)

POP(Pictu

NTSC ATSC 가
OSD

가
PIP POP PIP POP
IP POP 가 P

1 2 1 2 가

1a 가, 16 : 9 PIP 2
PIP (holl) . PIP(Picture In Picture)
(PIP/POP FSW) 1a 1a
(Vpos)

PIP 가 (speed up) /
 가 PIP 80 % , PIP 1/5
 가 25 MHz ATSC 5 125 MHz PIP
 (viewing distance),
 PIP

sub - sample) , PIP (decimate) (
 PIP , PIP
 가 ,
 가 PIP

1b POP , 가 가
 2 가 ,
 2 가
 POP 1/4 , 1b
 16 : 9 8 : 9
 가

1a 1b , (PIP/POP
)
 가

2
VHS 2 가 가 , 5 ATSC, NTSC, 2 , PIP, POP (SVGC), DVD

2 , (100) 가 가
VCR, DVD, , (100)
NTSC ATSC , POP
, PIP, PIP / (100)

P (150) (100) (150) PIP/PO
OSD(On Screen Display) (OSD FSW)

(100) (200) (Ymain, Ypip) PIP POP PIP
, (300) PIP POP Y

PIP POP (301) OSD (400) PIP OSD
, OSD , OSD 가 OSD
, OSD (300) (Ctrl1, Ctrl2) OSD (150) 가 OSD

(500) (401) 가 가 (500)
, 가 가
CRT (neck) SVM

가
, SVM
SVM
(Y") , OSD SVM

SVM (Y') , 2 SVM PIP OSD 가 (500) SVM
 SVM , SVM SVM PIP SVM PIP SVM SVM PIP SVM
 PIP 6 dB SVM SVM PIP 6 dB

3a

3b

3b

가 , 1 HDTV ATSC 30 MHz
 NTSC , ATSC 가 ,
 2 NTSC (subjectly) ,
 가 PIP , 3 NTSC ATSC
 PIP 4 PIP
 NTSC

3b
가

(leading)

(trailing)

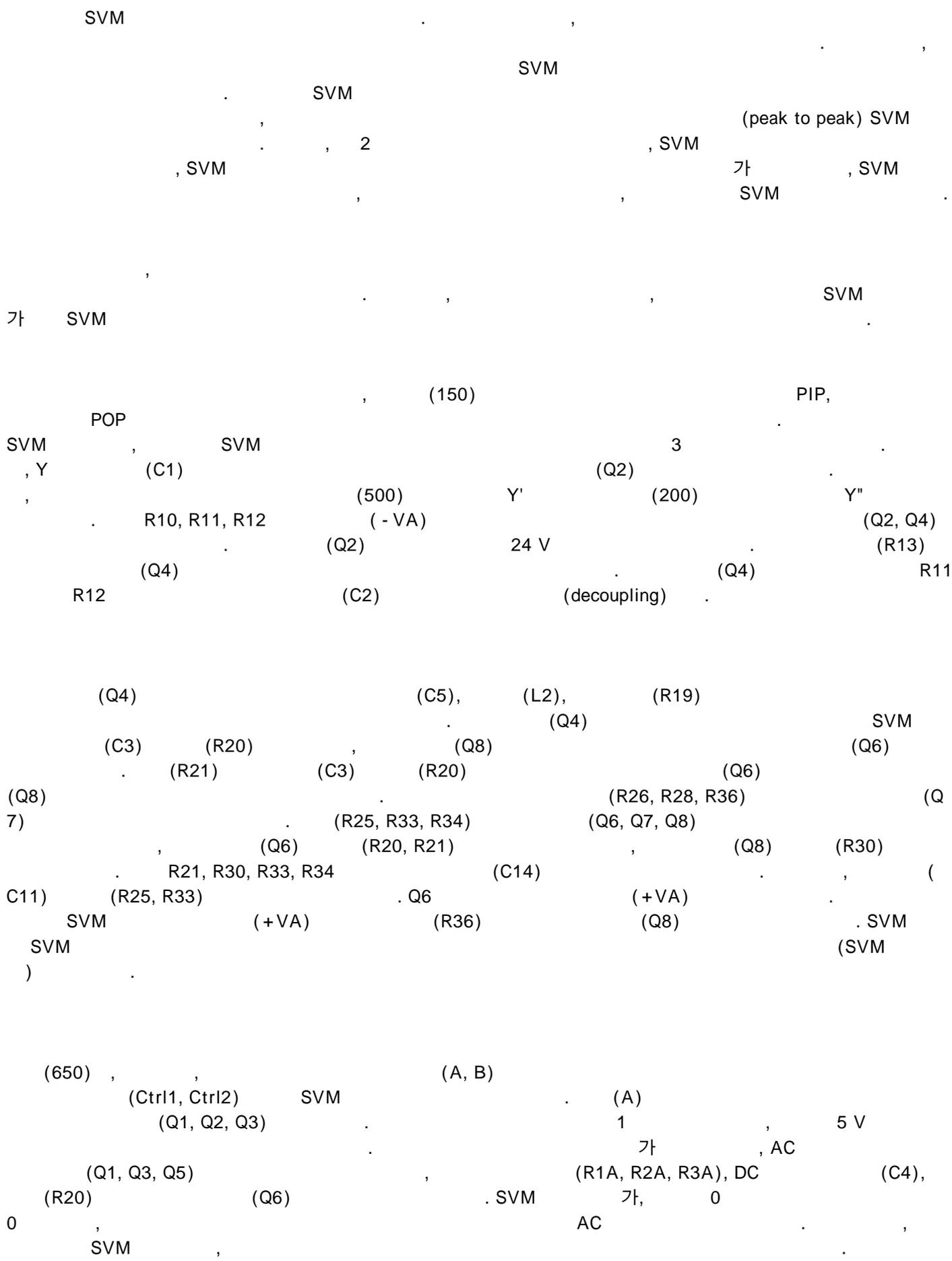
(SM)

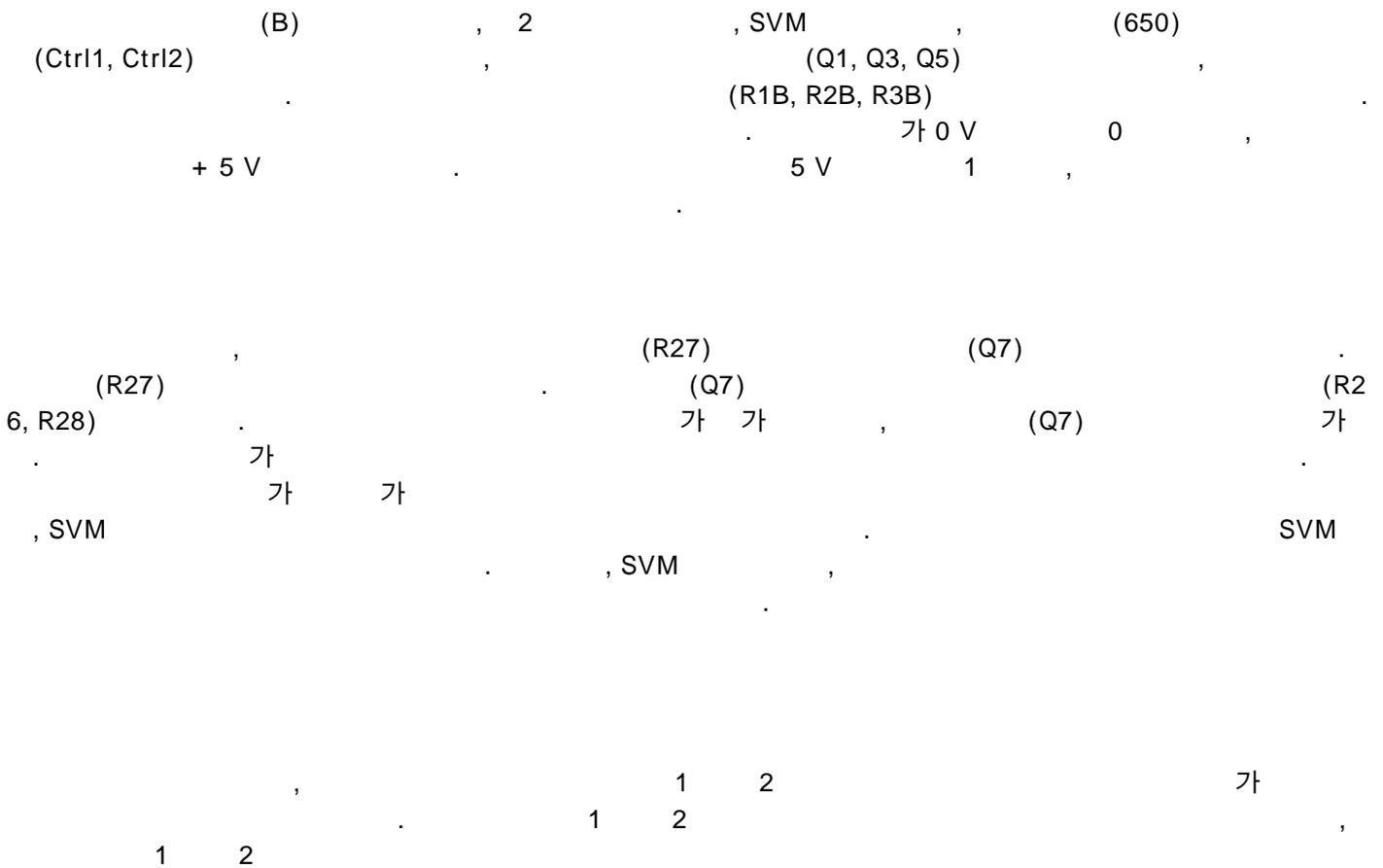
(SM)가

5a, 5b, 5c

가 2 , 4 가 2 (D
 1 D4) 74 ns , ITU 601 ((D
 HFpk) (D3, D4) 13.5 MHz (LFpk)
 D1 D3, D2 D4 6.75 MHz 37 ns 13.5 MHz
 27 MHz 가
 TA1276N I²C 가
 6 가
 2 , I²C 가 , 400 Kb/s
 I²C PIP POP 가

가
가
4 , A (D1)
(Hfe) 2 가 (SUM Hf) 2 - 1/4 가 (SUM Lf)
가 (SUM Hf) (D3) (Hfe)
(SM) (D4) , (HFpk, LFpk)가 (Yenh) 가
(SUM O/P)
(D3) , 1/2 , (Hfcor, Lfcor)가 가 (SUM
Hf, SUM Lf) (D4) (Hfl) 가 (SUM
SUM Hf) 3 Hfl , Lfl 가 (SUM Hf, SUM Lf)
(D2) 가 (Lf) 3 가 (SUM Hf, SUM Lf)
(Hfcor, Lfcor) , (Ctrl1, Ctrl2)
(CTHfpk, CTLfpk)
가 (150)
, ATSC Hfpk , PIP, POP
, NTSC (Lfpk) , PIP
5c 2Pk , NTSC
2:1 , ATSC
(visible difference)
(150) (Hfpk, Lfpk)
(Ctrl1, Ctrl2) , PIP
, PIP
(Ctrl1, Ctrl2)
가 (Fast Sw)
(150)가 , PIP POP
, 가 가 ,
, 가 가 PIP





(57)

1.

1 (Ymain) 2 (Ypip) 가

a) 1 (Ymain) 2 (Ypip) (301)

b) (CRT) (301)
 1 (Ymain) 2 (Ypip) (300)

2.

1 , (CRT) 1 2
(300) (Crt11, Crt12)

3.

1 2 (Ypip) 2 1
(Ymain) 1

4.

1 , ,
1 (Ymain) , 2 (Y
min)

5.

1 , 1 2 (Ymain, Ypip)

6.

1 , 1 2 (Ymain, Ypip)

7.

1 2 가 ,
(CRT) ,
1 2 (Ymain, Ypip) (301, 401)
(200) ,
(CRT) (200) (CRT) (300, 6)
(301, 401)

8.

1 2 가 ,
(CRT) ,

1 2 (Ymain, Ypip) (301, 401)
 (200) ,

(CRT) (200)
 (301, 401) (1A/2A, 1B/2B) (600)

(1A/2A, 1B/2B) 1 2

9.

1 2 가 ,

(CRT) .

1 2 (Ymain, Ypip) (301, 401)
 (200) ,

(CRT) (200)
 (301, 401) (1A/2A, 1B/2B) (600)

(1A/2A, 1B/2B) 1

2 (Ymain, Ypip)

10.

9 , 1 2 (Ymain, Ypip)
 , 1 2 (Ymain, Ypip) (1A, 2A, 1B, 2B)

11.

10 ,

12.

9 , (1A/2A, 1B/2B) 1 2 (Ym
 ain, Ypip) (1A, 2A, 1B, 2B) 1 2

13.

12 ,

14.

9 , (1A/2A, 1B/2B) 1 2 (Ym
 ain, Ypip) (301, 401) 1 2

15.

9 , (301, 401) 1 2 (Ymain, Ypip)
 , (301, 401) 1 1
 , (301, 401) 2 2

16.

1 2 가 ,
 (CRT) ,
 1 2 (Ymain, Ypip) (301, 401) (200)

(CRT) (200) , (CRT) 1 2
 (301, 401) ,
 (300) ,

1 1 (301, 401) 1 (Ymain) 1
 2 1 , 2 (Ypip) 1 1 1
 2 2 2 1

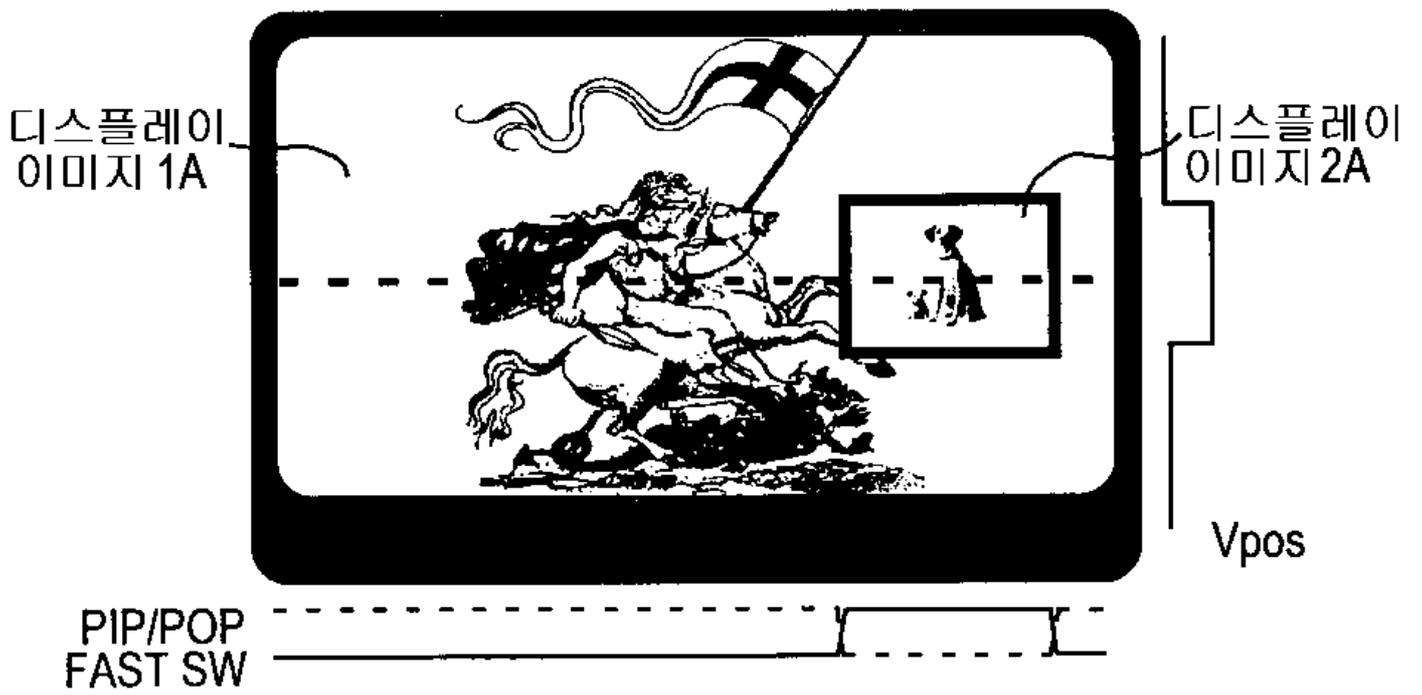
17.

16 , 1 .

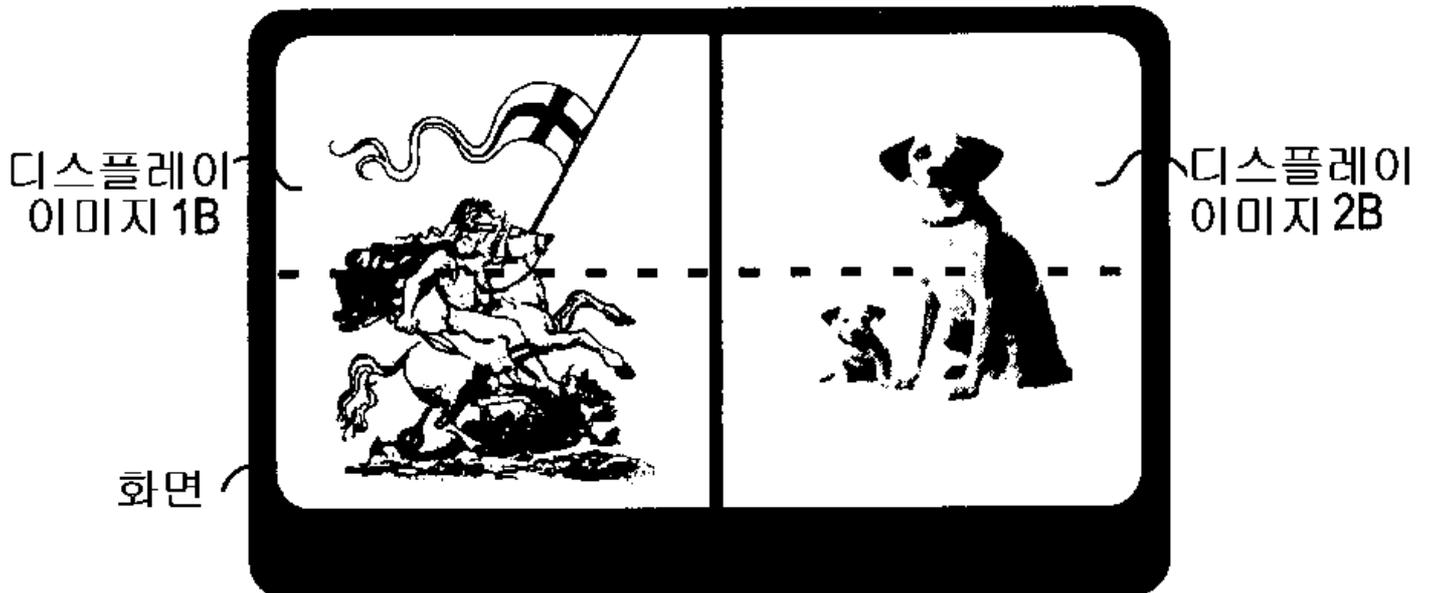
18.

16 , 1 2 .

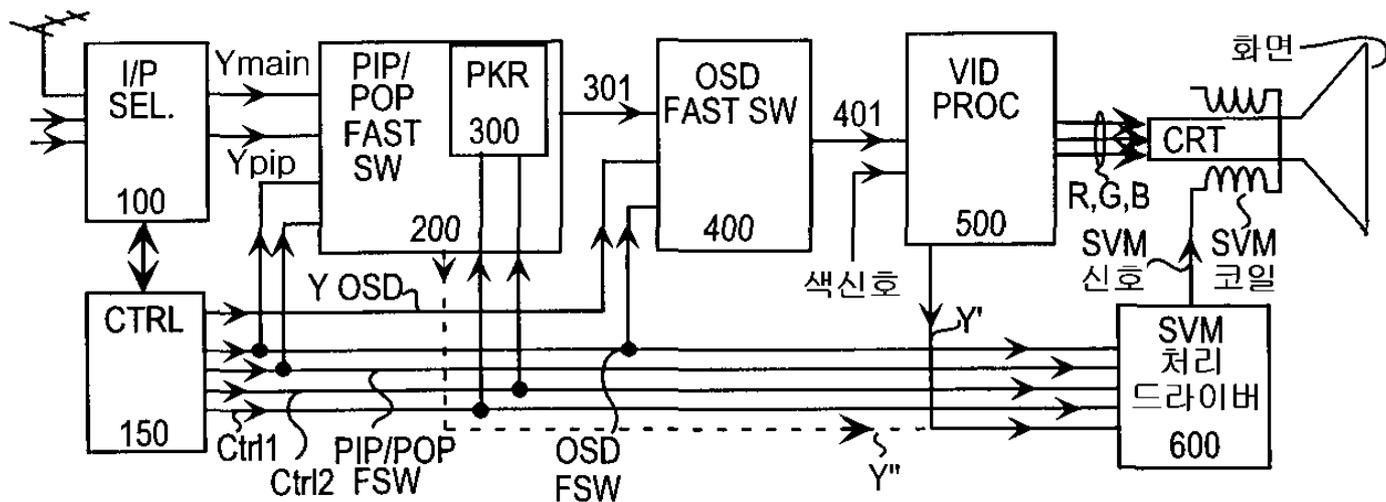
1a



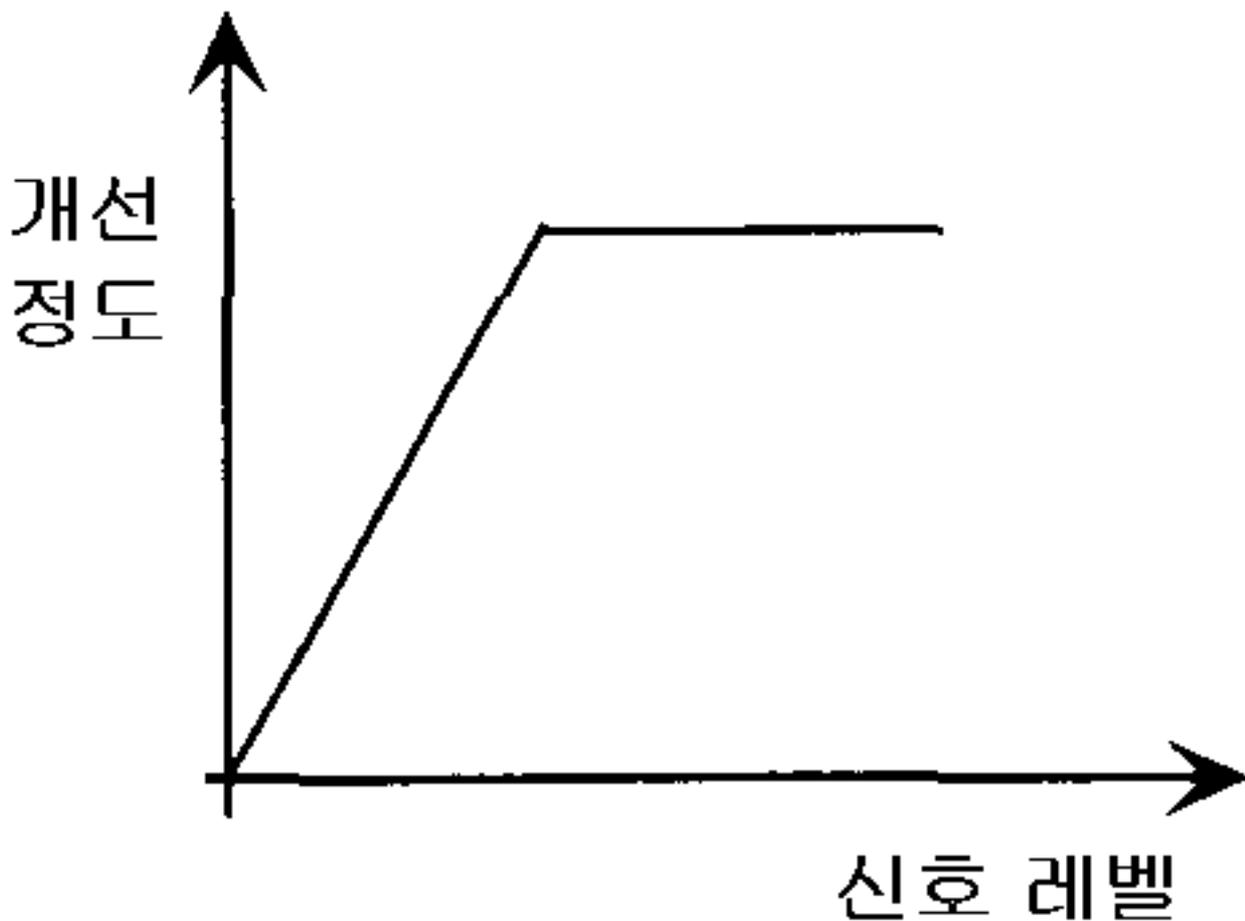
1b



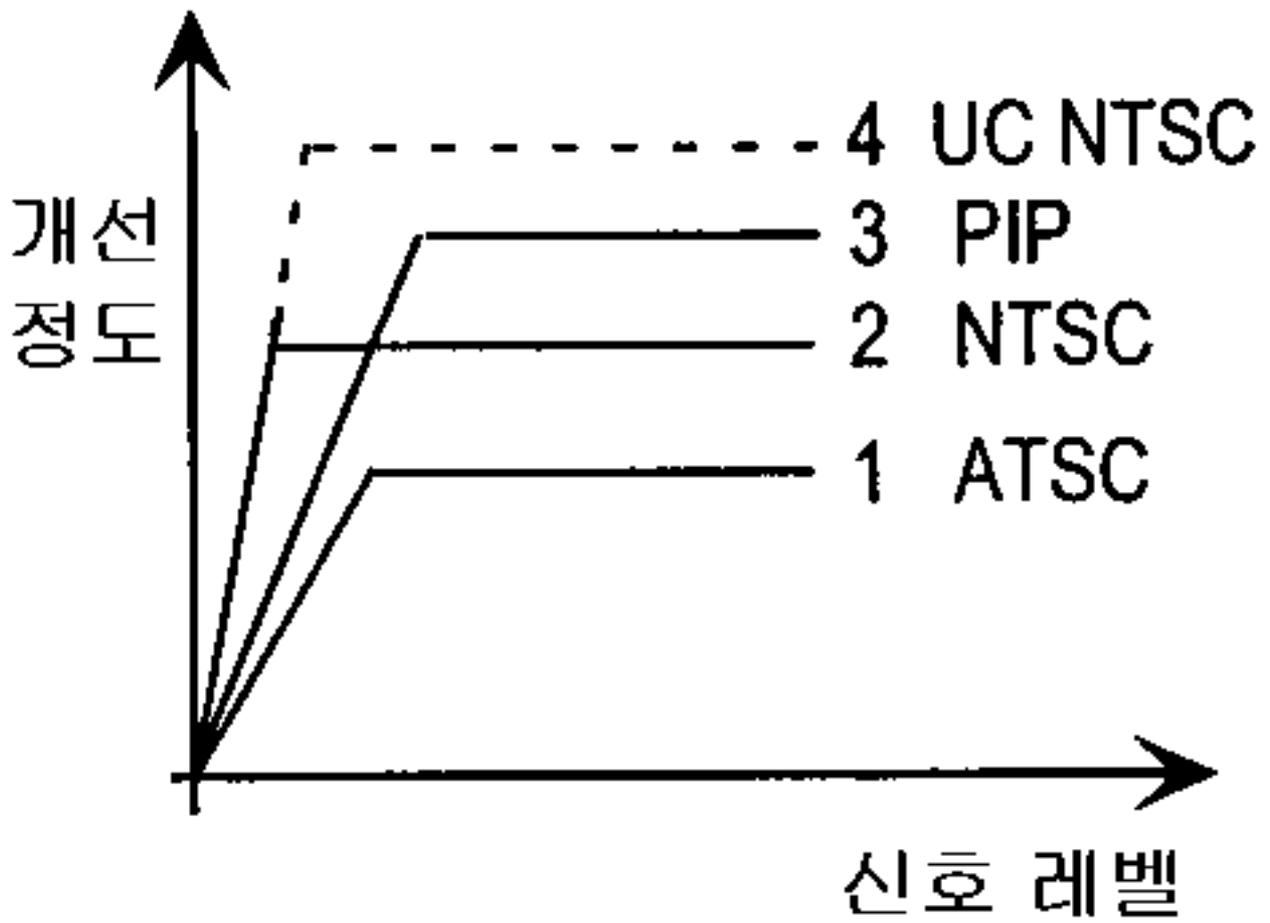
2



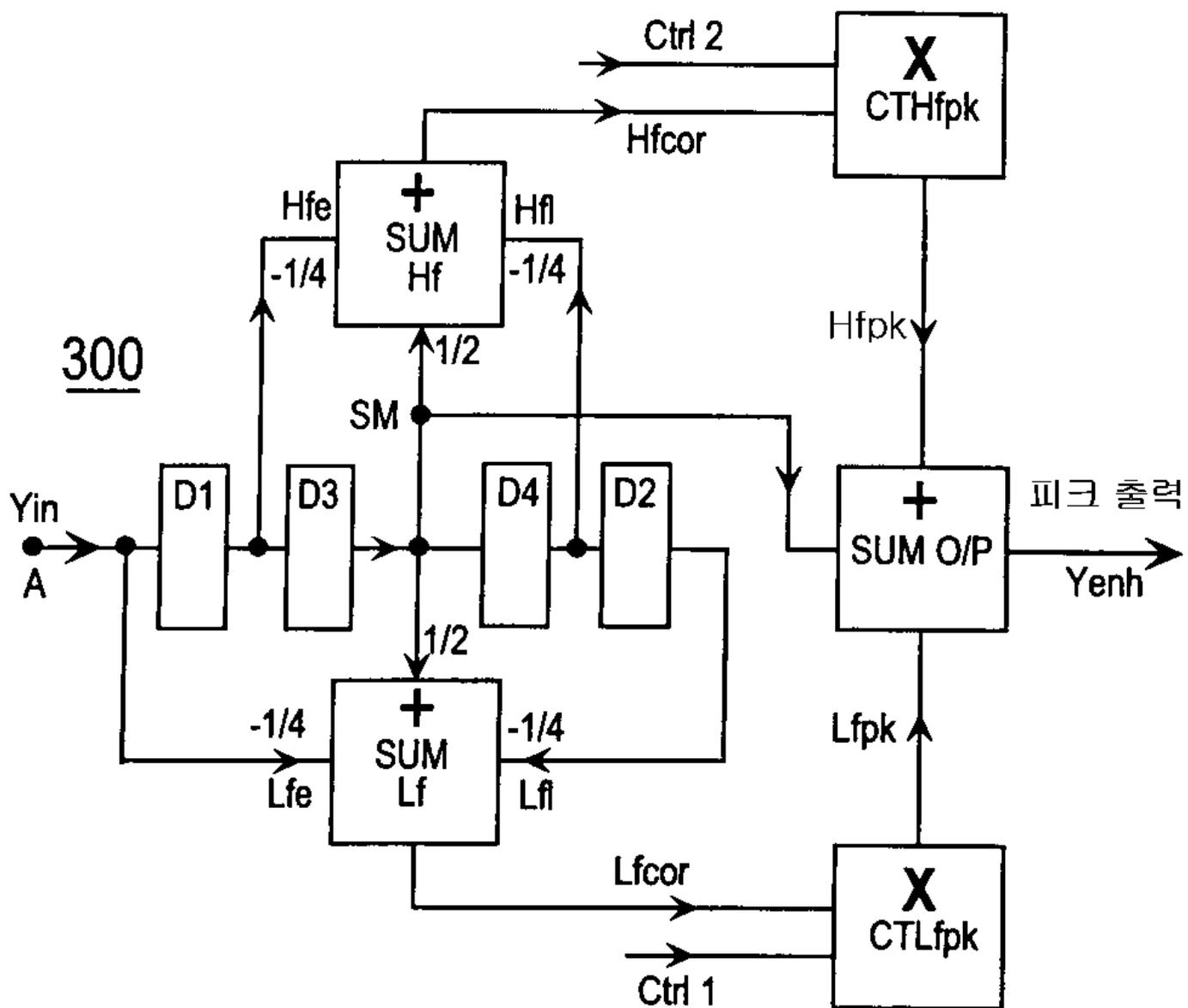
3a



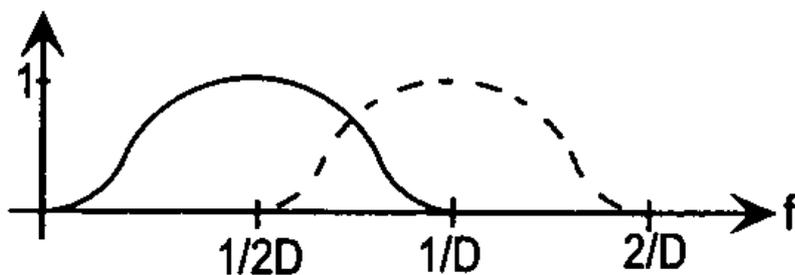
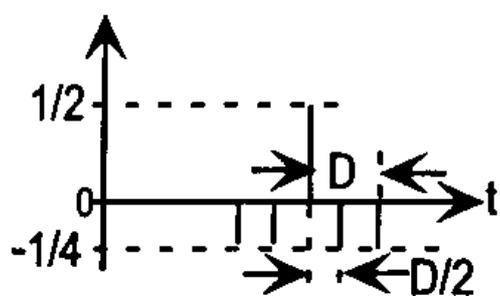
3b



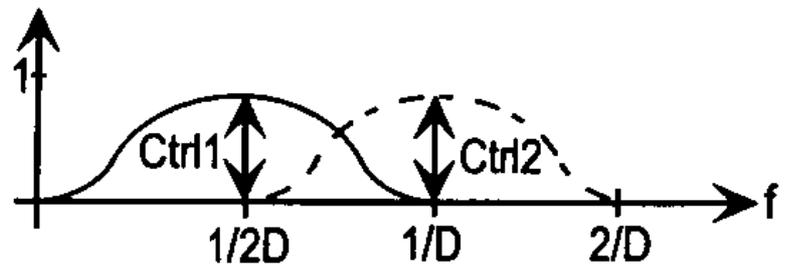
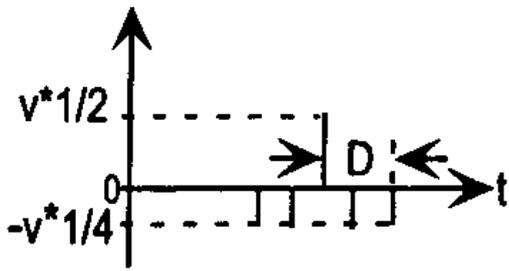
4



5a



5b



5c

