

(19) (KR)
(12) (B1)

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(11)
(24)

2004 10 14
10-0452860
2004 10 05

(21) 10-2000-0033921
(22) 2000 06 20

(65)
(43)

10-2001-0114030
2001 12 29

(73)
416

(72)
11-9 716

(74)
:

(54)

. VSB

704

가 /

가

2

1a
1b
2
3a
3b
4a
4b

VSB
VSB

a(n)

d(n)

5			
*			*
100 :		110 :	1
120 :	2	130 :	1
140 :	2		150 :
200 :		220 :	
250 :		260 :	

(vestigial side band: VSB)

1a VSB 832 가 (Forward Error Correction : FEC) 828 가 4 312 가 313 가 1b 가 511/63/63/63 511/63/-63/63 가 (Odd Fields) 가 (Even Fields) 63 가 (distortion) 가 63 (pseudo noise: PN) 63 (group coded recording: GCR) PN 63 가 VSB 10.75MHz VSB 8.76μs +5.86μs (post ghost) NTSC(National Television System Committee) PN 63 +/- 가 PN 63 2 가 4 511/63/63/63 PN 가

가

가

가

1

2

704

704

2

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704

가 가 /

가

3a 2 VSB d(n) 4a 5 a(n) 3b 2 4b VSB al) 704 1b 가 511/63/63/63 704 가 704 Sr (known sign h(n)

(impulse response)

t(n) Di

$$D_i = t(n)^1 * h(n)$$

$$d(n) = Di * t(n) = t(n) * h(n) * t(n) = h(n) * t(n) * t(n)$$

2, d(n) t(n) h(n).

$$h(n) = \delta(n) + m(n)$$

2 (140) 2 (MUX2) (Sr) a(n).

$$a(n) = t(n) * t(n) = t(n) * t(n) * \delta(n)$$

1 d) +/- 가 (130) 2 (140) (Fid) (Fi
(150) 1 (130) d(n) 2 (140)
a(n).

$$d(n) - a(n) = h(n) * t(n) * t(n) - t(n) * t(n) * \delta(n)$$

= (δ(n) + m(n)) * t(n) * t(n) - t(n) * t(n) * δ(n)
= m(n) * t(n) * t(n)
, t(n) δ(n) 가, (160) (M.P.
) , VSB

0 , B , 4a 4b A 6
3 a(n) 4a d(n) 4b C 4b C
(resolution)
-22dB 3 가
, 가
(DSP) (throughput)

(Sr) 2 (140) ROM (Fsync.) / 2 ((120) 2 (200) (200) (210), (220), (230), (250) (260) (150) (210) (100) (220) (250) (230) (2) 30) (220) (220) (250) (250) (260) / (260) 가 (pre cursor) 1 3 , 40 , 60 , 80 가 가 가 (post cursor) , 7 8 , 가 가 가 , ATSC (18.76μs) 224 , VSB 704 /

가 / 가 ,

가 가 가

(57)

1.

가

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2.

1

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1

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가

2

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1

704

1

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2

704

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1

2

3.

2

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4.

3

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5.

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6.

5

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;

704

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7.

6

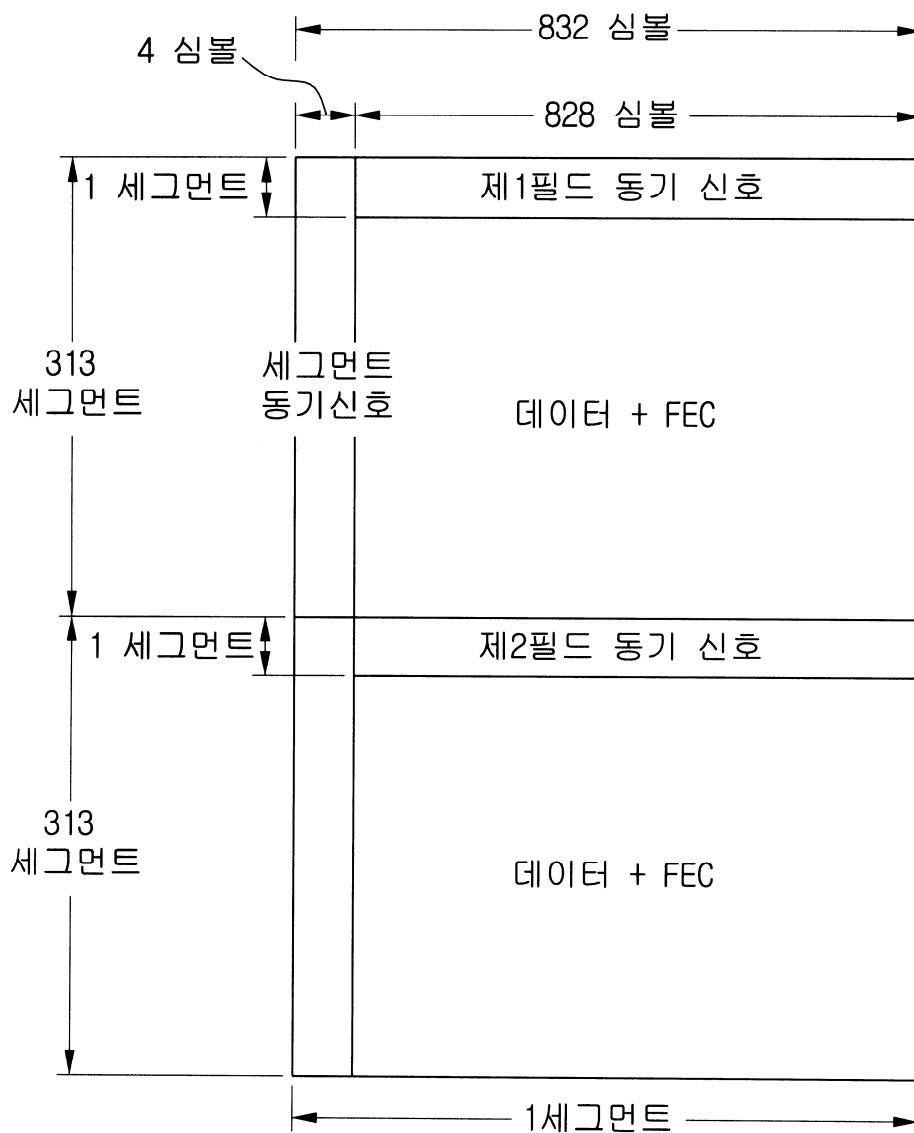
,

가 가

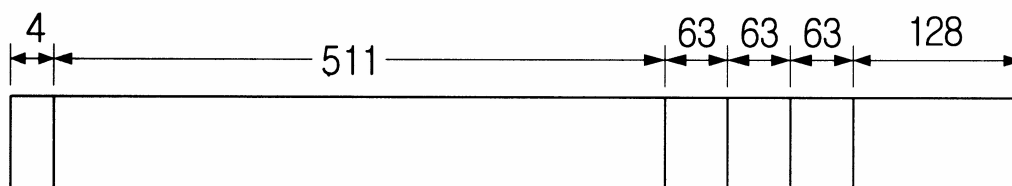
/

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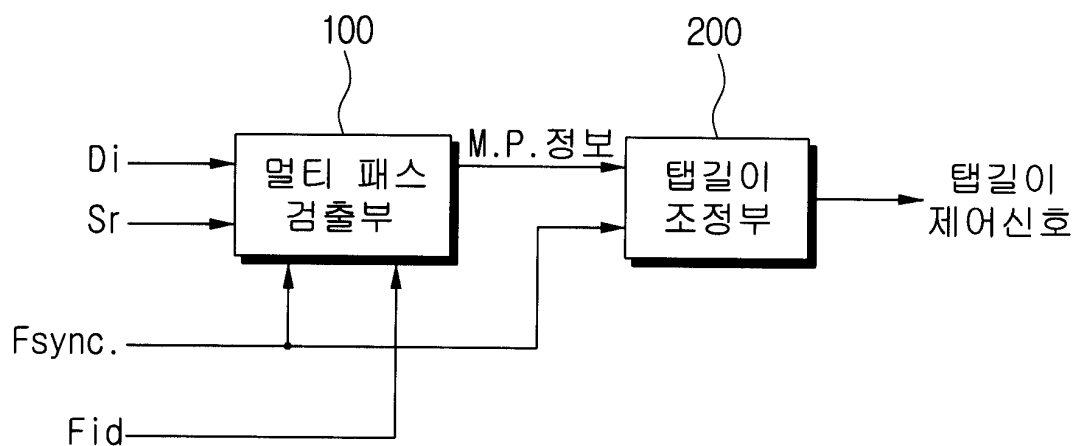
1a



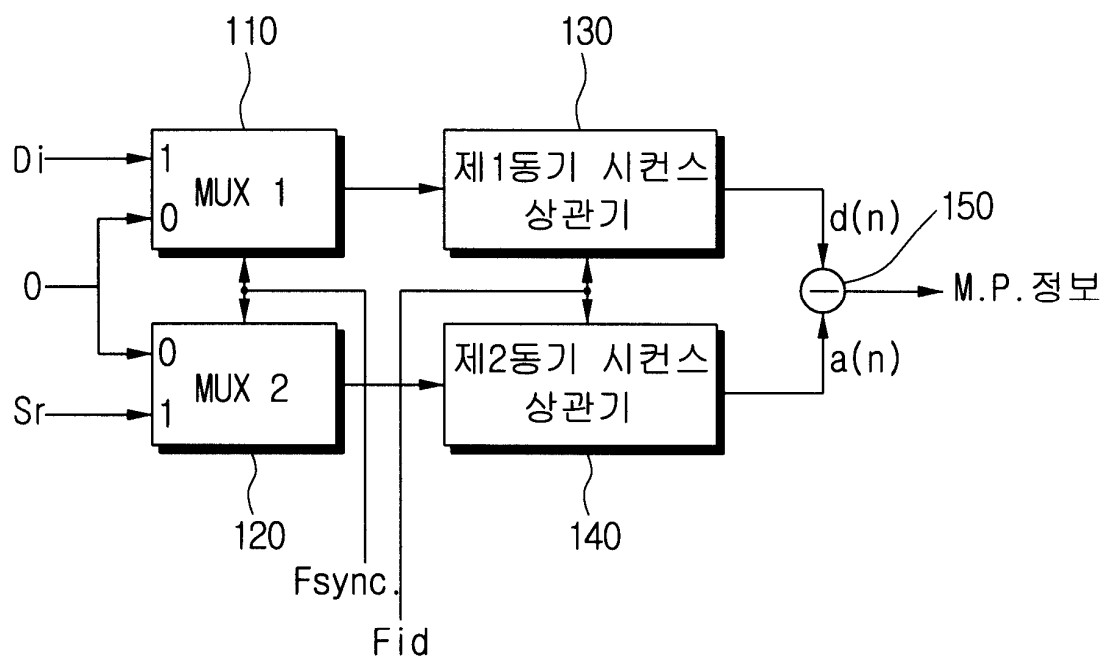
1b



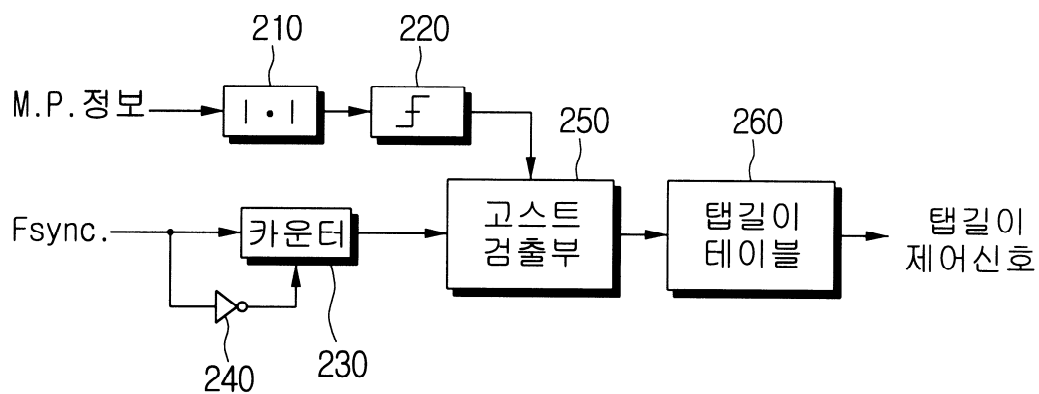
2



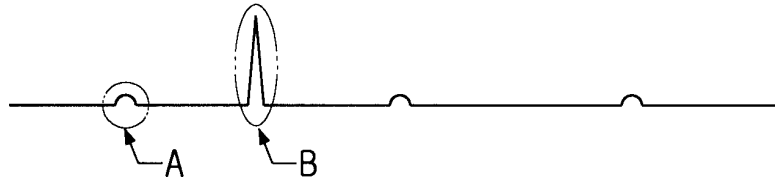
3a



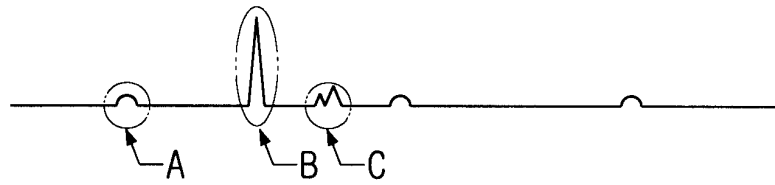
3b



4a



4b



5

