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(22)	1996 08 05	(43)	1997 03 29

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(30) 95-200120 1995 08 04 (JP)

(73) 가 가 가 가 6 7 35

(72) 가 가 가 6-7-35 가 가

가 가 6-7-35 가 가

(74)

:

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(54) , ,

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, TOC , ( CD  
CD ) , .

24

1  
2 (descriptors)

3 TOC TOC  
4 TOC  
5 TOC

6		TOC
7		TOC
8		TOC
9		TOC
10		TOC
11		TOC
12		TOC
13		TOC
14		TOC
15		TOC
16	TOC	
17	TOC	
18	TOC	
19	TOC	
20	TOC	
21	TOC	
22		
23		
24		
25		
26		
27		
28	가	
29	CD	CD
*		
1, 2, 52 :	10 :	(DSM)
13 :	23 :	
24, 26 :	25 :	
27, 64B :	28 :	가
30, 67 :	31 :	
32 :	33 :	가
35 :	50, 51 :	가
53 :	54 :	
56 : TOC	60 :	
61 : 62 :		
63 : ECC	64 :	
64A :	65, 66 :	
68 : TOC	69 :	
70 :	E2, E3 :	

TOC

TOC

가

CD-ROM  
27  
28

CD contents) CD , , 가 (leading end),

(TOC ; table-of-co

CD , ( , , , ) 가

CD  
가



```

, 'disc_date_offset' DTOC 'disc_date'
, 'disc_copyright_offset' DTOC 'disc_copyright'
, 'disc_publisher_offset' DTOC 'disc_publisher'
TOC (Disc_toc( )) 'Album' 4 가 , 'id_string'
, ISO646 16 , 'discs_in_album' , "disc
_number'
TOC 'Catalogue( )' 5 가 , , 'catalogue_string'
ISO646 16
'program linkage' , 6 가
, 'first_track_number' P , 'last_track_n
umber' P , 'first_track_lsa' P
, 'last_track_lsa' P
, 'last_es_lsa' P , 'I
ast_program_lsa' P , 'program_start_tc'
P
,
, 1
, 'program_linkage' , 'program link
age( )' , 'program linkage( )' , 'Program_linkage_offset'
, 'path'
TOC 'disc_track( )'
, 7 가 . 'number_of_tracks'
, 'program_number' , 'track_numb
er' , 'start_lsa' , 'last_lsa'
, 'last_es_lsa'
'track_playing_time'
, TOC 8
,
,
(Hours) = 'tc_hours_1' 10 + 'tc_hours_2'
(Minutes) = 'tc_minutes_1' 10 + 'tc_minutes_2'
(Seconds) = 'tc_seconds_1' 10 + 'tc_seconds_2'
'Program_toc pointers( )' TOC (TOC)
TOC (DTOC) , 9 . 'program_toc_lsa'
TOC (PTOC)
TOC (DTOC) 'Disc_play_time'
10 가 . 'Disc_playing_time( )'
TOC (DTOC) 'Disc_name' , 11 가
'Number_of_languages' , 'original_language_number'
가 , 'language_code' ISO 639-2 3 , 'character_set
_code' . 'character_set_code' 12
11 'disc_name_string_offset' 'disc_name' 'disc_name_string( )'
, 'Disc_name_string( )'
TOC (DTOC) 'Disc_date' 가 , 13
가 . 'Disc_recording_date( )' 14 가 'date( )'
'Disc_copyright( )' 'disc_publisher'가 DTOC
,
1 TOC (PTOC1, PTOC2, PTOC3, ... PTOCN)
TOC ( TOC 1, TOC 2, TOC 3, ... TOC N)
(PRG1, PRG2, PRG3, ... PRGN) , 15 가 'program_to
c( )'
15 , 'dvd_signature' , ISO646 8
, 'Dvd_version' , ISO646 4
Length' TOC (PTOC) , 'toc_type' TOC
, TOC( , PTOC) '2' 가 . 'Number_of_tracks'

```

, 'program\_start\_lsa' , 'program\_track\_of  
fset' 'Program\_toc()' i 'program\_tracks()' .  
'Elementary stream\_info\_offset' 'Program\_toc()' 'elementary\_stream\_info()' .  
, 'program\_play\_times\_offset' 'Program\_play\_times()' .  
, 'program\_name\_offset' 'Program\_toc()' 'Program\_name()' .  
, 'track\_name\_offset' 'Program\_toc()' 'track\_names()' .  
, 'track\_date\_offset' 'Program\_toc()' 'track\_dates()' .  
, 'program\_copyright\_offset' 'Program\_toc()' 'program\_copyright()' .  
, 'program\_publisher\_offset' 'Program\_toc()' 'program  
\_publisher()' .  
TOC '(i=0; i<8; i++)' 15 , , , .  
, 16 , , , .  
, 'number\_of\_path\_tracks' i , 'start\_rsa' .  
, 'last\_rsa' , 'last\_es\_rsa' .  
, 'track\_playing\_time()' .  
0 , . 'track\_playing  
\_time()' 8 'time()' .  
15 .  
'entry\_points()' 4 가 .  
'Program\_play\_times' , 17 가 .  
'Program\_name()' 18 가 , 'number\_of\_language'  
, 'original\_language\_number' , 'language\_code'  
'ISO639-2' 3 , 'character\_set\_code'  
, 'program\_name\_string()' .  
15 'program\_TOC()' , 'track\_name' 19 ,  
'track\_name' 'number\_of\_language' ,  
'original\_language\_number' , 'language\_code' 'ISO-639-2' 3 ,  
, 'character\_set\_code' , 'track\_name\_string\_  
\_offset' 'track\_names()' 'track\_name\_string()' .  
, .  
TOC 20 , 'program\_recording\_date()' .  
'program\_date' .  
TOC , 21 , 'track\_recording\_date()' .  
'track\_dates' .  
'track\_name()' 'track\_dates()' ( )가 , .  
, 'track\_names()' 'track\_dates()' .  
가 , 가 'track\_names()' 'track\_dates()'가 .  
TOC (PTOC) , .  
'program\_copyright()' 'program\_publisher()' .  
3 (PGM1, PGM2, PGM3) , 22 , (PG  
M1, PGM2, PGM3) 가 .  
가 .  
. 6 'program\_linkage' , (A  
) 'first\_track\_lsa' , (B) 'last\_track\_lsa'  
, (C) 'last\_es\_lsa' ,  
'last\_program\_lsa' . ,  
(D) 22 .  
(A 0) TOC (D) (D) .  
(PGM1, PGM2, PGM3) (A) (D),  
(A, C) , 가 (PGM1, PGM2, PG  
M3) (A, D) (PGM1) (A)  
, 22 , (PGM1) (D) , (PG  
(PGM2) (PGM1) (A) (D) , (PG  
M2) (D) , .  
(PGM3) (A) , (PGM3)  
, (PGM1, PGM2, PGM3) (PGM1, PGM2, PG  
M3) (A, C) .

(PGM3) (C) (PGM2) (PGM3)

(A) (PGM2) (A)

(C) (PGM2) (PGM2) (A) (PGM3, PGM2,

PGM1) (PGM1) (C) (A)

(PGM1) (PGM2) 가 (A)

(A) (PGM2) (PGM3) 가

(PGM1, PGM2, PGM3) (PGM2) (B)

(PGM3) 가 (PGM1)

가 (B) (PGM2)

(PGM1, PGM2, PGM3) (PGM1)

( ) 가 , 23

(PGM1, PGM2) (A,B,C) 3

(1, 2) (B) (P

GM1, PGM2, PGM3)

MPEG (GOP : group of pictures)

MPEG ( I- ) ( P- B- )

MPEG GOP I- , I- GOP 가 , G

OP I- GOP 가 가

.3 , I- , I- , I- , I-

가 I- , n 가

(PSM) , MPEG (ISO3818-1) (PSD)

(PSM) , PSD PSM ( )가

, 24 (60) (54)

(1) 가 , (2)

(2) (1) (DSM)(1

0) (13)

DSM(10) 가 (TOC) 가 (50) TOC 가

가 .TOC 가 (51) 가 , (53) EC

C ) (52) (54) .TOC 가 (50) TOC (56) TOC 가 (60

, TOC , 25 , (13) TOC 가 (35)

- (23) (13) (25)

(26) (24) (E2)

가 (26) (E2) 가 (DSM

(27) 가 (28) (F) 가 (27)

)(10) .DSM (31) (24,26) (27)

(30)가 (E1,E2) , 가 (28) MPEG

가 (32) (30) , (27) (E3)

(24) 가 가 (28) 가 , (26)

(1) I- (32)

(23)

PSD PSM (30) 가 PSD PSM (27)

(28) PSD PSM (E3) (F)

PSD PSM (24, 26) offsets prev\_directory 3 offset next\_directory (35)

DSM (35)

(30)

(35) DSM(10)

가 (rating addition circuit)(33) PSM

가 (33)

(1) (2)

가 (30) (35) DSM(10)

3 3 TOC TOC

TOC (10) (56) TOC TOC 가 (50)(24) DSM

TOC DSM(10) TOC 가 (50) (51) 가 (51)

2048 16 2048 16

가 가 ( ) 가 (60) 가 (51) (53)

ECC-TOC 가 가 , TOC

GM , PGM 가 , PVD , PVD DTOC , PTOC , PTOC PGM , P

DTOC, PTOC PGM

26 (67) (69) (60) (69)

(70) (61)

(61) (60)

(62) E

CC (63) (64A) (64B)

(64)

(67) (67) TOC ( ) (64A) , TOC 가 TOC

(68)

(67) (69)

가 (67) (60) (70)

(61) (65)

(66) (64A) , ECC , PSD PSM (64B)

(67)

(G) (65) (66)

(H1, H2) 가 (67)

(67) (64)

(71) (69) 가

```

(G) (64A) 'stream_id' (64B) (H1, H2)
(65) (66)
, 가 (67)
(64) (64A) 'Program_stream_map' (67)
Program_stream_map'
), (FF), (FR), (67) TOC (68)
'Disc_toc( )' 22 , 'program_linkage( )'
(69)
(FF), (FR),
가 (FF, FR)
PGM , PVD, DTOC, PTOC PGM 가 PVD, DTOC, PTOC
, 26
, 가
PVD, DTOC, PTOC PGM ( )가 PGM
, PVD, DTOC PTOC , 'program_linkage( )'
, 'Program_toc( )' 가 'Disc_toc( )'
'Program_toc( )' , 'Disc_toc( )'
, 'Program_toc( )'
, 가
, program_toc Disc toc( ) program_start_lsa
가 , Program_toc
Disc_toc( ) program_linkage( ) disc_tracks( )

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(57)

1.

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:
가 ;
, ;
, 1

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(self-co

mplete manner)

2.

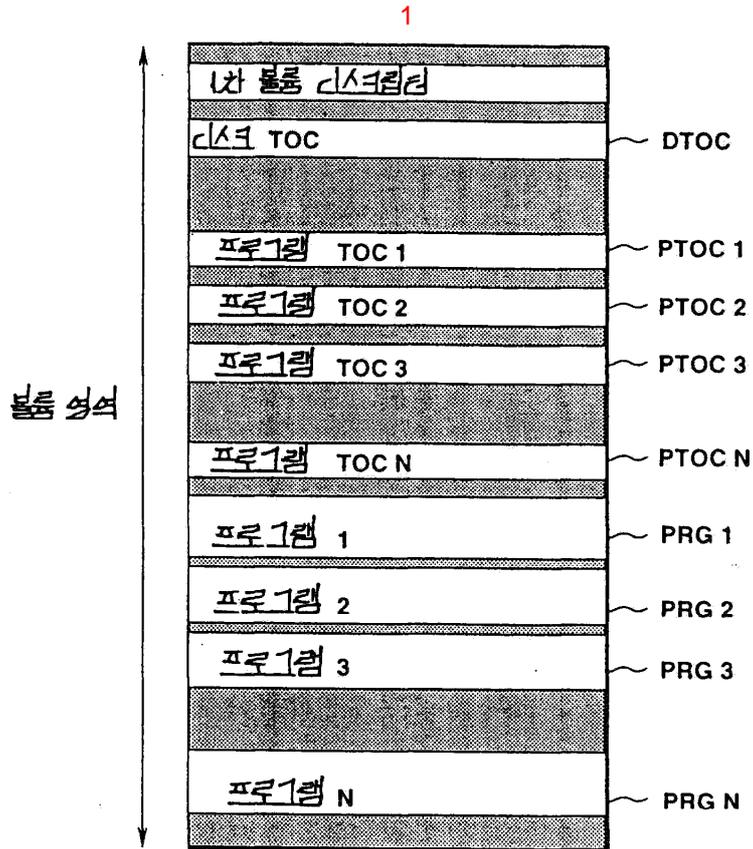




12

22.

16



BP	필드명	내용
1	Volume Descriptor Type	numerical value
2 to 6	Standard Identifier	CD001
7	Volume Descriptor Version	numerical value
8	Unused Field	(00) byte
9 to 40	System Identifier	a-characters
41 to 72	Volume Identifier	d-characters
73 to 80	Unused Field	(00) bytes
81 to 88	Volume Space Size	numerical value
89 to 120	Unused Field	(00) bytes
121 to 124	Volume Set Size	numerical value
125 to 128	Volume Sequence Number	numerical value
129 to 132	Logical Block Size	numerical value
133 to 140	Path Table Size	numerical value
141 to 144	Location of Occurrence of Type L Path Table	numerical value
145 to 148	Location of Optional Occurrence of Type L Path Table	numerical value
149 to 152	Location of Occurrence of Type M Path Table	numerical value
153 to 156	Location of Optional Occurrence of Type M Path Table	numerical value
157 to 190	Directory Record for Root Directory	34 bytes
191 to 318	Volume Set Identifier	d-characters
319 to 446	Publisher Identifier	a-characters
447 to 574	Data Preparer Identifier	a-characters
575 to 702	Application Identifier	a-characters
703 to 739	Copyright File Identifier	d-characters, SEPARATOR 1, SEPARATOR 2
740 to 776	Abstract File Identifier	d-characters, SEPARATOR 1, SEPARATOR 2
777 to 813	Bibliographic File Identifier	d-characters, SEPARATOR 1, SEPARATOR 2
814 to 830	Volume Creation Date and Time	Digit(s), numerical value
831 to 847	Volume Modification Date and Time	Digit(s), numerical value
848 to 864	Volume Expiration Date and Time	Digit(s), numerical value
865 to 881	Volume Effective Date and Time	Digit(s), numerical value
882	File Structure Version	numerical value
883	(Reserved for future standardization)	(00) byte
884 to 1 395	Application Use	not specified
1 396 to 2 048	(Reserved for future standardization)	(00) bytes



6

신택스	비트수	단위
<pre> program_linkage(){     for(p=0;p&lt;NOP;p++){         first_track_number         last_track_number         first_track_lsa         last_track_lsa         last_es_lsa         last_program_lsa         program_start_tc     } }                     </pre>	<p>32 uimsbf 32 uimsbf 32 uimsbf 32 uimsbf 32 uimsbf 32 uimsbf</p>	

7

신택스	비트수	단위
<pre> disc_tracks(){     for(i=0;i&lt;8;i++){         number_of_tracks(NOT)         reserved         for(t=0;t&lt;NOT;T++){             program_number             track_number             start_lsa             last_lsa             last_es_lsa             track_playing_time()         }     } }                     </pre>	<p>16 uimsbf 16 bslbf 16 uimsbf 16 uimsbf 32 uimsbf 32 uimsbf 32 uimsbf</p>	

8

신택스	비트수	신택스
<pre> time(){     tc_hours_1     tc_hours_2     tc_minutes_1     tc_minutes_2     tc_seconds_1     tc_seconds_2     reserved }                     </pre>	<p>4 bcd 4 bcd 4 bcd 4 bcd 4 bcd 4 bcd 8 bslbf</p>	

9

신택스	비트수	단위
<pre> program_toc_pointer(){     for(p=0;p&lt;NOP;p++){         program_toc_lsa     } }                     </pre>	<p>32 uimsbf</p>	

10

선택스	비트수   단위
<pre> disc_play_times(){     for(i=0;i&lt;8;i++){         disc_playing_time()     } }                 </pre>	

11

선택스	비트수   단위
<pre> disc_name(){     number_of_languages(NOL)     original_language_number     for(l=0;l&lt;NOL;l++){         language_code         character_set_code         disc_name_string_offset     }     for(n=0;n&lt;NOL;n++){         disc_name_string()     }     stuffing_byte }                 </pre>	
	16 uimsbf 16 bs1bf 24 bs1bf 8 bs1bf 32 uimsbf 0-24 bs1bf

12

값	표시 방법
0	reserved
1	ISO 646
2-255	reserved(TBD)

13

선택스	비트수   단위
<pre> disc_date(){     disc_recording_date() }                 </pre>	

14

선택스	비트수   단위
<pre> date(){     year     month     day     time() }                 </pre>	
	16 bcd 8 bcd 8 bcd

인덱스	바이트수	리모트
program_toc(){		
dvd_signature	64	bslbf
dvd_version	32	bslbf
length	16	uimsbf
toc_type	8	bslbf
reserved	8	bslbf
number_of_tracks (NOT)	16	uimsbf
reserved	16	bslbf
program_start_lsa	32	uimsbf
path_rating_assignment_offset	32	uimsbf
for (i=0; i<8; i++){		
program_tracks_offset_i	32	uimsbf
}		
elementary_stream_info_offset	32	uimsbf
program_play_times_offset	32	uimsbf
program_name_offset	32	uimsbf
track_names_offset	32	uimsbf
program_date_offset	32	uimsbf
track_dates_offset	32	uimsbf
program_copyright_offset	32	uimsbf
program_publisher_offset	32	uimsbf
reserved	288	bslbf
path_rating_assignments()		
for (i=0; i<8; i++){		
if (program_chapters_offset_i>0){		
program_tracks()		
entry_points()		
path_table()		
}		
}		
elementary_stream_info()		
program_play_times()		
program_name()		
track_names()		
program_date()		
track_dates()		
program_copyright()		
program_publisher()		

인덱스	바이트수	리모트
program_tracks(){		
number_of_path_tracks(NOPT)	16	uimsbf
reserved	16	bslbf
for(t=0;t<NOPT;t++){		
reserved	16	bslbf
track_number	16	uimsbf
start_rsa	32	uimsbf
last_rsa	32	uimsbf
last_es_rsa	32	uimsbf
track_playing_time()	32	uimsbf
}		
}		

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선택스	비트스 길이
<pre> program_play_times(){     for(i=0;i&lt;8;i++){         program_playing_time()     } }                     </pre>	

18

선택스	비트스 길이
<pre> program_name(){     number_of_languages(NOL)     original_language_number     for(l=0;l&lt;NOL;l++){         language_code         character_set_code         program_name_string_offset     }     for(n=0;n&lt;NOL;n++){         program_name_string()     }     stuffing_bytes }                     </pre>	<p>16 uimbsf</p> <p>16 bslbf</p> <p>24 bslbf</p> <p>8 bslbf</p> <p>32 uimbsf</p> <p>0-24 bslbf</p>

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선택스	비트스 길이
<pre> track_names(){     number_of_languages(NOL)     original_language_number     for(l=0;l&lt;NOL;l++){         language_code         character_set_code         for(t=0;t&lt;NOT;t++){             track_name_string_offset         }     }     for(n=0;n&lt;NOL*NOT;n++){         track_name_string()     }     stuffing_bytes }                     </pre>	<p>16 uimbsf</p> <p>16 bslbf</p> <p>24 bslbf</p> <p>8 bslbf</p> <p>32 uimbsf</p> <p>0-24 bslbf</p>

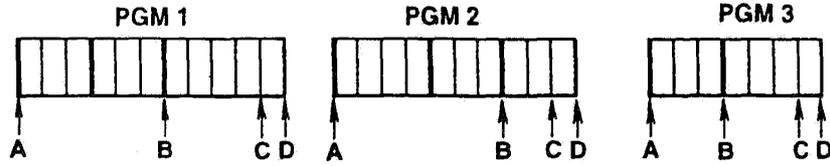
20

선택스	비트스 길이
<pre> program_dates(){     program_recording_date() }                     </pre>	

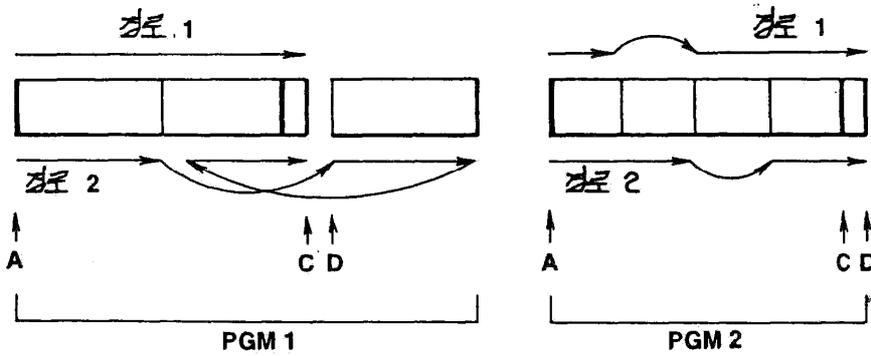
21

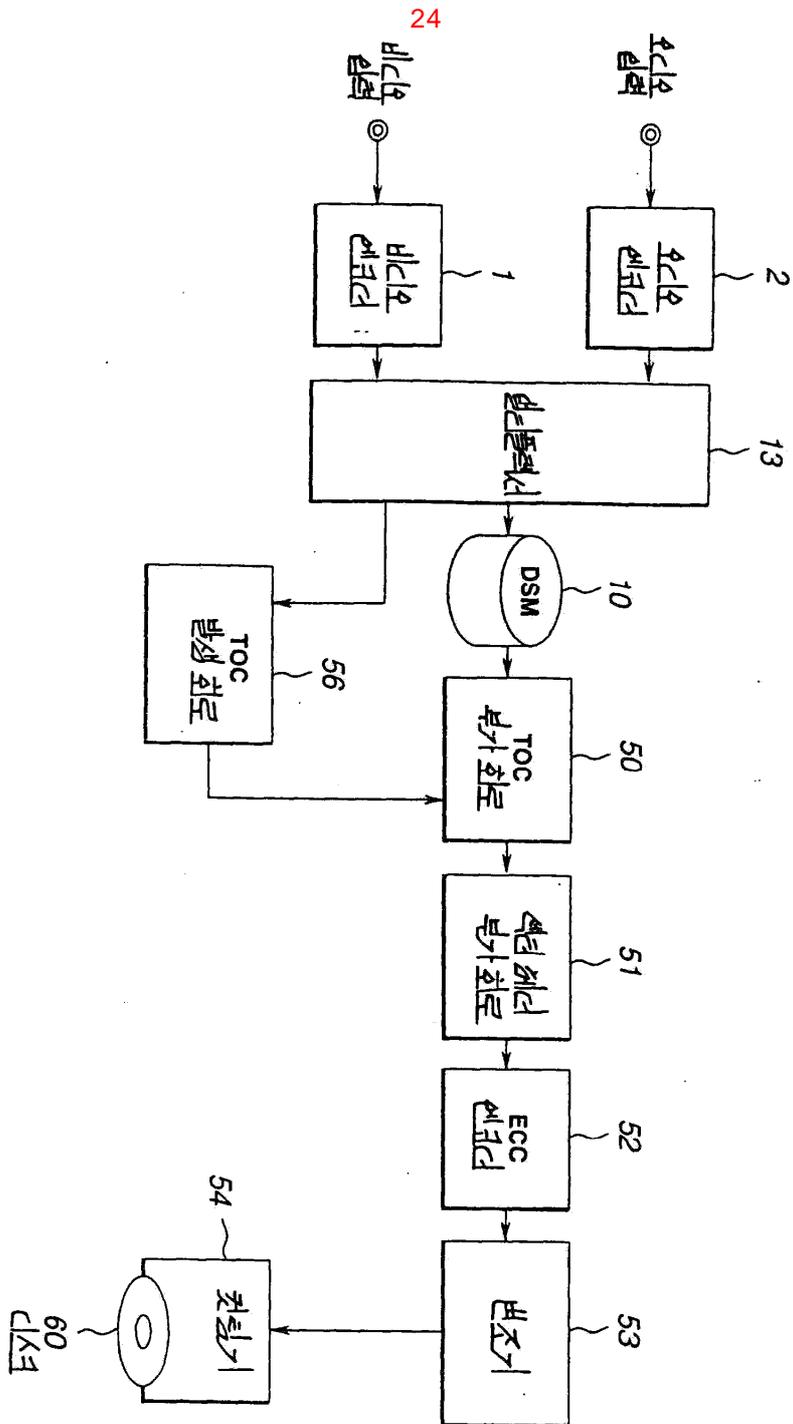
선택스	비트수 기록
<pre> track_dates(){     for(t=0;t&lt;NOT;t++){         track_recording_date()     } }                 </pre>	

22



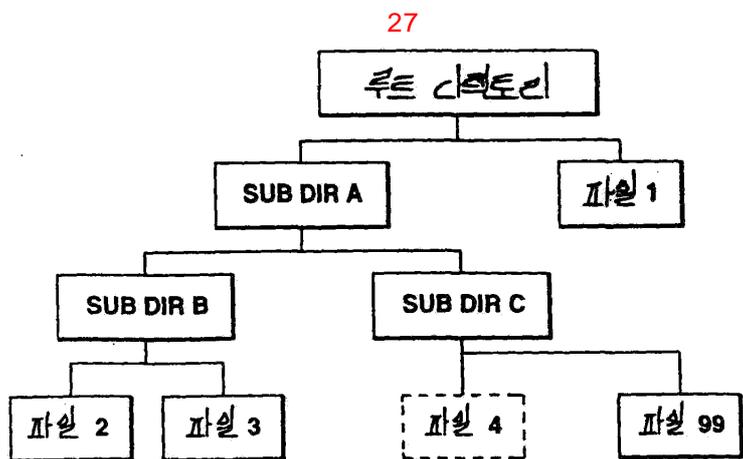
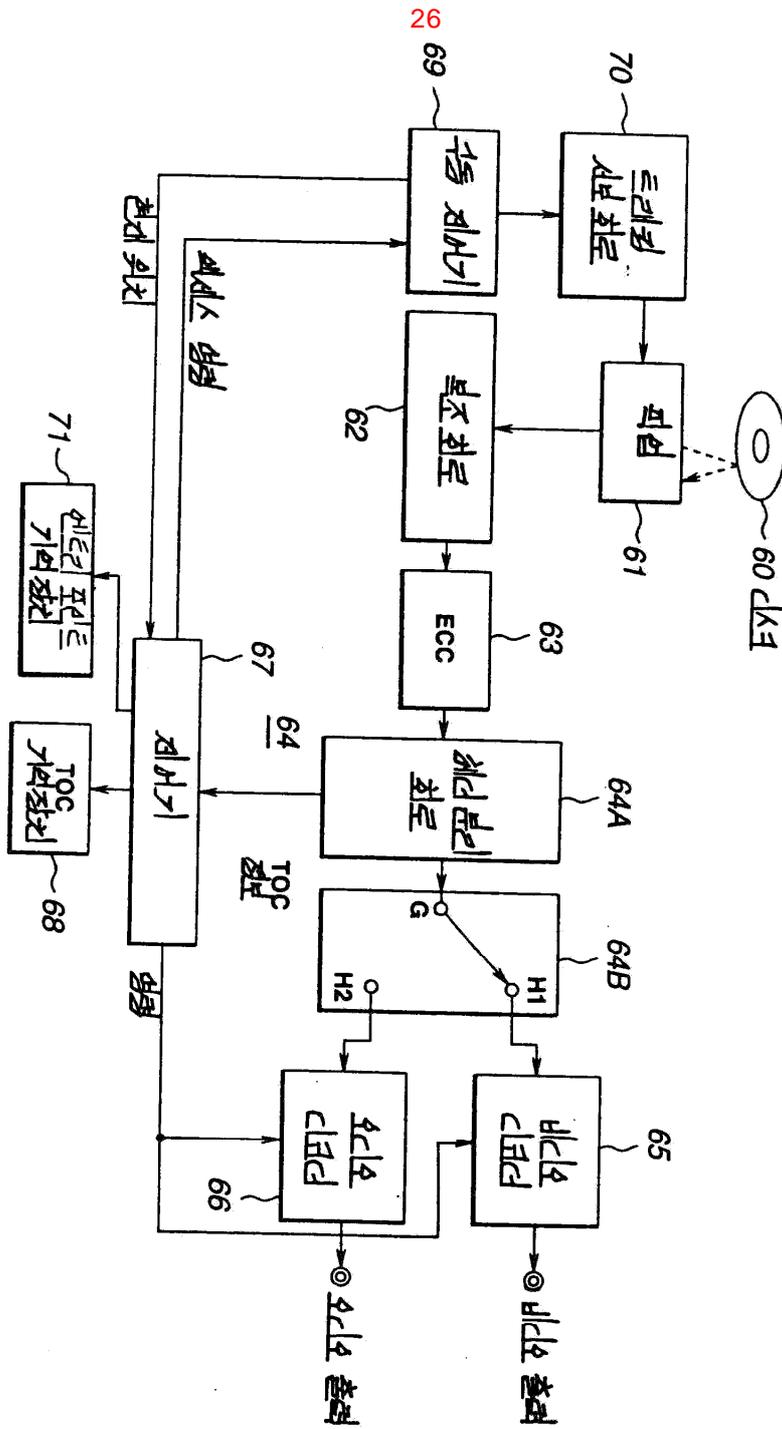
23



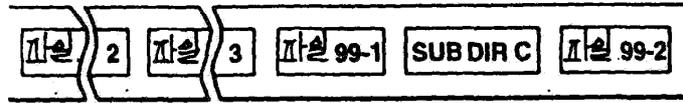


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