

FIG. 1

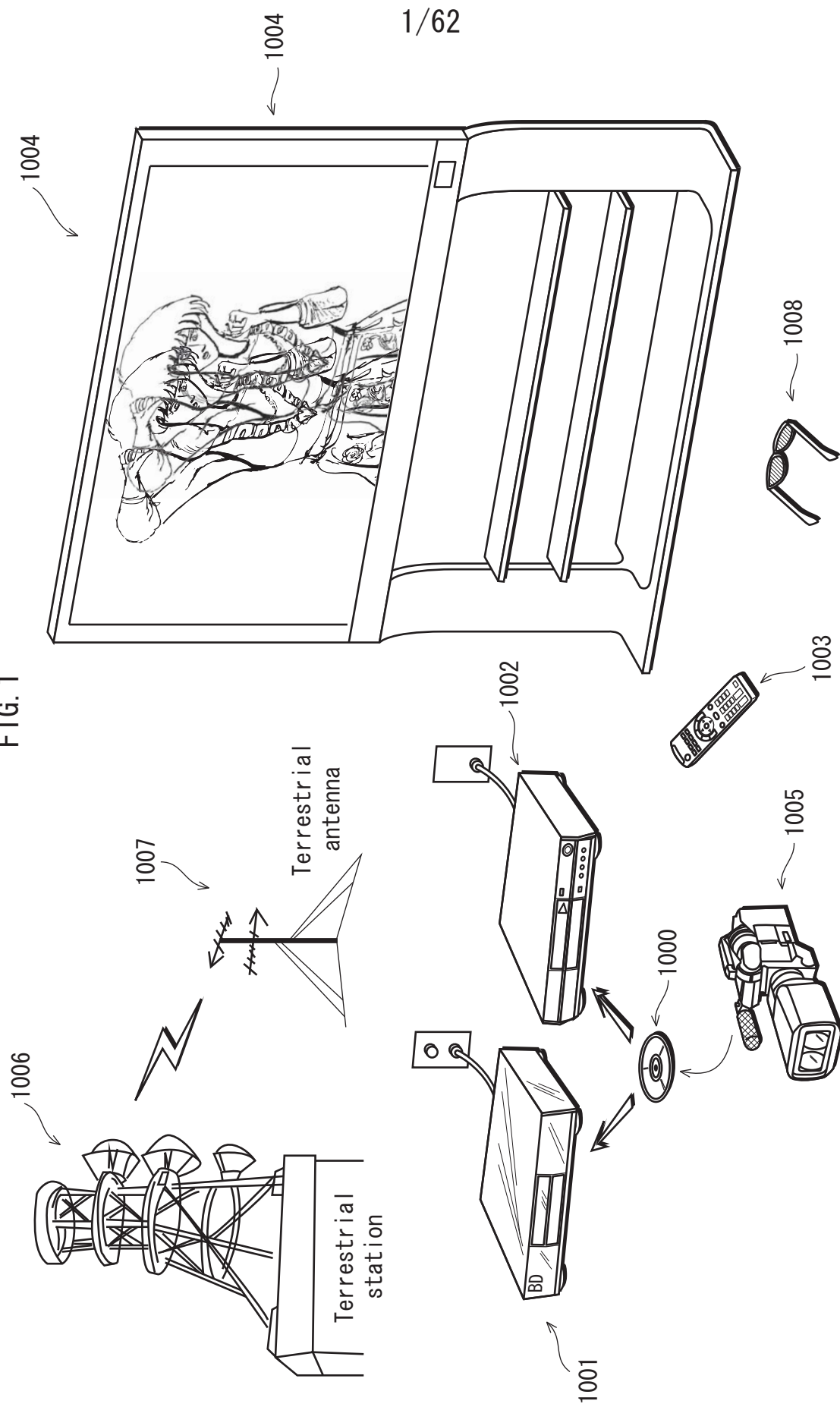


FIG. 2A

Two-dimensional image

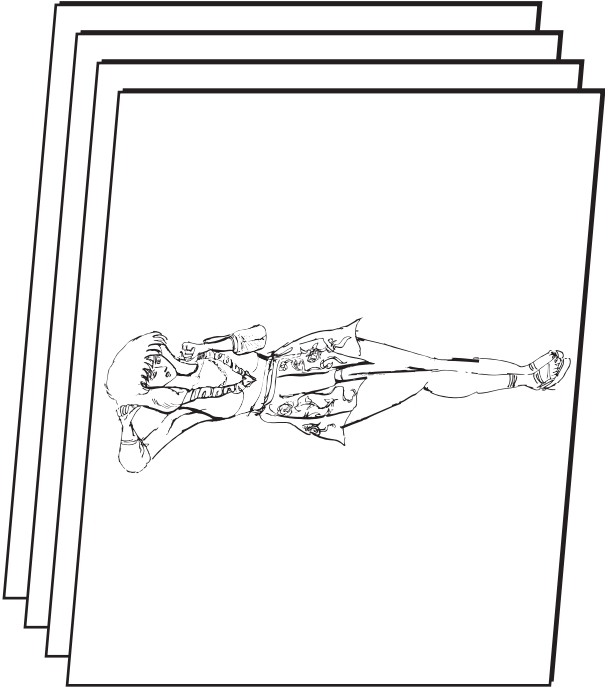


FIG. 2B

Stereoscopic image

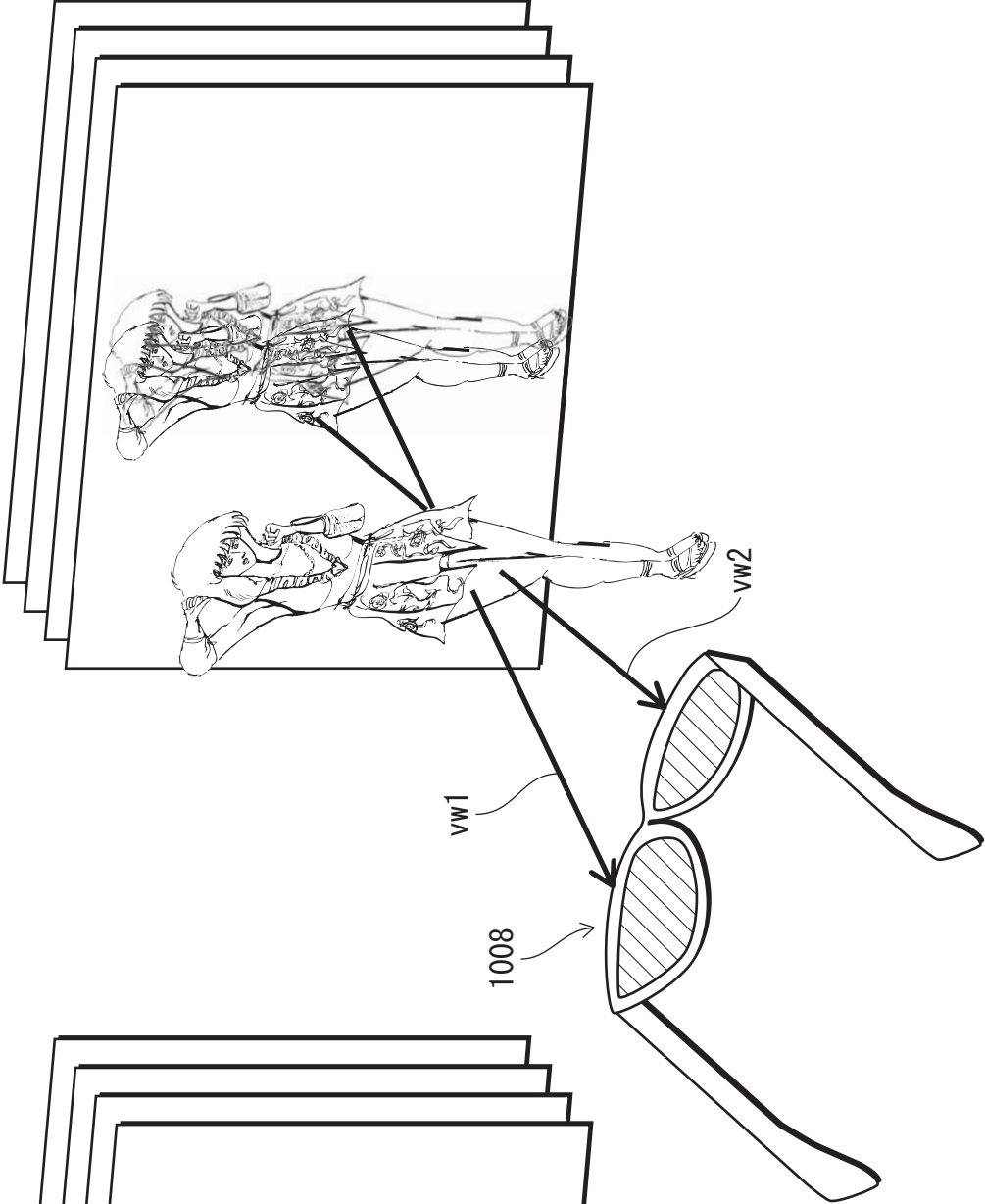


FIG. 3A

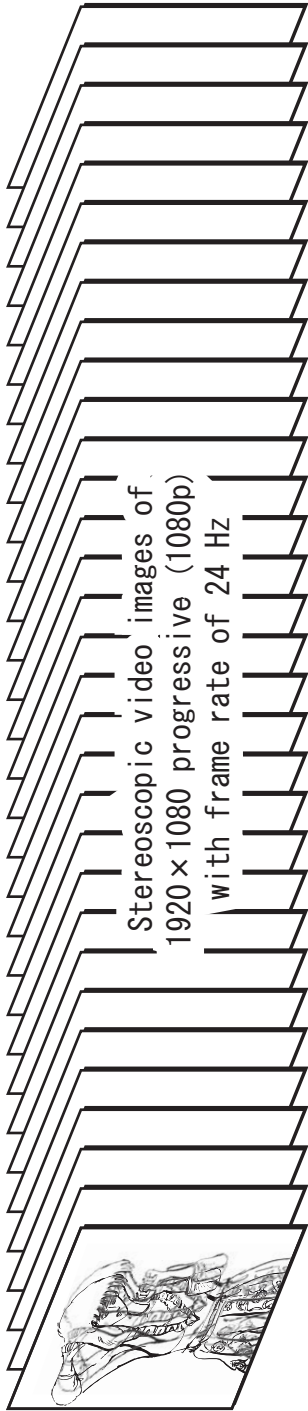


FIG. 3B

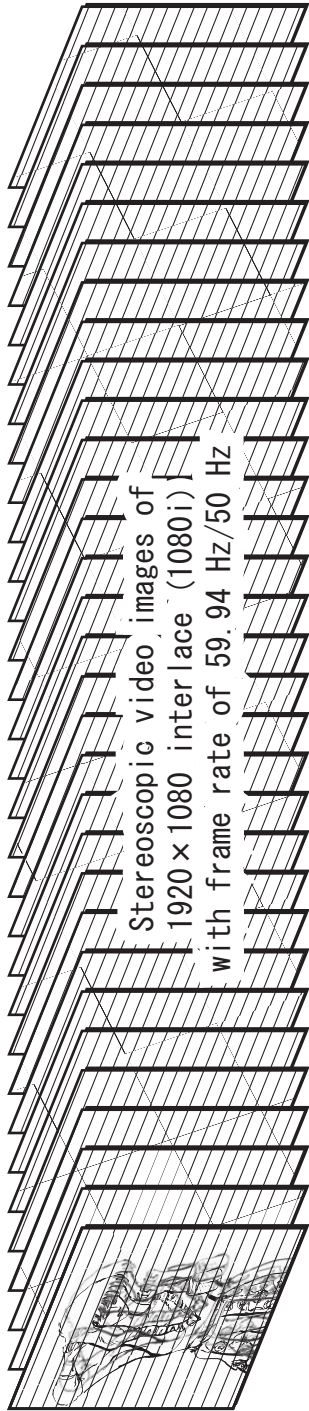


FIG. 3C

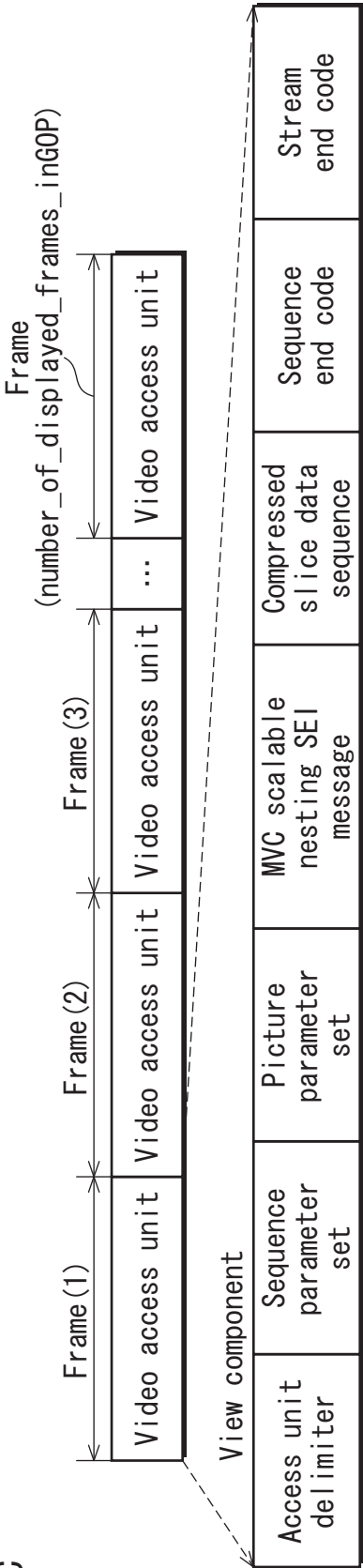


FIG. 4A

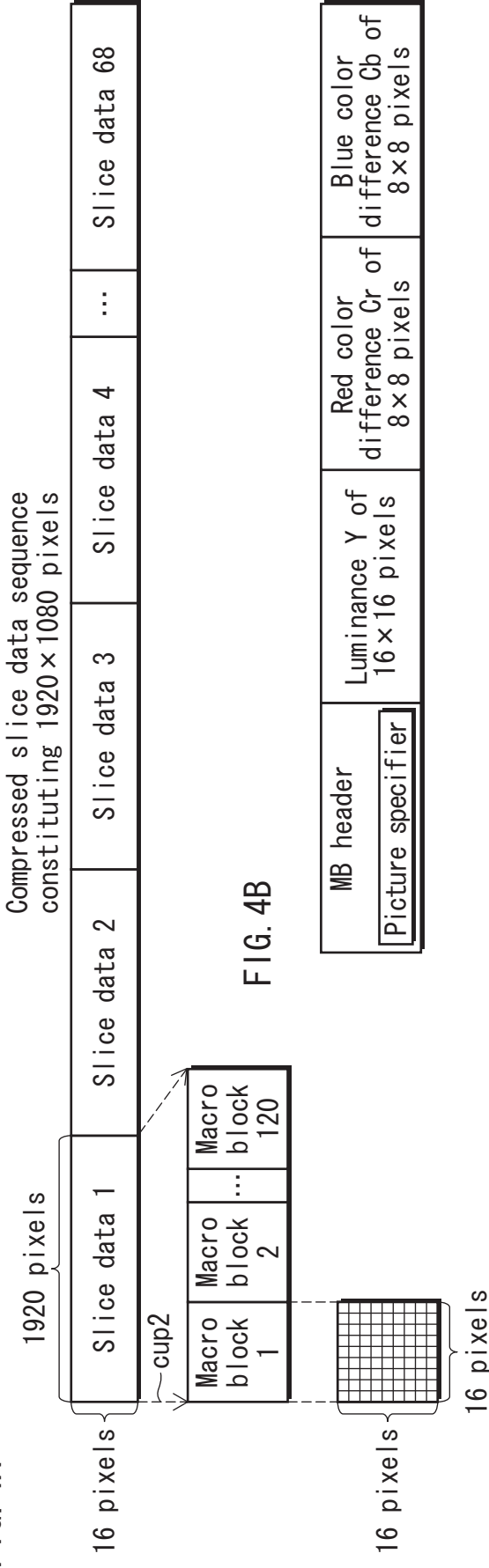
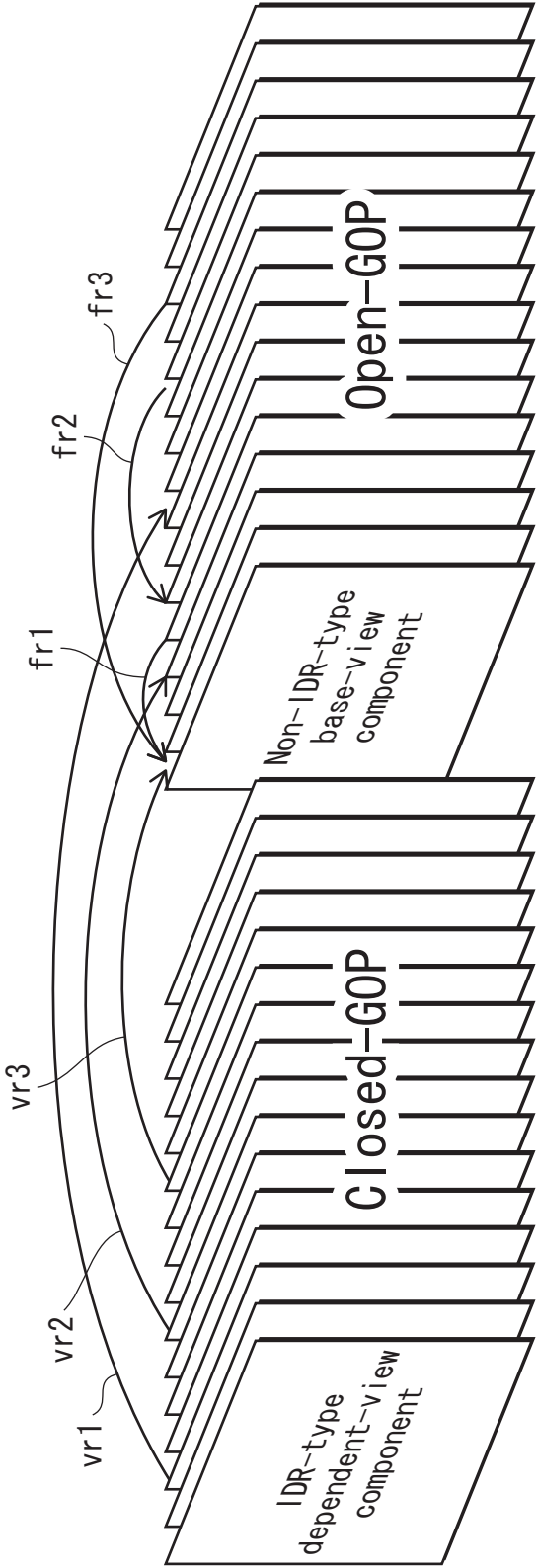


FIG. 4C



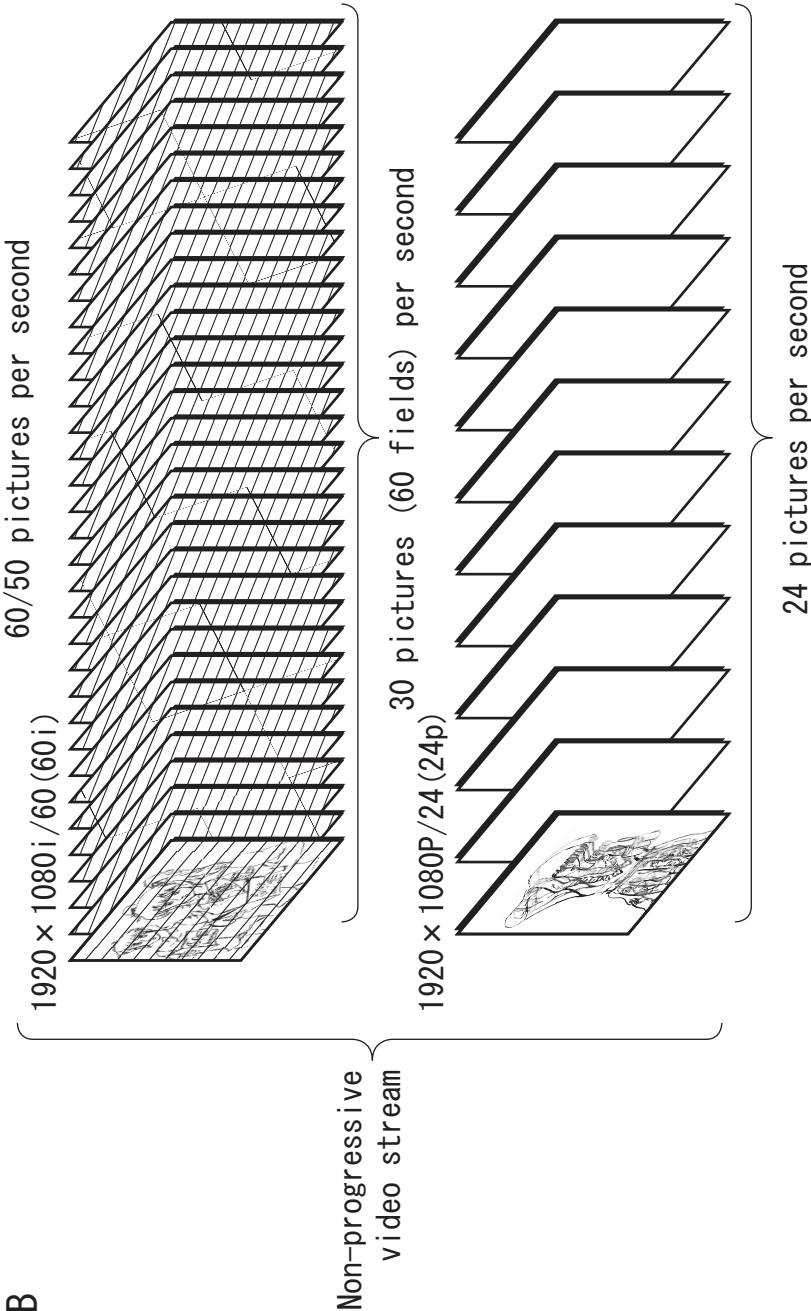
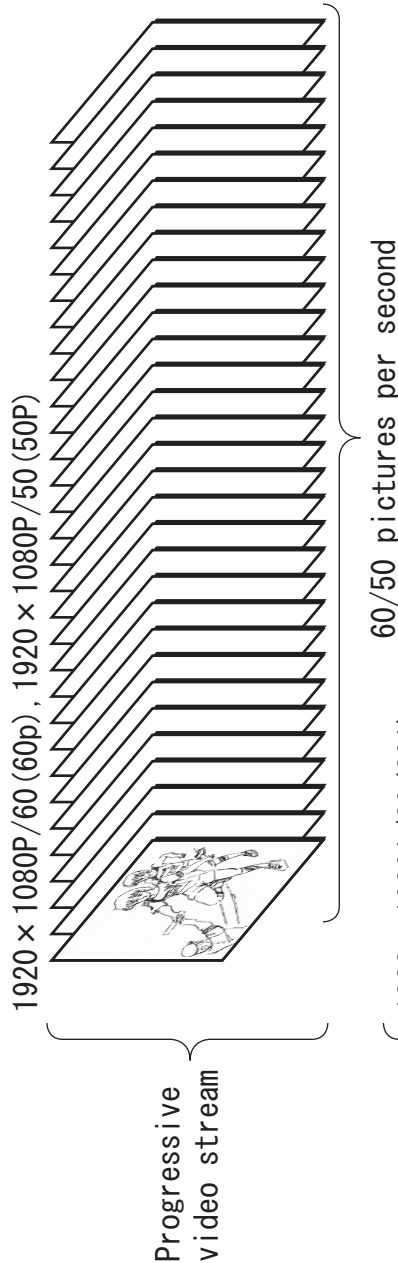


FIG. 5A

FIG. 5B

FIG. 6B Conventional recording/playback format

```

AppInfoBDMV() {
    length
    editability_flag
    reserved_for_future_use
    content_provider_user_data
}

```

FIG. 6A

```

index.bdmv {
    type_indicator           8 bits
    version_number          8*4 bits
    Indexes_start_address   32 bits
    ExtensionData_start_address 32 bits
    reserved_for_future_use 192 bits
    AppInfoBDMV()
    for (i=0; i<N1; i++) {
        padding_word
    }
    Indexes()
    for (i=0; i<N2; i++) {
        padding_word
    }
    ExtensionData()
}

```

FIG 6C | Extended recording/playback format

```

AppInfoBDWV () {
    length
    editability_flag
    initial_output_mode_preference
    SS_content_exist_flag
    if (condition(A) is TRUE)
        extended_editability_flag
    else
        reserved
        reserved_for_future_use
        video_format
        frame_rate
        content_provider_user_data
}

```

FIG. 6D

bit	b0 - b31	b32	b33	b34	b35	b36 - b39	b40 - b43	b44 - b47	b48 -
AppInfoBDMW @Extended	length	editability _flag	initial_ output_ mode_ preference	SS_content_ exist_flag	extended_ editability_ flag ----- reserved	reserved	video_ format	frame_ rate	content_ provider_ user_data
AppInfoBDMW @Conventional	length	editability _flag	reserved	reserved	reserved	reserved	reserved	reserved	content_ provider_ user_data

FIG. 7

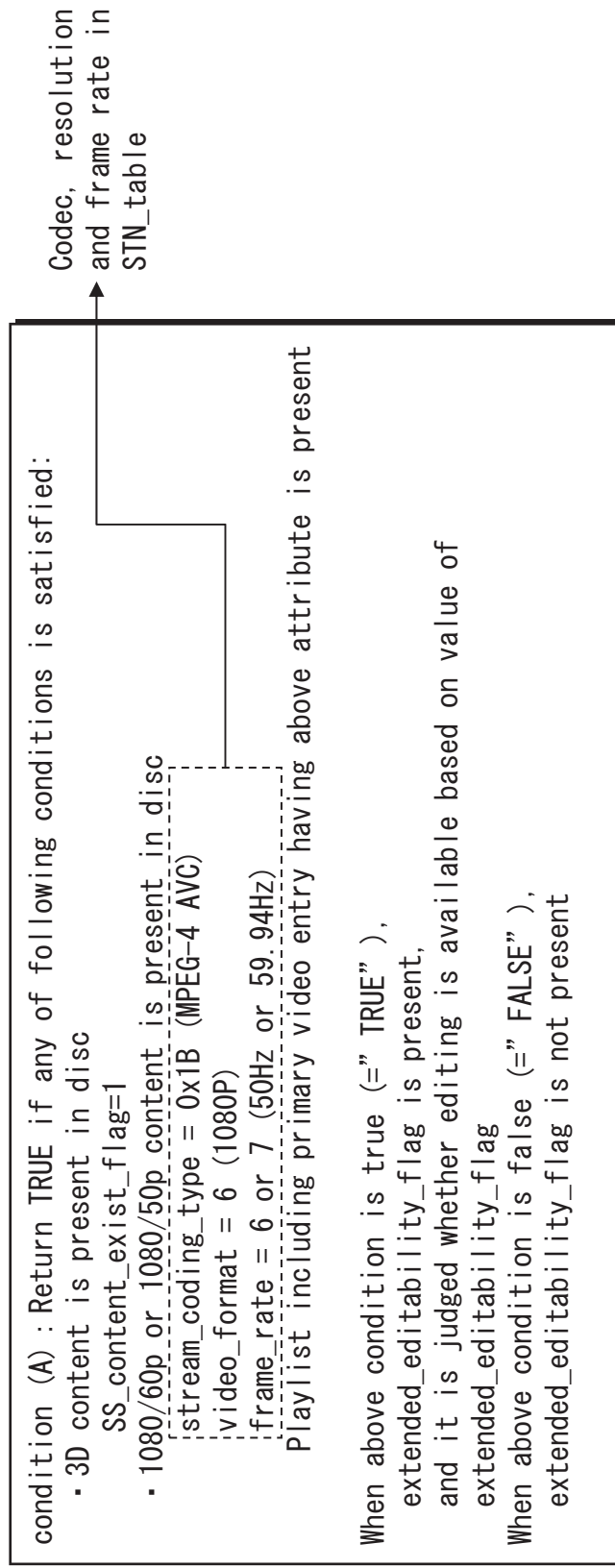


FIG. 9

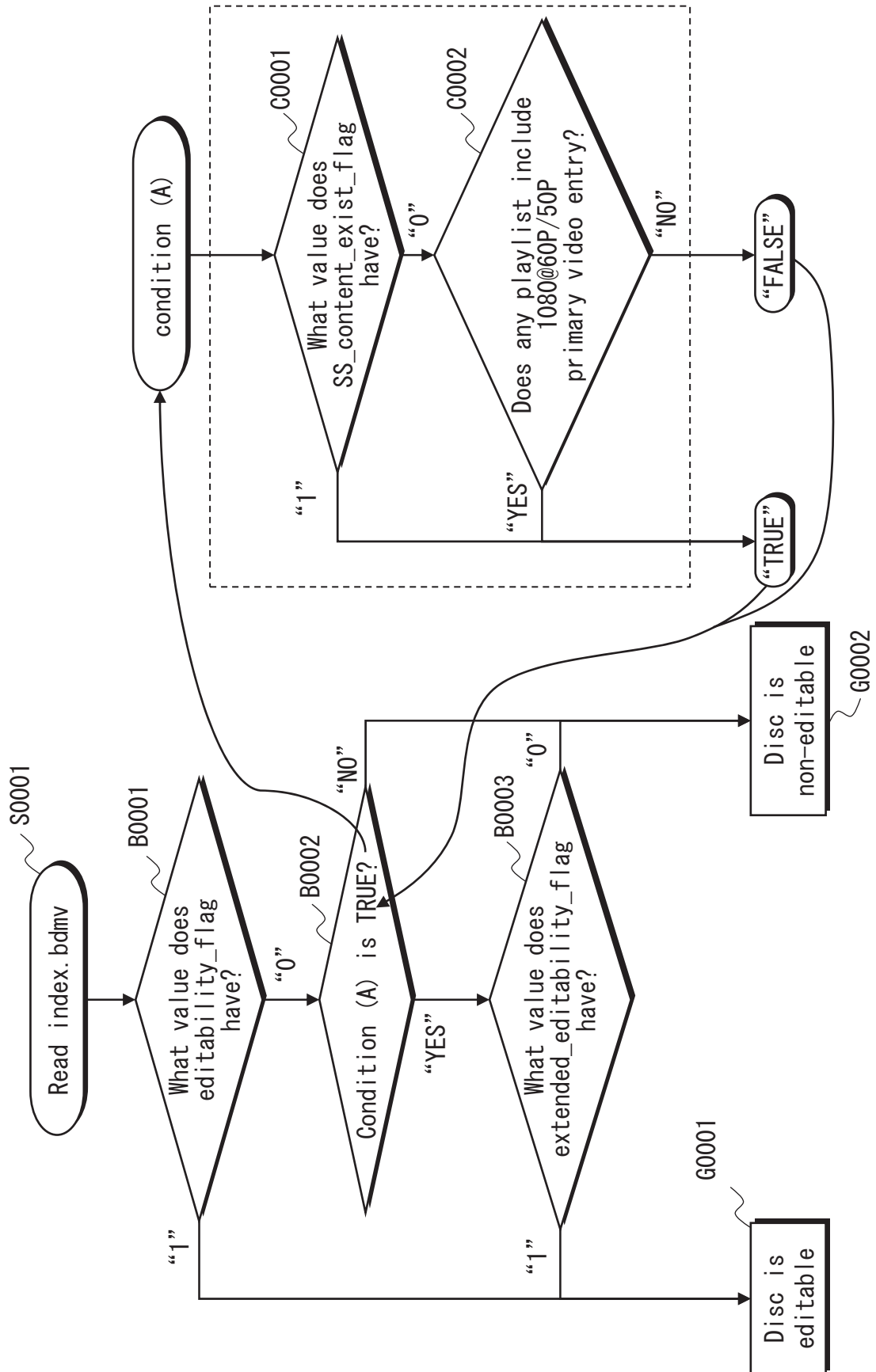


FIG. 10

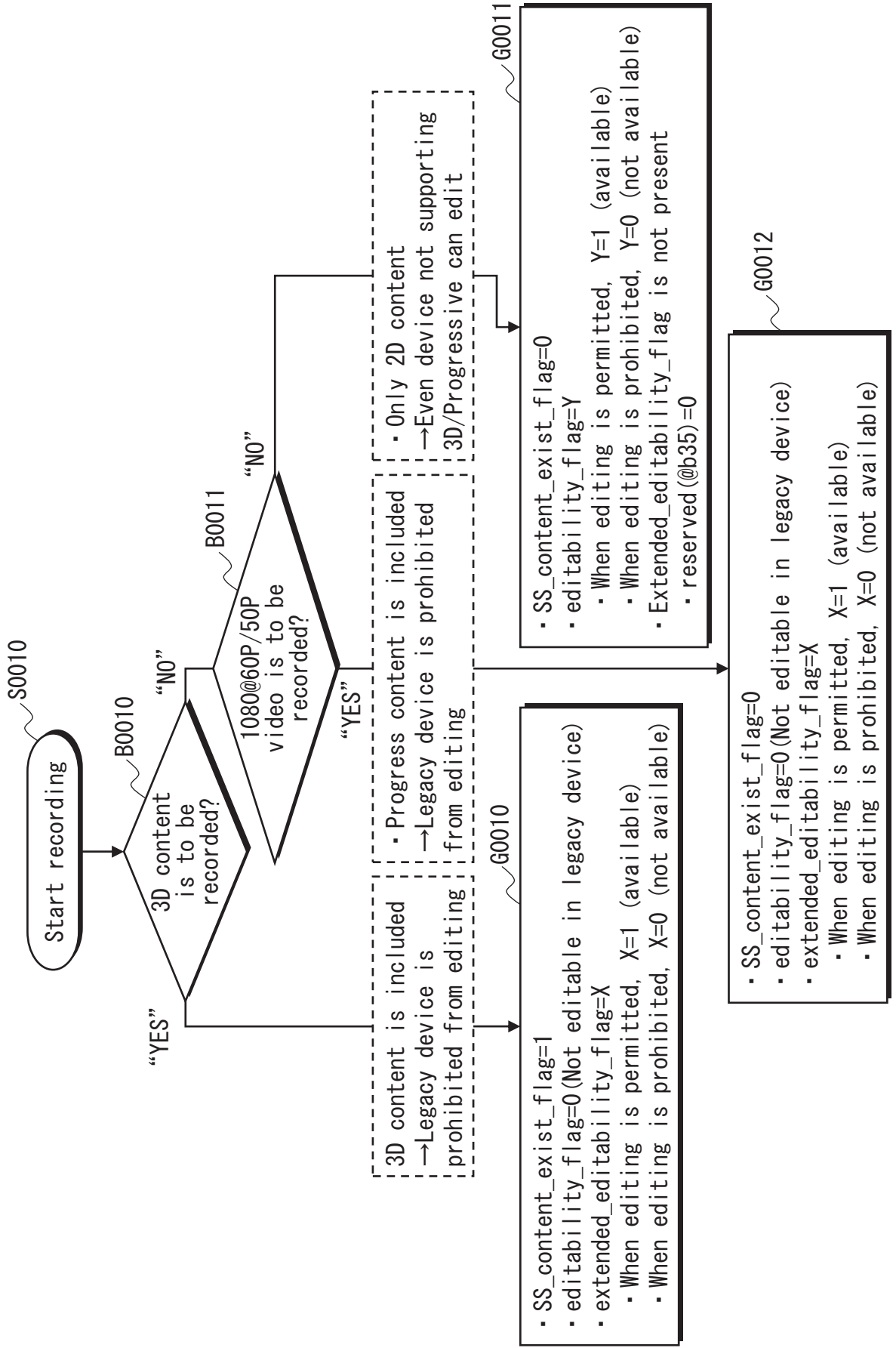
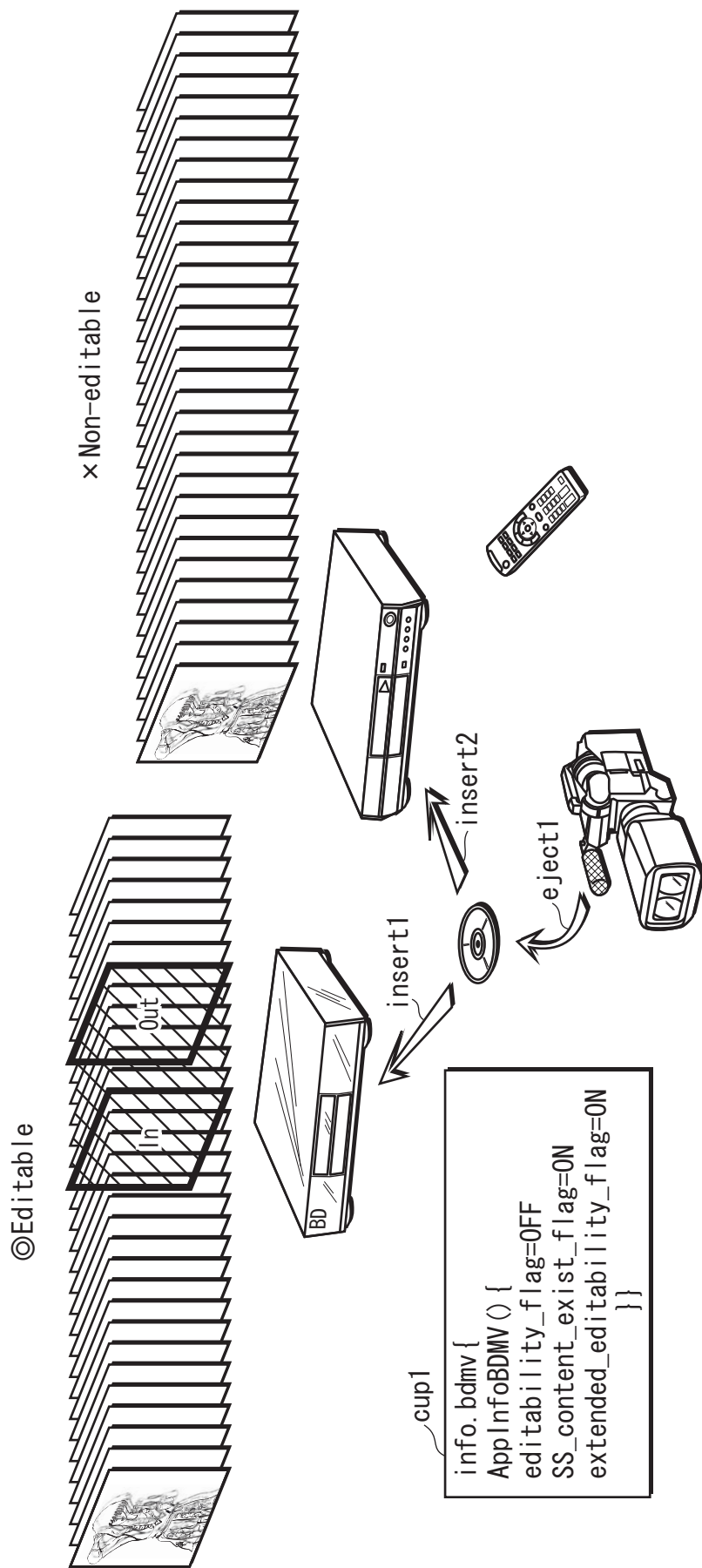


FIG. 11



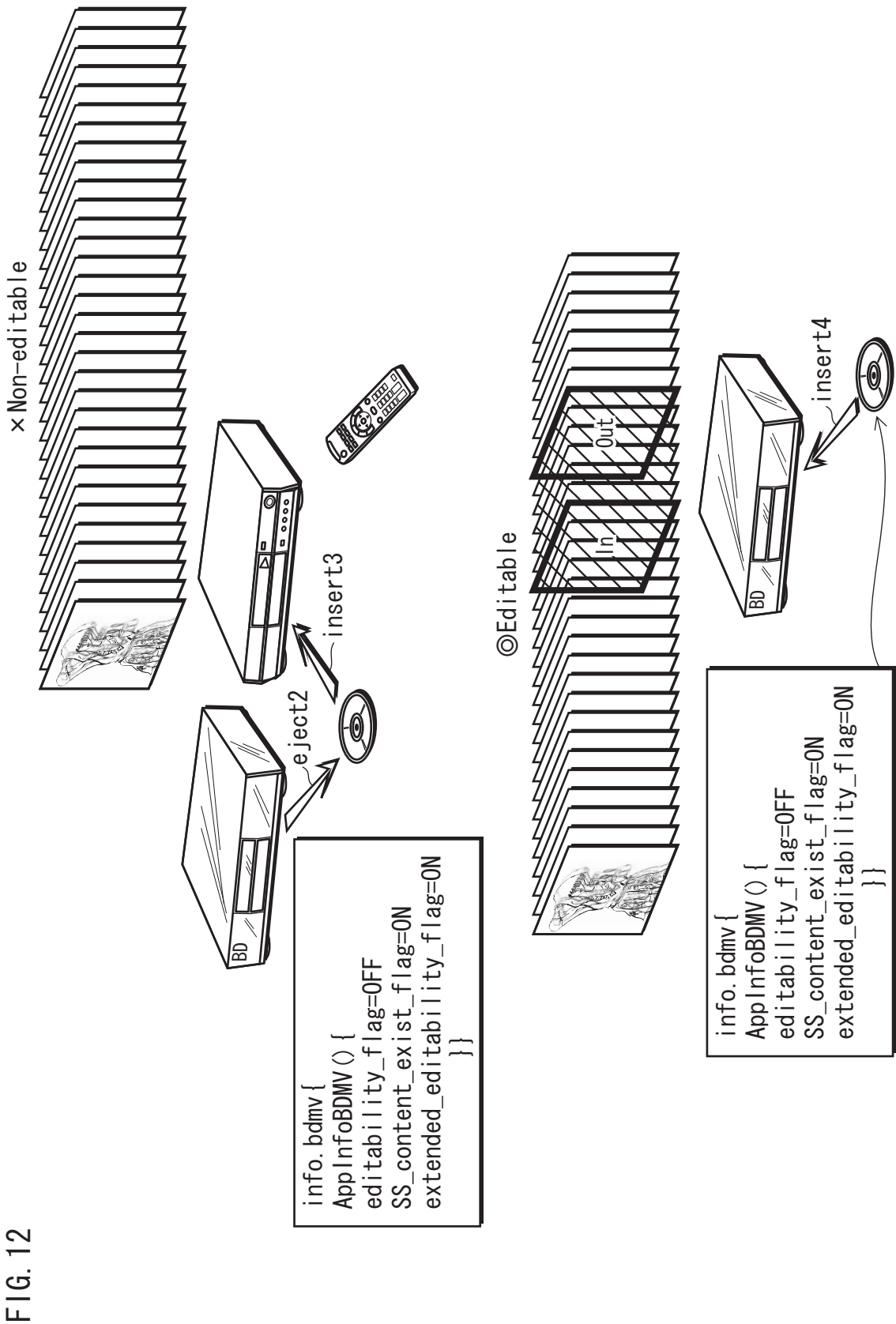


FIG. 13

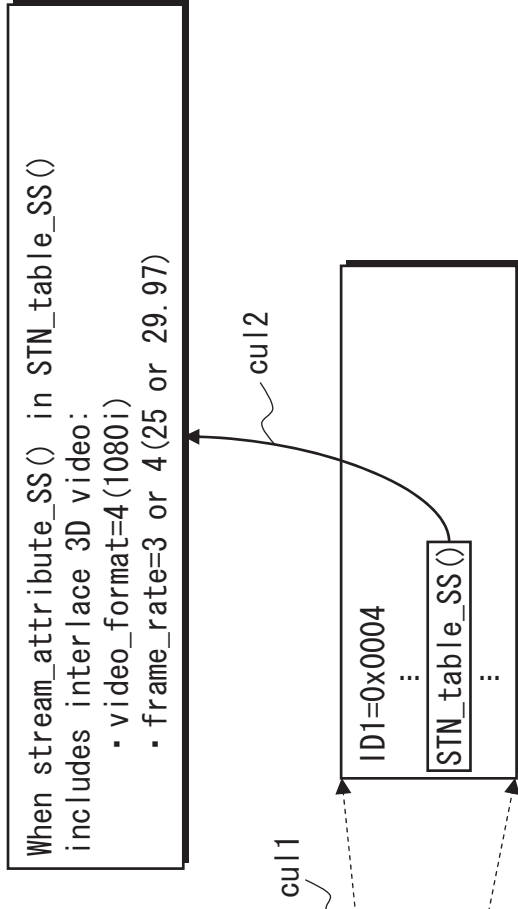
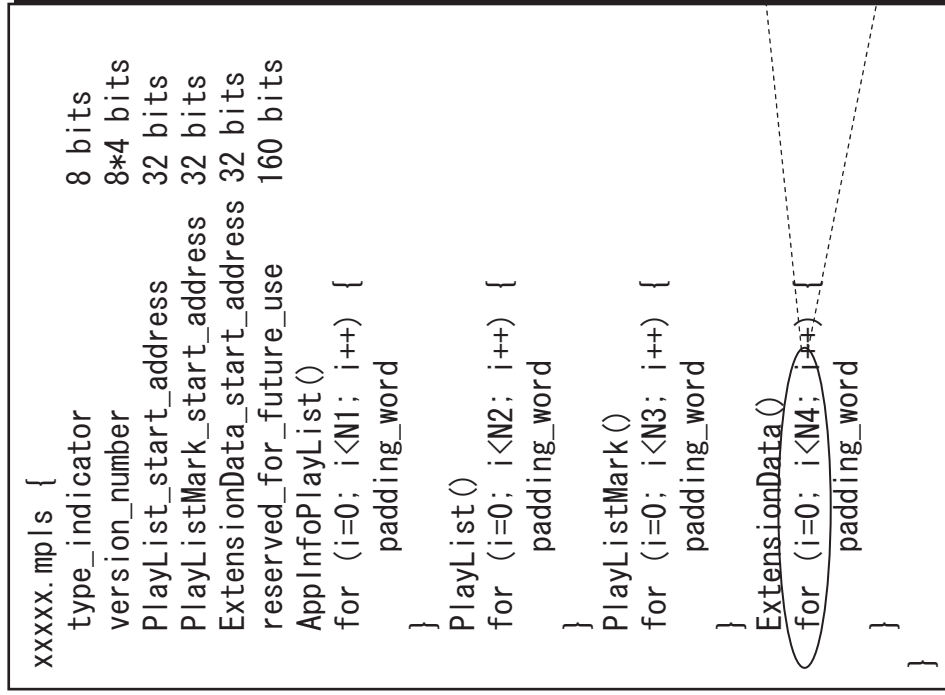


FIG. 14

PSR31 Player Profile and Player Version

b31	b30	b29	b82	b27	b26	b25	b24
reserved							
b23	b22	b21	b20	b19	b18	b17	b16
reserved		Profile 5 indicator		Player Profile			
b15	b14	b13	b12	b11	b10	b9	b8
Player Version (b15-b8)							
b7	b6	b5	b4	b3	b2	b1	b0
Player Version (b7-b0)							

Profile 5 indicator <<Profile5 → supports 3D playback>>

0b: BD-RE/BD-R Player which complies with BD-RE Profile 1, Profile 2, Profile 3 or Profile 4

1b: BD-RE/BD-R Player which complies with BD-RE Profile 5. When the Profile 5 indicator value is set to 1b, the Player Profile value shall be set to 0011b.

Player Version

0000 0010 0100 0000b (0x0240): BD-RE/BD-R Player which complies with “System Description Blu-ray Disc Rewritable Format, Part 3: Audio Visual Basic Specifications Version 3.1”

FIG. 15

PSR29 Player Status Register for Player Capability for Video

b31	b30	b29	b28	b27	b26	b25	b24
reserved							
b23	b22	b21	b20	b19	b18	b17	b16
reserved							
b15	b14	b13	b12	b11	b10	b9	b8
reserved							
b7	b6	b5	b4	b3	b2	b1	b0
reserved			Progressive Video Capability	Scaling value type of x1 for 720x480 16:9 on 1920x1080 or 1280x720		50&25Hz Video Capability	HD Secondary Video Capability

Progressive Video Capability
0b: Progressive Video incapable
1b: Progressive Video capable

FIG. 16

PSR23 Display Capability

b31	b30	b29	b82	b27	b26	b25	b24
reserved							
b23	b22	b21	b20	b19	b18	b17	b16
reserved							
b15	b14	b13	b12	b11	b10	b9	b8
Horizontal display size (b7-b0)							
b7	b6	b5	b4	b3	b2	b1	b0
reserved							
Stereoscopic 1920x1080 interlace video Display Capability				Stereoscopic 1280x720 50p video Display Capability			
0b: Incapable of displaying Stereoscopic 1920x1080 Interlace video				1b: Capable of displaying Stereoscopic 1920x1080 Interlace video			

Stereoscopic 1920x1080 interlace video Display Capability
<<Whether TV connected with playback device can display interlace 3D>>
0b: Incapable of displaying Stereoscopic 1920x1080 Interlace video
1b: Capable of displaying Stereoscopic 1920x1080 Interlace video

FIG. 17

PSR24 3D Capability

b31	b30	b29	b28	b27	b26	b25	b24
reserved							
b23	b22	b21	b20	b19	b18	b17	b16
reserved							
b15	b14	b13	b12	b11	b10	b9	b8
reserved				Stereoscopic 1920x1080 interlace video output conversion Capability			
reserved				Stereoscopic 1920x1080 interlace video Capability			
b7	b6	b5	b4	b3	b2	b1	b0
Limited Stereoscopic BD-J	Secondary audio Capability	Stereoscopic BD-J Capability	dialog_region_offset	Stereoscopic IG Capability	Stereoscopic PG Capability	Stereoscopic 1280x720	Stereoscopic 1280x720

Stereoscopic 1920x1080 interlace video Capability
<<Whether interlace 3D can be decoded>>
0b: Incapable of decoding Stereoscopic 1920x1080 interlace video
1b: Capable of decoding Stereoscopic 1920x1080 interlace video.
This field shall not be set to 1b, If Profile 5 indicator in PSR31 is set to 0b.

When Profile5 is not supported, this field is not set to 1
(*:Because 3D other than Profile5 is not supported, decoding of interlace 3D is not supported).

Stereoscopic 1920x1080 interlace video output conversion Capability
<<Whether interlace 3D can be converted into HDMI v1.4a compliant 3D video>>
0b: Incapable of output conversion
1b: Capable of output conversion. If PSR24 8b is set to 1b, this field shall be set to 1b.

Players capable of decoding interlace 3D need to have 3D output conversion function
⇒Currently presumed combination of capabilities is [b9, b8]=[0, 0] or [1, 1]

FIG. 18A

PSR22: Stereoscopic status

b31	b30	b29	b28	b27	b26	b25	b24
reserved							
b23	b22	b21	b20	b19	b18	b17	b16
reserved							
b15	b14	b13	b12	b11	b10	b9	b8
reserved							
b7	b6	b5	b4	b3	b2	b1	b0
reserved							Output Mode

b0: Current Output ... Mode Status	0b: Current output mode is 2D output mode
	1b: Current output mode is stereoscopic output mode

FIG. 18B

Procedure when playback condition is changed

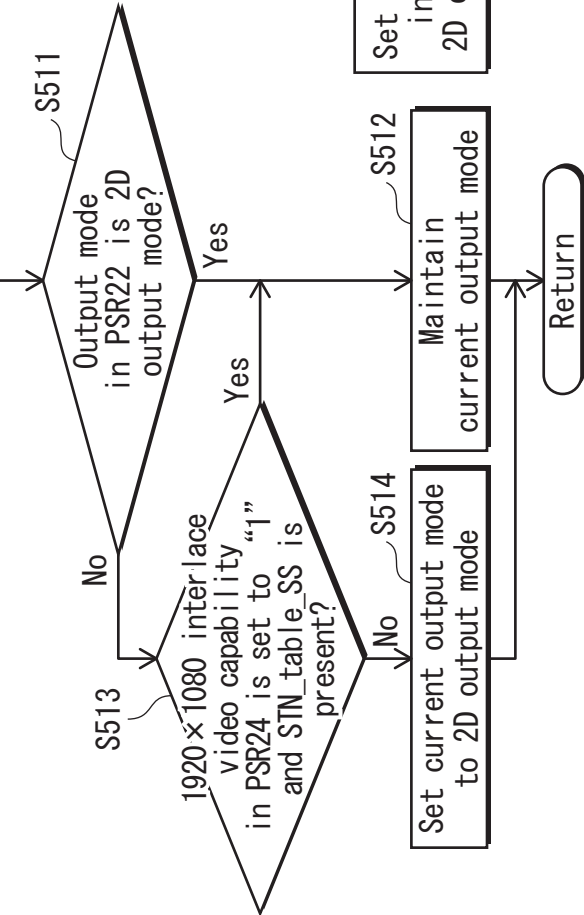


FIG. 18C

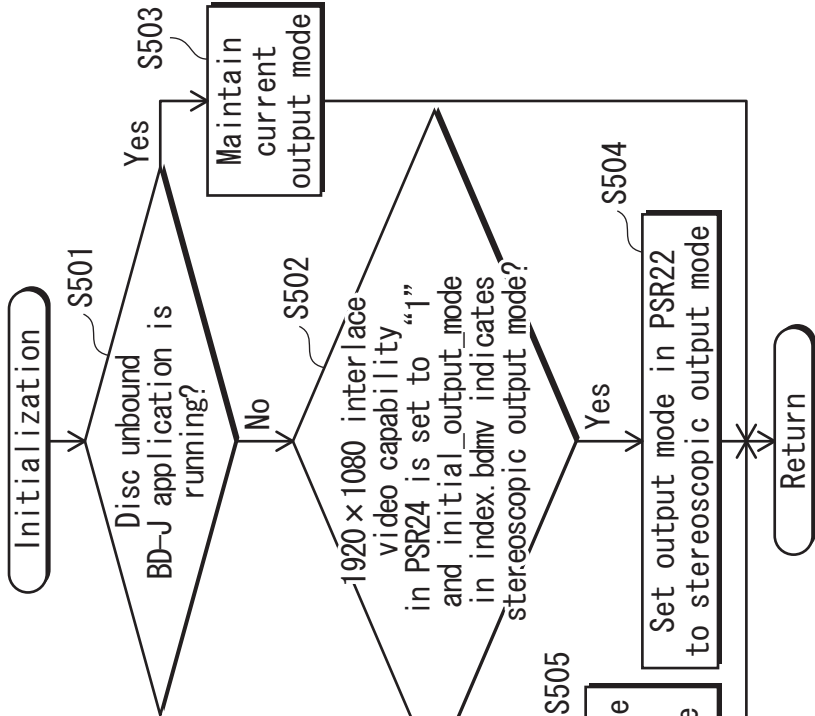


FIG. 19

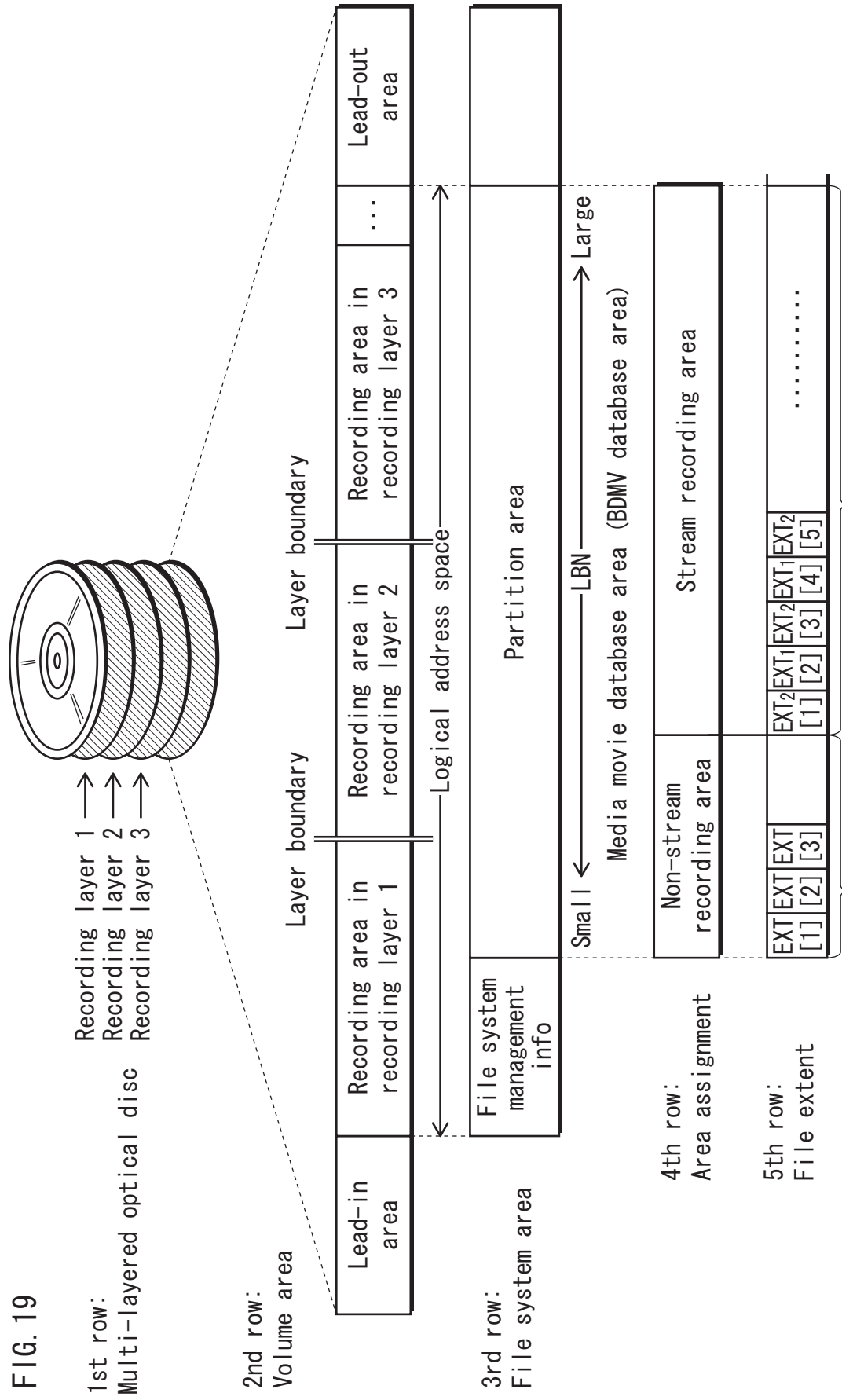


FIG. 20

20/62

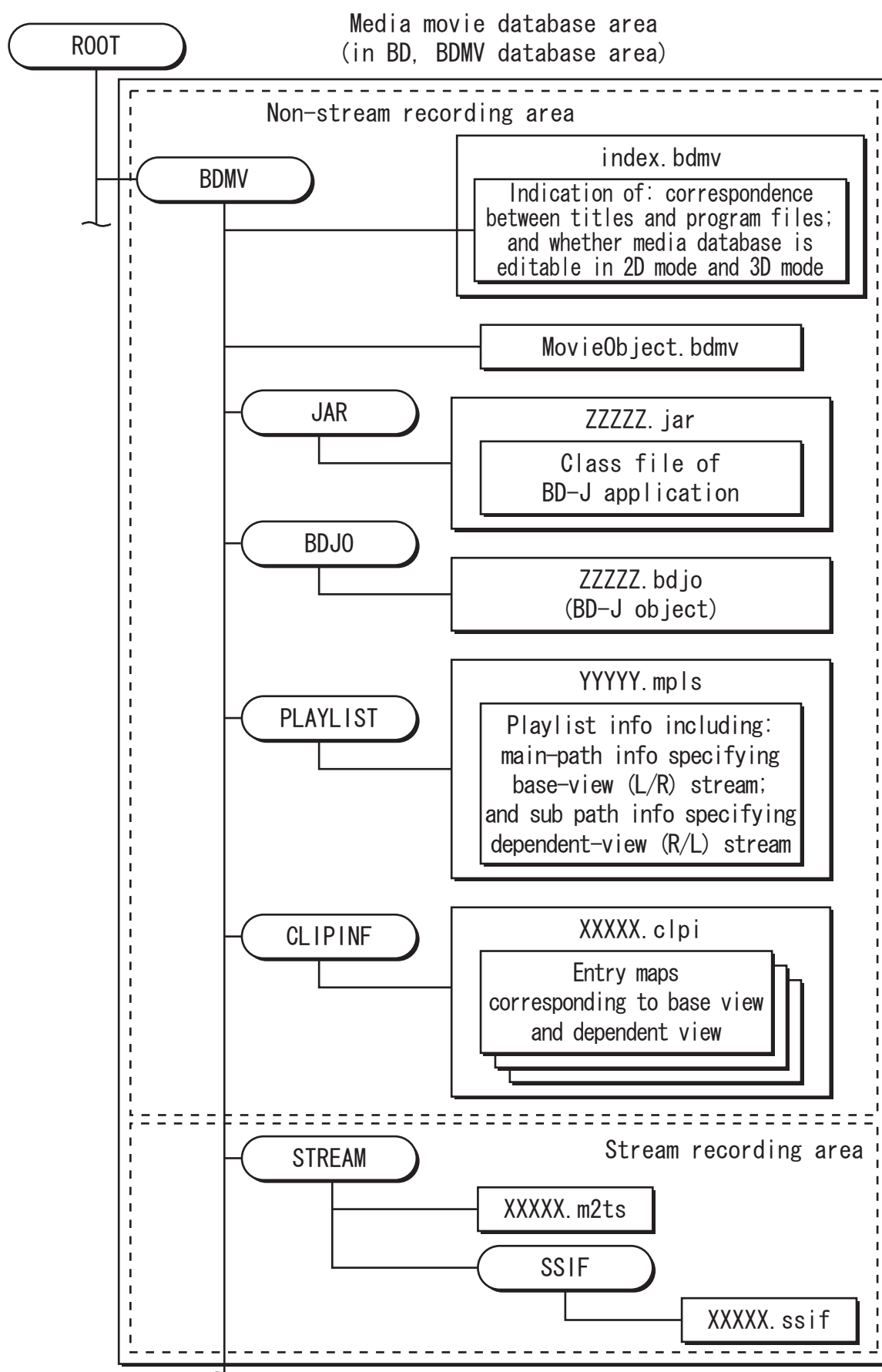


FIG. 21

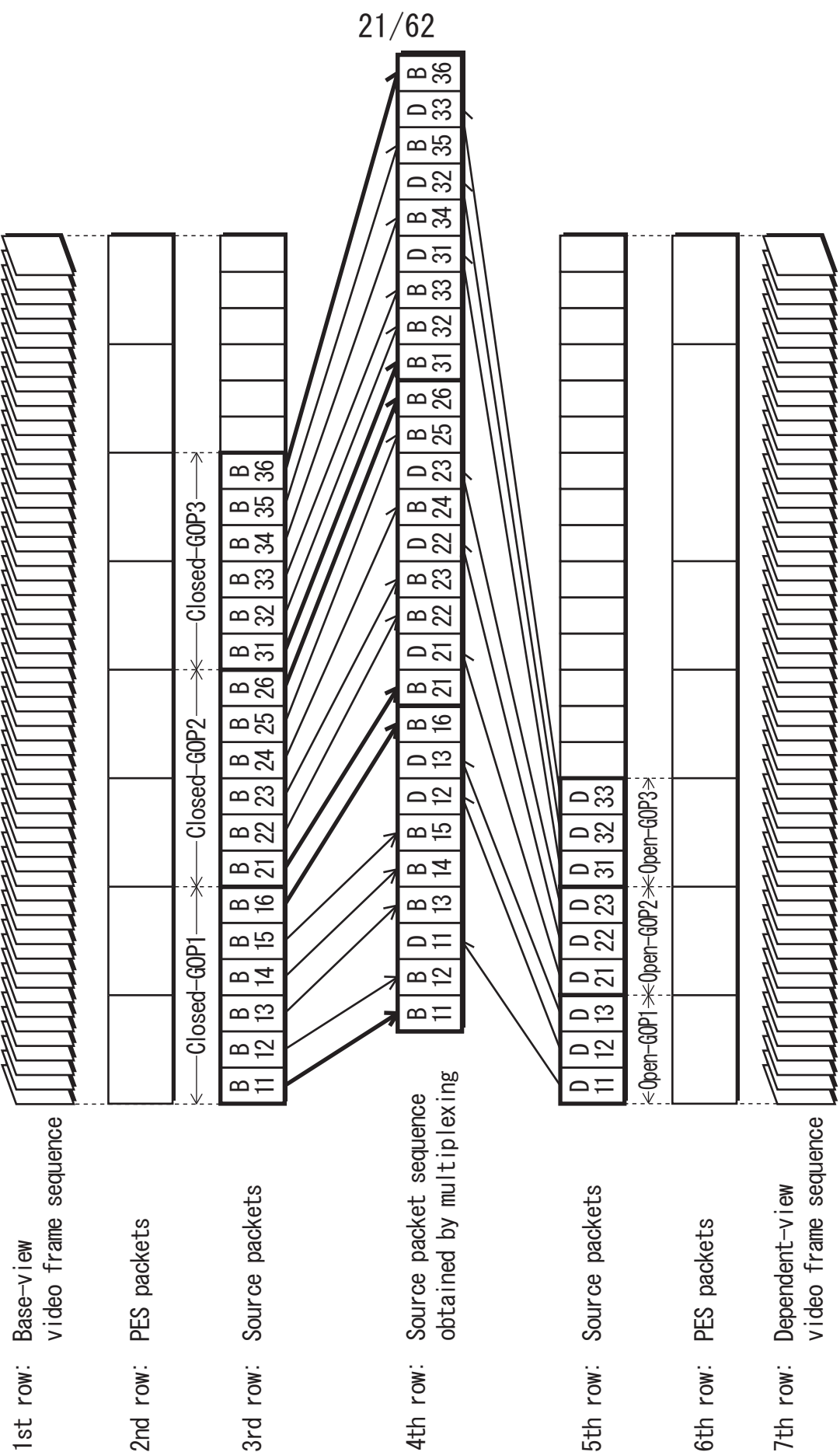


FIG. 22A

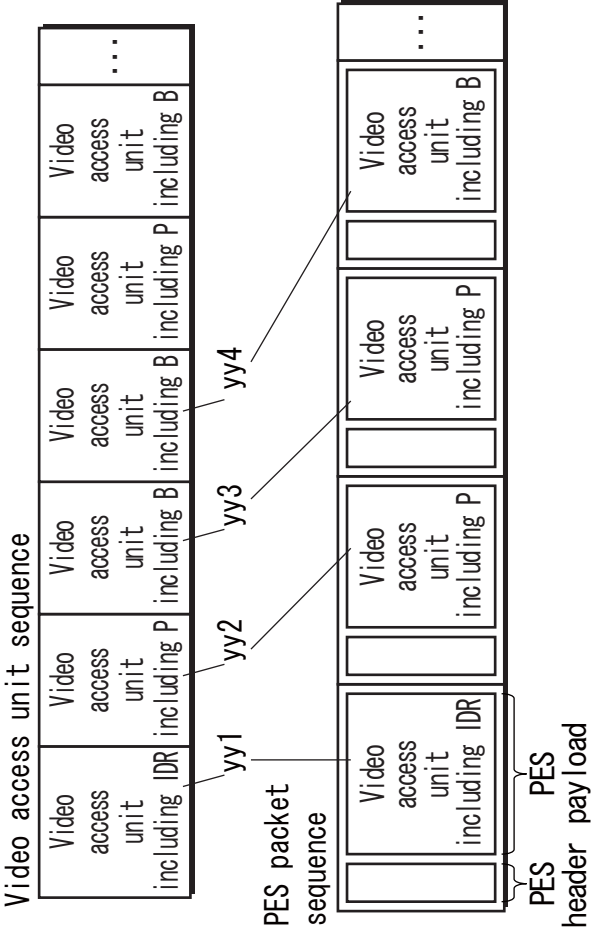


FIG. 22B

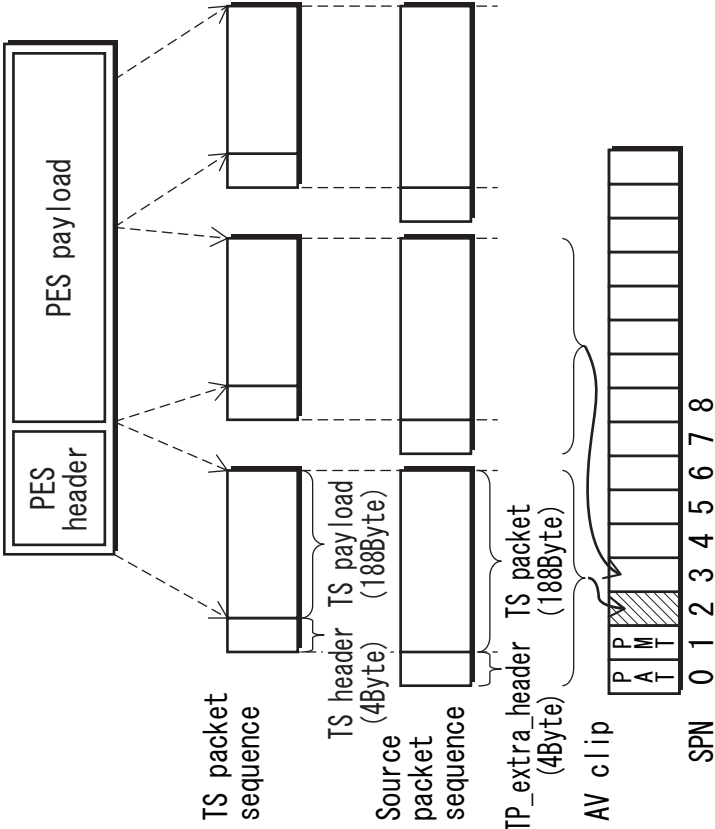


FIG. 22C

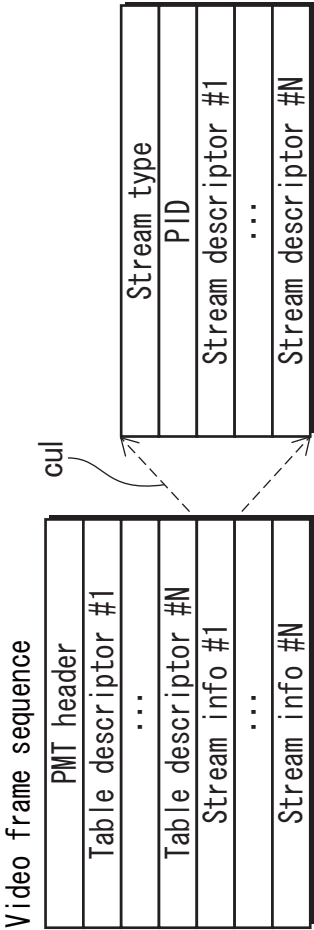


FIG. 23A

Clip info file

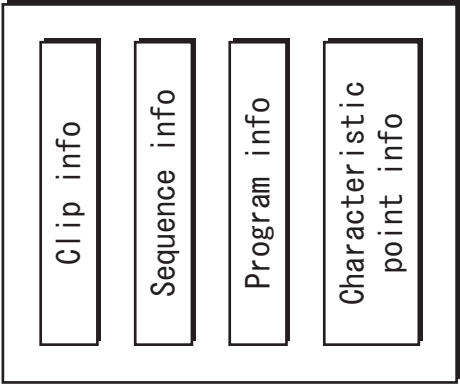


FIG. 23B

Clip info file (00002.clpi)

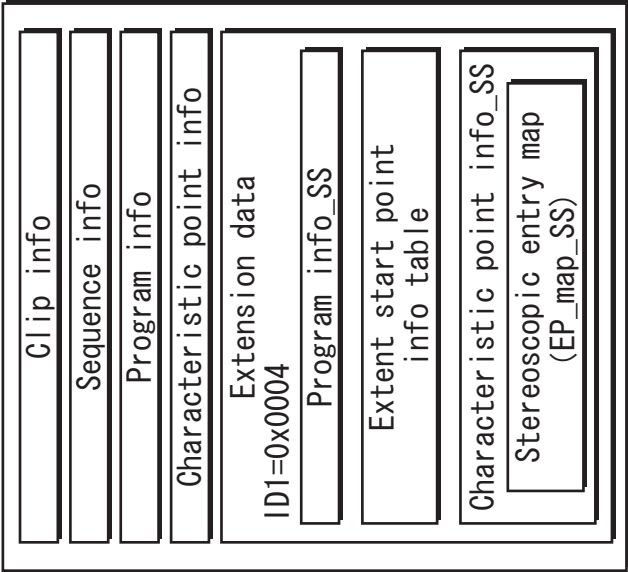


FIG. 23C

Internal structure of clip info

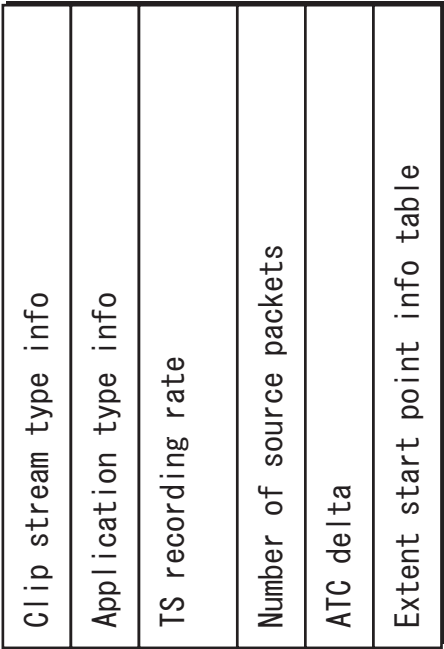


FIG. 23D

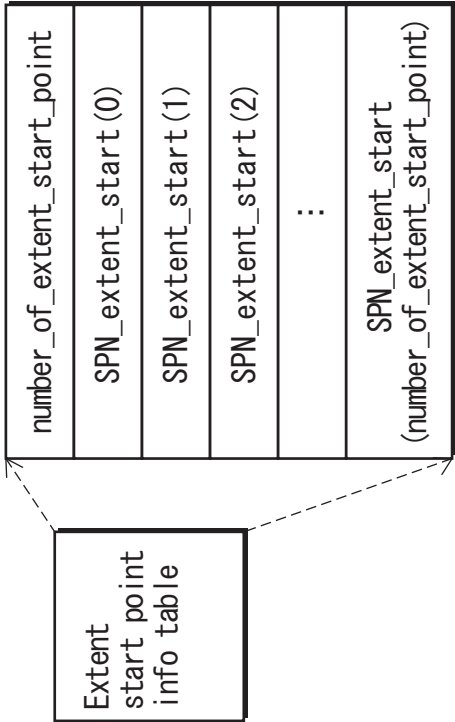


FIG. 23E

Frame rate	Resolution
24Hz	1920 × 1080
24Hz (23.976Hz)	1280 × 720
25Hz	960 × 540
30Hz (29.97Hz)	720 × 576
50Hz	720 × 480
60Hz (59.94Hz)	

FIG. 25A

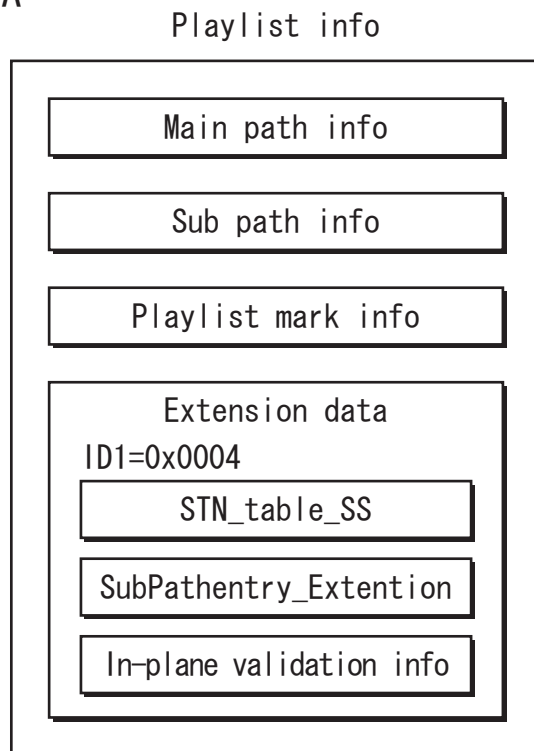


FIG. 25B

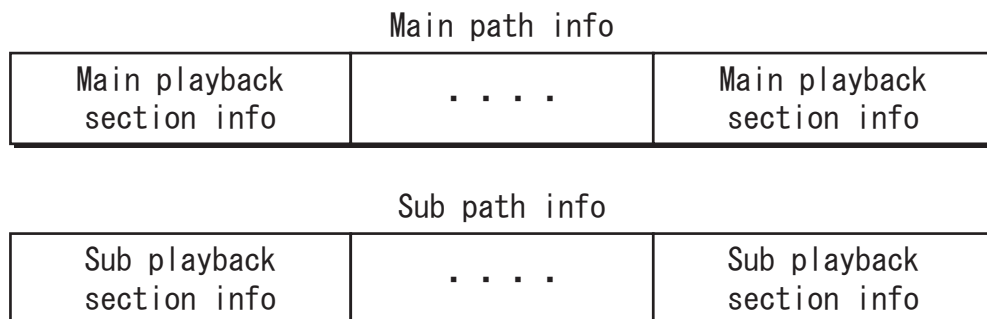


FIG. 25C

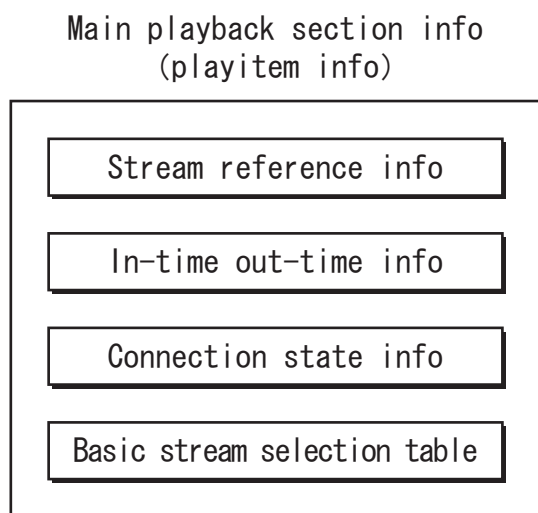


FIG. 25D

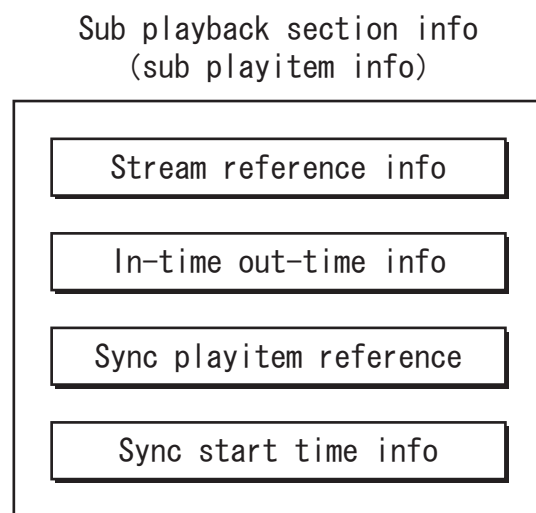


FIG. 26

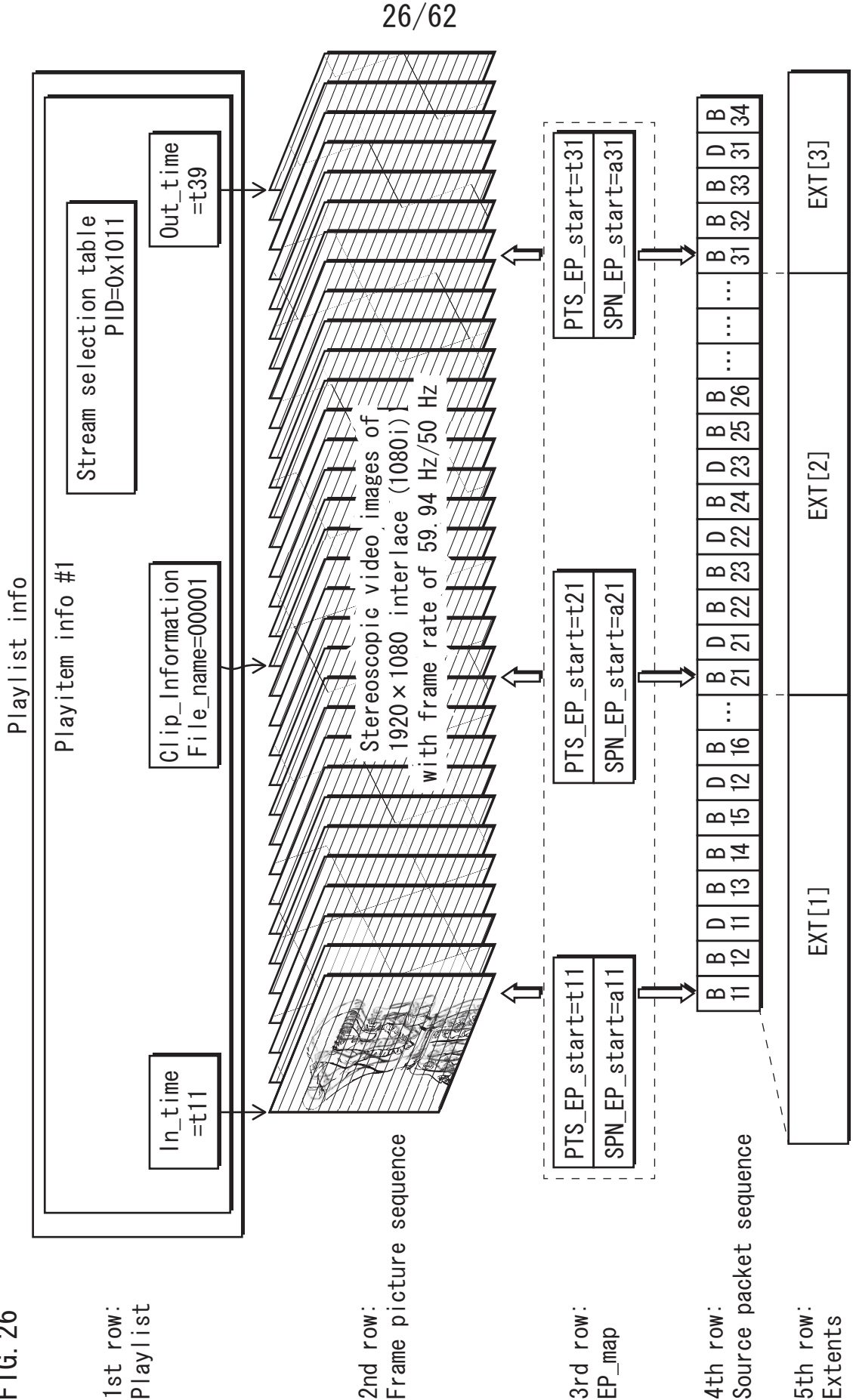


FIG. 27

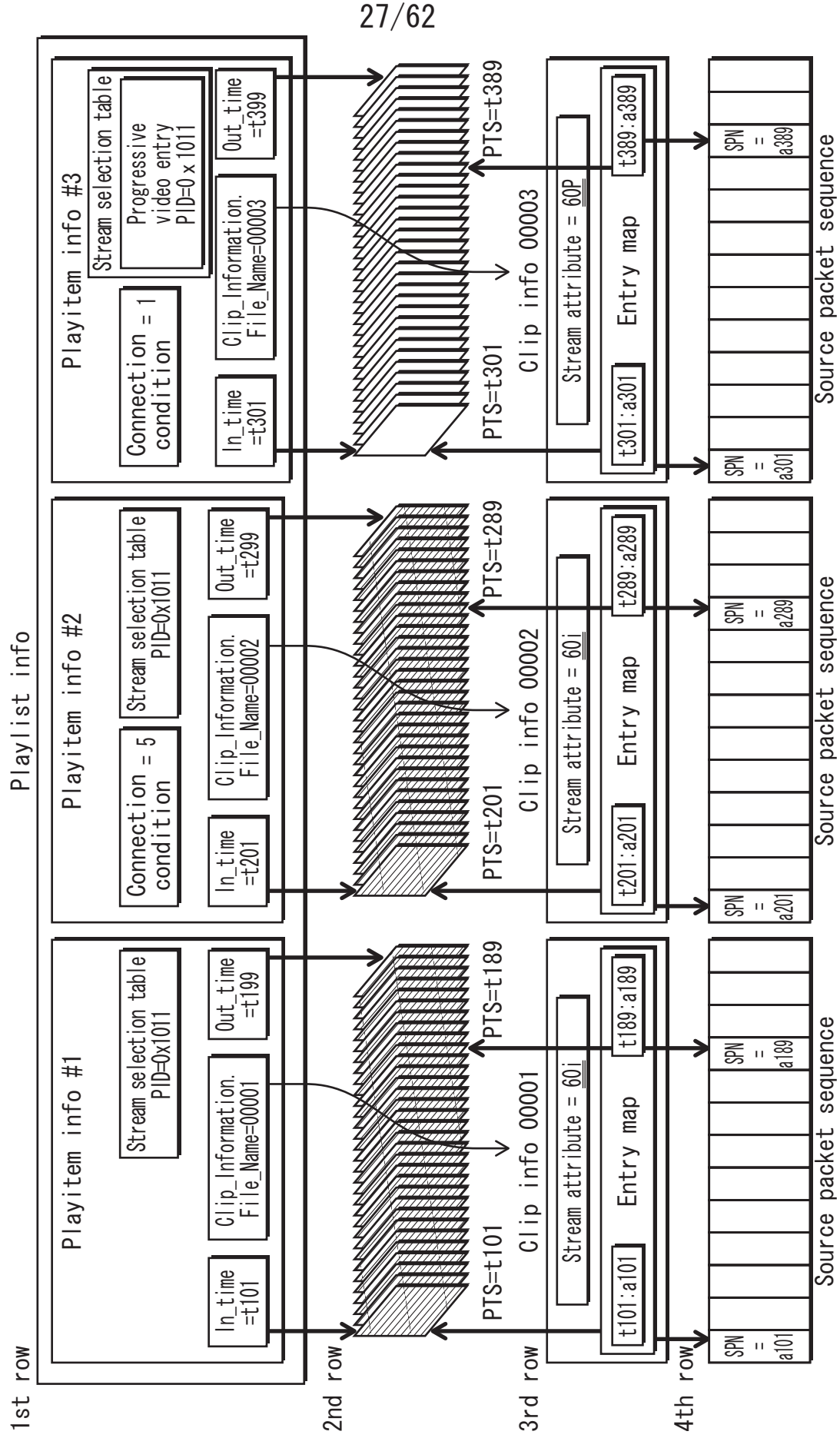


FIG. 28A Internal structure of recording device

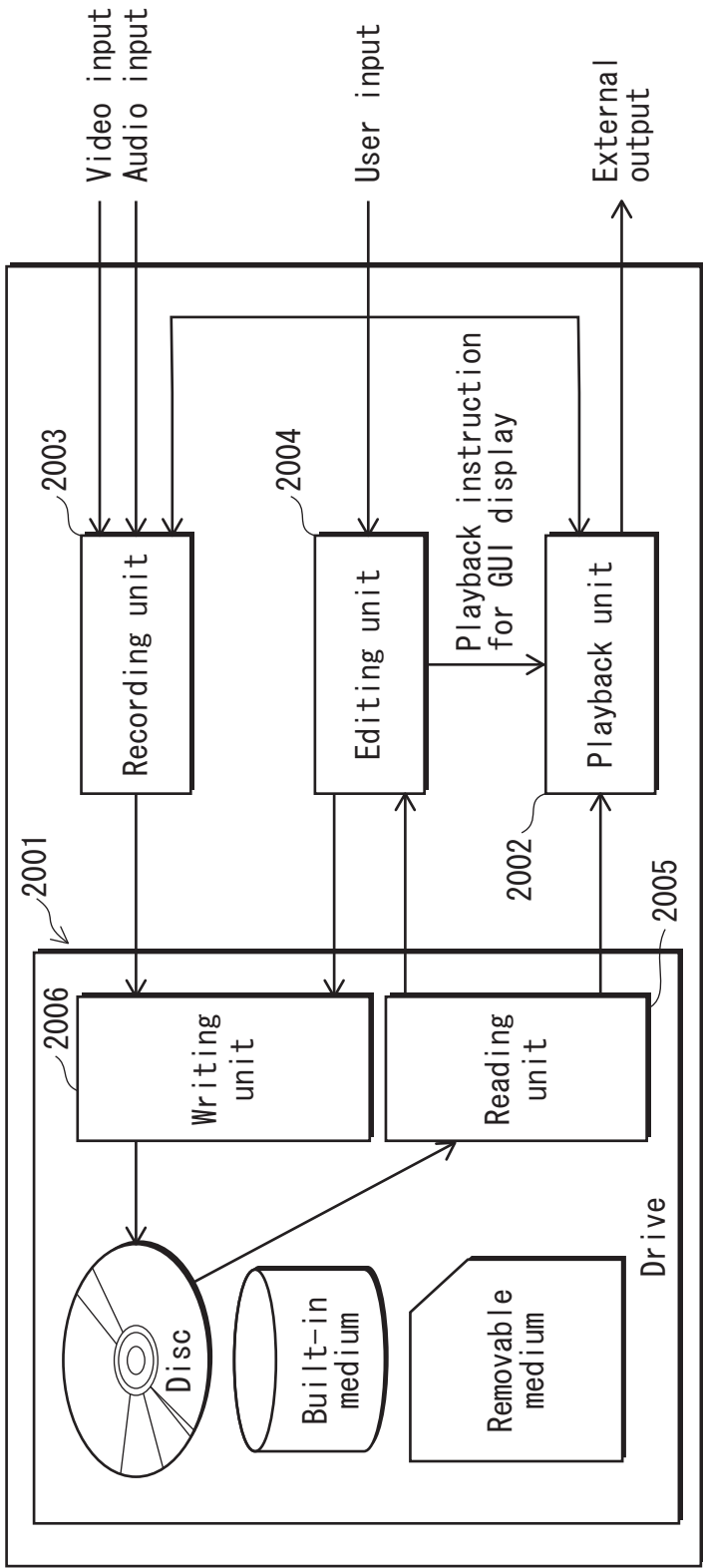


FIG. 28A

FIG. 28B Internal structure of playback device

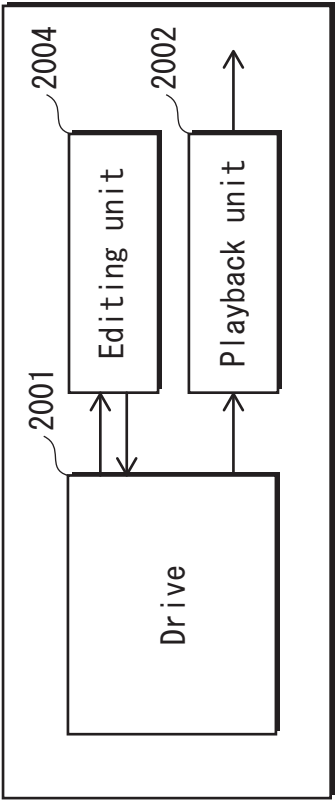


FIG. 28B

FIG. 29

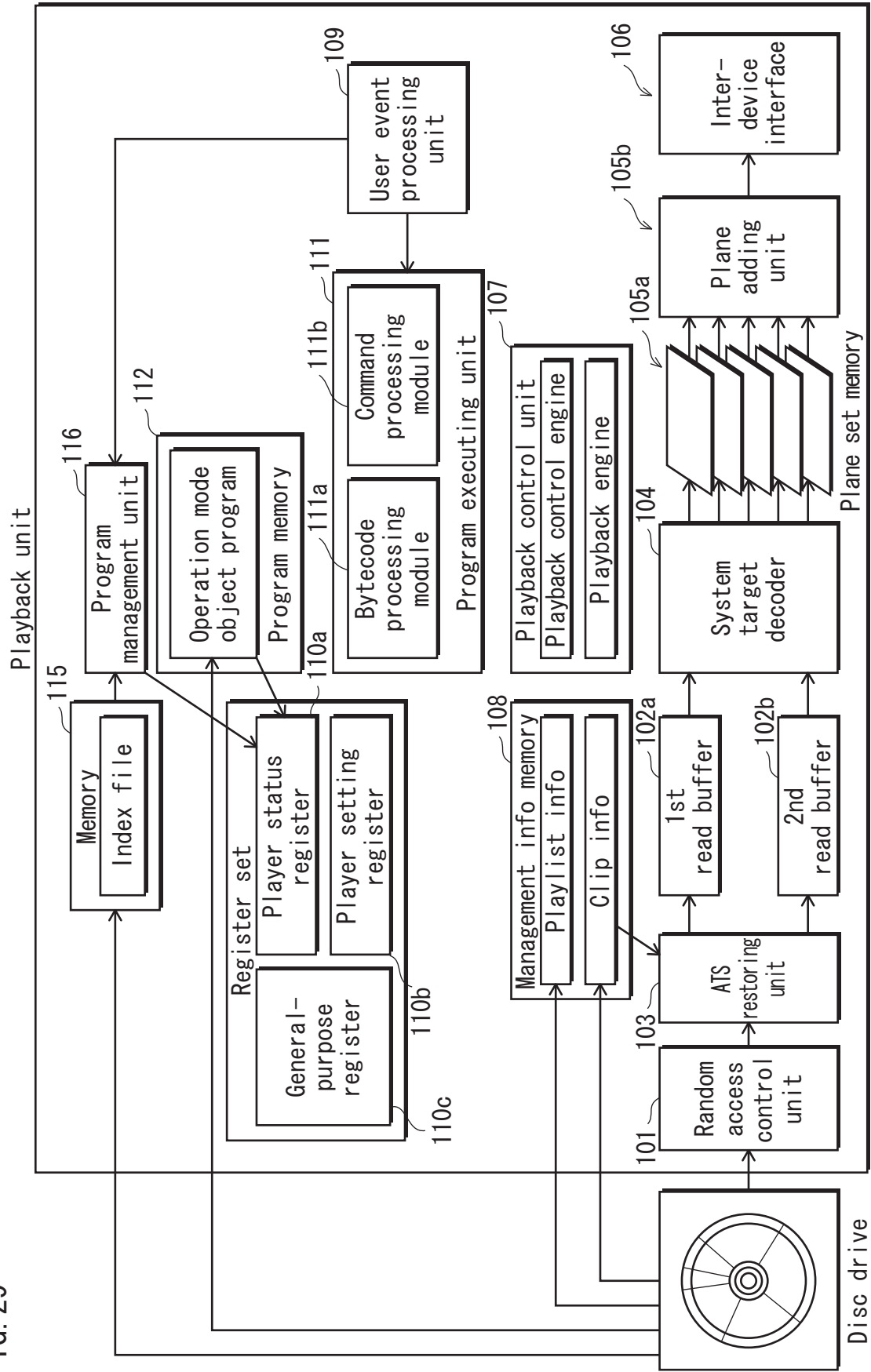


FIG. 30

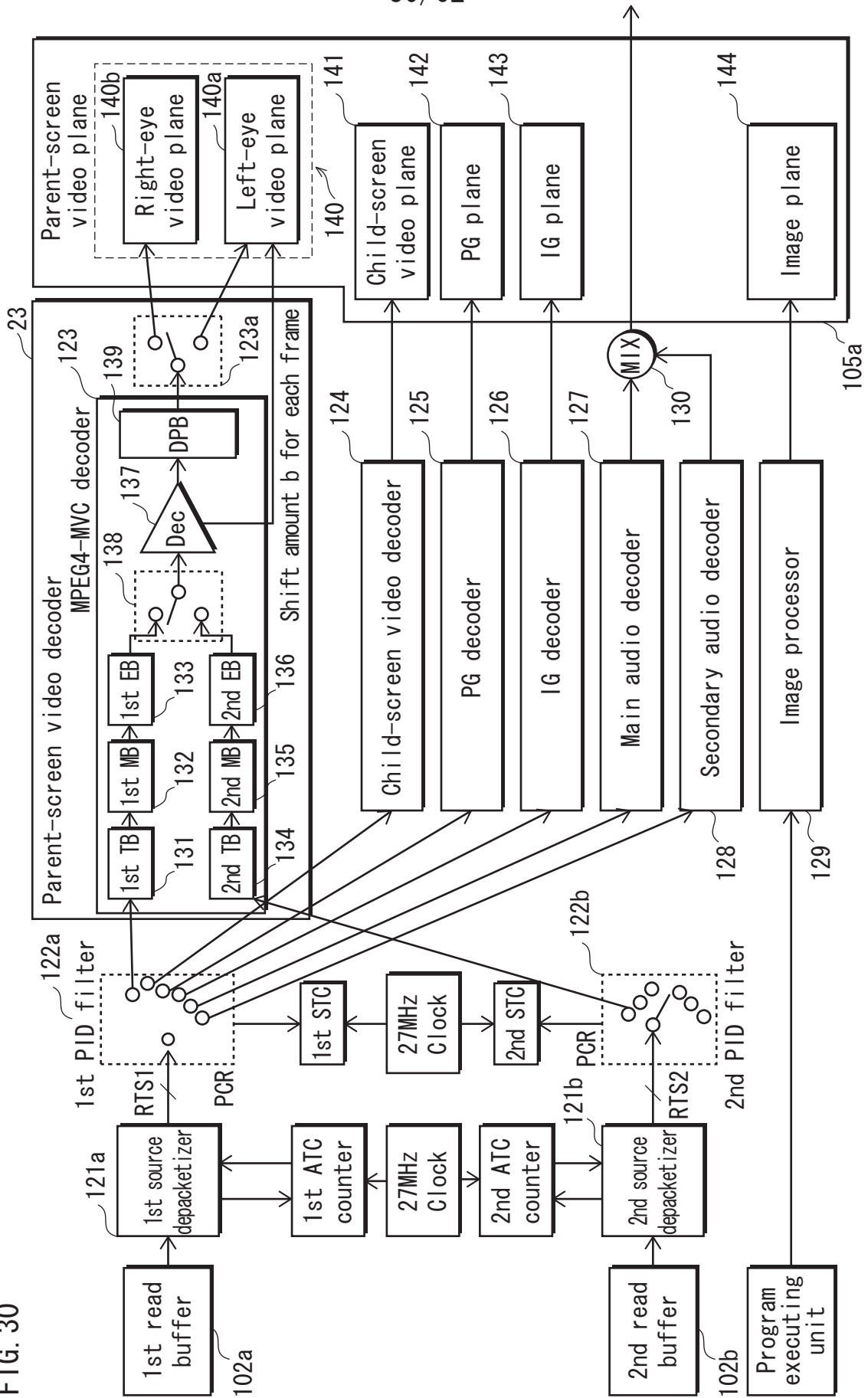


FIG. 31

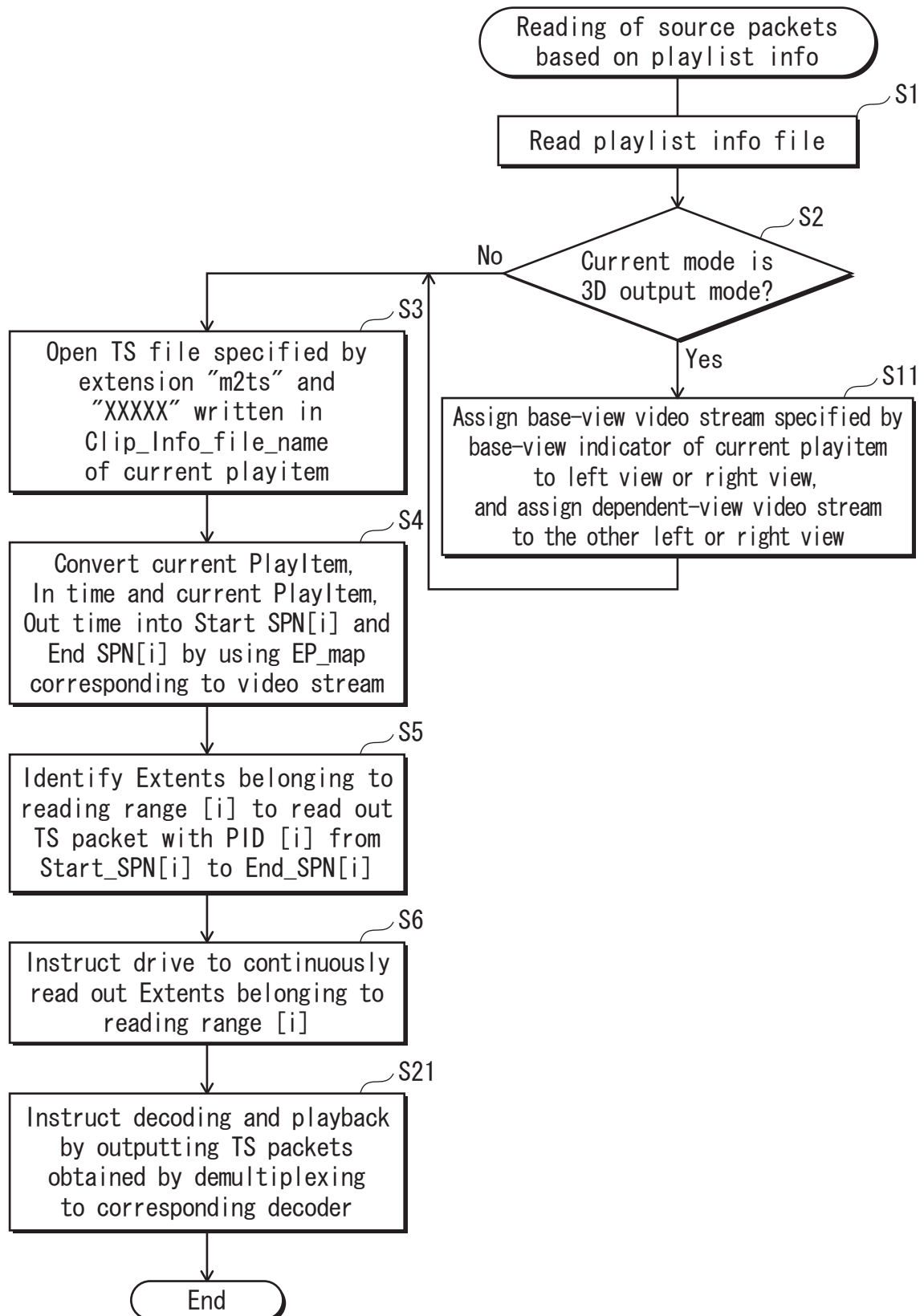


FIG. 32

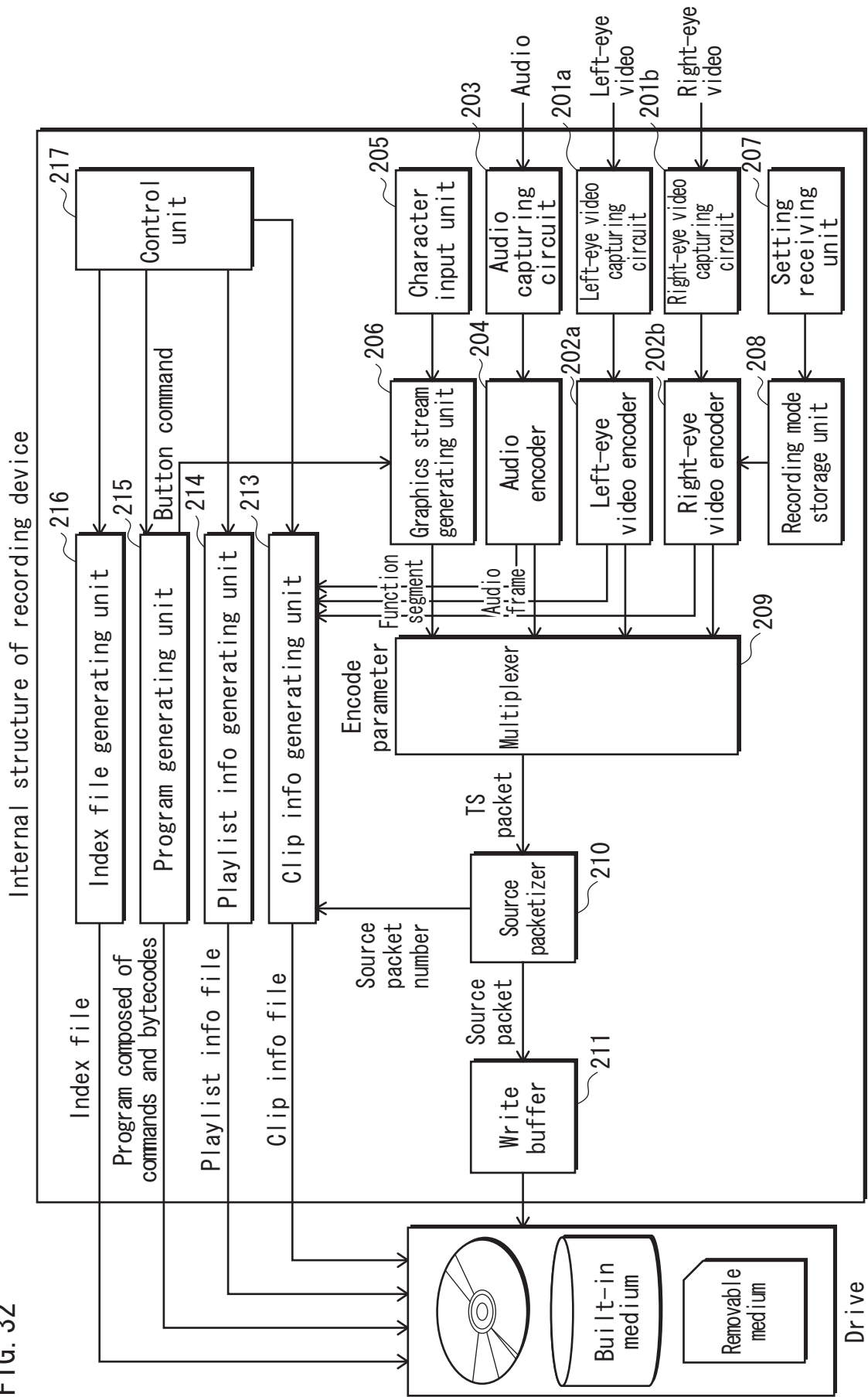


FIG. 33

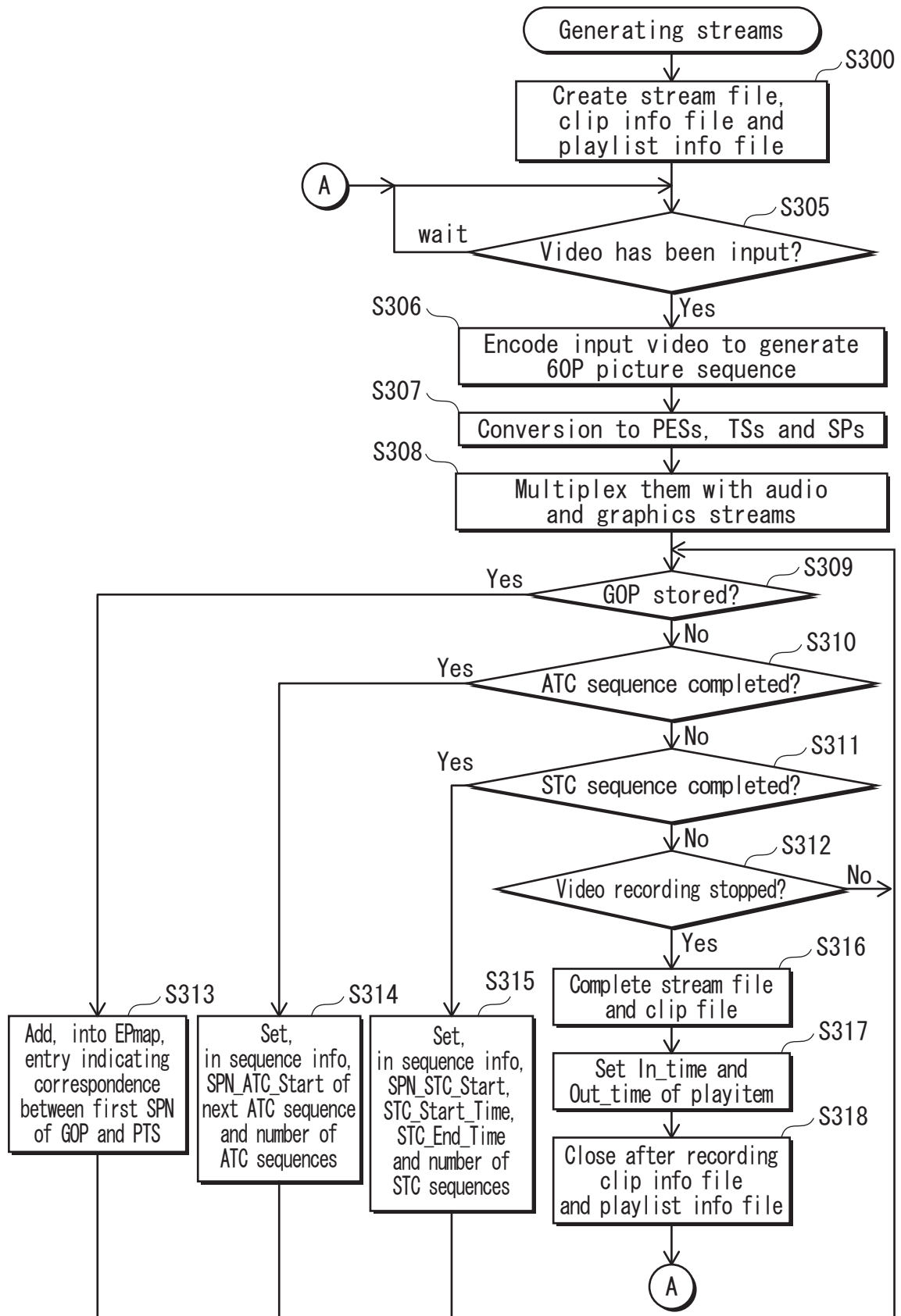


FIG. 34

34/62

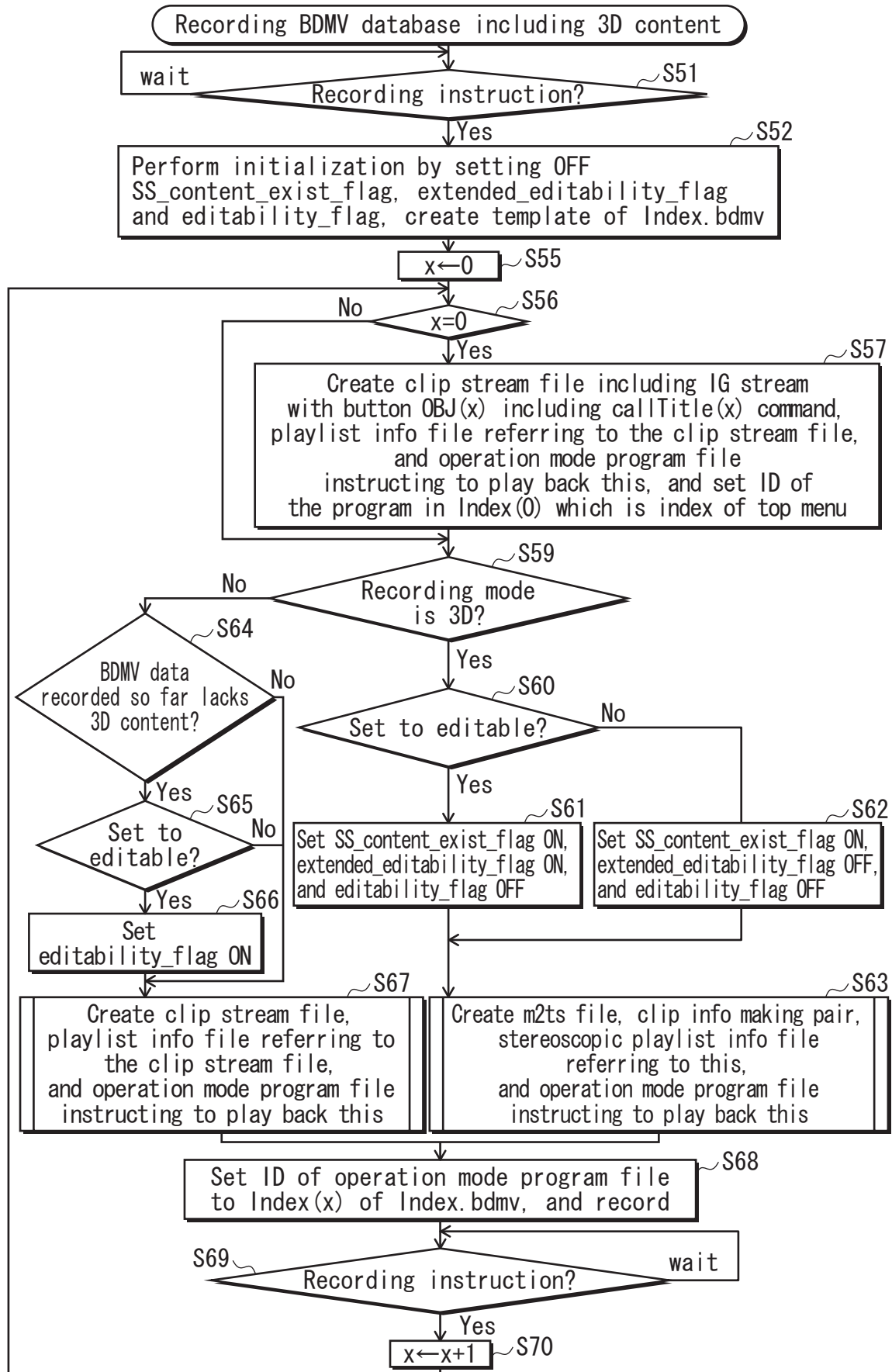


FIG. 35

35/62

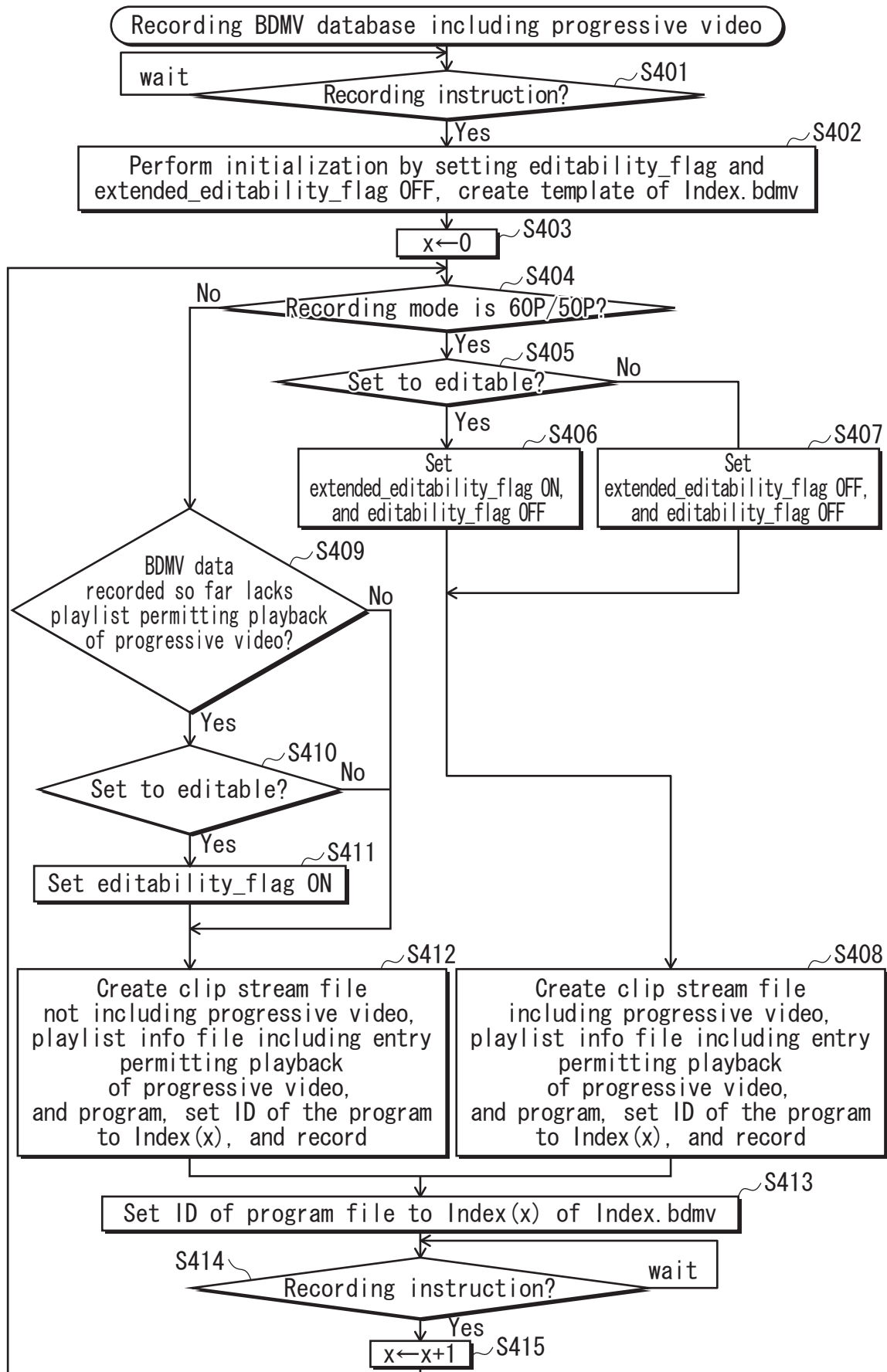


FIG. 36

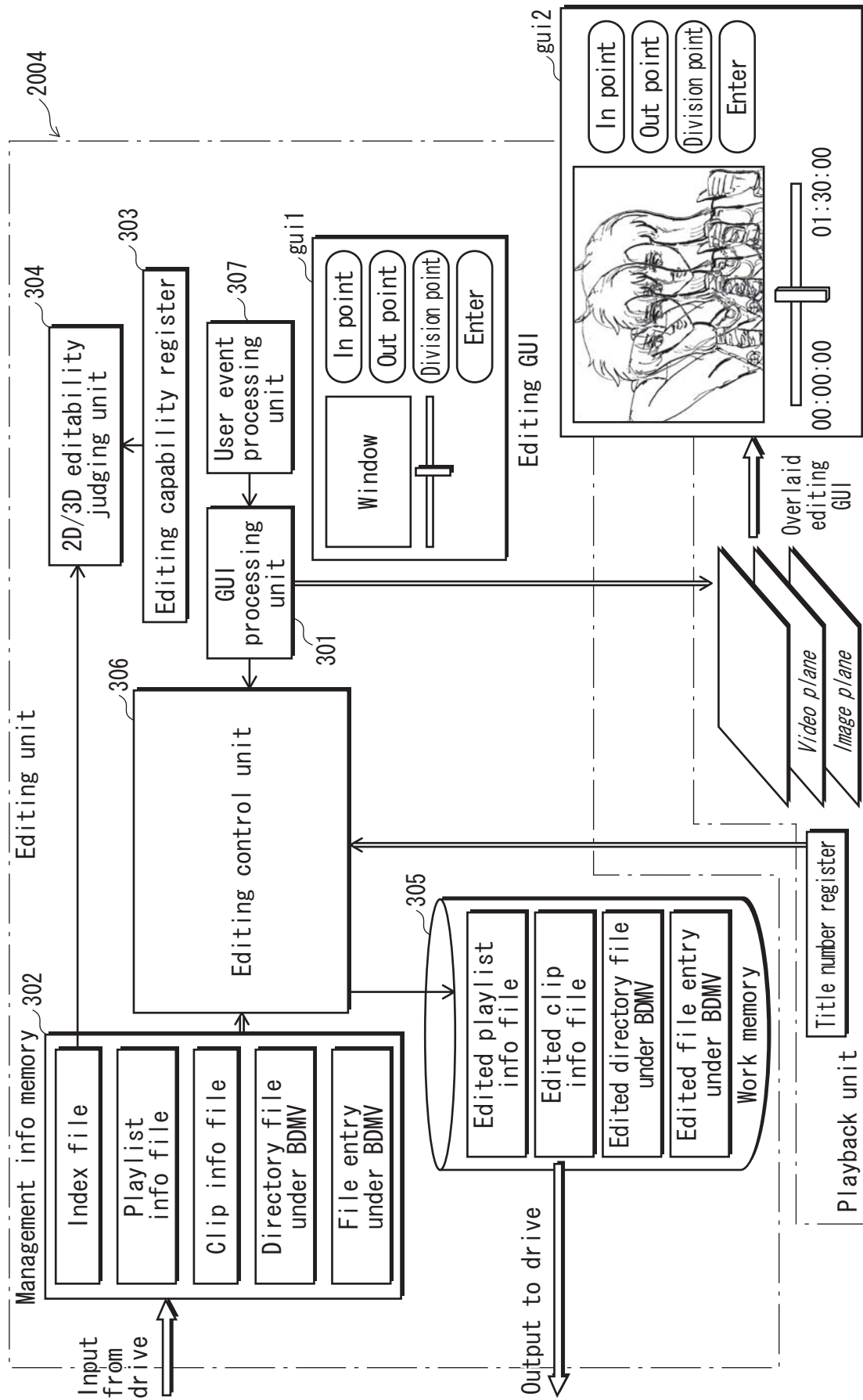


FIG. 37A

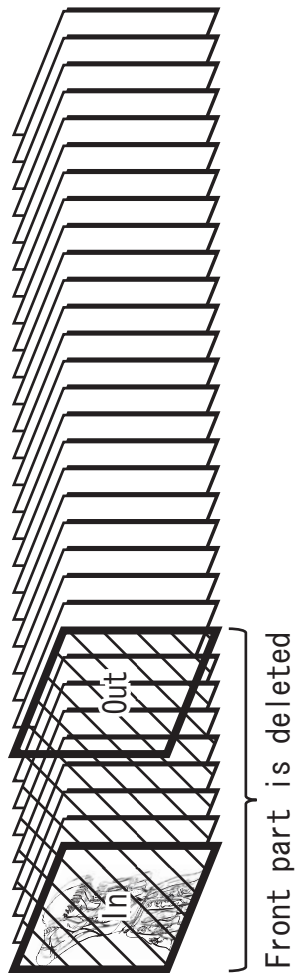


FIG. 37B

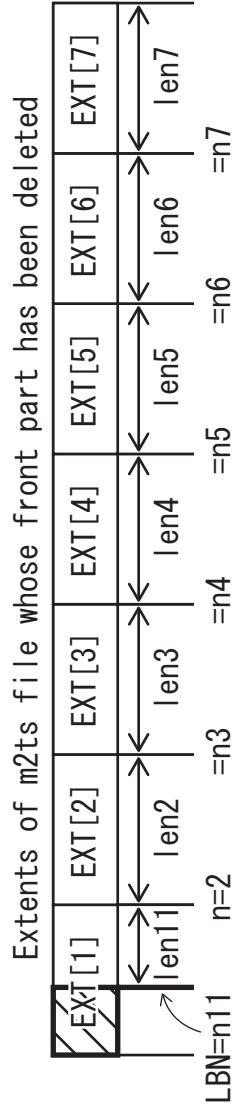


FIG. 37C

Allocation descriptor sequence of m2ts file whose front part has been deleted		
Extent ID=1	n11: len11	
Extent ID=2	n2: len2	
Extent ID=3	n3: len3	
Extent ID=4	n4: len4	
Extent ID=5	n5: len5	
Extent ID=6	n6: len6	
Extent ID=7	n7: len7	

FIG. 38

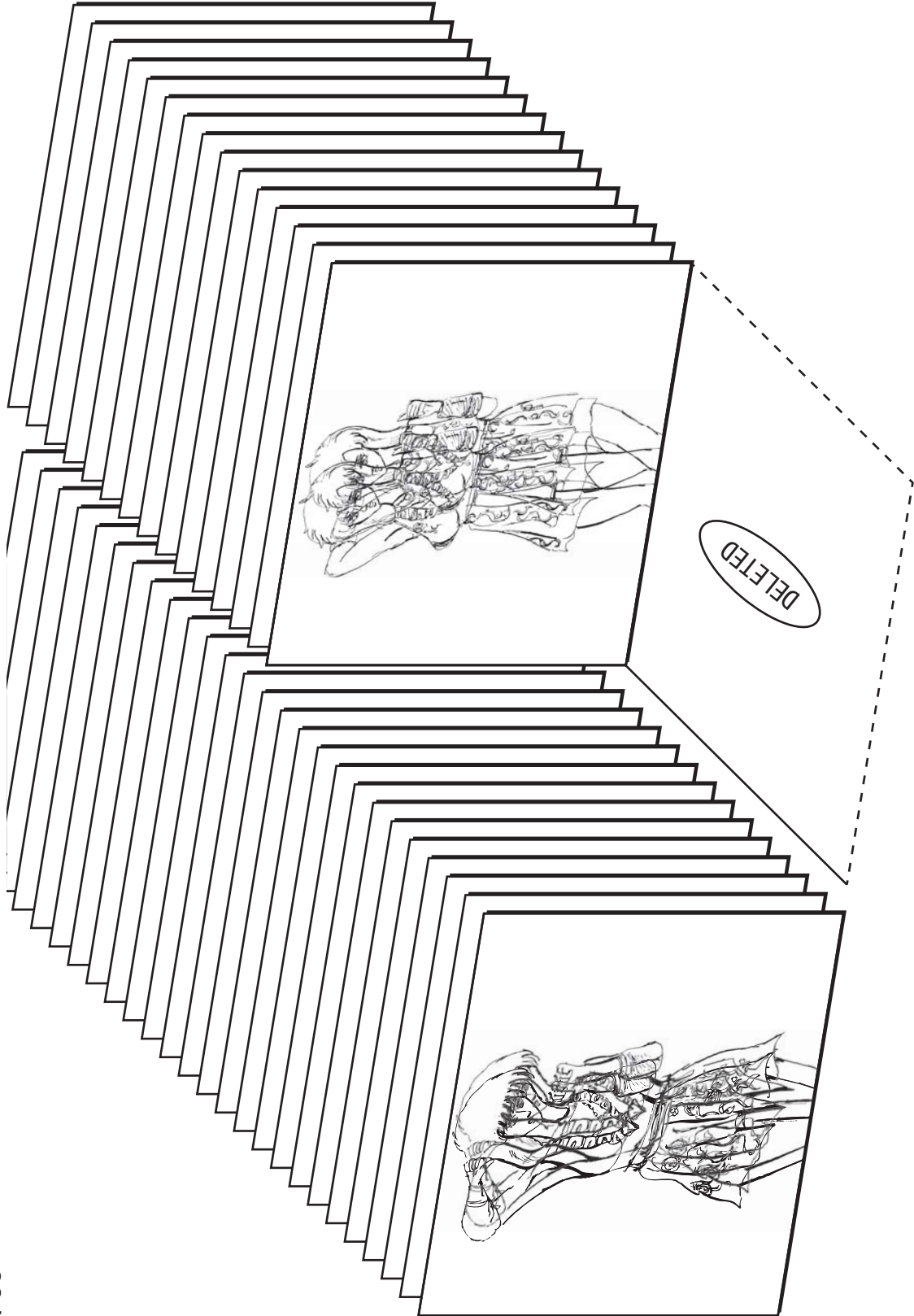


FIG. 39

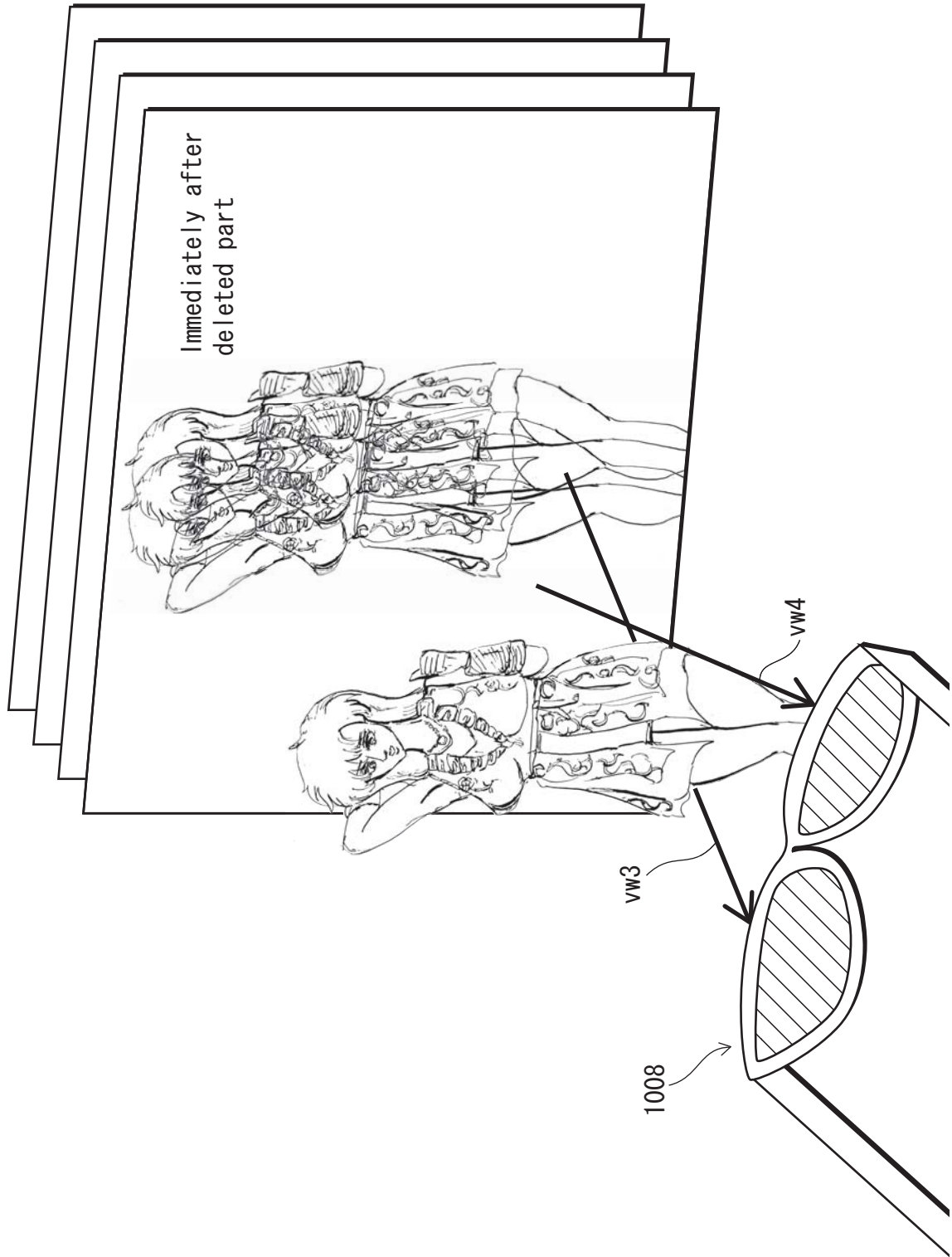


FIG. 40A

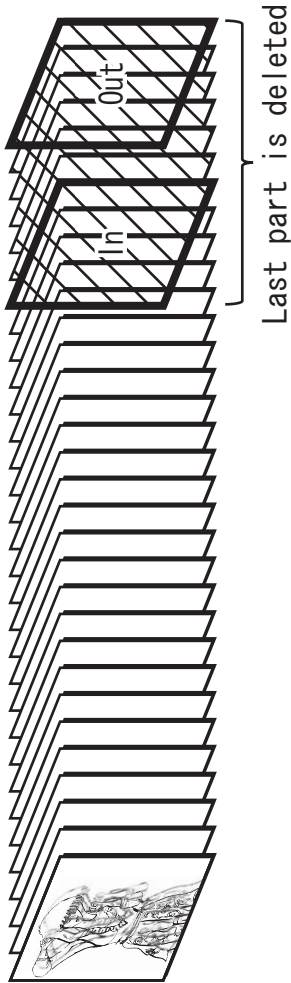


FIG. 40B

Extents of m2ts file whose last part has been deleted

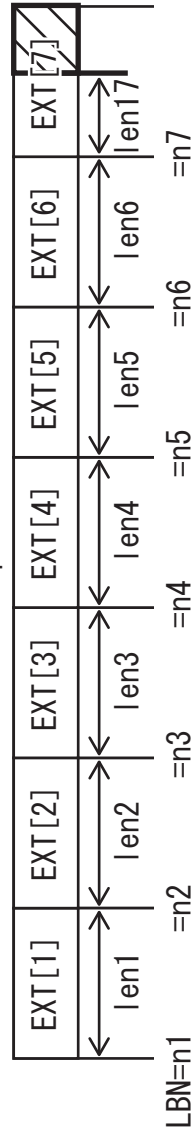


FIG. 40C

Allocation descriptor sequence of m2ts file whose last part has been deleted		
Extent ID=1	n1:	len1
Extent ID=2	n2:	len2
Extent ID=3	n3:	len3
Extent ID=4	n4:	len4
Extent ID=5	n5:	len5
Extent ID=6	n6:	len6
Extent ID=7	n7:	len17

FIG. 41A

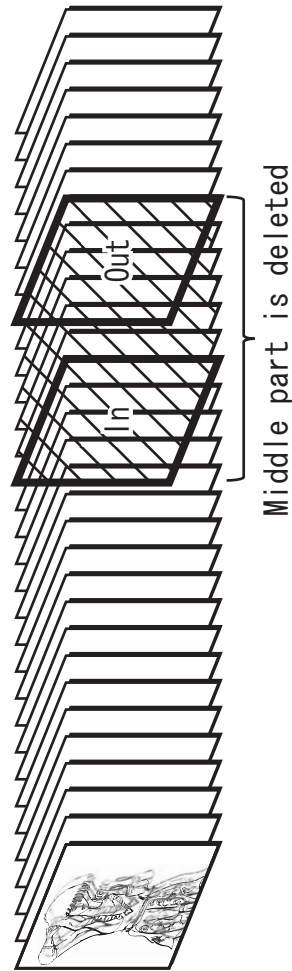


FIG. 41B

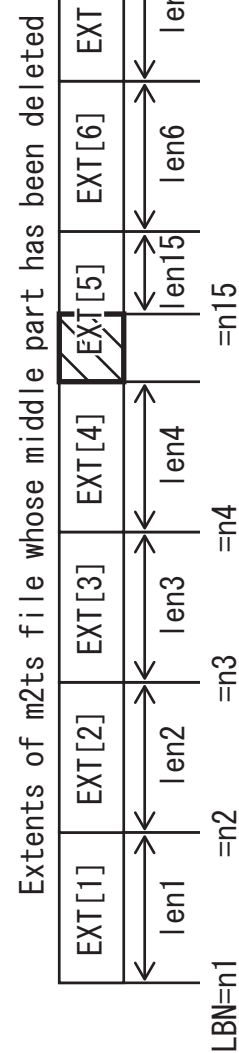


FIG. 41C

Allocation descriptor sequence of part of m2ts file located before deleted middle part				
Extent ID=1	n1: len1			
Extent ID=2	n2: len2			
Extent ID=3	n3: len3			
Extent ID=4	n4: len4			

FIG. 41D

Allocation descriptor sequence of part of m2ts file located after deleted middle part				
Extent ID=5	n15: len15			
Extent ID=6	n6: len6			
Extent ID=7	n7: len7			

FIG. 42

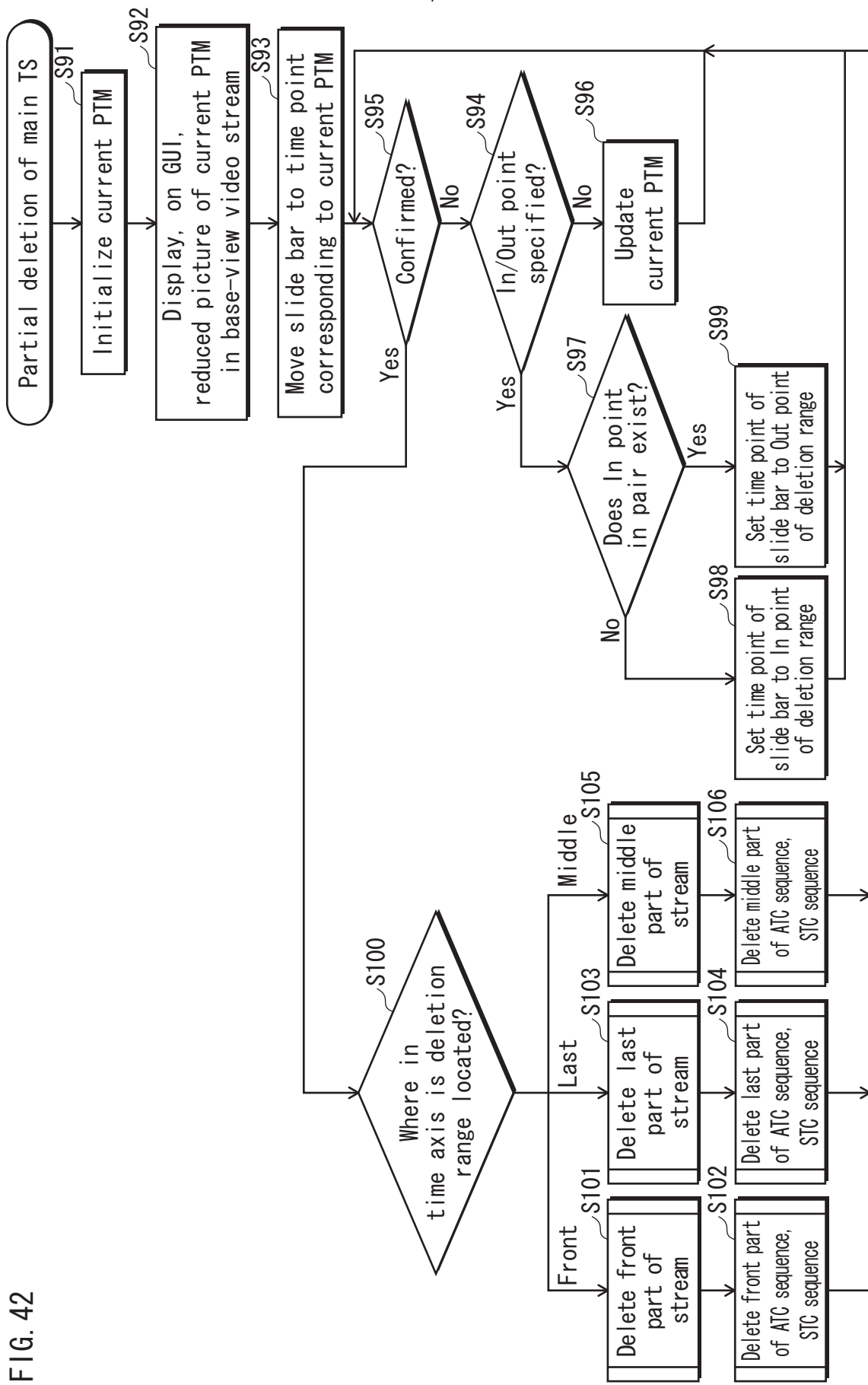


FIG. 43

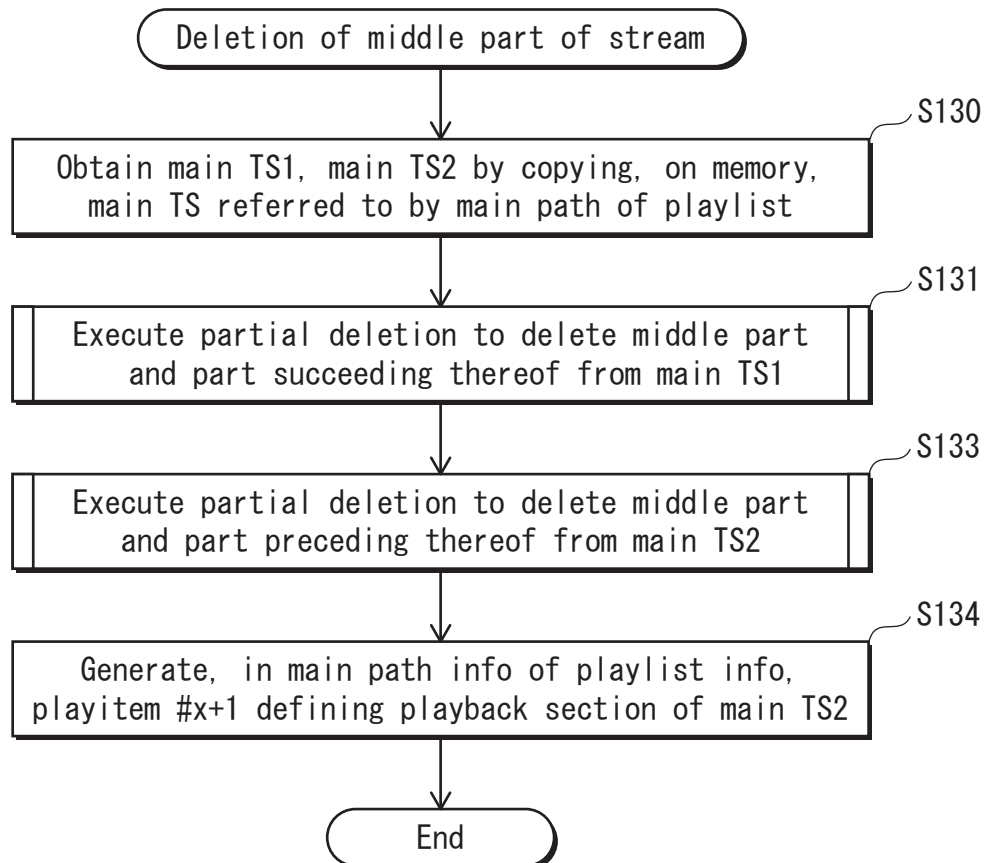


FIG. 44

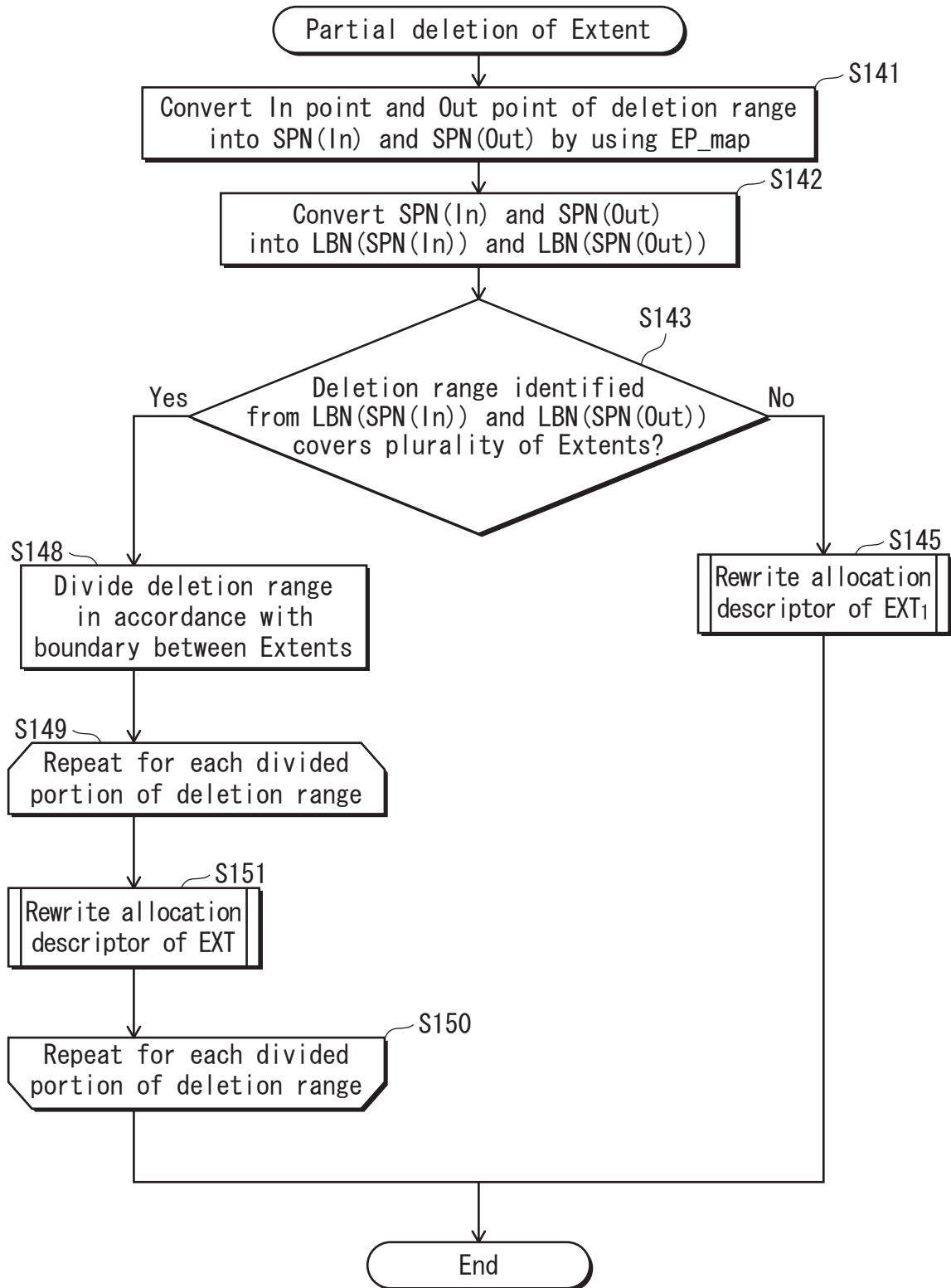


FIG. 45

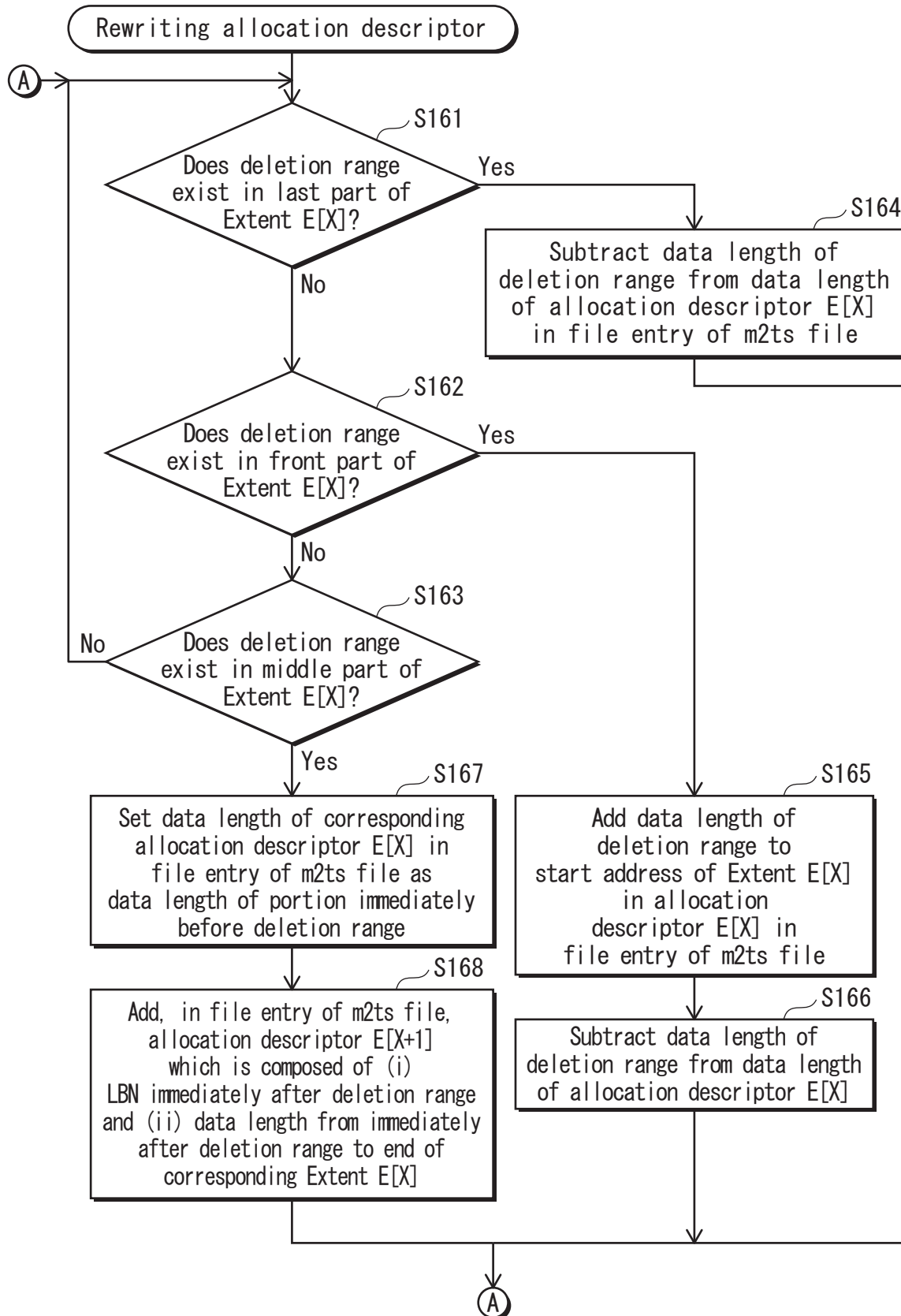


FIG. 46A

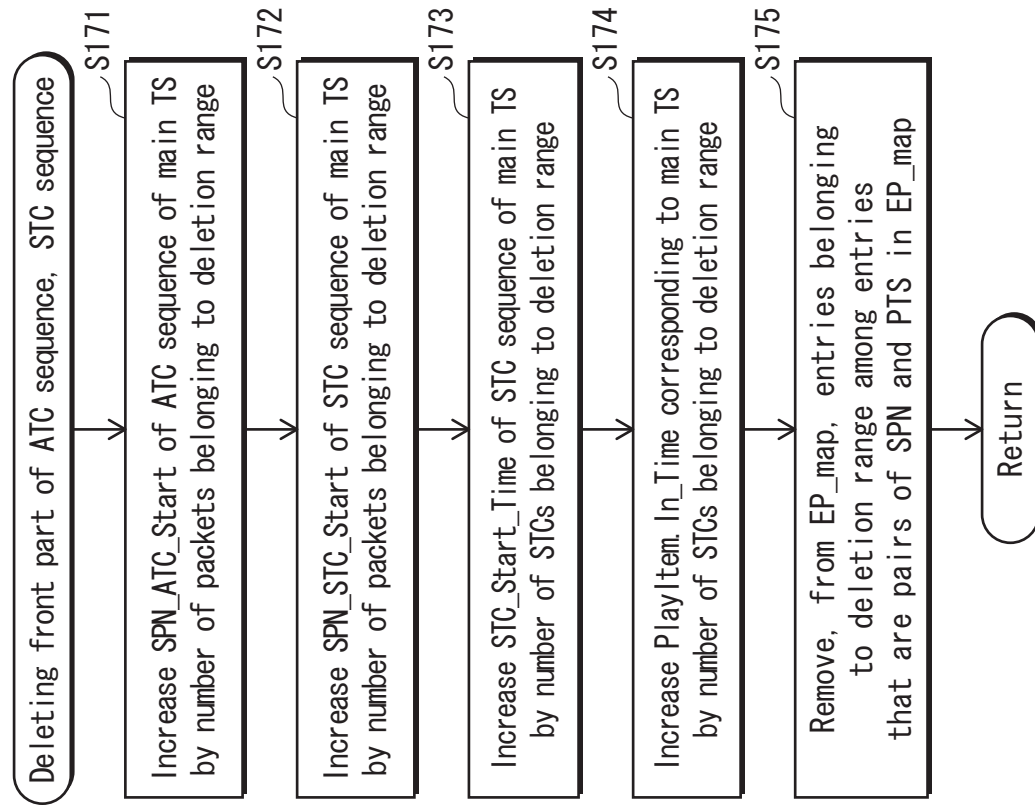


FIG. 46B

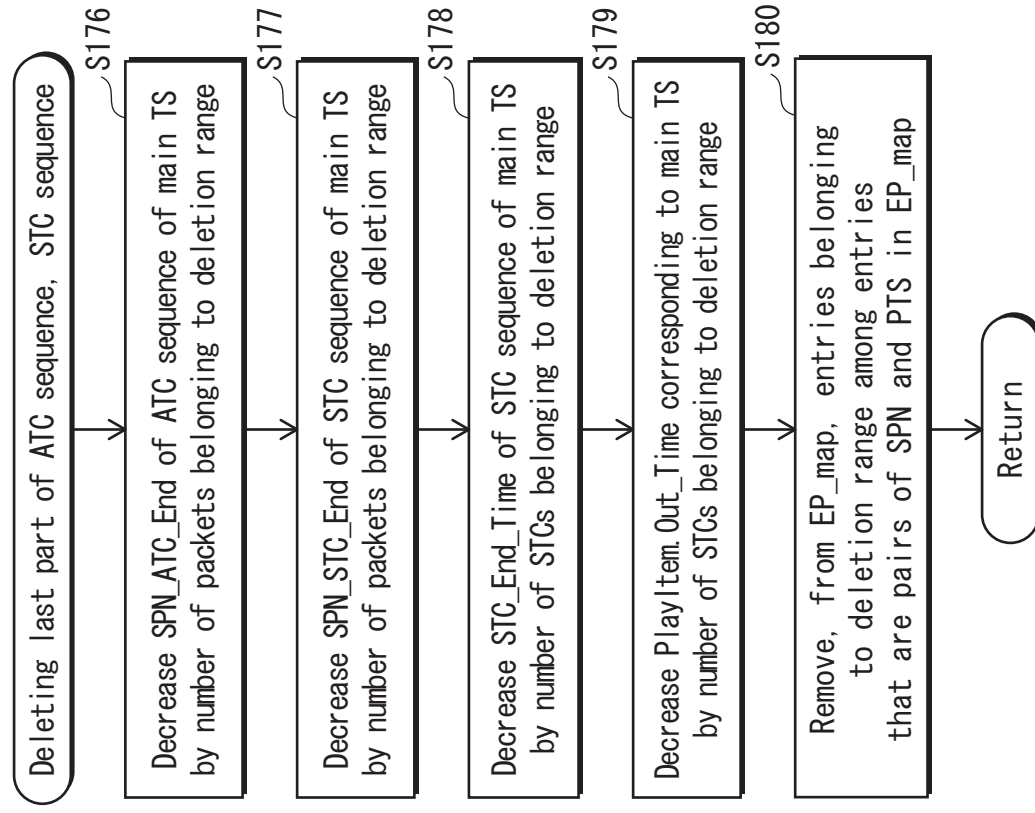


FIG. 47

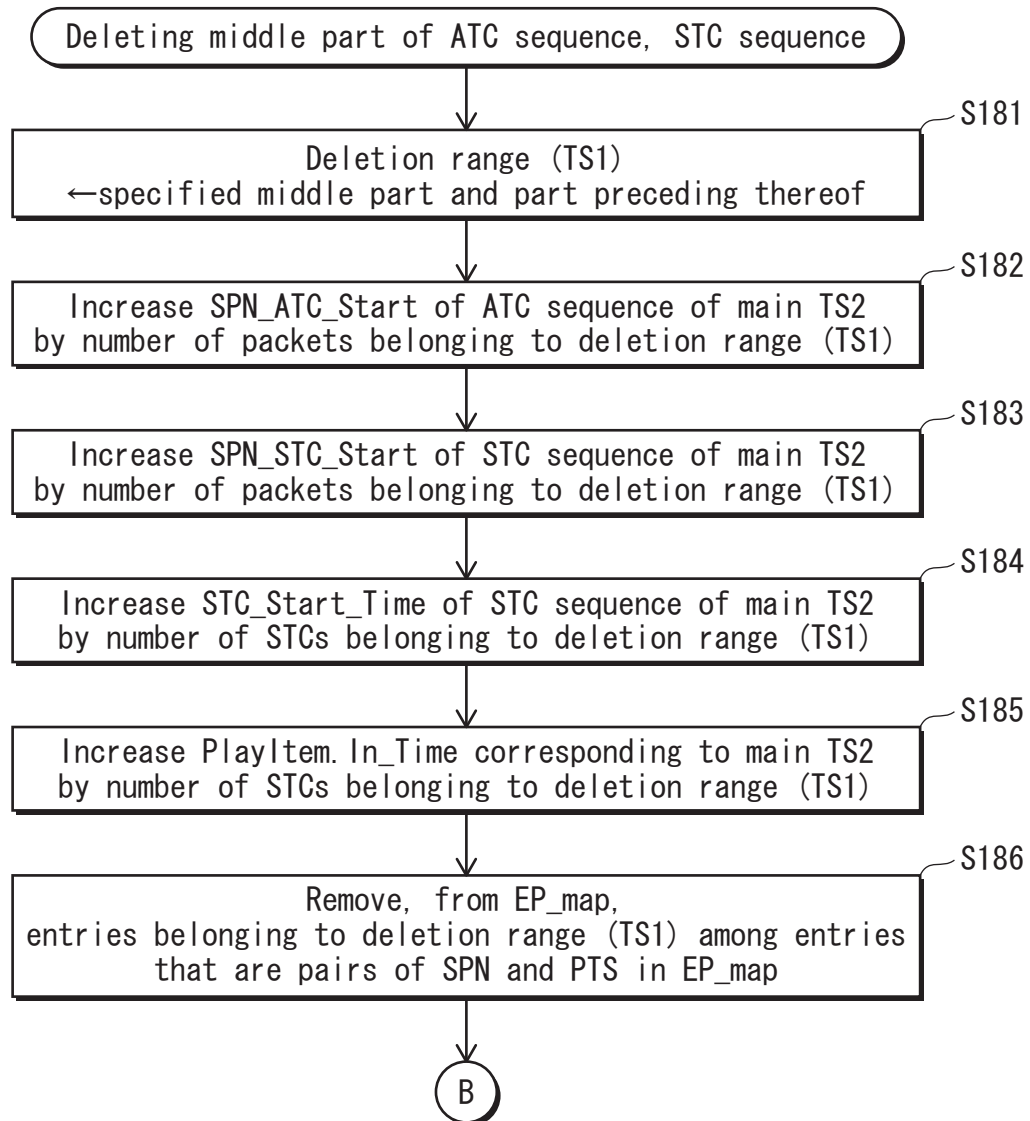


FIG. 48

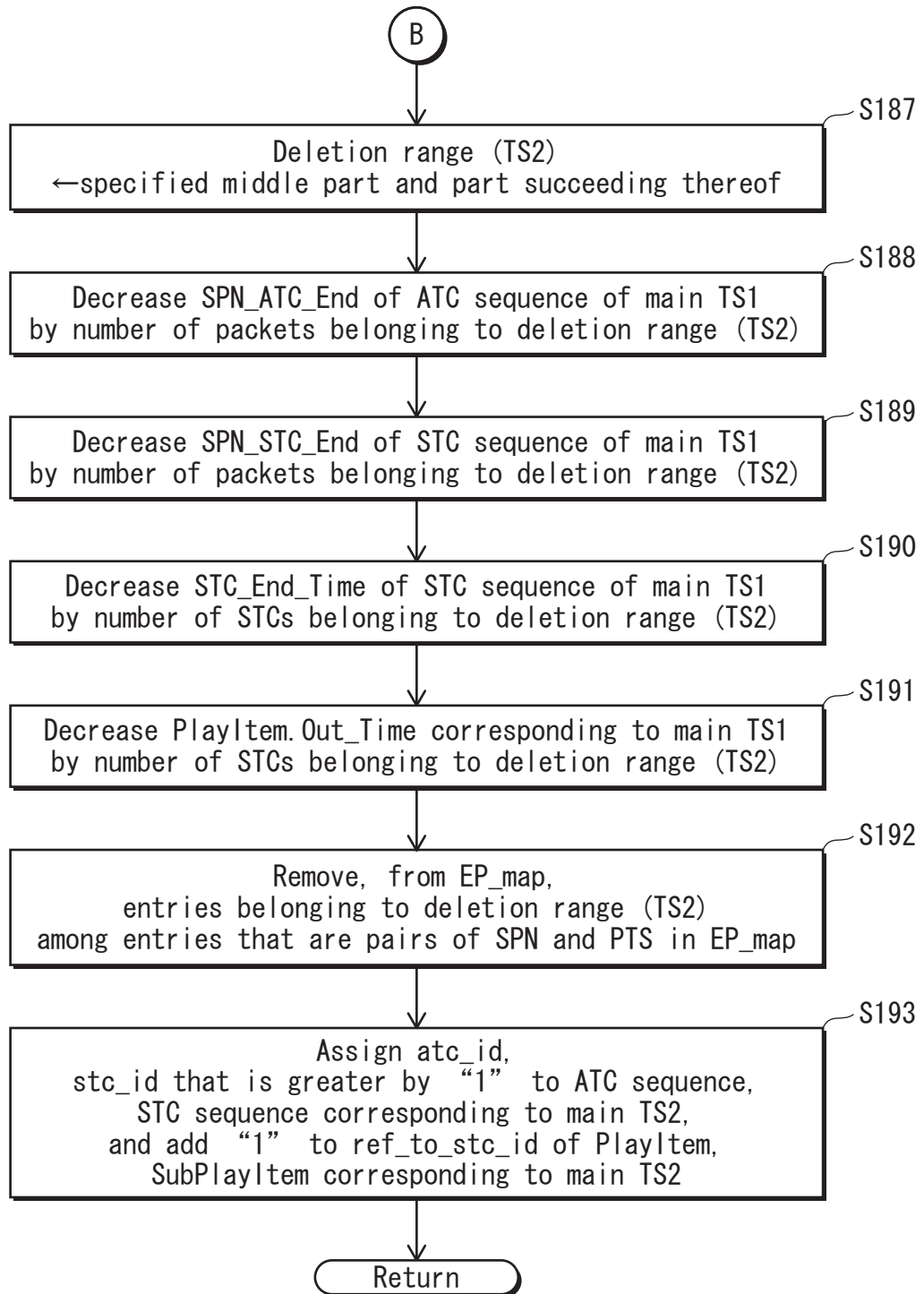


FIG. 49

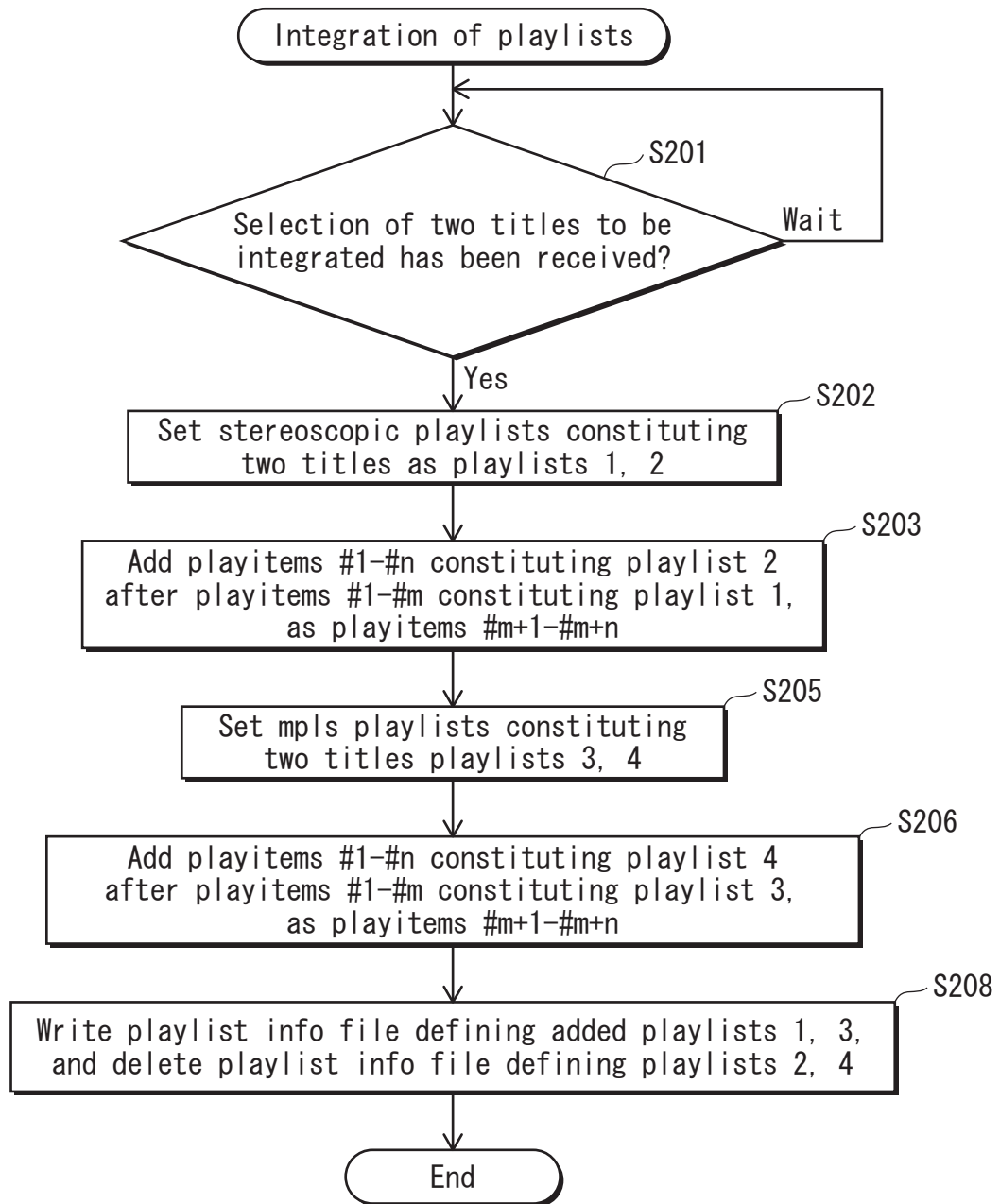


FIG. 50A

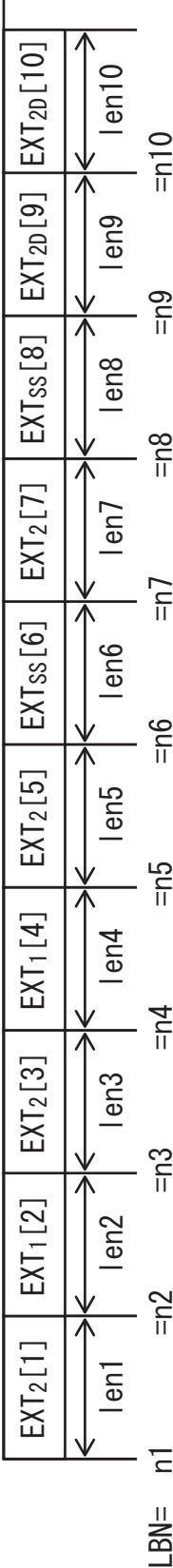


FIG. 50B

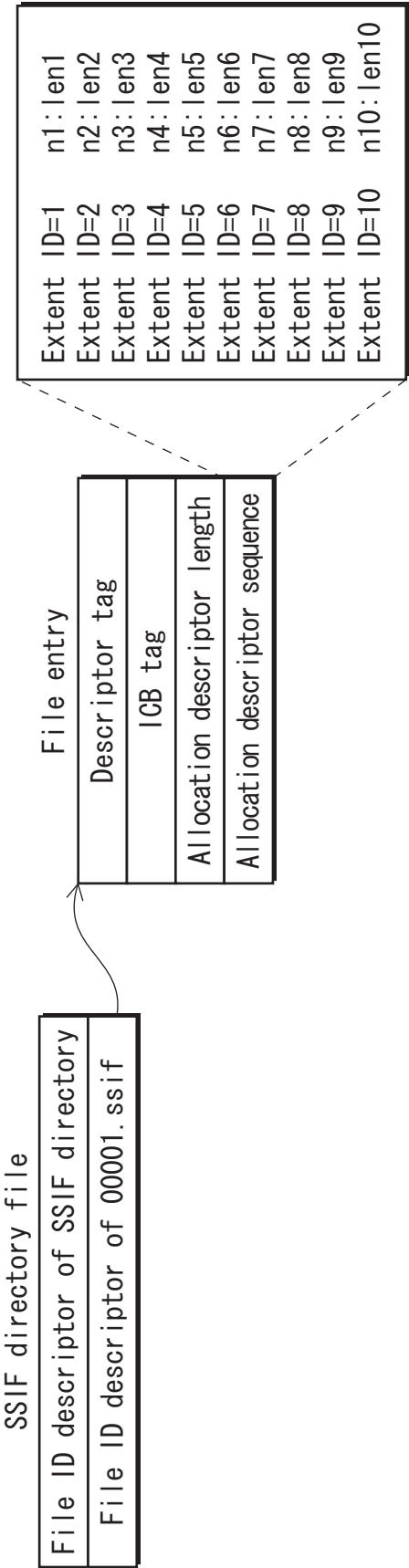


FIG. 51

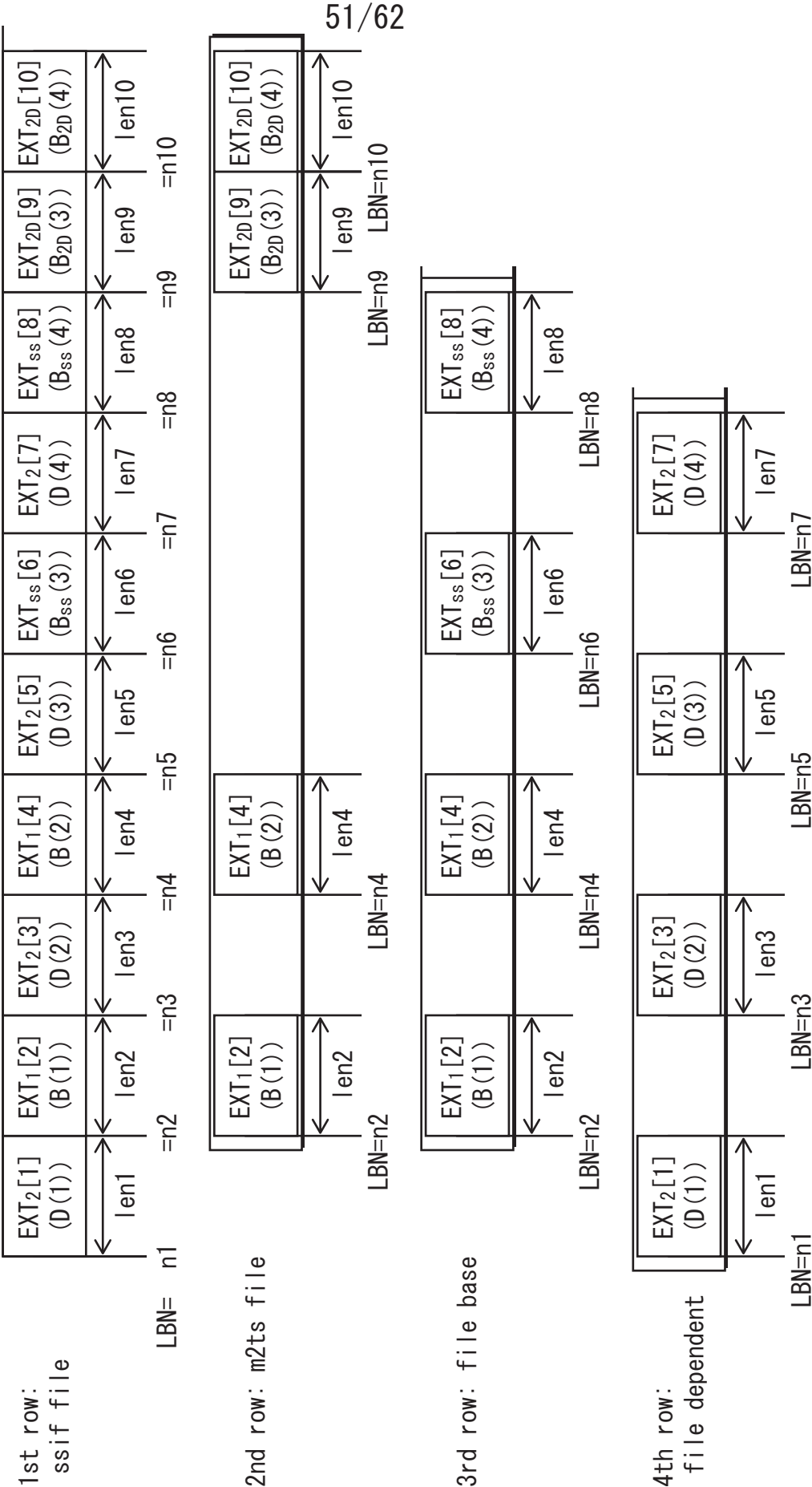


FIG. 52

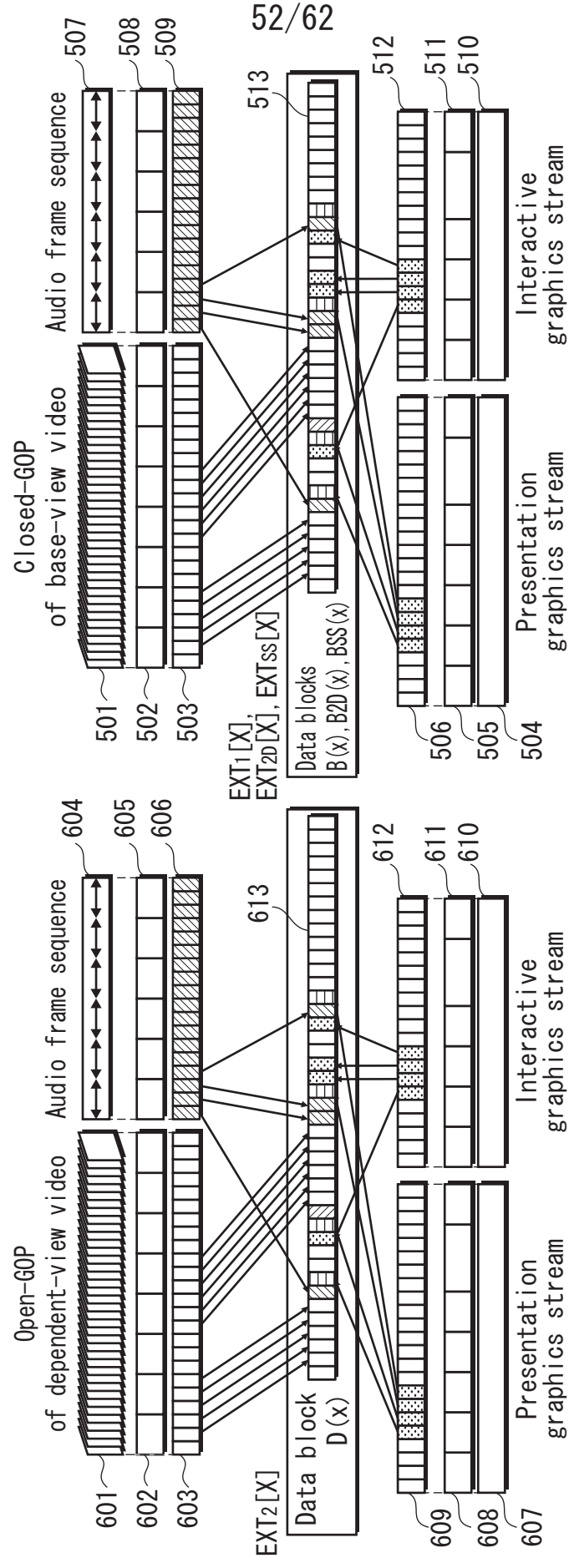


FIG. 53

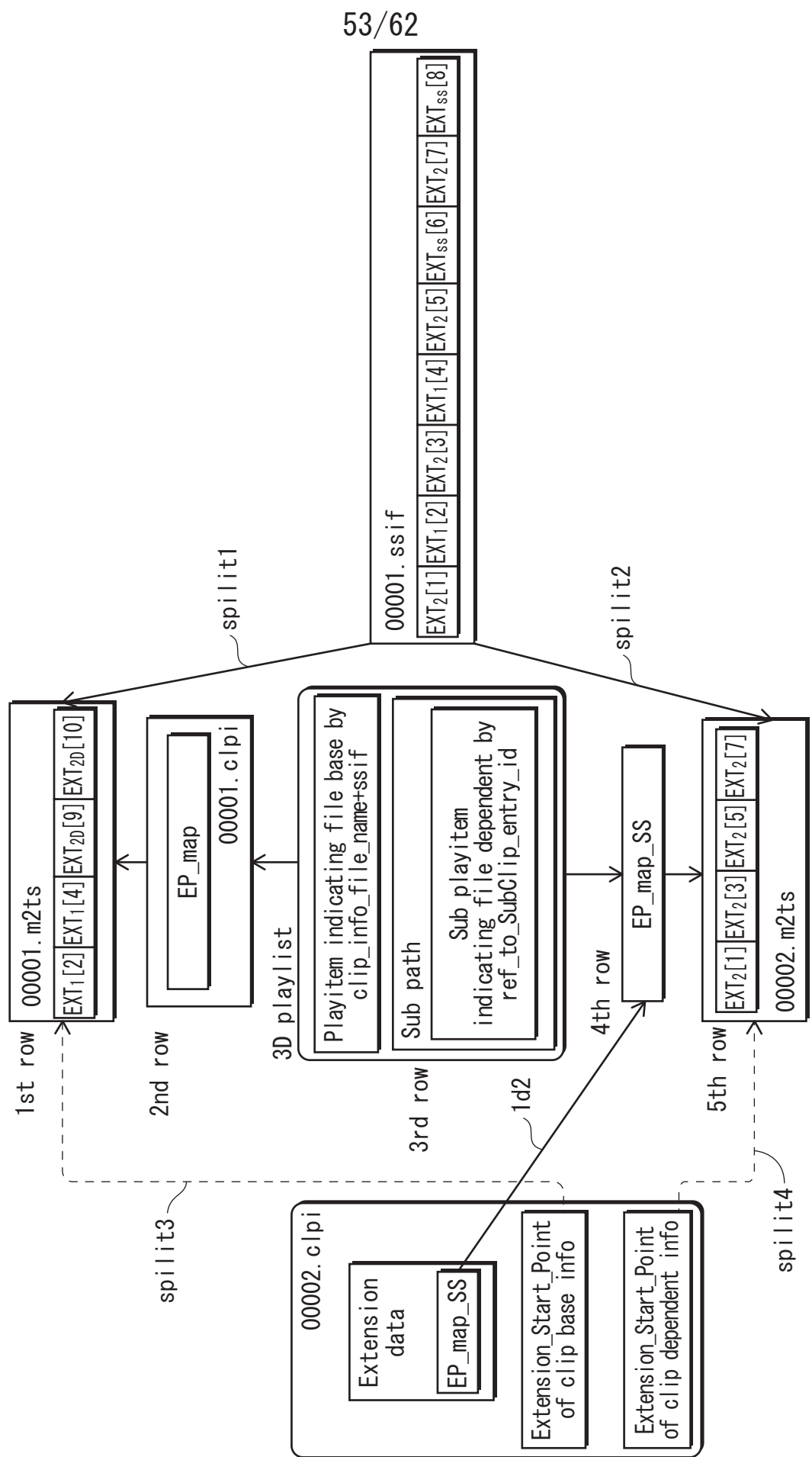


FIG. 54

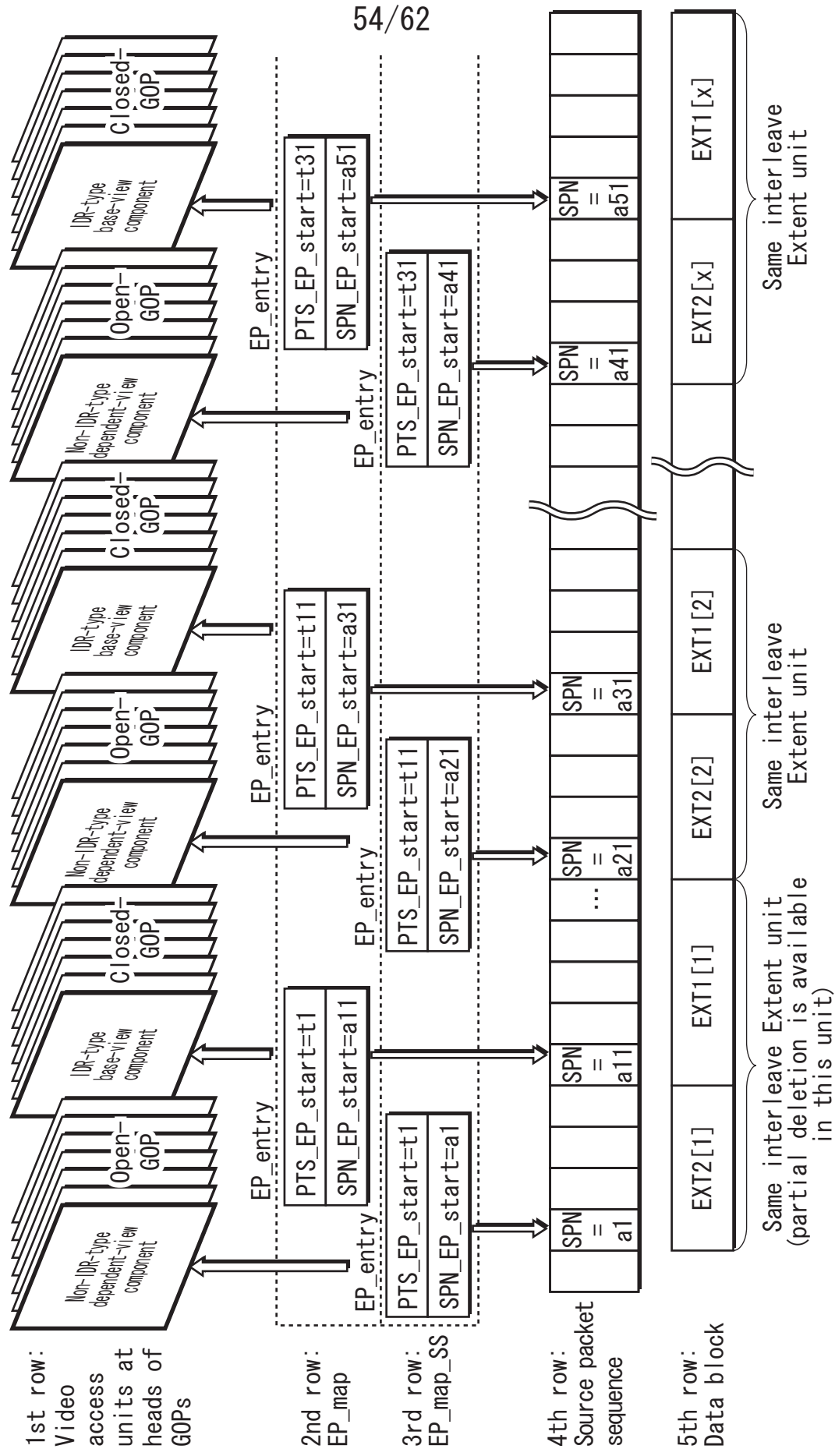


FIG. 55

Left-hand side:

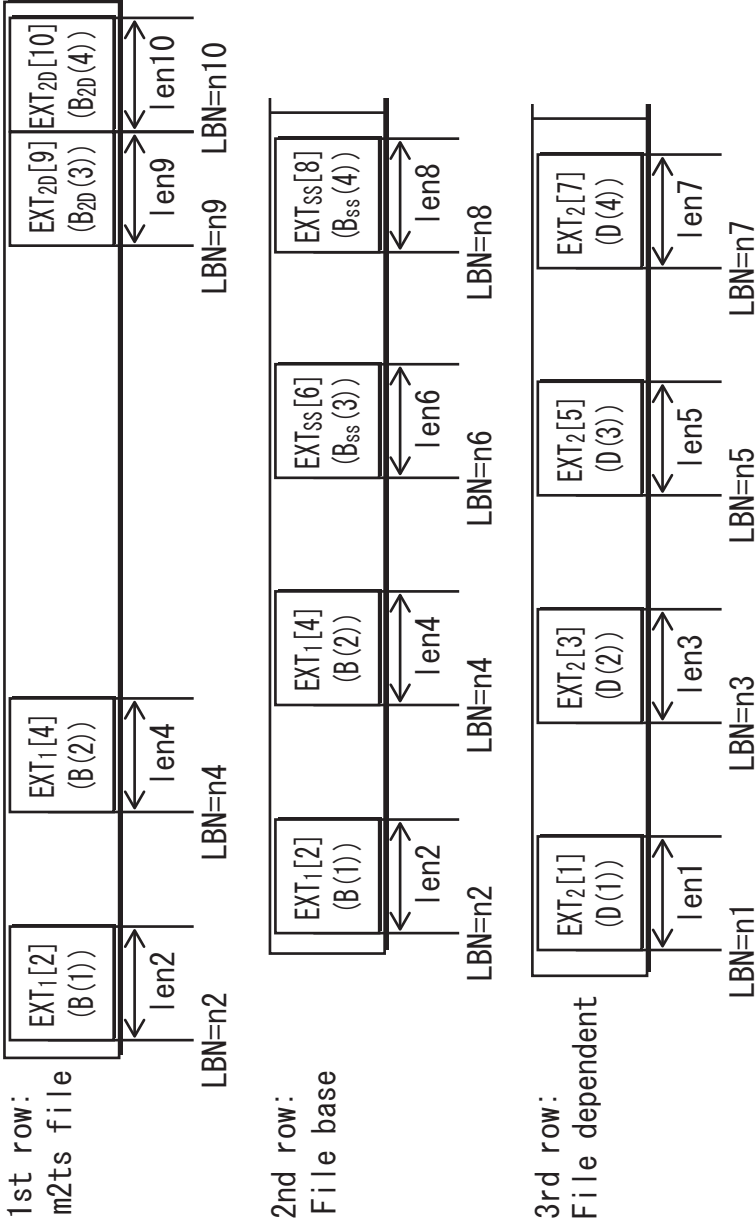


FIG. 56

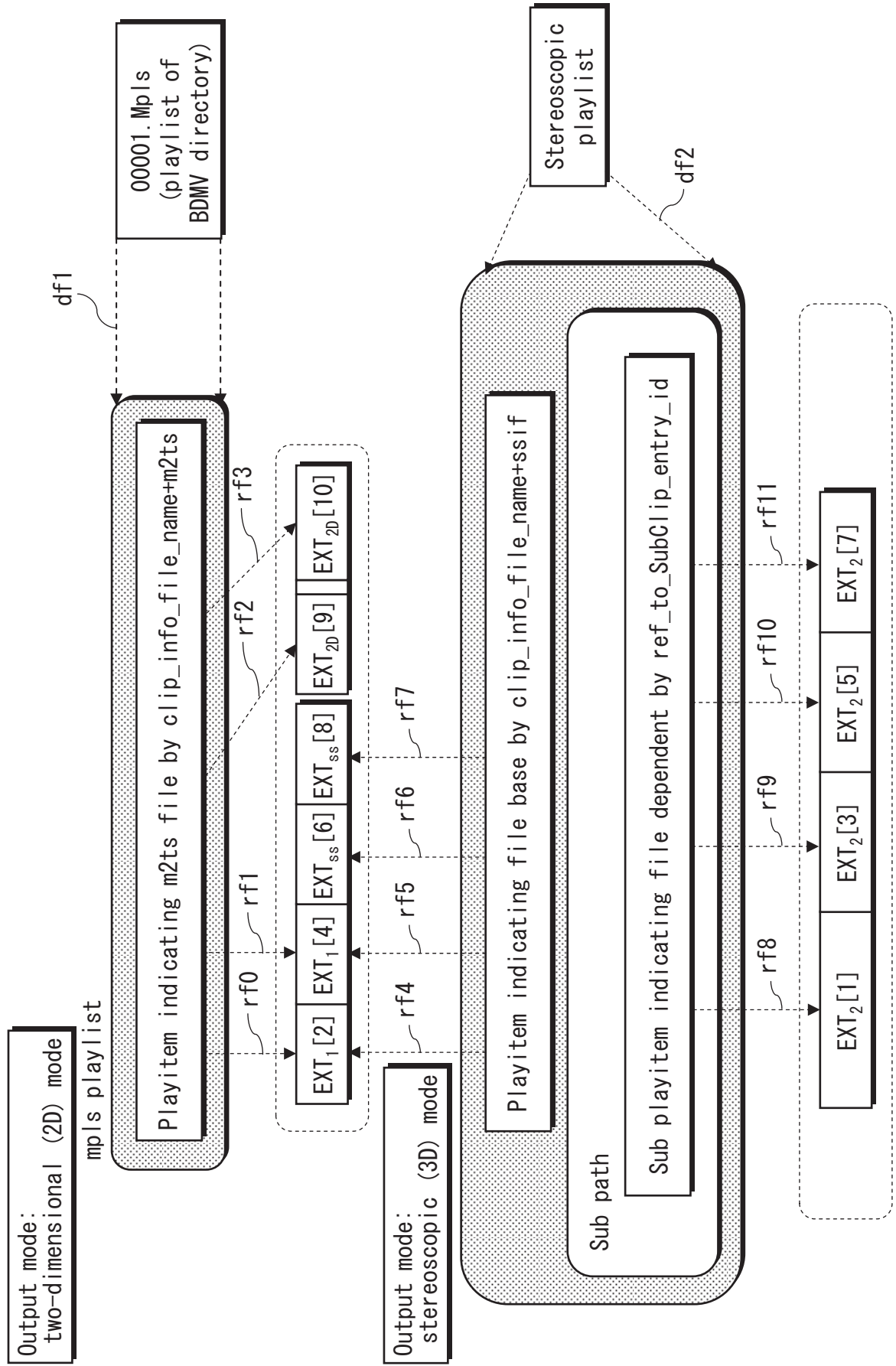


FIG. 57A

Partially deleted mp1s playlist

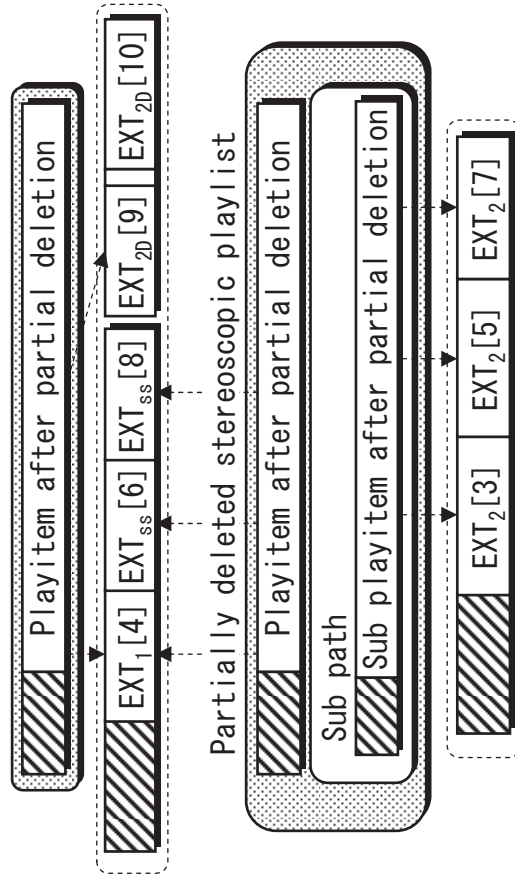


FIG. 57B

Divided mp1s playlist

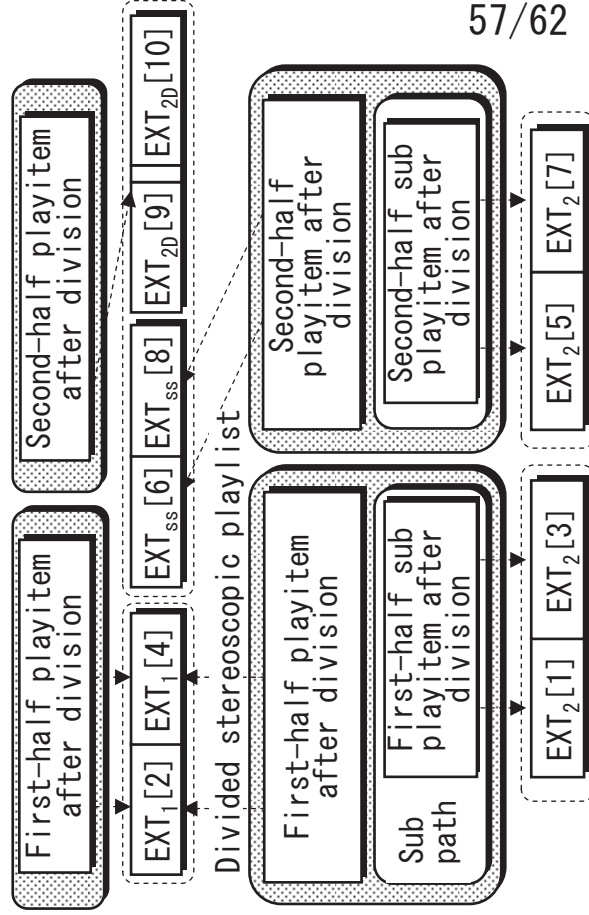
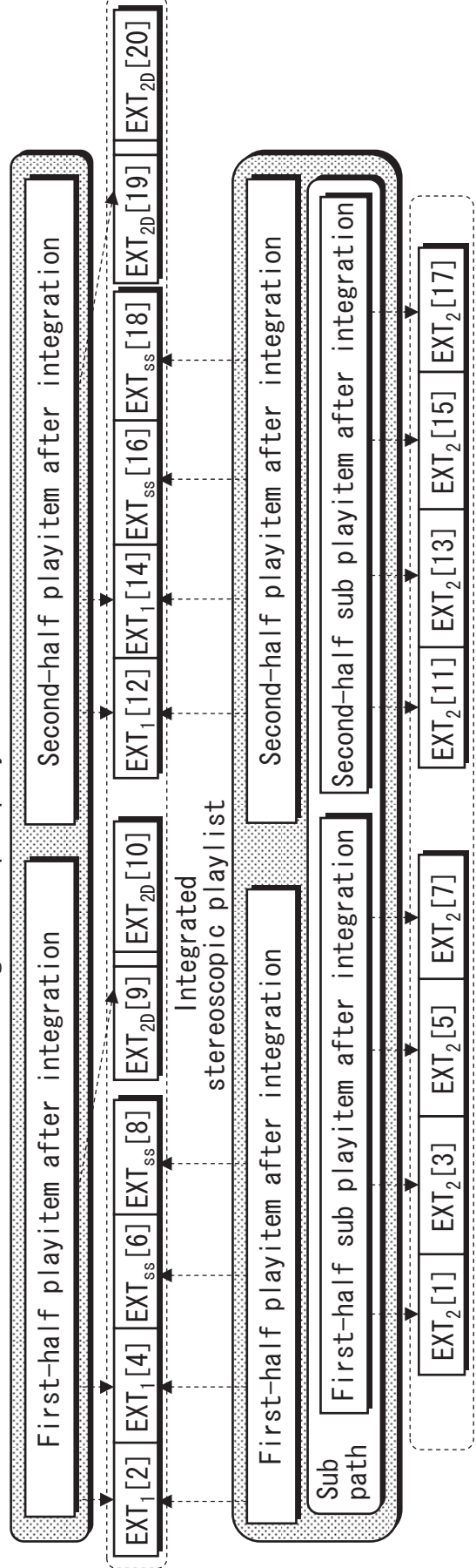


FIG. 57C

Integrated mp1s playlist



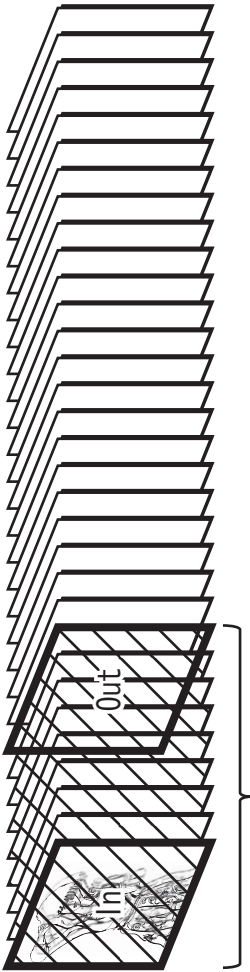


FIG. 58A

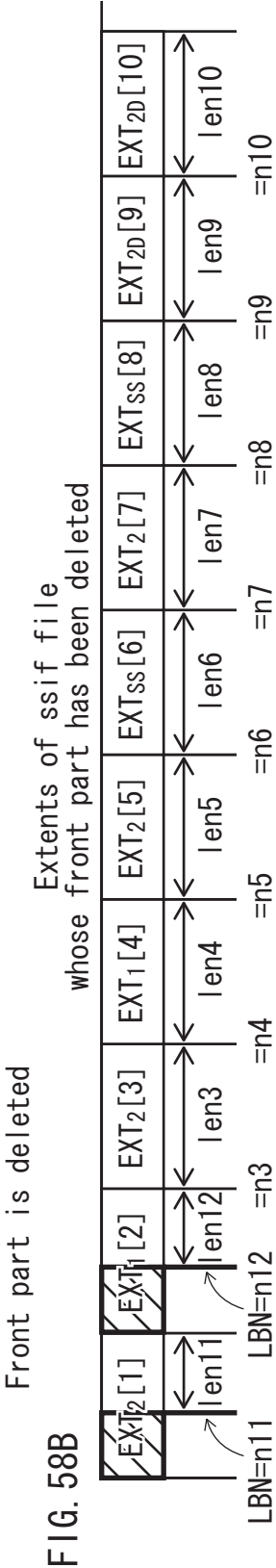


FIG. 58B

Allocation descriptor sequence of ssif file whose front part has been deleted	
Extent ID=1	n11: len11
Extent ID=2	n12: len12
Extent ID=3	n3: len3
Extent ID=4	n4: len4
Extent ID=5	n5: len5
Extent ID=6	n6: len6
Extent ID=7	n7: len7
Extent ID=8	n8: len8
Extent ID=9	n9: len9
Extent ID=10	n10: len10

Allocation descriptor sequence of m2ts file whose front part has been deleted	
Extent ID=1	n11: len11
Extent ID=2	n4: len4
Extent ID=3	n9: len9
Extent ID=4	n10: len10

FIG. 58C

Extent start point info of clip base info after deletion of front part	
SPN(n12)	
SPN(n4)	
SPN(n6)	
SPN(n8)	

FIG. 58E

Extent start point info of clip dependent info after deletion of front part	
SPN(n11)	
SPN(n3)	
SPN(n5)	
SPN(n7)	

FIG. 58F

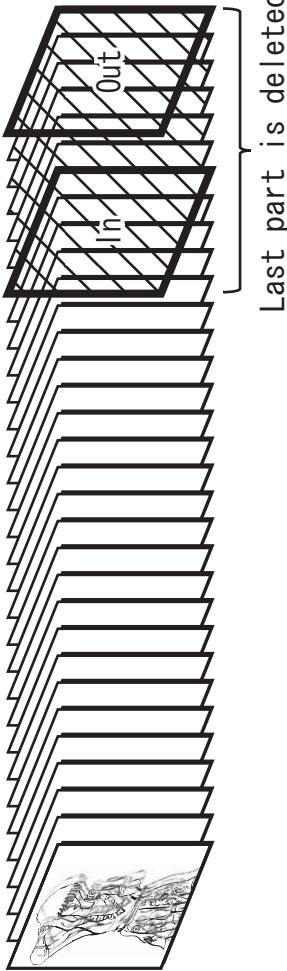


FIG. 59A

FIG. 59B Extents of ssif file whose last part has been deleted

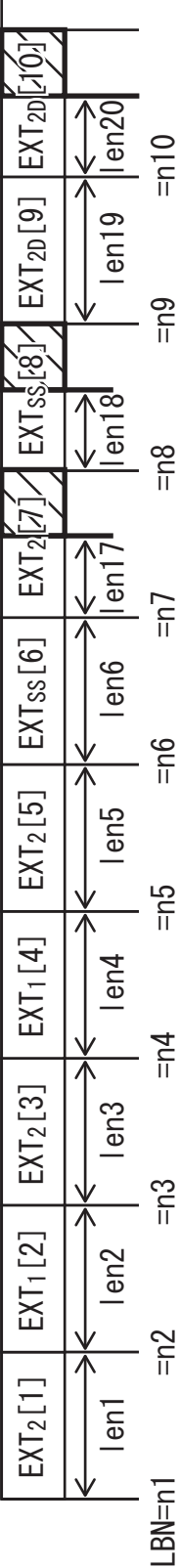


FIG. 59C

Allocation descriptor sequence of ssif file whose last part has been deleted	
Extent ID=1	n1: len1
Extent ID=2	n2: len2
Extent ID=3	n3: len3
Extent ID=4	n4: len4
Extent ID=5	n5: len5
Extent ID=6	n6: len6
Extent ID=7	n7: len17
Extent ID=8	n8: len18
Extent ID=9	n9: len9
Extent ID=10	n10: len20

FIG. 59D

Allocation descriptor sequence of m2ts file whose last part has been deleted	
Extent ID=1	n1: len1
Extent ID=2	n4: len4
Extent ID=3	n9: len9
Extent ID=4	n10: len20

FIG. 59E

Extent start point info of clip base info after deletion of last part	
	SPN (n2)
	SPN (n4)
	SPN (n6)
	SPN (n8)

FIG. 59F

Extent start point info of clip dependent info after deletion of last part	
	SPN (n1)
	SPN (n3)
	SPN (n5)
	SPN (n7)

FIG. 60A

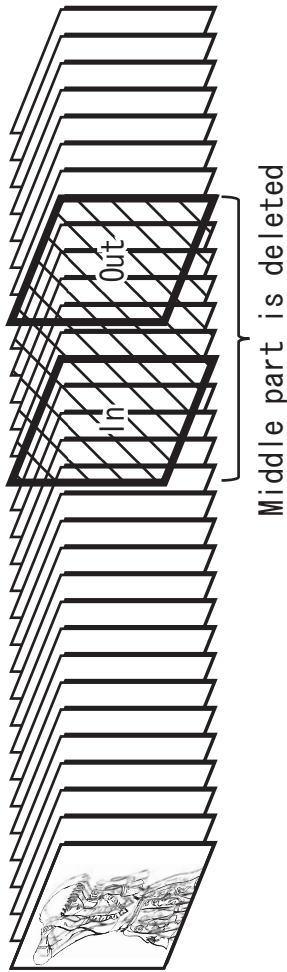


FIG. 60B

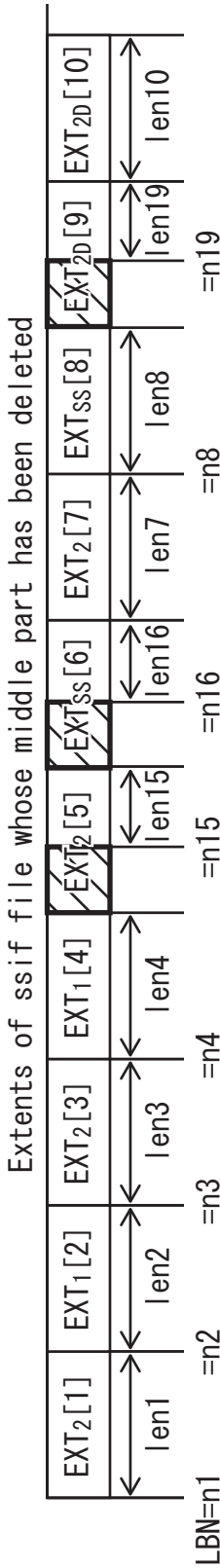


FIG. 60C

Allocation descriptor sequence of part of ssif file located before deleted middle part				
Extent ID=1	n1: len1			
Extent ID=2	n2: len2			
Extent ID=3	n3: len3			
Extent ID=4	n4: len4			

FIG. 60D

Allocation descriptor sequence of part of ssif file located after deleted middle part				
Extent ID=5	n15: len15			
Extent ID=6	n16: len16			
Extent ID=7	n7: len7			
Extent ID=8	n8: len8			
Extent ID=9	n19: len19			
Extent ID=10	n10: len10			

FIG. 61A

Allocation descriptor sequence of part of m2ts file located before deleted middle part		
Extent ID=2	n2:	len2
Extent ID=4	n4:	len4

FIG. 61B

Allocation descriptor sequence of part of m2ts file located after deleted middle part		
Extent ID=9	n19:	<u>len19</u>
Extent ID=10	n10:	<u>len10</u>

FIG. 61C

Extent start point of part of file base located before deleted middle part		
	SPN(n2)	
	SPN(n4)	
	SPN(<u>n16</u>)	

FIG. 61D

Extent start point of part of file dependent located before deleted middle part		
	SPN(n1)	
	SPN(n3)	
	SPN(<u>n15</u>)	

FIG. 61E

Extent start point of part of file base located after deleted middle part		
	SPN(n8)	

FIG. 61F

Extent start point of part of file dependent located after deleted middle part		
	SPN(n7)	

FIG. 62

