

FIG. 1

10

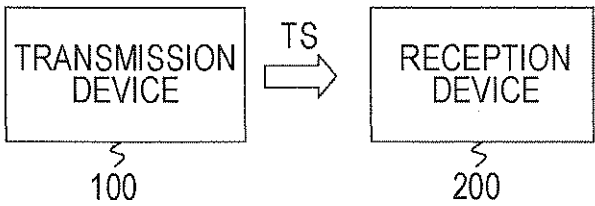


FIG. 2

200

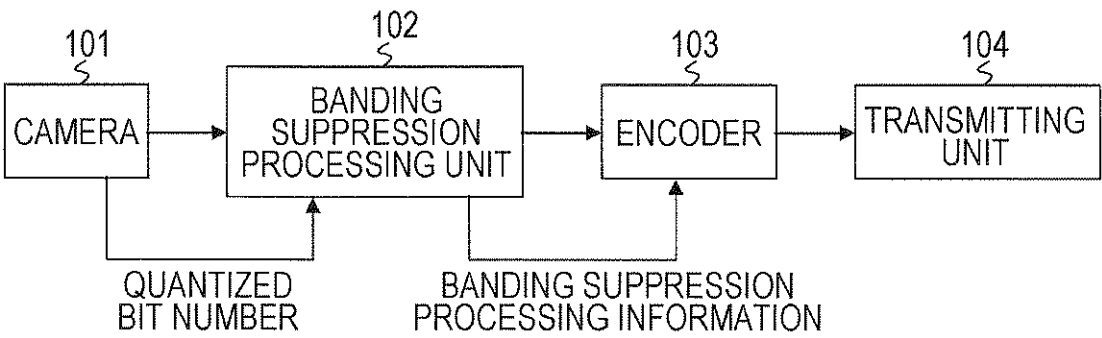


FIG. 3

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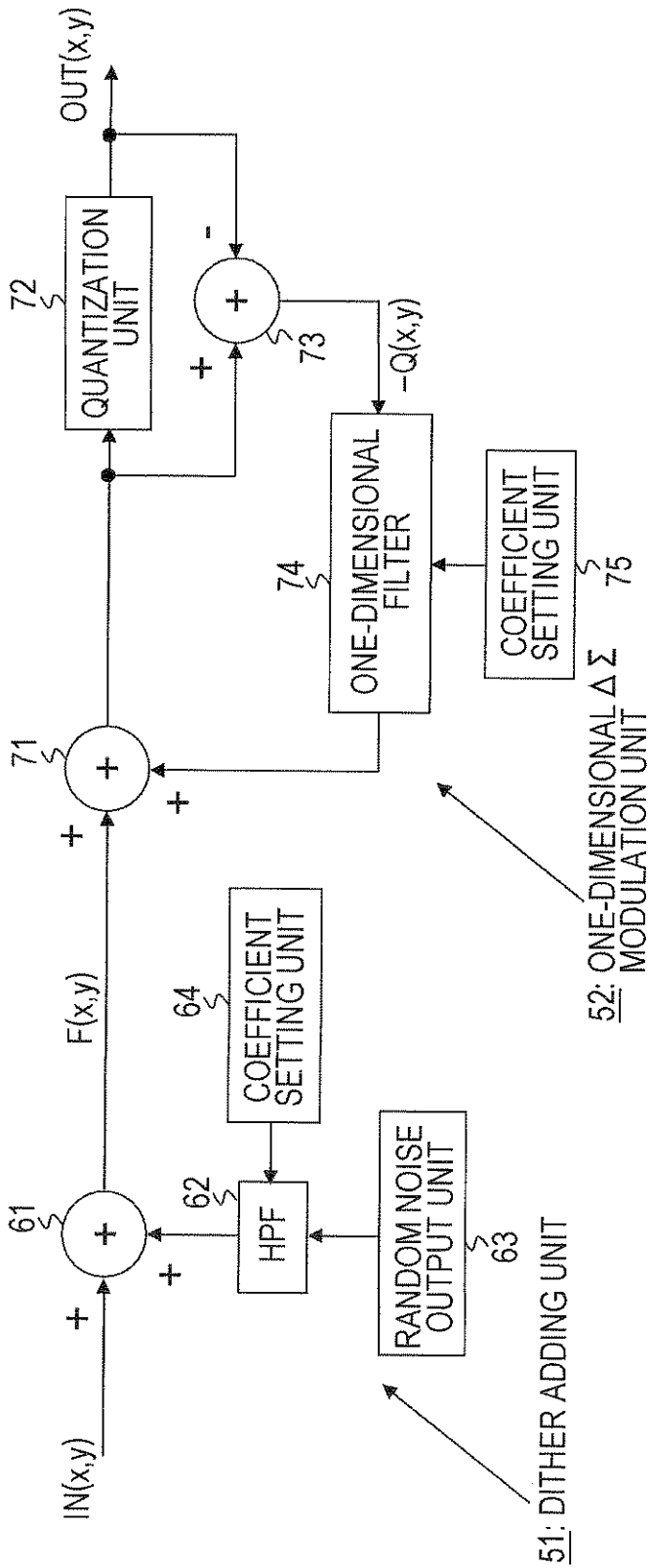


FIG. 4

ACCESS UNIT DATA STRUCTURE

HEAD ACCESS UNIT OF GOP

AU Delimiter (ONE)	SPS (ONE)	PPS (ONE)	SEIs	Slices(Primary Coded Picture) (ONE OR MORE)	Filler data (ONE)	End of sequence (ONE)
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(a)

Buffering period SEI message (ONE)	Recovery point SEI message (ESSENTIAL ONLY IN CASE OF open GOP, ONE)	Picture timing SEI message (ONE)	Pan-scan rectangle; SEI message (ONE)	Decoded reference; Picture marking SEI message (ONE)	Picture processing SEI message (ONE)
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☐ : ESSENTIAL
☐ : NOT ESSENTIAL

ACCESS UNIT OF GOP OTHER THAN HEAD ACCESS UNIT

AU Delimiter (ONE)	PPS (ONE)	SEIs	Slices(Primary Coded Picture) (ONE OR MORE)	Filler data (ONE)	End of sequence (ONE)
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(b)

Picture timing SEI message (ONE)	Pan-scan rectangle; SEI message (ONE)	Decoded reference; Picture marking SEI message (ONE)	Picture processing SEI message (ONE)
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FIG. 5

Syntax	No. of Bits	Format
user_data_unregistered (size) {		
uuid_iso_iec_11578	128	uimslbf
for(i = 16; i < payloadSize; i++)		
user_data_payload_byte	8	bslbf
}		

(a)

Syntax	No. of Bits	Format
picture_processing_data () {		
userdata_id	16	uimslbf
window_attribute_sei_length	8	bslbf
Picture processing_sei ()		
}		

(b)

FIG. 6

Picture processing SEI syntax

Syntax	No. of Bits	Format
Picture processing_SEI() {		
tone_process_preferred	1	bslbf
levels_scaled	1	bslbf
levels_before_encoding	2	bslbf
anti_banding_processed	1	bslbf
banding_process_type	3	bslbf
}		

FIG. 7

Picture processing SEI semantics

tone_process_preferred (1 bit)	INDICATE WHETHER banding SUPPRESSION PROCESSING SHOULD BE APPLIED
1	IMAGE IMPROVEMENT IS EXPECTED BY APPLYING banding SUPPRESSION PROCESSING
0	PROCESSING IS NOT NECESSARY
levels_scaled (1 bit)	INDICATE WHETHER GRADATION NUMBER REDUCING PROCESSING HAS BEEN APPLIED
1	GRADATION NUMBER REDUCING PROCESSING HAS BEEN APPLIED
0	GRADATION NUMBER REDUCING PROCESSING HAS NOT BEEN APPLIED
levels_before_encoding (2 bits)	INDICATE GRADATION NUMBER BEFORE GRADATION NUMBER REDUCING PROCESSING
00	8 bits/pixel
01	10 bits/pixel
10	12 bits/pixel
11	14 bits/pixel
anti_banding_processed (1 bit)	INDICATE WHETHER banding SUPPRESSION PROCESSING HAS BEEN EXECUTED ON TRANSMITTING SIDE
1	BANDING SUPPRESSION PROCESSING HAS BEEN EXECUTED
0	BANDING SUPPRESSION PROCESSING HAS NOT BEEN EXECUTED
banding_process_type (3 bits)	INDICATE TYPE OF Banding SUPPRESSION PROCESSING
000	reserved
001	DITHER METHOD
010	DENSITY PATTERN METHOD
011	ERROR DIFFUSION METHOD
others	reserved

FIG. 8
picture_processing descriptor syntax

Syntax	No. of Bits	Format
picture_processing descriptor () {		
picture_processing descriptor tag	8	uimsbf
picture_processing descriptor length	8	uimsbf
picture_processing_information_existed	1	bslbf
reserved	7	0x7f
}		

(a)

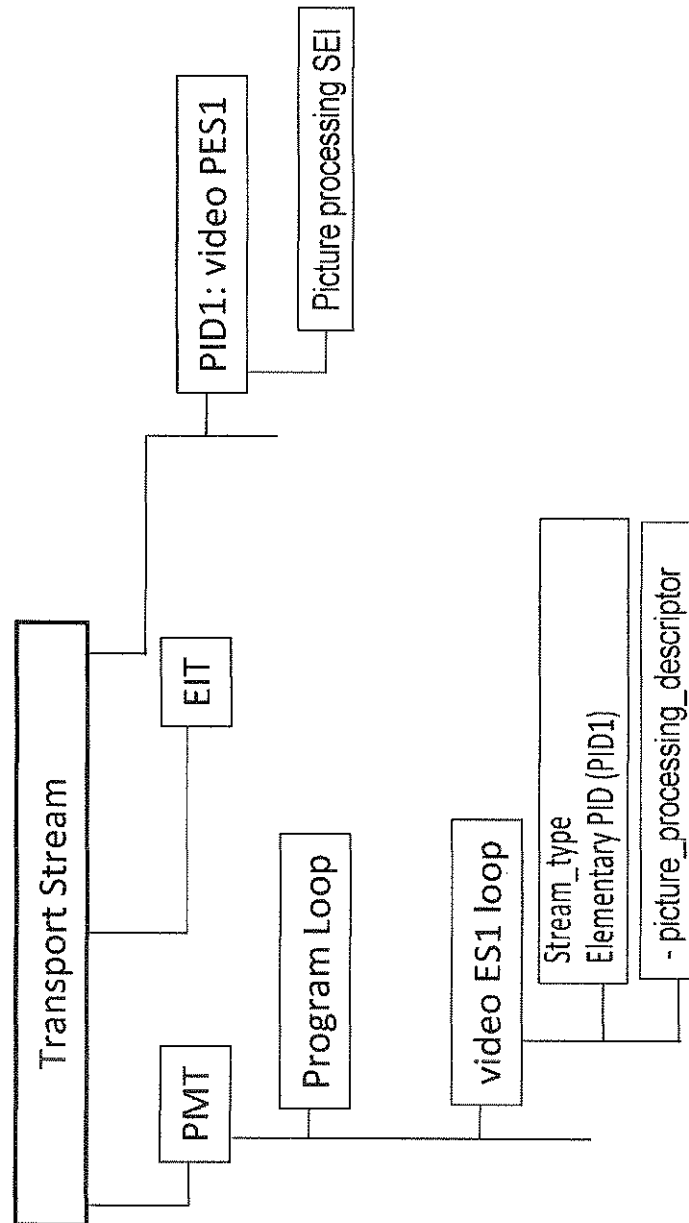
picture_processing descriptor semantics

picture_processing_information_existed (1bit)	
1	INDICATE WHETHER IMAGE PROCESSING HAS BEEN APPLIED TO VIDEO LAYER IMAGE PROCESSING HAS BEEN APPLIED TO VIDEO LAYER (picture_processing_SEI EXISTS)
0	IMAGE PROCESSING HAS NOT BEEN APPLIED TO VIDEO LAYER (picture_processing_SEI DOES NOT EXIST)

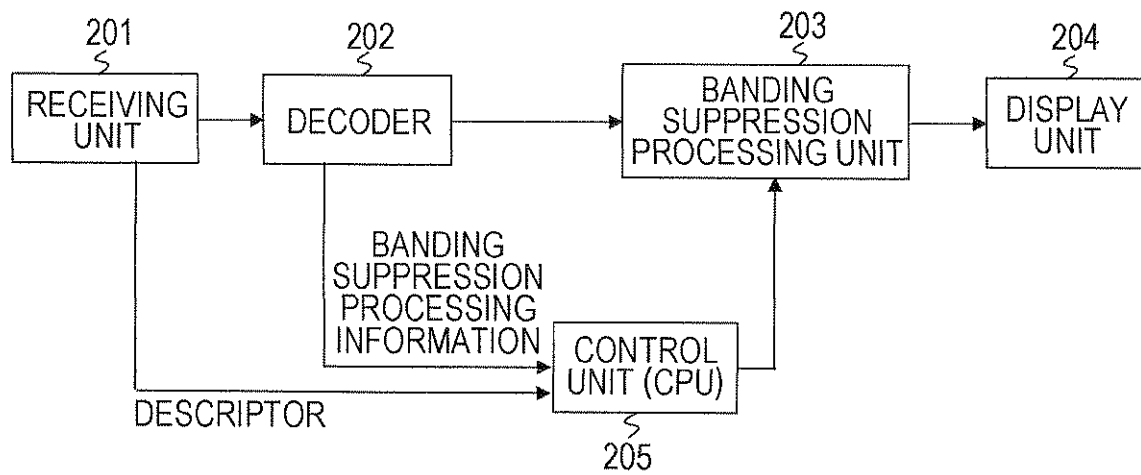
(b)

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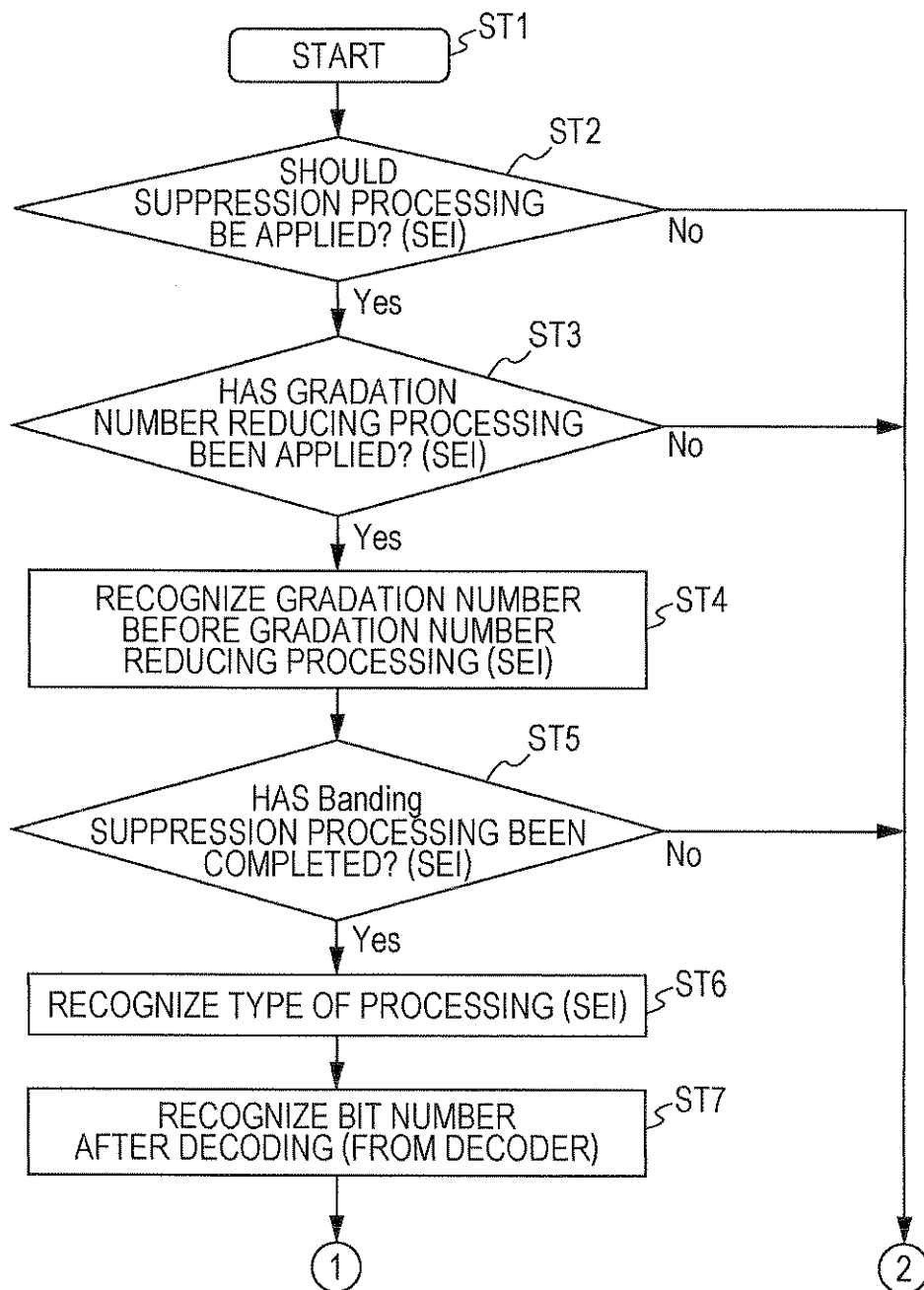
FIG. 9



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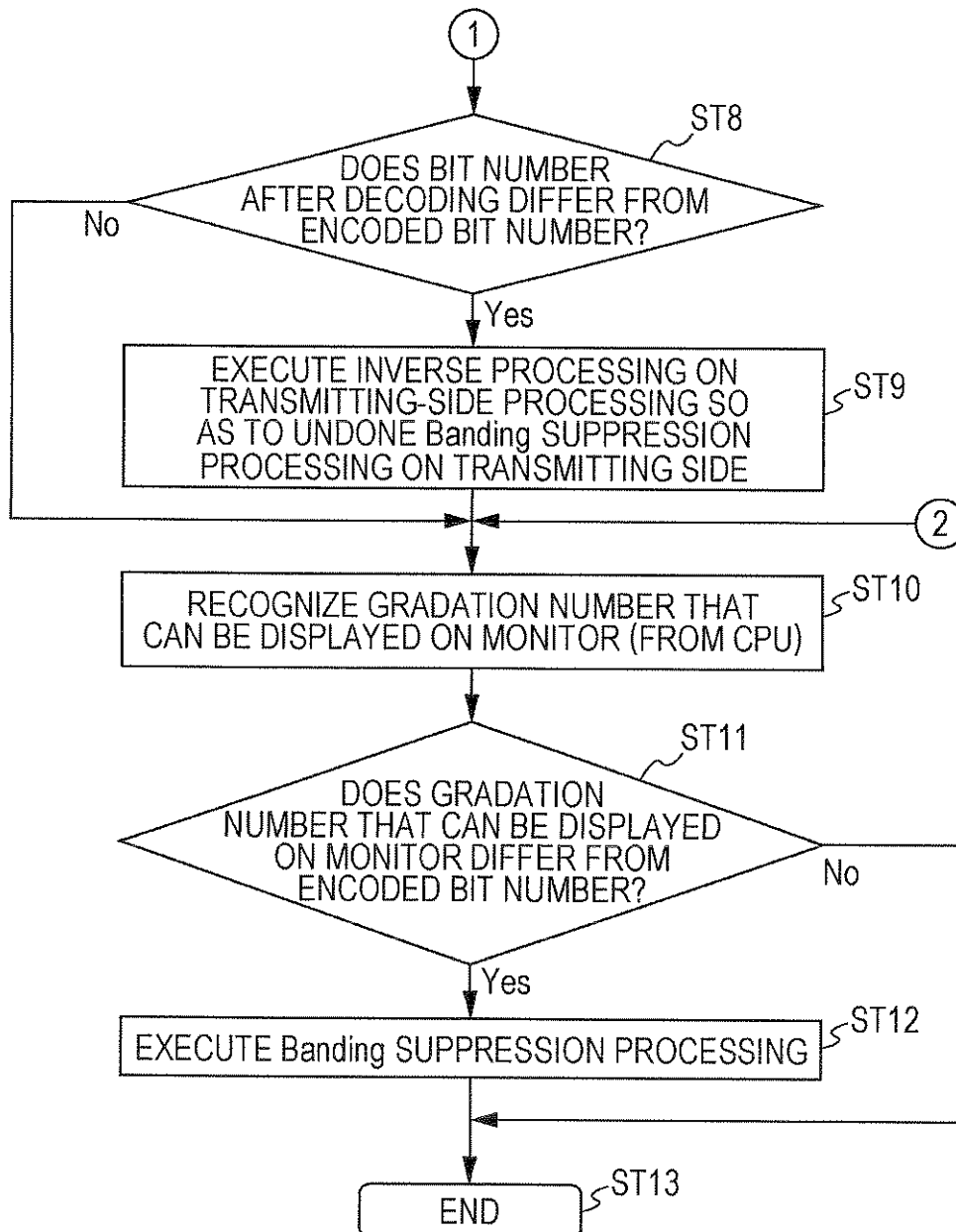
*FIG. 10*200

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FIG. 11

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FIG. 12



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FIG. 13

10A

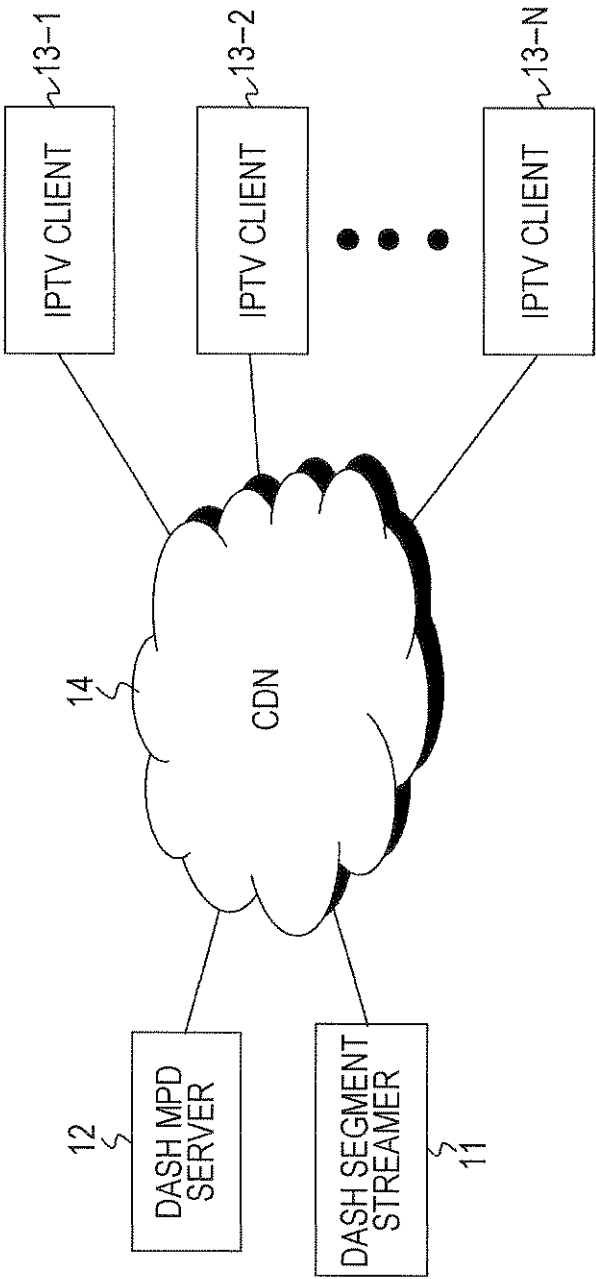


FIG. 14

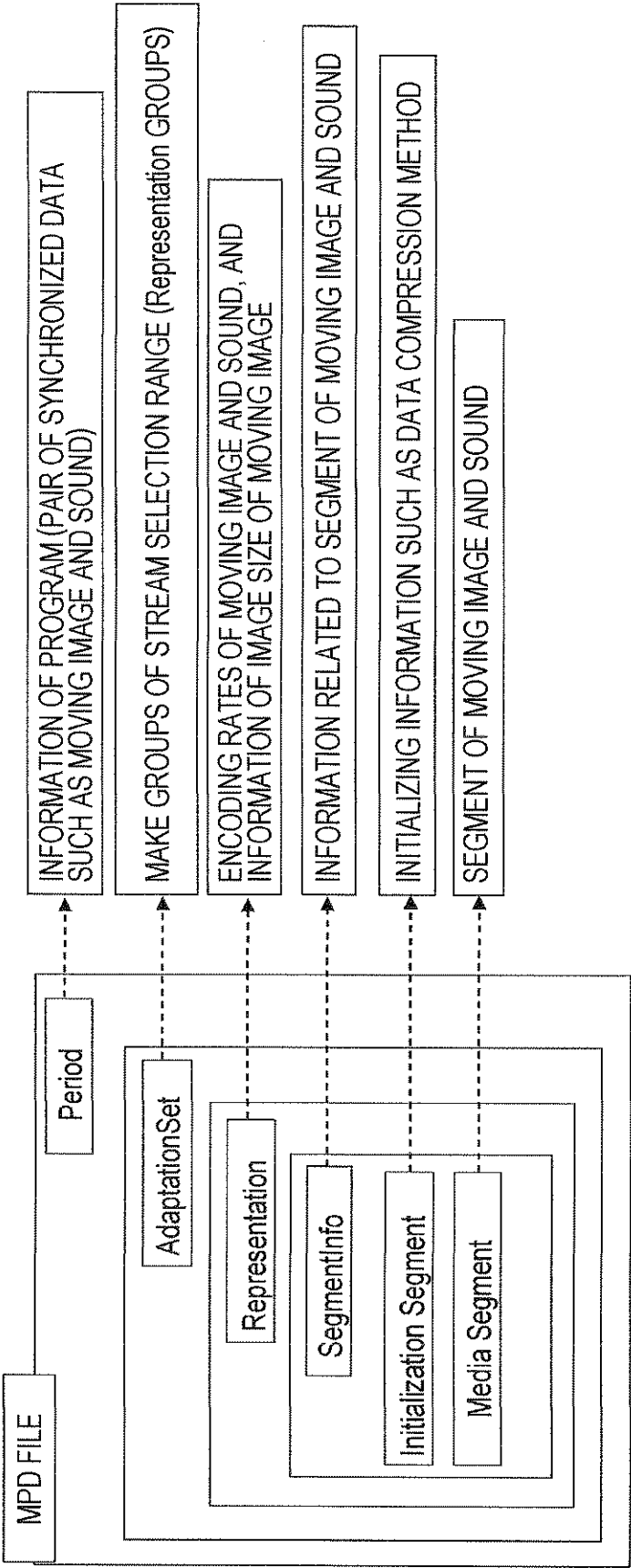


FIG. 15

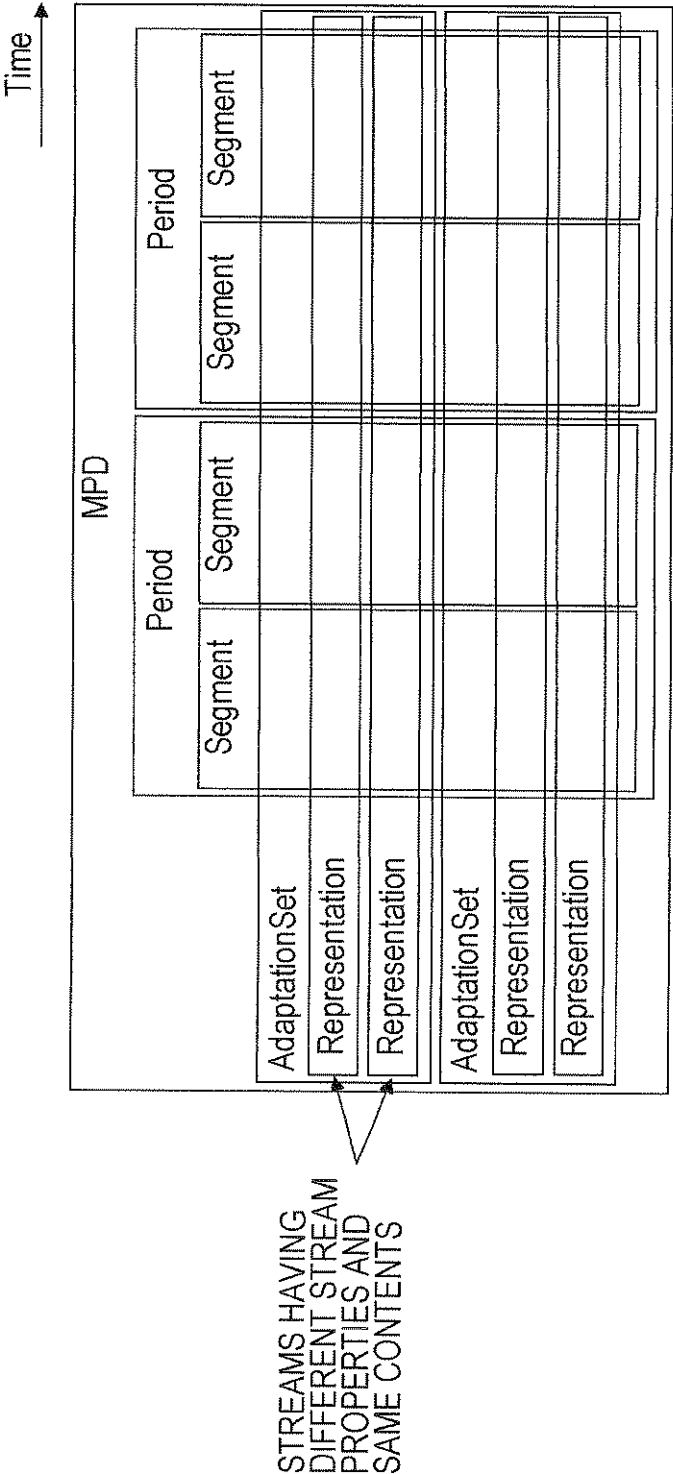


FIG. 16

(d)

Segment Info
Initialization Segment http://www.e.com/ahs-5.3gp
Media Segment 1 Start=0s http://www.e.com/ahs-5-1.3gp
Media Segment 2 Start=10s http://www.e.com/ahs-5-2.3gp
Media Segment 3 Start=20s http://www.e.com/ahs-5-3.3gp
...
Media Segment 20 Start=190s http://www.e.com/ahs-5-20.3gp

(c)

Representation 1 • bandwidth=500kbit/s • width 640, height 480 ...
Segment Info duration=10s Template: .ahs-5-SIndexS.3gs

(b)

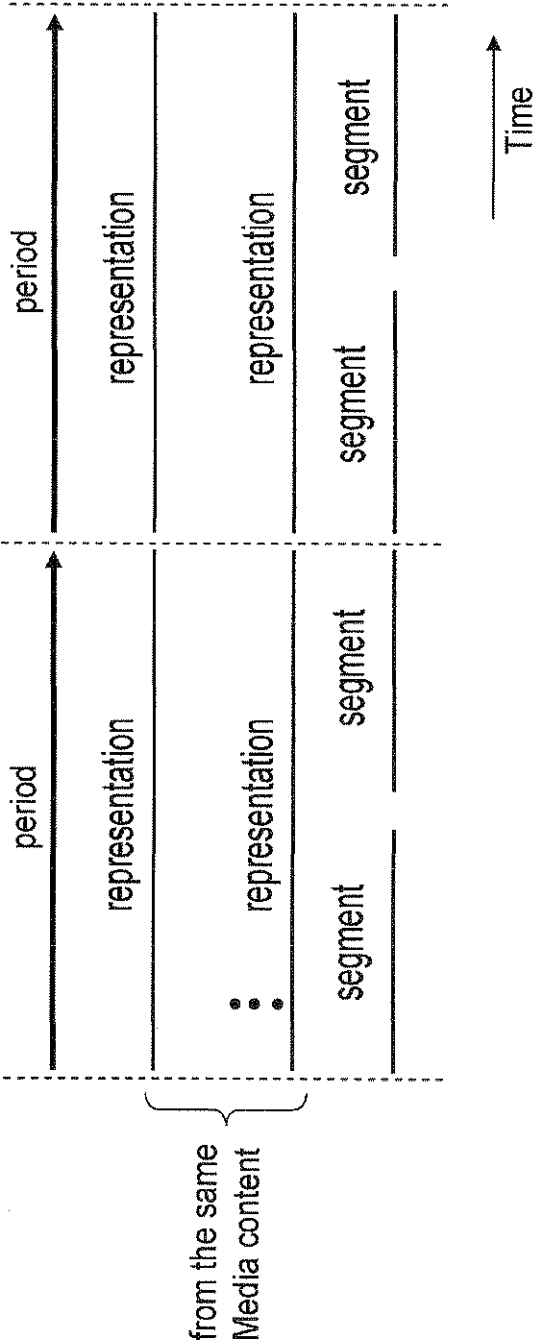
Period, start=100s • baseURL=http://www.e.com/ ...
Representation 1 500kbits/s
Representation 2 100kbits/s ...

(a)

Media Presentation
Period, start=0s ...
Period, start=100s ...
Period, start=295s ...
...

FIG. 17

RELATION BETWEEN Period/Representation/Segment



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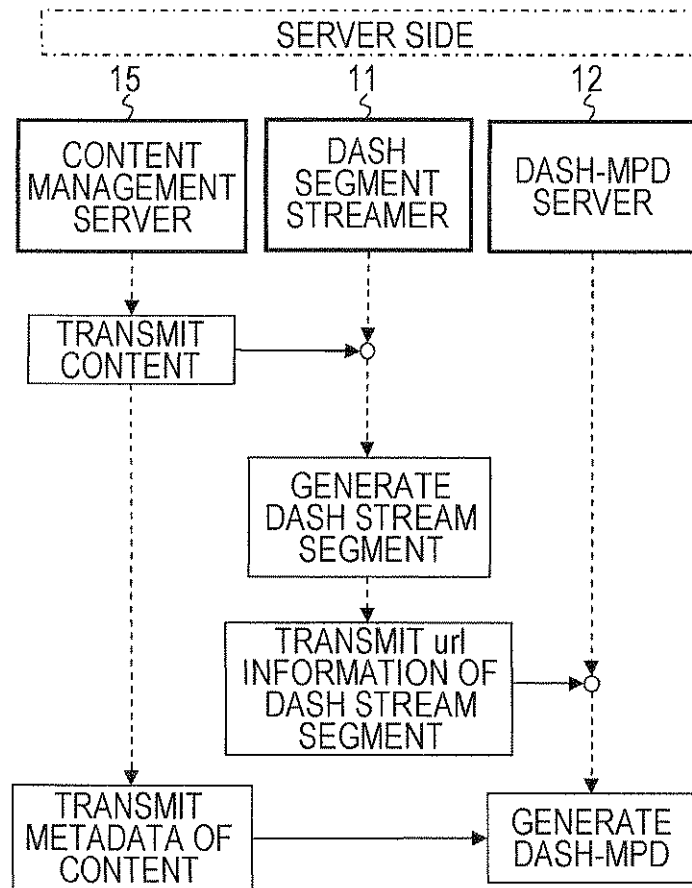
FIG. 18

FIG. 19

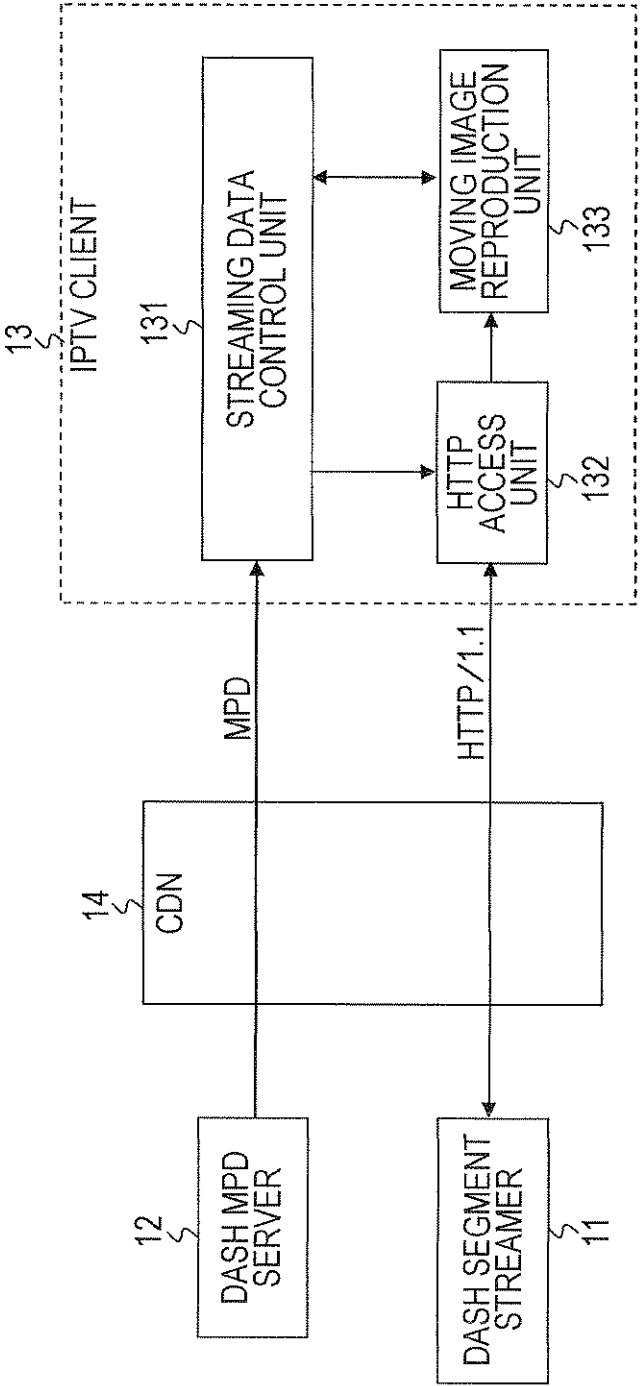


FIG. 20

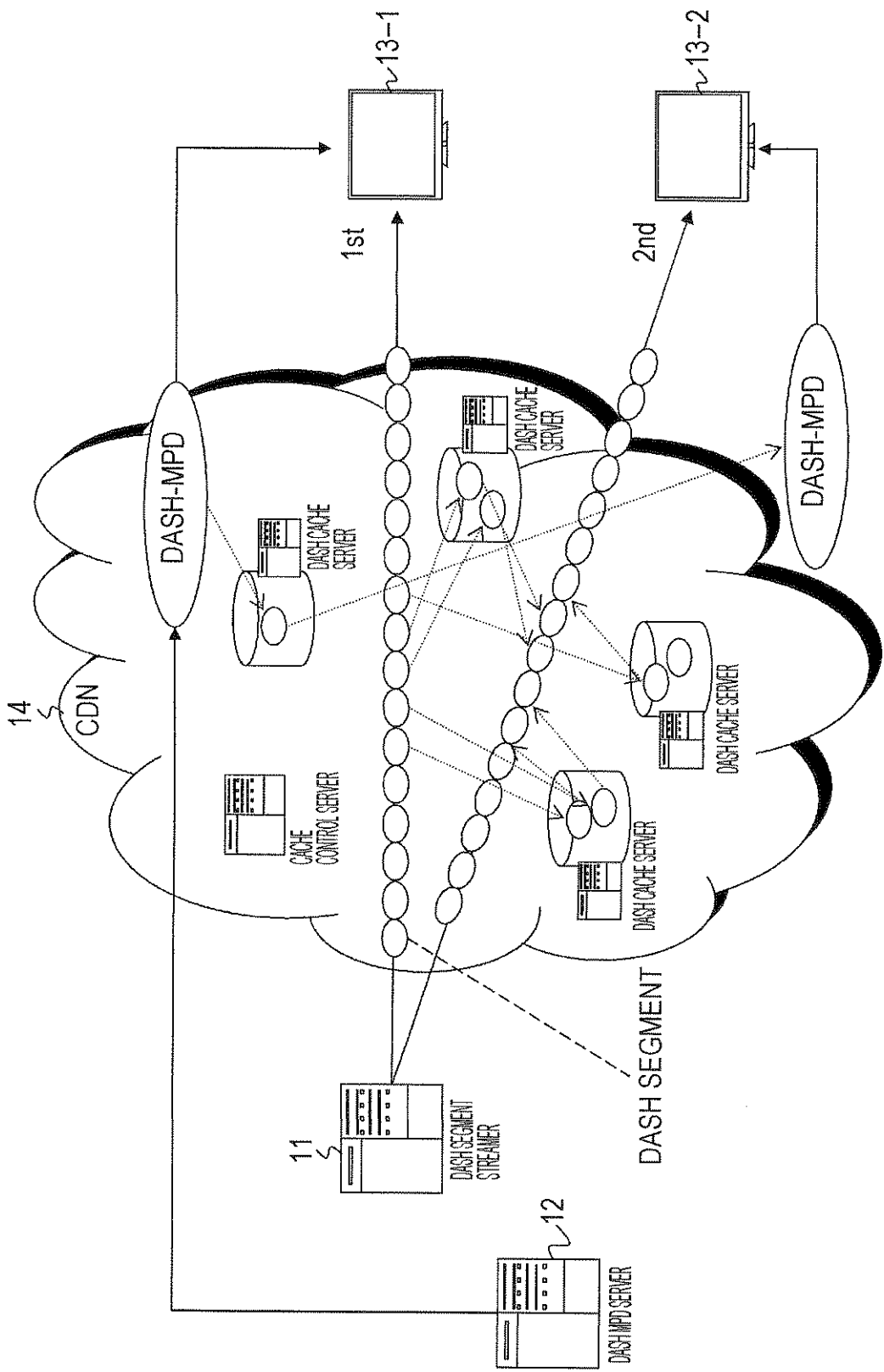
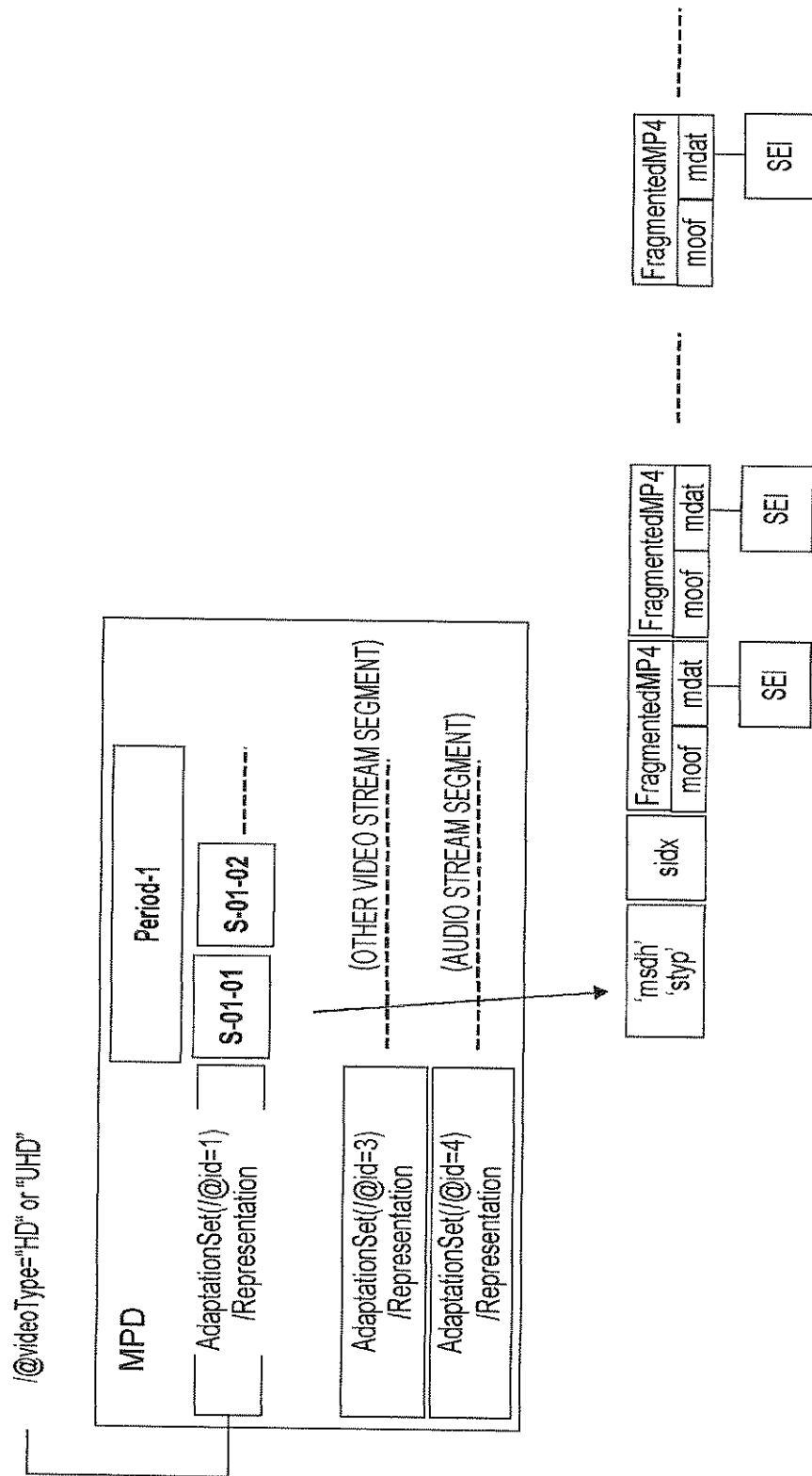


FIG. 21



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FIG. 22

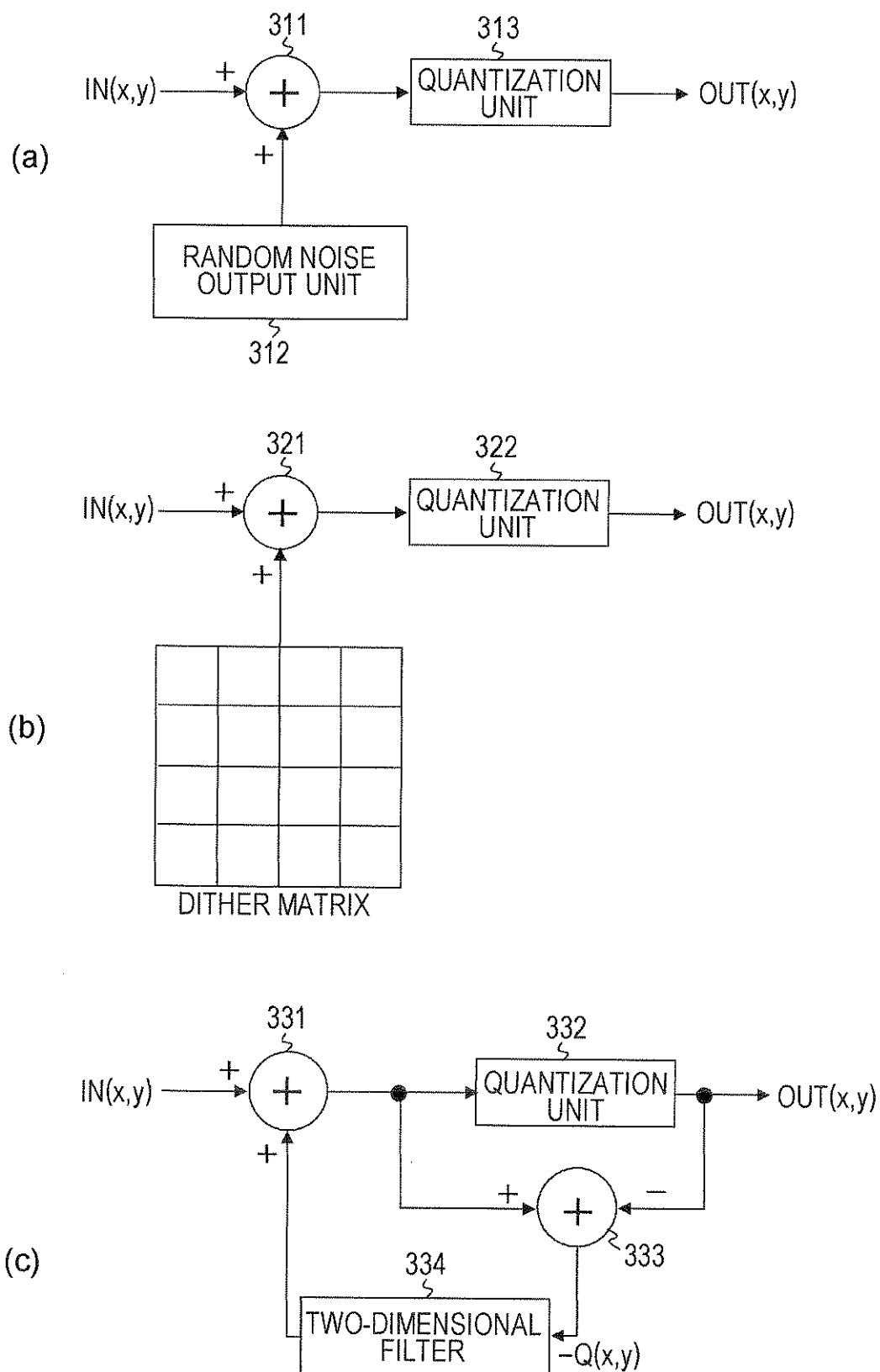


FIG. 23

