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Kikuchi et al.

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(54) **MOVING IMAGE CODING APPARATUS AND DECODING APPARATUS**

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H04N 7/12 (2006.01)
(52) **U.S. Cl.** **375/240.01**
(58) **Field of Classification Search** 375/240.01, 375/240.27, 240.12, 845.1; 386/68, 101, 386/125; 370/468, 487, 537; 348/423.1; H04N 7/44, H04N 7/12
See application file for complete search history.

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(57) **ABSTRACT**

A moving image coding apparatus which has coders (**17, 18, 19**) for dividing an input moving image signal into a plurality of frames, dividing each of the frames into one or more image areas, compressing and coding the image areas, and outputting an area image code string, a system multiplexer (**20**) for separating frame header information indicating the coding mode, etc., of the frame frame from the frame frame and adding the frame header information to one or more coded area image code strings, and a sender (**25**) for collecting one or more area image code strings to which the frame header information is added, adding packet header information, putting into a packet, and sending the packet.
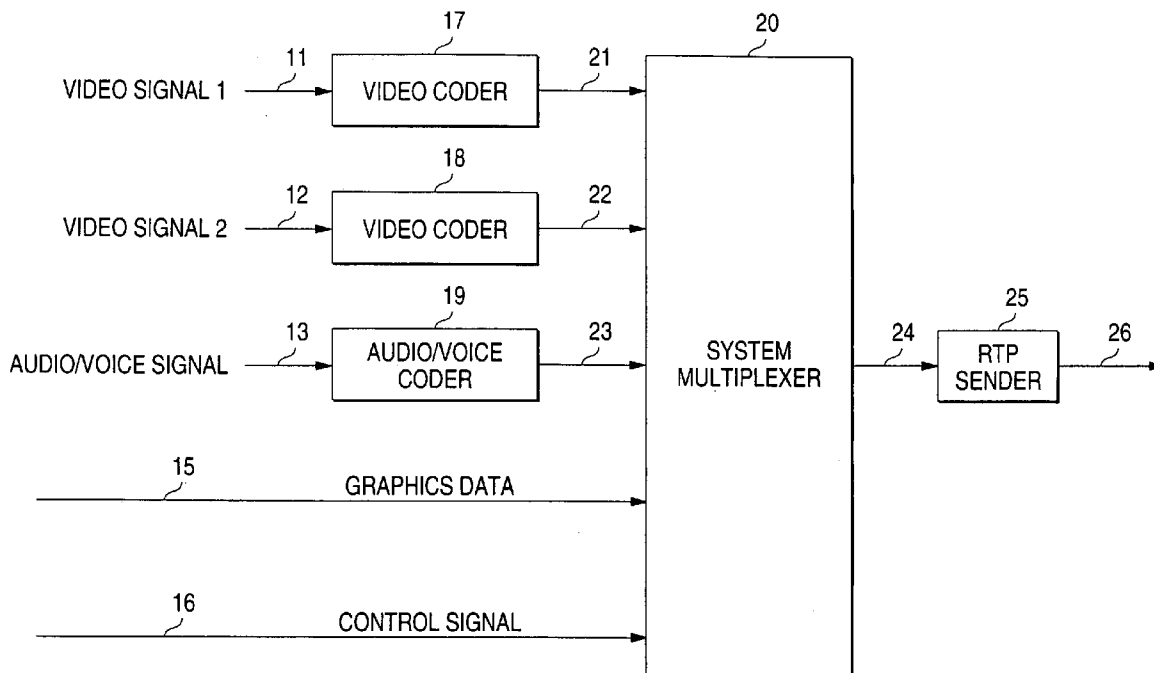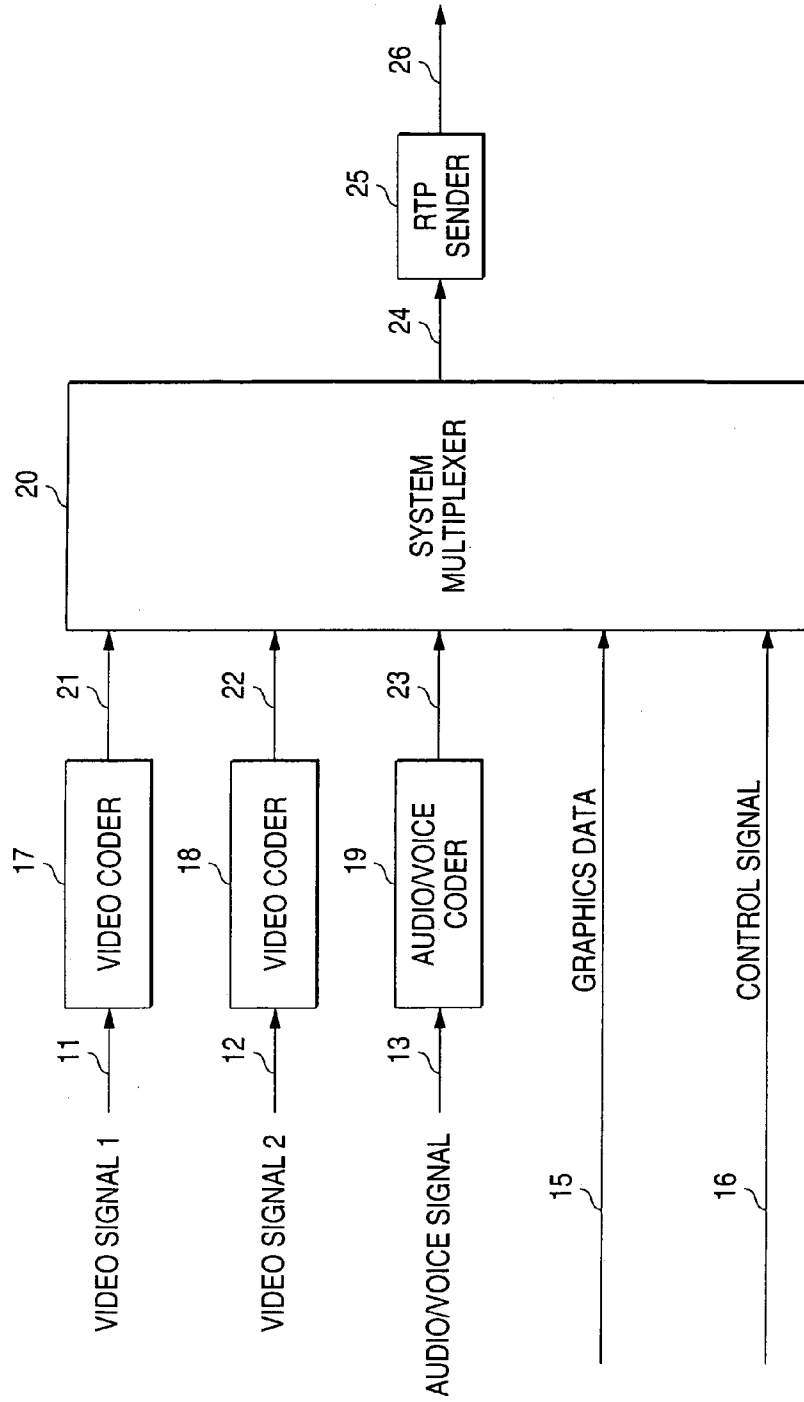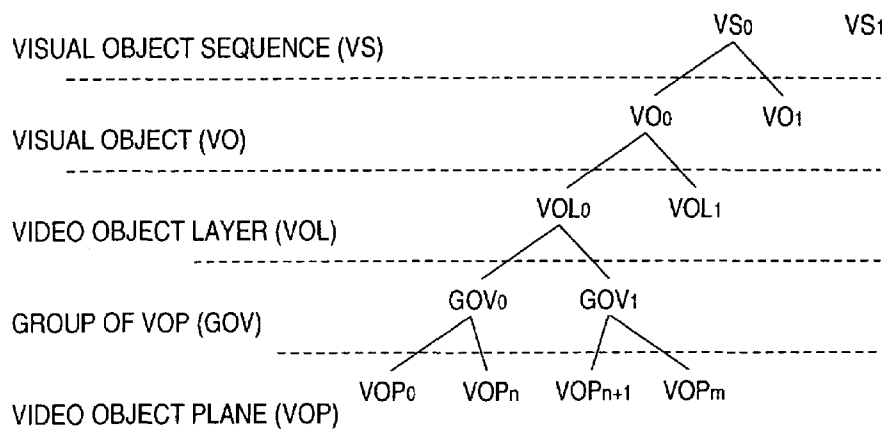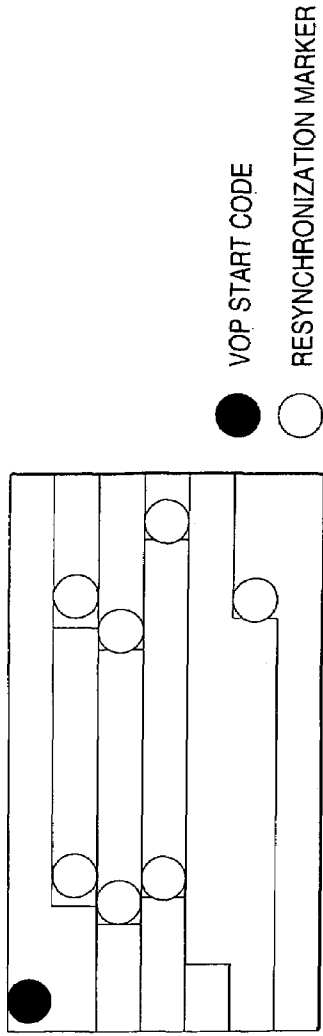
21 Claims, 21 Drawing Sheets

FIG. 1

FIG. 2

VISUAL OBJECT SEQUENCE (VS)

VISUAL OBJECT (VO)

VIDEO OBJECT LAYER (VOL)

GROUP OF VOP (GOV)

VIDEO OBJECT PLANE (VOP)

VS_0 VS_1

VO_0 VO_1

VOL_0 VOL_1

GOV_0 GOV_1

VOP_0 VOP_n VOP_{n+1} VOP_m

FIG. 3A

● VOP START CODE

○ RESYNCHRONIZATION MARKER

FIG. 3B

| VOP START CODE | VOP HEADER | MB1 | MB2 | MB3 | RESYNC MARKER | VP HEADER | MB4 | RESYNC MARKER | VP HEADER | MB5 | MB6 |

VIDEO PACKET   VIDEO PACKET   VIDEO PACKET

FIG. 3C

| MBN | QP | HEC (= 0) |

FIG. 3D

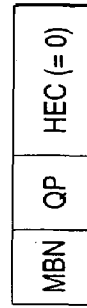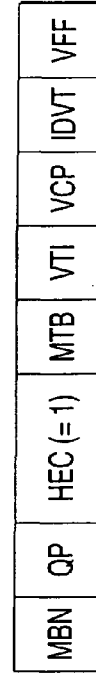| MBN | QP | HEC (= 1) | MTB | VTI | VCP | IDVT | VFF |
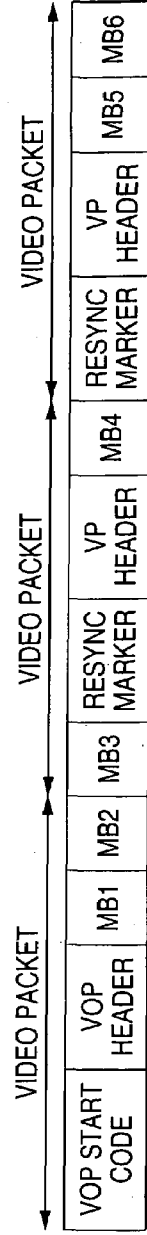
FIG. 4

DOCKET ALARM
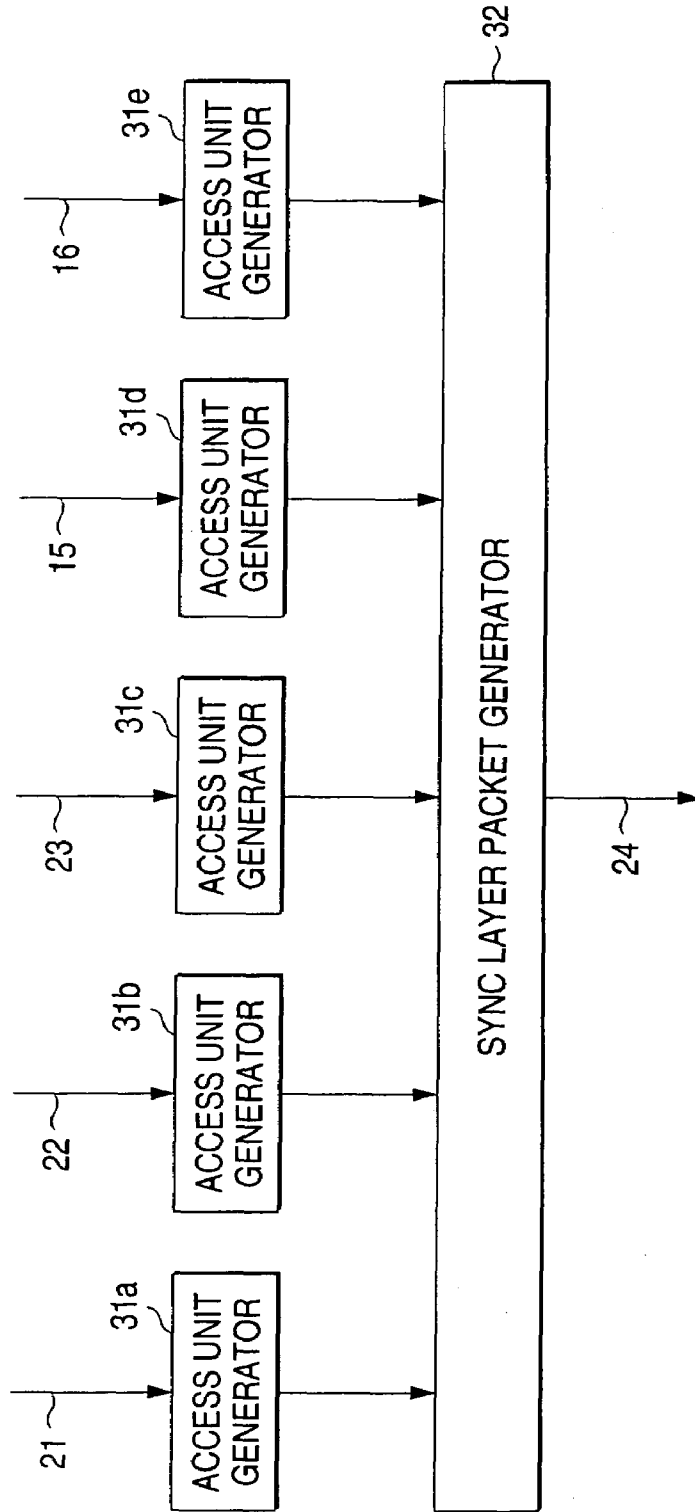
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