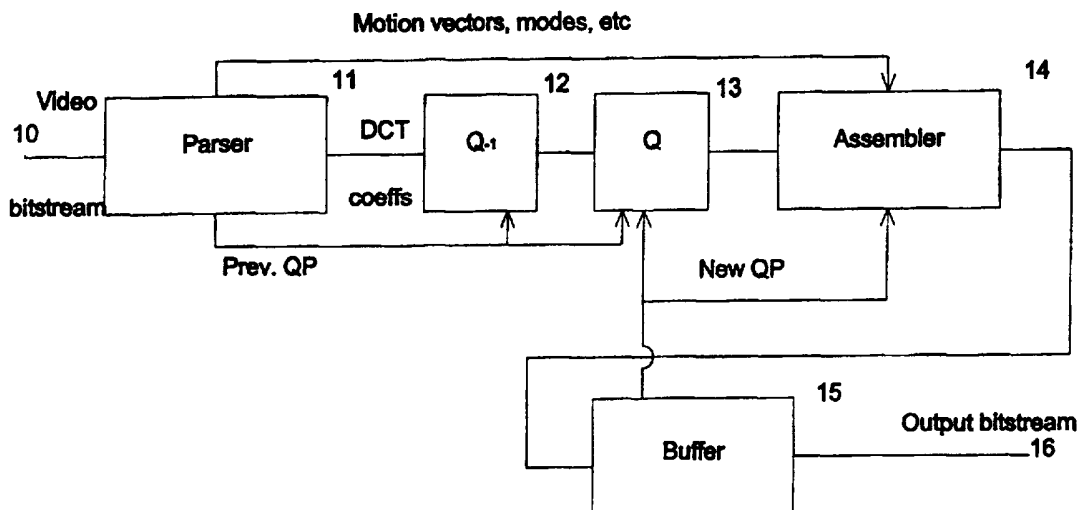




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(54) Title: IMPROVEMENTS IN OR RELATING TO CHANGING THE BIT RATE OF A SIGNAL



(57) Abstract

The present invention relates to a method and apparatus for changing the bit rate of an input compressed digital signal such as a digitally compressed video signal including quantised picture information and motion vectors relating to motion compensation between picture frames. In order to change the bit rate of the signal, the present invention provides in a first step, for a partial decoding of the signal including a separation of a component including the motion vectors. In a second step, the quantisation of the quantised picture information is modified so as to change the compression of the picture information. In a third step, the modified picture information is reassembled with the motion vectors to generate an output video signal. The invention may be applied to a near video on demand (NVOD) in which the signal is multiplexed with time shifted versions of itself and the bit rate of the signal is changed such that the combined bit rate of the multiplexed signals is limited to a rate which can be accommodated by the multiplexer.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 97/01486

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04N7/26 H04N7/58

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 712 251 A (GEN INSTRUMENT CORP) 15 May 1996	1-4, 10-13
Y	see page 5, column 8, line 12 - page 6, column 9, line 54; claims; figures 3,5	5-9, 14-18
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Y	WO 95 29546 A (THOMSON CONSUMER ELECTRONICS, INC.) 2 November 1995	5-9, 14-18
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Patent family members are listed in annex.

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A	GUHA A ET AL: "MULTICHANNEL JOINT RATE CONTROL OF VBR MPEG ENCODED VIDEO FOR DBS APPLICATIONS" IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 40, no. 3, 1 August 1994, pages 616-623, XP000471227 see paragraph I; figure 1 ---	1-18
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