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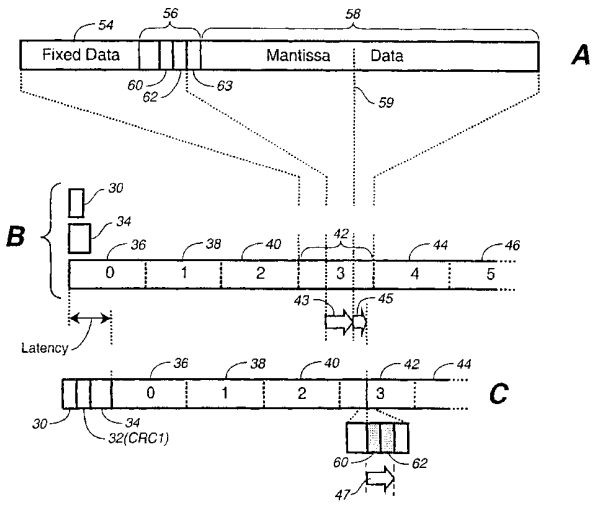
(54) Title: LOW LATENCY DATA ENCODER



(57) Abstract: Codeword-position-caused encoder latency is reduced by avoiding the requirement for knowledge of the message prior to generating an error detecting or concealing codeword associated with the message. A pseudo error detecting or concealing codeword is inserted in place of the normal error detecting or concealing codeword appropriate for the segment of information to which the error detecting or concealing codeword relates. In order to satisfy the requirement of conventional decoders, the pseudo error detecting or concealing information must match or be appropriate for the segment so that the decoder sees the codeword and message segment as valid or error free. This is accomplished by modifying or perturbing at least a portion of the segment to which the pseudo codeword relates. The invention is particularly useful for maintaining the backward compatibility of audio data encoding formats in which the minimum latency is too long (e.g. computer games, where the player performs some operation leading to a sound, and that sound must not be perceptibly delayed with respect to the operation).

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G11B20/00 H03M13/09

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 7 G11B H03M

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)
EPO-Internal, INSPEC, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ADVANCED TELEVISION SYSTEMS COMMITTEE: "Digital Audio Compression Standard (AC-3)" ATSC, 20 December 1995 (1995-12-20), XP002192340 Washington, USA cited in the application paragraph '5.4.1.2! paragraph '5.4.5.2! paragraph '7.10.1! -----	1,9

☐ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

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