

Title: A Stuffing Codeword for several Purposes

Source: FRG

In different situations a codeword for stuffing bits is usefull:

1. When the encoder buffer is in danger of underflowing, a special mode is provided in the Flexible Hardware for transmitting zeros after the last nonzero coefficient. This produces dummy bits and prevents the bufferstore from an underflow. Reaching the lower limit the buffer control unit enables this mode in the video multiplex encoder and let fill up the buffer. A more direct way without the inclusion of the video multiplex encoder is desirable. Also the video multiplex decoder should not be stressed with removing these stuffing bits.
2. For the combination of four coded Quarter CIF pictures to one Full CIF picture for continuous presence multipoint a stuffing codeword is necessary to equalize the bitrate after removing of three picture start codes.

Solution:

Stuffing codewords which can satisfy the demands, are a picture start code with a non valid group number or a group of blocks start code with a non valid group number. Preferably only one kind of stuffing codeword should be allowed. This codeword can be easily detected, inserted and removed. Neither the video multiplex encoder nor the video multiplex decoder are stressed.