ABSTRACT OF THE DISCLOSURE

Method For Reducing

Processing Power Requirements of a Video Decoder

The invention described herein permits video decoders of varying degrees of computational power to decode bitstreams with varying degrees of visual quality degradation. It does so by reducing processing power requirements of a video decoder based on both bitstream contents and decoder capabilities. One method it uses is the reduction of motion compensation processing by modifying the use or values of motion vectors, such as by turning some motion compensation off, or by limiting the precision of motion vectors during decoding. Another method is by limiting the coefficient processing so as to reduce the computational requirements. Another method is to limit the processing of color components, and another method is by reducing the amount of filtering performed on the decoder's output video pictures.

Fig. 1