



Abstract

A SCALABLE DELIVERY SCHEME OF COMPRESSED VIDEO

A method and system for scalable delivery of compressed video data over a communications
5 network which is dynamically adaptable to network congestion conditions. A frequency
domain encoding algorithm is used to encode/compress the video data which generates
frequency domain coefficients and motion vectors representing the video. The DC
coefficients, motion vectors and header data required for decoding are stored in a base-file,
and the AC coefficients are split into ordered groups and stored in separate delta-files.
10 During transmission the base-file is always sent, which itself can provide a low level of video
quality when decoded. Depending upon network conditions, as many of the delta-files
containing the AC coefficients as possible or desirable can be dynamically multiplexed with
the base-file to provide for greater quality video. The network conditions can be determined
by monitoring the packet loss ratio on the network, for example.