

ABSTRACT

SYSTEM AND METHOD FOR MULTI-STREAM VIDEO COMPRESSION USING MULTIPLE ENCODING FORMATS

A computer-implemented system and method are described for performing video compression. For example, a method according to one embodiment comprises: encoding a plurality of video frames or portions thereof according to a first encoding format, the first encoding format being optimized for transmission to a client device over a current communication channel; transmitting the plurality of encoded video frames or portions to the client device over the communication channel; concurrently encoding the first plurality of video frames according to a second encoding format, the second encoding format having a relatively higher-quality compressed video and/or a lower compression ratio than the first encoding format; storing the first plurality of video frames encoded in the second encoding format on a storage device; and making the first plurality of video frames encoded in the second encoding format available to the client device and other client devices for playback of the video stream.

Fig. 4a