

CONTENT-ADAPTIVE ONLINE TRAINING WITH IMAGE SUBSTITUTION IN NEURAL IMAGE COMPRESSION

ABSTRACT OF THE DISCLOSURE

Aspects of the disclosure provide a method and an apparatus for video encoding. The apparatus includes processing circuitry configured to perform an iterative update of sample values of a plurality of samples in an initial input image. The iterative update includes generating a coded representation of a final input image based on the final input image by an encoding neural network (NN) and at least one training module. The final input image has been updated from the initial input image by a number of iterations of the iterative update. The iterative update includes generating a reconstructed image of the final input image based on the coded representation of the final input image by a decoding NN. One of a rate-distortion loss for the final input image or the number of iterations of the iterative update satisfies a pre-determined condition. An encoded image corresponding to the final input image is generated.

Figure 1A