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(54) Title: METHOD AND APPARATUS FOR DYNAMIC LEARNING RATES OF SUBSTITUTION IN NEURAL IMAGE COM-
PRESSION

(57) Abstract: Neural network based substitutional end-to-end (E2E) image compression (NIC) being performed by at least one proces-
sor and includes receiving an input image to an E2E NIC framework, determining a step size of the input image indicating a learning
rate of a training model, determining a substitute image based on the training model, encoding the substitute image in lieu of the input
image to generate a bitstream, and mapping the substitute image to the bitstream to generate a compressed representation. Further, step
size may be determined by a scheduler and change throughout the training of the training model. The image may also be split into
patches for which a scheduler is assigned for each patch and each patch is encoded instead of the entire input image.