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(54) **NONITERATIVE ENTROPY CODING**

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(57) **ABSTRACT**

This disclosure provides methods, devices, and systems for data compression and decompression. The present implementations more specifically relate to entropy encoding and decoding techniques for keeping a state variable within upper and lower bounds using a noniterative process. The entropy encoding uses a fixed state threshold to determine a number of bits to remove and removes the bits from a current state prior to encoding a symbol with the current state. The entropy decoding decodes encoded data in a bitstream based on a current state to obtain the symbol and a new state and determines a number of bits to read from the bitstream and to add to the new state to update the current state.