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(54) **ADAPTIVE CODING OF PREDICTION MODES USING PROBABILITY DISTRIBUTIONS**

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(57) **ABSTRACT**

A system, apparatus, and method for encoding and decoding a video image having a plurality of frames is disclosed. Encoding and decoding the video image can include selecting, for a current block, a prediction mode from a plurality of prediction modes; identifying, for the current block, a quantization value; selecting, for the current block, a probability distribution from a plurality of probability distributions based on the identified quantization value using a processor; and entropy encoding the selected prediction mode using the selected probability distribution.