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(54) **ENCODER, DECODER, ENCODING METHOD, AND DECODING METHOD**

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(57) **ABSTRACT**

A decoder that decodes a current block using a motion vector includes: a processor; and memory. Using the memory, the processor: derives a first candidate vector from one or more candidate vectors of one or more neighboring blocks that neighbor the current block; determines, in a first reference picture for the current block, a first adjacent region that includes a position indicated by the first candidate vector; calculates evaluation values of a plurality of candidate regions included in the first adjacent region; and determines a first motion vector of the current block, based on a first candidate region having a smallest evaluation value among the evaluation values. The first adjacent region is included in a first motion estimation region determined based on the position indicated by the first candidate vector.