CLAIMS

What is claimed is:

1. A decoding method, wherein the method comprises:

obtaining a construction mode of a candidate motion information list comprising candidate motion information of a current block, and obtaining an index of the candidate motion information in the candidate motion information list, wherein the construction mode of the candidate motion information list is a mode of constructing a block-based candidate motion information list or a mode of constructing a subblock-based candidate motion information list;

constructing the candidate motion information list in the construction mode;

determining motion information from the constructed candidate motion information list based on the index; and

predicting the current block based on the motion information.

2. A decoding method, wherein the method comprises:

obtaining an identifier that is used to determine a candidate motion information list comprising candidate motion information of a current block, and obtaining an index of the candidate motion information in the candidate motion information list, wherein an inter prediction mode used for the current block is a merge mode;

constructing the candidate motion information list based on the identifier, wherein when the identifier is a first feature value, the candidate motion information list is a block-based candidate motion information list, or when the identifier is a second feature value, the candidate motion information list is a subblock-based candidate motion information list;

determining motion information from the constructed candidate motion information list based on the index; and

predicting the current block based on the motion information.

3. A decoding apparatus, wherein the apparatus comprises:

an obtaining module, configured to obtain a construction mode of a candidate motion information list that comprises candidate motion information of a current block, and obtain an index of the candidate motion information in the candidate motion information list, wherein the construction mode of the candidate motion information list is a mode of constructing a block-based candidate motion information list or a mode of constructing a subblock-based candidate motion

information list;

a construction module, configured to construct the candidate motion information list in the construction mode;

a determining module, configured to determine motion information from the constructed candidate motion information list based on the index; and

a prediction module, configured to predict the current block based on the motion information.

4. A decoding apparatus, wherein the apparatus comprises:

an obtaining module, configured to obtain an identifier that is used to determine a candidate motion information list comprising candidate motion information of a current block, and obtain an index of the candidate motion information in the candidate motion information list, wherein an inter prediction mode used for the current block is a merge mode;

a construction module, configured to construct the candidate motion information list based on the identifier, wherein when the identifier is a first feature value, the candidate motion information list is a block-based candidate motion information list, or when the identifier is a second feature value, the candidate motion information list is a subblock-based candidate motion information list;

a determining module, configured to determine motion information from the constructed candidate motion information list based on the index; and

a prediction module, configured to predict the current block based on the motion information.

5. A decoding method, wherein the method comprises:

parsing a bitstream to obtain a syntax element, wherein the syntax element comprises at least an index of candidate motion information of a current block;

determining, based on the syntax element, to construct a first list or a second list for the current block, wherein the first list is a block-based candidate motion information list, and the second list is a subblock-based candidate motion information list;

determining motion information from the first list or the second list based on the index; and

predicting the current block based on the motion information.

6. A decoding apparatus, wherein the apparatus comprises:

an obtaining module, configured to parse a bitstream to obtain a syntax element, wherein the syntax element comprises at least an index of candidate motion information of a current block;

a construction module, configured to determine, based on the syntax element, to construct a

first list or a second list for the current block, wherein the first list is a block-based candidate motion information list, and the second list is a subblock-based candidate motion information list;

a determining module, configured to determine motion information from the first list or the second list based on the index; and

a prediction module, configured to predict the current block based on the motion information.

7. An encoding method, wherein the method comprises:

constructing a first list, wherein the first list is a block-based candidate motion information list;

constructing a second list, wherein the second list is a subblock-based candidate motion information list;

determining candidate motion information from the first list and the second list; and

predicting the current block based on the motion information.

8. An encoding method, wherein the method comprises:

obtaining an identifier that is used to determine a candidate motion information list comprising candidate motion information of a current block, and obtaining an index of the candidate motion information in the candidate motion information list, wherein an inter prediction mode used for the current block is a merge mode, and when the identifier is a first feature value, the candidate motion information list a block-based candidate motion information list, or when the identifier is a second feature value, the candidate motion information list is a subblock-based candidate motion information list; and

encoding the identifier and the index into a bitstream.

9. An encoding apparatus, wherein the apparatus comprises:

a construction module, configured to construct a first list and a second list, wherein the first list is a block-based candidate motion information list, and the second list is a subblock-based candidate motion information list;

a determining module, configured to determine candidate motion information from the first candidate motion information list and the second candidate motion information list; and

a prediction module, configured to predict the current block based on the motion information.

10. An encoding apparatus, wherein the apparatus comprises:

an obtaining module, configured to obtain an identifier that is used to determine a candidate motion information list comprising candidate motion information of a current block, and obtain an

index of the candidate motion information in the candidate motion information list, wherein an inter prediction mode used for the current block is a merge mode, and when the identifier is a first feature value, the candidate motion information list a block-based candidate motion information list, or when the identifier is a second feature value, the candidate motion information list is a subblock-based candidate motion information list; and

an encoding module, configured to encode the identifier and the index into a bitstream.

11. A video coding device, wherein the device comprises a nonvolatile memory and a processor coupled to each other, and the processor invokes program code stored in the memory to perform the method according to any one of claims 1-2, 5, or 7-8.

12. A computer-readable storage medium, wherein the computer-readable storage medium stores a computer program, and when the computer program runs on a processor, the method according to any one of claims 1-2, 5, or 7-8 is implemented.

13. A storage medium storing an encoded bitstream for video signals, the encoded bitstream comprises a plurality of syntax elements, wherein the plurality of syntax elements comprises an identifier, which is used to indicate determine the candidate motion information list.

14. An encoder, comprising:

circuitry configured to perform the method of any one of claims 7-8.

15. A non-transitory computer-readable storage medium storing instructions for execution by a processing circuitry, wherein the instructions, when executed by the processing circuitry, configures the processing circuitry to carry out the method according to any one of claims 1-2, 5, or 7-8.