BRIEF DESCRIPTION OF DRAWINGS

[0146] FIG. 1 is a schematic diagram of a video encoding procedure;

[0147] FIG. 2 is a schematic diagram of inter prediction;

[0148] FIG. 3 is a schematic diagram of a video decoding procedure;

[0149] FIG. 4 is a schematic diagram of candidate locations of motion information;

[0150] FIG. 5 is a schematic diagram of an advanced motion vector prediction mode of affine transformation;

[0151] FIG. 6 is a schematic diagram of a video transmission system;

[0152] FIG. 7 is a schematic diagram of motion information of spatially neighboring candidate blocks;

[0153] FIG. 8 is a schematic diagram of motion information of spatially non-neighboring candidate blocks;

[0154] FIG. 9 is a schematic diagram of an affine model merge mode;

[0155] FIG. 10 is a schematic diagram of a complex merge mode;

[0156] FIG. 11 is a schematic diagram of an ATMVP prediction mode;

[0157] FIG. 12 is a schematic diagram of an STMVP prediction mode;

[0158] FIG. 13 is a schematic diagram of planar motion vector derivation;

[0159] FIG. 14 shows a decoding method according to an embodiment of the present invention;

[0160] FIG. 15 shows another decoding method according to an embodiment of the present invention;

[0161] FIG. 16A and 16B show~~s~~ a syntax table according to an embodiment of the present invention;

[0162] FIG. 17 shows another decoding method according to an embodiment of the present invention;

[0163] FIG. 18 shows a decoding apparatus according to an embodiment of the present invention; and

[0164] FIG. 19 shows a coding device according to an embodiment of the present invention.

DESCRIPTION OF EMBODIMENTS

[0165] The following describes the embodiments of this application with reference to the accompanying drawings in the embodiments of this application.

and/or S11.2 in the embodiment.

[0328] For construction of the subblock-based candidate motion information list, refer to S12.1, S12.2, S12.3, and/or S12.4 in the embodiment.

[0329] S143: Determine optimal motion information from the constructed candidate motion information list based on the index. For an optional manner, refer to S13 in the embodiment.

[0330] S144: Predict the current block based on the optimal motion information. For an optional manner, refer to S14 in the embodiment.

[0331] FIG. 15 shows a decoding method. The method includes the following steps.

[0332] S151: Parse a bitstream to obtain a syntax element, where the syntax element includes at least an index of optimal candidate motion information of a current block.

[0333] For an optional manner, refer to S21 in the embodiment.

[0334] S152: Determine, based on the syntax element, to construct a first list or a second list for the current block, where the first list is a block-based candidate motion information list, and the second list is a subblock-based candidate motion information list.

[0335] For an optional manner, refer to S22 in the embodiment.

[0336] For construction of the block-based candidate motion information list, refer to S11.1 and/or S11.2 in the embodiment.

[0337] For construction of the subblock-based candidate motion information list, refer to S12.1, S12.2, S12.3, and/or S12.4 in the embodiment.

[0338] S153: Determine optimal motion information from the first list or the second list based on the index.

[0339] For an optional manner, refer to S23 in the embodiment.

[0340] S154: Predict the current block based on the optimal motion information.

[0341] For an optional manner, refer to S24 in the embodiment.

[0342] A specific implementation solution has been fully described in the foregoing embodiment. Details are not described herein again.

[0343] For a clearer syntax table, refer to FIG. 16A and 16B. FIG. 16A and 16B shows a merge data syntax table.

[0344] It can be learned that the syntax table or the bitstream includes merge_subblock_flag[x0][y0]. merge_subblock_flag[x0][y0] may correspond to indication information that may be used to indicate that the block-based candidate motion information list or the subblock-based candidate motion information list is used for the current block in the present