CLAIMS

1. An image encoding method of dividing an input image signal into pixel blocks, and performing inter-prediction on the divided pixel blocks, comprising:

performing a scaling process in accordance with information of a reference frame contained in predicted motion information candidates;

selecting predicted motion information from a plurality of items of the predicted motion information candidates, based on first information indicating a method of selecting the predicted motion information, the first information being acquired from a plurality of items of motion information in the encoded region; and

predicting motion information of an encoding target block by using the predicted motion information candidates,

wherein the first information contains second information which specifies a position in the encoding target block, the second information being used to select the predicted motion information.

2. An image encoding apparatus for dividing an input image signal into pixel blocks, and performing inter-prediction on the divided pixel blocks, comprising:

a prediction unit to perform a scaling process in accordance with information of a reference frame contained in predicted motion information candidates, select predicted motion information from a plurality of items of the predicted motion information candidates, based on first information indicating a method of selecting the predicted motion information, and predict motion information of an encoding target block by using the predicted motion information candidates, the first information being acquired from a plurality of items of motion information in the encoded region,

wherein the first information contains second information which specifies a position in the encoding target block, the second information being used to select the predicted motion information.

3. An image decoding method of dividing an input image signal into first pixel blocks, and performing inter-prediction on the divided first pixel blocks, comprising:

selecting predicted motion information from a plurality of items of motion information in a decoded region;

predicting the selected predicted motion information of a decoding target block by using the predicted motion information, and

acquiring representative motion information from a second pixel block which exists in a center of region in a same position of the decoding target block in a reference frame, in accordance with first information specifying the center of region in the same position of the decoding target block, the first information being selected from a plurality of items of motion information in the decoded region,

wherein the representative motion information includes motion information at a position of representative motion information of the second pixel block.

4. An image decoding apparatus for dividing an input image signal into first pixel blocks, and performing inter-prediction on the divided first pixel blocks, comprising:

a selection unit to select predicted motion information from a plurality of items of motion information in a decoded region;

a prediction unit to predict the selected predicted motion information of a decoding target block; and

an acquisition unit to acquire representative motion information from a second pixel block which exists in a center of region in a same position of the decoding target block in a reference frame, in accordance with first information specifying the center of region in the same position of the decoding target block, the first information being selected from a plurality of items of motion information in the decoded region,

wherein the representative motion information includes motion information at a position of representative motion information of the second pixel block.

5. An image decoding method of dividing an input image signal into pixel blocks, and performing inter-prediction on the divided pixel blocks, comprising:

acquiring first motion information from a pixel block which exists in a center of region in a same position of a decoding target block in temporally near frames, in accordance with second information included in a plurality of items of motion information in a decoded region, the second information indicating the center of region in the same position of the decoding target block in the temporally near frames;

predicting second motion information of the decoding target block by using the first motion information; and

performing inter-prediction by using the predicted second motion information.

6. An image decoding apparatus for dividing an input image signal into pixel blocks, and performing inter-prediction on the divided pixel blocks, comprising:

an acquisition unit to acquire first motion information from a pixel block which exists in a center of region in a same position of a decoding target block in temporally near frames, in accordance with second information included in a plurality of items of motion information in a decoded region, the second information indicating the center of region in the same position of the decoding target block in the temporally near frames;

a prediction unit to predict second motion information of the decoding target block by using the first motion information, and perform inter-prediction by using the predicted second motion information.