Claims

1. An image decoding device comprising:

a decoder that decodes first information from encoded data, the first information indicating whether a filter parameter for a largest coding block to be decoded in a picture is same as a filter parameter for another largest coding block which is adjacent to top or left of the largest coding block, and decodes second information indicating whether or not to carry out a filtering process on a coding block divided from the largest coding block; and

a filter that, when the second information indicates that the filtering process is not carried out on the coding block, carries out the filtering process on the largest coding block excluding the coding block with the filter parameter for the another largest coding block, and generates a decoded image on which the filtering process is carried out.

2. An image encoding device comprising:

a coding parameter determinator that determines a largest coding block in a picture;

a block divider that divides the picture by the largest coding block, and divides the largest coding block into coding blocks; and

an encoder that carries out a filtering process on the largest coding block excluding one of the coding blocks on which the filtering process is not carried out to generate a bit stream, the filtering process being same as a filter parameter for another largest coding block which is adjacent to top or left of the largest coding block, wherein the encoder encodes first information indicating whether a filter parameter for the largest coding block is same as that for the another largest coding block which is adjacent to top or left of the largest coding block, and second information indicating whether or not to carry out the filtering process on the one of the coding blocks.

3. An image decoding method comprising:

decoding first information from encoded data, the first information indicating whether a filter parameter for a largest coding block to be decoded in a picture is same as that for another largest coding block which is adjacent to top or left of the largest coding block;

decoding second information indicating whether or not to carry out a filtering process on a coding block divided from the largest coding block;

carrying out, when the second information indicates that the filtering process is not carried out on the coding block, the filtering process on the largest coding block excluding the coding block with the filter parameter for the another largest coding block; and

generating a decoded image on which the filtering process is carried out.

4. An image encoding method comprising:

determining a largest coding block in a picture;

dividing the picture by the largest coding block, and dividing the largest coding block into coding blocks; and

carrying out a filtering process on the largest coding block excluding one of the coding blocks on which the filtering process is not carried out to generate a bit stream, the filtering process being same as that for another largest coding block which is adjacent to top or left of the largest coding block,

encoding first information indicating whether a filter parameter for the largest coding block is same as that for the another largest coding block which is adjacent to top or left of the largest coding block, and second information indicating whether or not to carry out the filtering process on the one of the coding blocks.

5. A storage medium for storing a bit stream which is obtained by carrying out a filtering process on a picture and encoding, the bit stream comprising:

first information indicating a size of a largest coding block divided from the picture:

second information indicating a size of a coding block divided from the largest

coding block;

third information indicating whether a filter parameter for the largest coding block is same as a filter parameter for another largest coding block which is adjacent to top or left of the largest coding block; and

fourth information indicating whether or not to carry out the filtering process on the coding block divided from the largest coding block.