with the I_PCM mode is not disclosed therein.

[0019]

Embodiments of the present invention are directed to enhancing encoding efficiency while suppressing a decrease in the efficiency of encoding processing.

Solution to Problem

[0019a]

According to a first aspect of the present invention, there is provided an image processing apparatus including: a decoder adapted to decode encoded data, the encoded data received by the decoder in encoded coding units wherein coding units are partial regions of an image of each picture and have a hierarchical structure from a largest coding unit to a smallest coding unit, the encoded data including an encoded coding unit for which a non-compression mode has been set, the non-compression mode being a mode in which the encoded data is received as uncompressed image data; and a filter processing controller adapted to perform decoding control, on the encoded coding unit for which the non-compression mode has been set, to skip filter processing in which filtering is performed on the encoded data including the encoded coding unit for which the non-compression mode has been set.

[0019b]

According to a second aspect of the present invention, there is provided an image processing method including: decoding, in units of encoded coding units that are partial regions of an image of each picture and that have a hierarchical structure from a largest coding unit to a

smallest coding unit, the encoded data including an encoded coding unit for which a non-compression mode has been set, the non-compression mode being a mode in which the encoded data is received as uncompressed image data; and controlling, on the encoded coding unit for which the non-compression mode has been set, to skip filter processing in which filtering is performed on the encoded data including the encoded coding unit for which the non-compression mode has been set.

[0020]

Disclosed herein is an image processing apparatus. The image processing apparatus includes an encoding mode setter that sets, in units of coding units having a hierarchical structure, whether a non-compression mode is to be selected as an encoding mode for encoding image data, the non-compression mode being an encoding mode in which the image data is output as encoded data; and an encoder that encodes the image data in units of the coding units in accordance with a mode set by the encoding mode setter.

[0021]

The above disclosed image processing apparatus may further include a shift processing controller that performs control, on a coding unit for which the non-compression mode has been set by the encoding mode setter, to skip shift processing in which a bit precision for encoding or decoding is increased; and a shift processor that performs the shift processing on a coding unit of the image data, the coding unit being controlled by the shift processing controller so as to undergo the shift processing.

Claims:

1. An image processing apparatus comprising:

a decoder adapted to decode encoded data, the encoded data received by the decoder in encoded coding units wherein coding units are partial regions of an image of each picture and have a hierarchical structure from a largest coding unit to a smallest coding unit, the encoded data including an encoded coding unit for which a non-compression mode has been set, the non-compression mode being a mode in which the encoded data is received as uncompressed image data; and

a filter processing controller adapted to perform decoding control, on the encoded coding unit for which the non-compression mode has been set, to skip filter processing in which filtering is performed on the encoded data including the encoded coding unit for which the non-compression mode has been set.

2. The image processing apparatus according to Claim 1, wherein,

the filter processing controller is adapted to perform decoding control to skip the filter processing in which the filtering is performed on the encoded data after a deblocking filter.

3. The image processing apparatus according to Claim 2, further comprising:

a filter processor adapted to perform a filter processing on only pixels which are controlled by the filter processing controller so as to undergo the filter processing.

4. The image processing apparatus according to Claim 3, wherein

the filter processing controller is adapted to perform decoding control to skip the filter processing using filter identification information indicating whether the filter processing is to be performed.

5. An image processing method comprising:

decoding, in units of encoded coding units that are partial regions of an image of each picture and that have a hierarchical structure from a largest coding unit to a smallest coding unit, the encoded data including an encoded coding unit for which a non-compression mode has been set, the non-compression mode being a mode in which the encoded data is received as uncompressed image data; and

controlling, on the encoded coding unit for which the non-compression mode has been set, to skip filter processing in which filtering is performed on the encoded data including the encoded coding unit for which the non-compression mode has been set.

6. The image processing method according to Claim 5, wherein,

the step of controlling filter processing is adapted to skip the filter processing in which the filtering is performed on the encoded data after a deblocking filter.

7. The image processing method according to Claim 6, further comprising:

performing filter processing on only pixels which are controlled by the step of controlling filter processing so as to undergo the filter processing.

8. The image processing method according to Claim 7, wherein

the step of controlling filter processing is adapted to skip the filter processing using filter identification information indicating whether the filter processing is to be performed.