Non-Patent Document 1: Benjamin Bross, Woo-Jin Han, Jens-Rainer Ohm, Gary J. Sullivan, Thomas Wiegand, "High efficiency video coding (HEVC) text specification draft 7", JCTVC-I1003_d4, 2012.4.27-5.7

SUMMARY OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0019]

However, the amount of information relating to the reference image specifying information such as the RPS is not sufficiently reduced.

[0020]

~~The~~Embodiments of the present ~~technology is contrived in consideration of such a situation and~~ invention enable~~s~~ reduction of the amount of information relating to the information that specifies a reference image.

SOLUTIONS TO PROBLEMS

[0021]

~~According to an aspect of the present technology, there is provided a decoding device including: a reception unit that receives reference information representing whether reference image specifying information specifying a reference image, which is used for generating a predicted image, of a prior image that is an image prior to a current coding image in coding order that is transmitted in a case where the current coding image is an image other than a first image of a GOP (Group of Picture) is used as the reference image specifying information of the current coding image; a reference image setting unit that generates the reference image specifying information of a current decoding image based on the reference~~

~~information in a case where the reference information is received by the reception unit and generates the reference image specifying information of the current decoding image based on reference information representing that the reference image specifying information of the prior image is not used as the reference image specifying information of the current coding image in a case where the reference information is not received by the reception unit; and a predicted image generation unit that generates a predicted image by using the reference image that is specified by the reference image specifying information generated by the reference image setting unit.~~

According to a first aspect of the present invention, there is provided a decoding device comprising: a reception unit that receives reference information representing whether reference image specifying information specifying a reference image, which is used for generating a predicted image, of a prior image that is an image prior to a current coding image in coding order that is transmitted only in a case where the current coding image is an image other than a first image of a GOP (Group of Picture) is used as the reference image specifying information of the current coding image; a reference image setting unit that generates the reference image specifying information of a current decoding image based on the reference information in a case where the reference information is received by the reception unit and generates the reference image specifying information of the current decoding image based on reference information representing that the reference image specifying information of the prior image is not used as the reference image specifying information of the current coding image in a case where the reference information is not received by the reception unit; and a predicted image generation unit that generates a predicted image by using the reference image that is specified by the reference image specifying information generated by the reference image setting unit.

[0022]

~~A decoding method according to another aspect of the present technology corresponds to the decoding device according to the aspect of the present technology.~~

According to a second aspect of the present invention, there

is provided a decoding method, the decoding method comprising, by a decoding device: a receiving step of receiving reference information representing whether reference image specifying information specifying a reference image, which is used for generating a predicted image, of a prior image that is an image prior to a current coding image in coding order that is transmitted only in a case where the current coding image is an image other than a first image of a GOP (Group of Picture) is used as the reference image specifying information of the current coding image; a reference image setting step of generating the reference image specifying information of a current decoding image based on the reference information in a case where the reference information is received in the process of the receiving step and generating the reference image specifying information of the current decoding image based on reference information representing that the reference image specifying information of the prior image is not used as the reference image specifying information of the current coding image in a case where the reference information is not received in the process of the receiving step; and a predicted image generating step of generating a predicted image by using the reference image that is specified by the reference image specifying information generated in the process of the reference image setting step.

[0023]

According to the above aspect of the present ~~technology~~invention, reference information representing whether reference image specifying information specifying a reference image, which is used for generating a predicted image, of a prior image that is an image prior to a current coding image in coding order that is transmitted in a case where the current coding image is an image other than a first image of a GOP (Group of Picture) is used as the reference image specifying information of the current coding image is received. The reference image specifying information of a current decoding image is generated based on the reference information in a case where the reference information is received and the reference image specifying information of the current decoding image is generated based on reference information representing

that the reference image specifying information of the prior image is not used as the reference image specifying information of the current coding image in a case where the reference information is not received. Then, the predicted image is generated by using the reference image that is specified by the reference image specifying information.

[0024]

In addition, the decoding device according to the above aspect of the present ~~technology~~ invention may be realized by causing a computer to execute a program.

[0025]

Furthermore, in order to realize the decoding device according to the above aspect of the present ~~technology~~invention, the program executed by the computer may be provided by being transmitted through a transmission medium or being recorded on a recording medium.

EFFECTS OF THE INVENTION

[0026]

According to embodiments of the present ~~technology~~invention, a coded stream in which the amount of information relating to information that specifies a reference image is reduced can be decoded.

BRIEF DESCRIPTION OF DRAWINGS

[0027]

Fig. 1 is a diagram that illustrates an example of the syntax of an RPS.

Fig. 2 is a diagram that illustrates an example of inter_ref_pic_set_prediction_flag and delta_idx_minus1.

Fig. 3 is a block diagram that illustrates an example of the configuration of an encoding device, to which the present