CLAIMS

1. An image coding method of coding a target image including a luminance component and color difference components, the method comprising:

acquiring a reference image; ~~and~~

selecting a bi-directional prediction or a uni-directional prediction based on a prediction mode, the prediction mode being explicitly or implicitly designated; ~~generating a predicted image by interpolating the luminance component and the color difference components in the reference image according to a motion vector, wherein~~

if a size of a block, which is designated as a unit of an~~the~~ interpolation, satisfies a first condition and if the bi-directional prediction is selected, changing the bi-directional prediction to the uni-directional prediction~~is equal to or smaller than a predetermined first threshold value, the generating includes inhibiting a bi-directional prediction, and performing only a uni-directional prediction to generate the predicted image according to the motion vector~~; and

interpolating the luminance component and the color difference components in the reference image according to a motion vector.

2. The image coding method according to claim 1, wherein

in the generating, if the size of the block, which is designated as a unit of the interpolation, satisfies a second condition that is different from the first condition~~is equal to or smaller than a second threshold value that is different from the first threshold value~~, the uni-directional prediction is not performed.

~~3. The image coding method according to claim 1, wherein if the size of the block, which is designated as a unit of the interpolation, is equal to or smaller than the first threshold value, the generating includes changing the bi-directional prediction to the uni-directional prediction.~~

~~4. The image coding method according to claim 1, wherein the predicted image is generated from two reference images if the bi-directional prediction is performed and generated from a single reference image if the the uni-directional prediction is performed.~~

3~~5~~. An image coding apparatus that codes a target image including a luminance component and color difference components, the apparatus comprising:

a generating unit configured to generate a predicted image by interpolating the luminance component and the color difference components in a reference image according to a motion vector; and

a coding unit configured to code coefficient

information acquired from a prediction error indicating a difference between the predicted image and ~~to~~ the target image, wherein

the generating unit selects a bi-directional prediction or a uni-directional prediction based on a prediction mode that is explicitly or implicitly designated; and

if a size of a block, which is designated as a unit of an~~the~~ interpolation, satisfies a first condition and if the bi-directional prediction is selected~~is equal to or smaller than a predetermined first threshold value~~, the generating unit changes the~~inhibits a~~ bi-directional prediction to the uni-directional prediction~~,~~ and performs the interpolation on the reference image~~only a uni-directional prediction~~ to generate the predicted image according to the motion vector.

4~~6~~. The image coding apparatus according to claim 3~~5~~, wherein

if the size of the block, which is designated as a unit of the interpolation, satisfies~~is equal to or smaller than~~ a second condition~~threshold value~~ that is different from the first condition~~threshold value~~, the generating unit does not perform the uni-directional prediction.

~~7. The image coding apparatus according to claim 5, wherein~~

~~if the size of the block, which is designated as a~~

~~unit of the interpolation, is equal to or smaller than the first threshold value, the generating unit changes the bi-directional prediction to the uni-directional prediction.~~

~~8. The image coding apparatus according to claim 5, wherein the predicted image is generated from two reference images if the bi-directional prediction is performed and generated from a single reference image if the uni-directional prediction is performed.~~

~~9. The image coding apparatus according to claim 5, wherein~~

~~the generating unit and the coding unit are implemented as a processor.~~