ABSTRACT

In the present invention, a virtual pixel (indicated by ◎ in Fig.18) is assumed near an SD pixel (indicated by ○ in Fig.18) constituting an SD picture obtained by thinning an HD picture, and the pixel value of the virtual pixel is found from the HD picture. A part of the pixel value of the virtual pixel is arranged in place of a part of the pixel value of the SD pixel. Then, one of the SD pixels is used as a notable pixel so as to form a prediction tap from the SD pixel around the notable pixel and the virtual pixel. By linear combination between the prediction tap and a predetermined prediction coefficient, adaptive processing for finding a prediction value of the HD picture is carried out. In addition, a prediction error of the prediction value found by adaptive processing with respect to the HD picture is calculated, and the pixel value of the notable pixel is corrected in accordance with the prediction error. Thus, a decoded picture more proximate to an original picture may be obtained without deteriorating the coding efficiency.