ENCODING DEVICE, DECODING DEVICE, AND METHOD THEREOF

ABSTRACT

Disclosed are an encoding device and others capable of reducing the encoded information amount, the audio signal encoding error, and the decoded signal audio quality degradation. The device includes: a frequency region conversion unit (101) which converts an inputted audio signal into a frequency region; a band selection unit (102) which selects a quantization object band from a plurality of sub bands obtained by dividing the frequency region; and a shape quantization unit (103) which quantizes the shape of the frequency region parameter of the quantization object band. When a prediction encoding presence/absence judgment unit (104) judges that the number of common sub bands between the quantization object band and the quantization object band selected in the past is not smaller than a predetermined value, a gain quantization unit (105) performs prediction encoding on the gain of the frequency region parameter of the quantization object band. When the number of the common sub bands is smaller than the predetermined value, the gain quantization unit (105) directly quantizes the gain of the frequency region parameter of the quantization object band.

Figure 1