

SIGNAL PROCESSING APPARATUS AND SIGNAL PROCESSING METHOD,
ENCODER AND ENCODING METHOD, DECODER AND DECODING METHOD, AND
PROGRAM

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ABSTRACT

The present invention relates to a signal processing apparatus and a signal processing method, an encoder and an encoding method, a decoder and a decoding method, and a program
10 capable of reproducing music signal having a better sound quality by expansion of frequency band.

A high band decoding circuit decodes high band encoded data outputs a coefficient table having coefficients for the respective high band sub-bands, which are specified by a
15 coefficient index obtained as a result of decoding. A decoding high band sub-band power calculation circuit calculates decoded high band sub-band powers for the respective high band sub-bands based on low band signals and the coefficient table, and a decoded high band signal production unit produces decoded
20 high band signals from these decoded high band sub-band powers. At this time, an extension and reduction unit newly produces or deletes coefficients of the coefficient table for the respective sub-bands to correspond to the number of sub-bands of the calculated decoded high band sub-band powers, thereby
25 to extend or reduce the coefficient table. The present invention can be applied to a decoder.

Figure 35