

ABSTRACT

Provided is a voice encoding device which can accurately encode a spectrum shape of a signal having a strong tonality such as a vowel. The device includes: a sub-band constituting unit
5 (151) which divides a first layer error conversion coefficient to be encoded into M sub-bands so as to generate M sub-band conversion coefficients; a shape vector encoding unit (152) which performs encoding on each of the M sub-band conversion coefficient so as to obtain M shape encoded information and calculates a target gain of
10 each of the M sub-band conversion coefficients; a gain vector forming unit (153) which forms one gain vector by using M target gains; a gain vector encoding unit (154) which encodes the gain vector so as to obtain gain encoded information; and a
multiplexing section unit (155) which multiplexes the shape
15 encoded information with the gain encoded information.