

# ENCODING METHOD, DECODING METHOD, ENCODING APPARATUS, AND DECODING APPARATUS

## ABSTRACT

Embodiments of the present invention provide an encoding method, a decoding  
5 method, an encoding apparatus, a decoding apparatus, a transmitter, a receiver, and a  
communications system. The encoding method includes: dividing a to-be-encoded  
time-domain signal into a low band signal and a high band signal; performing  
encoding on the low band signal to obtain a low frequency encoding parameter;  
performing encoding on the high band signal to obtain a high frequency encoding  
10 parameter, and obtaining a synthesized high band signal according to the low  
frequency encoding parameter and the high frequency encoding parameter;  
performing short-time post-filtering processing on the synthesized high band signal to  
obtain a short-time filtering signal, where, compared with a shape of a spectral  
envelope of the synthesized high band signal, a shape of a spectral envelope of the  
15 short-time filtering signal is closer to a shape of a spectral envelope of the high band  
signal; and calculating a high frequency gain based on the high band signal and the  
short-time filtering signal. A technical solution according to the embodiments of the  
present invention can improve an encoding and/or decoding effect.

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Figure 1