ABSTRACT

SPEECH ENCODING DEVICE, SPEECH DECODING DEVICE, SPEECH ENCODING METHOD, SPEECH DECODING METHOD, SPEECH ENCODING PROGRAM, AND SPEECH DECODING PROGRAM

A linear prediction coefficient of a signal represented in a frequency domain is obtained by performing linear prediction analysis in a frequency direction by using a covariance method or an autocorrelation method. After the filter strength of the obtained linear prediction coefficients is adjusted, filtering is performed in the frequency direction on the signal by using the adjusted coefficients, whereby the temporal envelope of the signal is shaped. This reduces the occurrence of pre-echo and post-echo and improves the subjective quality of the decoded signal, without significantly increasing the bit rate in a bandwidth extension technique in the frequency domain represented by SBR.

Fig 1