Claims

1. A decoding method comprising:

selecting, based on a parameter from a bitstream including at least one of an encoded audio signal and an encoded speech signal, one of a first decoding scheme without inter-frame prediction and a second decoding scheme with the inter-frame prediction; and

decoding, performed by a processor, the bitstream, based on the selected decoding scheme, for reconstruction of audio or speech,

wherein the first decoding scheme comprises a trellis-structured de-quantizer with block constraints and an intra-frame predictor,

wherein both the first decoding scheme and the second decoding scheme are configured to perform decoding by using an identical number of bits per frame, and

wherein the bitstream is obtained based on a voiced coding mode from among a plurality of coding modes.

2. The method of claim 1, wherein the second decoding scheme comprises a trellis-structured de-quantizer with block constraints, an intra-frame predictor and an inter-frame predictor.

3. A decoding method comprising:

selecting, based on a parameter from a bitstream including at least one of an encoded audio signal and an encoded speech signal, one of a first decoding scheme without inter-frame prediction and a second decoding scheme with the inter-frame prediction; and

decoding, performed by a processor, the bitstream, based on the selected decoding scheme, for reconstruction of audio or speech,

wherein the first decoding scheme comprises a trellis-structured de-quantizer with block constraints, an intra-frame predictor and a vector de-quantizer,

wherein both the first decoding scheme and the second decoding scheme are configured to perform decoding by using an identical number of bits per frame, and

wherein the bitstream is obtained based on a voiced coding mode from among a plurality of coding modes.

4. The method of claim 3, wherein the second decoding scheme comprises a trellis-structured de-quantizer with block constraints, an intra-frame predictor, an inter-frame predictor and a vector de-quantizer.