ABSTRACT

MODEL BASED PREDICTION IN A CRITICALLY SAMPLED FILTERBANK

The present document relates to audio source coding systems. In particular, the present document relates to audio source coding systems which make use of linear prediction in combination with a filterbank. A method for estimating a first sample (615) of a first subband signal in a first subband of an audio signal is described. The first subband signal of the audio signal is determined using an analysis filterbank (612) comprising a plurality of analysis filters which provide a plurality of subband signals in a plurality of subbands from the audio signal, respectively. The method comprises determining a model parameter (613) of a signal model;determining a prediction coefficient to be applied to a previous sample (614) of a first decoded subband signals derived from the first subband signal, based on the signal model, based on the model parameter (613) and based on the analysis filterbank (612); wherein a time slot of the previous sample (614) is prior to a time slot of the first sample (615); and determining an estimate of the first sample (615) by applying the prediction coefficient to the previous sample (614).

Fig. 6b