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(54) Title: MODEL BASED PREDICTION IN A CRITICALLY SAMPLED FILTERBANK

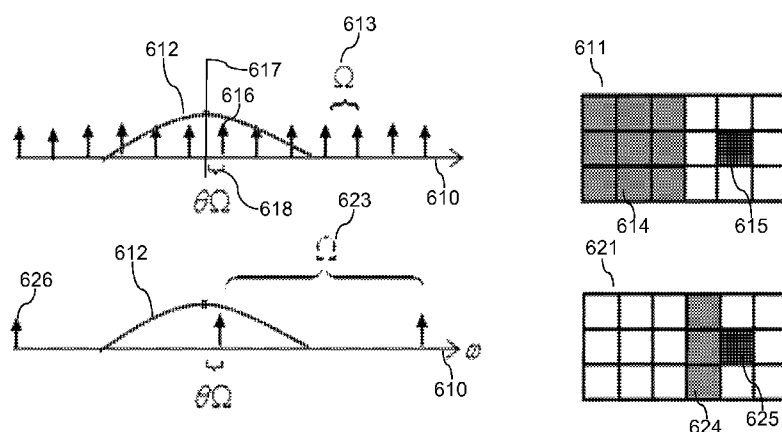


Fig. 6b

(57) Abstract: 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).