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(54) Title: LOW-FREQUENCY EMPHASIS FOR LPC-BASED CODING IN FREQUENCY DOMAIN

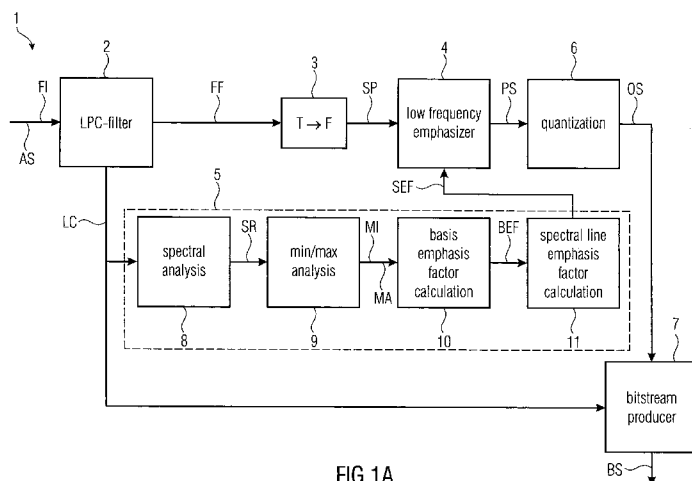


FIG 1A

(57) Abstract: The invention provides an audio encoder and method for encoding a non-speech audio signal so as to produce therefrom a bitstream, the audio encoder comprising: a combination (2, 3) of a linear predictive coding filter (2) having a plurality of linear predictive coding coefficients (LC) and a time-frequency converter (3), wherein the combination (2, 3) is configured to filter and to convert a frame (FI) of the audio signal (AS) into a frequency domain in order to output a spectrum (SP) based on the frame (FI) and on the linear predictive coding coefficients (LC); a low frequency emphasisizer (4) configured to calculate a processed spectrum (PS) based on the spectrum (SP), wherein spectral lines (SL) of the processed spectrum (PS) representing a lower frequency than a reference spectral line (RSL) are emphasized; and a control device (5) configured to control the calculation of the processed spectrum (PS) by the low frequency emphasisizer (4) depending on the linear predictive coding coefficients (LC) of the linear predictive coding filter (2). Furthermore, the invention provides a corresponding audio decoder, a system, a method for decoding a bitstream containing quantized spectrums and a plurality of linear predictive coding coefficients and a corresponding computer program.