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(54) **Title:** LINEAR PREDICTION BASED AUDIO CODING USING IMPROVED PROBABILITY DISTRIBUTION ESTIMATION

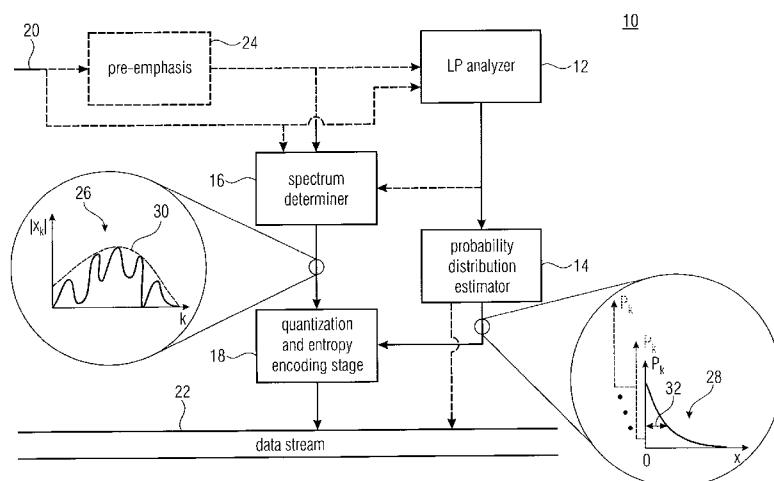


FIG 1

(57) **Abstract:** Linear prediction based audio coding is improved by coding a spectrum composed of a plurality of spectral components using a probability distribution estimation determined for each of the plurality of spectral components from linear prediction coefficient information. In particular, the linear prediction coefficient information is available anyway. Accordingly, it may be used for determining the probability distribution estimation at both encoding and decoding side. The latter determination may be implemented in a computationally simple manner by using, for example, an appropriate parameterization for the probability distribution estimation at the plurality of spectral components. All together, the coding efficiency as provided by the entropy coding is compatible with probability distribution estimations as achieved using context selection, but its derivation is less complex. For example, the derivation may be purely analytically and/or does not require any information on attributes of neighboring spectral lines such as previously coded/decoded spectral values of neighboring spectral lines as is the case in spatial context selection.