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(54) Title: FREQUENCY-DOMAIN AUDIO CODING SUPPORTING TRANSFORM LENGTH SWITCHING

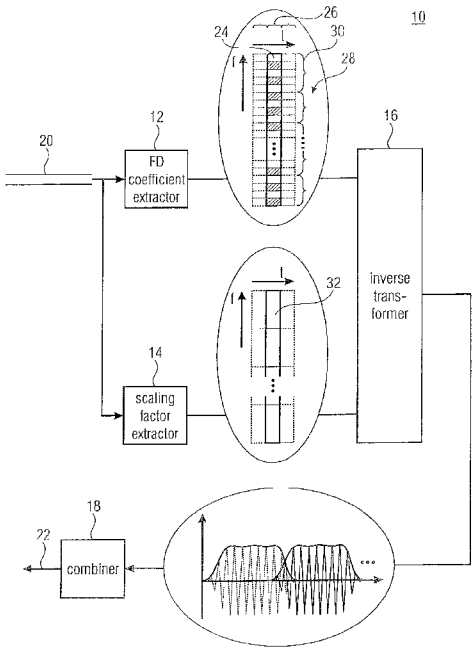

FIG 1

(57) Abstract: A frequency-domain audio codec is provided with the ability to additionally support a certain transform length in a backward-compatible manner, by the following: the frequency-domain coefficients of a respective frame are transmitted in an interleaved manner irrespective of the signalization signaling for the frames as to which transform length actually applies, and additionally the frequency-domain coefficient extraction and the scale factor extraction operate independent from the signalization. By this measure, old-fashioned frequency-domain audio coders/decoders, insensitive for the signalization, would be able to nevertheless operate without faults and with reproducing a reasonable quality. Concurrently, frequency-domain audio coders/decoders able to support the additional transform length would offer even better quality despite the backward compatibility. As far as coding efficiency penalties due to the coding of the frequency domain coefficients in a manner transparent for older decoders are concerned, same are of comparatively minor nature due to the interleaving.

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