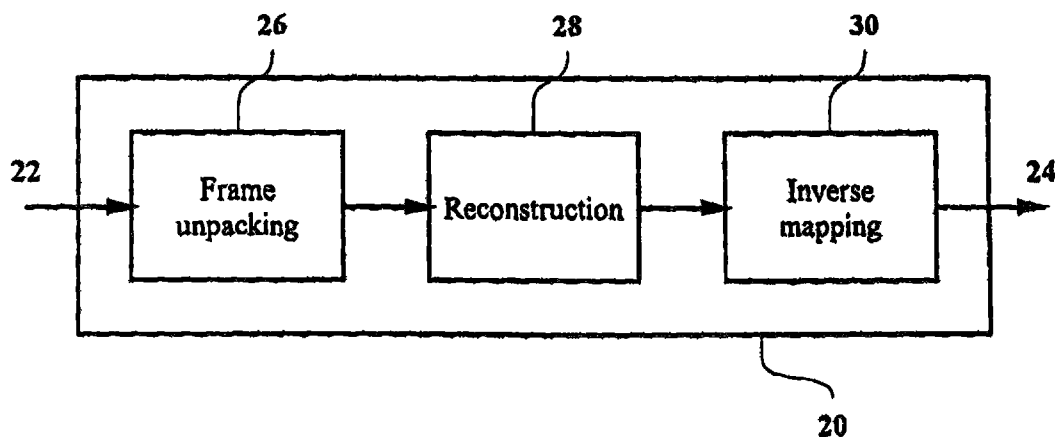




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(54) Title: FAST SYNTHESIS SUB-BAND FILTERING METHOD FOR DIGITAL SIGNAL DECODING



(57) Abstract

In order to reproduce audio signals which have been compressed or encoded for storage or transmission using, for example, MPEG audio encoding, a synthesis sub-band filter is employed which performs an inverse modified discrete cosine transform (IMDCT). The computational cost of the IMDCT implementation is reduced by pre-calculating arrays of sum and difference data. The arrays of sum and difference data are then used in two separate transform calculations, the results of which can be used in the generation of pulse code modulation (PCM) audio data.