EFFICIENT BIT ALLOCATION FOR HIGH QUALITY SUBBAND CODING USING NON−SELECTIVE FILTER BANKS UNDER QUANTIZATION NOISE CONSTRAINTS (WedAmPO2)

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Abstract :

This paper addresses the problem of computing the optimum bit allocation in a subband coder with low selectivity filters, while maintaining the power of quantization noise below a given value. A low complexity strategy that takes into account the frequency responses of the synthesis filter bank, is proposed. The Lagrange multiplier method is used to obtain the optimum bit distribution. The number of bits to be allocated to a subband depends only on the frequency response of that subband, on the variance of the corresponding subband signal, on the maximum allowed noise power, and on the decimation factors of all the subbands.

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