EFFICIENT ECG COMPRESSION BASED ON M−CHANNEL MAXIMALLY DECIMATED FILTER BANKS (MonAmOR11)

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Abstract :

A filter bank−based algorithm for ECG compression is developed in this paper. The proposed method utilises a nearly−perfect reconstruction cosine modulated filter bank to split the incoming signals into several subband signals that are then quantised through thresholding and Huffman encoded. The advantage of the proposed method is that the threshold is chosen so that the quality of the retrieved signal is guaranteed. In this paper it is shown that the compression ratio achieved is an improvement over those obtained by previously reported thresholding−based algorithms

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