



MULTIPLE-DESCRIPTION CODING OF LOGARITHMIC PCM (ThuAmPO2)

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A practical approach for the design of multiple–description scalar quantization of speech is presented that

conforms to standard G.711 PCM. The method chiefly consists of an index assignment algorithm that enables the side decoders to exhibit SNR characteristics comparable to those of the standard logarithmic quantizer. With two–channel transmission of multiple descriptions, an increase in robustness to lossy channels is obtained without violation of the standard coding method. The method found is suitable for the design of multiple descriptions of any given scalar quantizer, e. g. one within a complex speech coder.

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