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(54) Title: A METHOD OF REDUCING MEMORY REQUIREMENTS IN AN AC-3 AUDIO ENCODER

(57) Abstract: A method of reducing memory requirements for an encoder which includes a function of bit allocation for quantising frequency coefficients of an input signal, including: calculating a PSD (power spectrum density); integrating the PSD over a plurality of frequency bands to form a band-PSD; computing an excitation function by applying a prototype masking curve to the band-PSD; generating a FSMC (first-step-masking curve) of a noise level threshold from the excitation function; calculating a SSMC (second-step-masking curve) by incrementing the FSMC in accordance with a selected signal to noise variable (snroffst), wherein the excitation function, after being computed, is written to memory in place of the band-PSD and is subsequently overwritten by the FSMC and wherein the SSMC is stored in a temporary memory and recalculated for each block of data provided by the encoder.