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(54) STEGOTEXT ENCODER AND DECODER

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(57) ABSTRACT

The invention comprises an encoder for encoding a stegotext and a decoder for decoding the encoded stegotext, the stegotext being generated by modulating the log power spectrogram of a covertext signal with at least one key, the or each key having been added or subtracted in the log domain to the covertext power spectrogram in accordance with the data of the watermark code with which the stegotext was generated, and the modulated power spectrogram having been returned into the original domain of the covertext. The decoder carries out Fast Fourier Transformation and rectangular polar conversion of the stegotext signal so as to transform the stegotext signal into the log power spectrogram domain; subtracts in the log power domain positive and negative multiples of the key or keys from blocks of the log power spectrogram and evaluates the probability of the results of such substractions representing an unmodified block of covertext in accordance with a predetermined statistical model.

MODIFICATION OF POWER SPECTROGRAM USING WINDOWED FFTs