ABSTRACT

Without realizing it easy dissemination of information and data activity on the Internet today,it has caused problems in the protection of the original data held or produced by industrial establishments, and for an example in the music industry is a case of copyright piracy. For solving these problems, we need a reliable technique to solve these problems, one of them by using audio watermarking techniques.

Method of audio watermarking that used in this research is the method of frequency masking, the method of insertion of information at specific frequencies which can not be heard by humans, and with the techniques FFT (Fast Fourier Transform) as a technique to convert the signal from the time domain to the frequency domain, the difference with others researches, the data watermark re-recorded using another recorder tool (ambient mode), to analyze the robustness of the information that has been inserted in a host of data is still intact or not after going through the recording process with other tools (ambient mode).

Based on the research that has been done, system design audio watermarking using frequency masking has achieved good results, to produce audio watermarking with audibility good at SNR > 20dB, and the quality is good on the value of BER and CER minimum is 0 before attacked.

Keywords: Audio Watermarking, Fast Fourier Transform, Frequency Masking Method, Ambient Mode.