ABSTRACT

Due to the fast improvement in communication technology, the illegal copy and distribution of digital multimedia content become easier. One of the most promising solutions to solve this problem is watermarking. Audio Watermarking is a technique for data hiding into audio file by utilizing the weakness in human sense.

This system using Discrete Cosine Transform and BCH code as error correction. Using methods based on transforms provides better perceptual quality and robustness against common attacks. The application in this system is made using MATLAB.

The propose method will be applied in ambient mode which is conditions that the watermarked audio will be played and recorded by another device. Then, the recorded audio wil be analyzed to get the performance of system. The best results of testing system gained an average accuracy 61,8 % at a distance of 1 meter and 61 % at a distance of 4 meter using BCH (31,16) code.

Keywords : Audio Watermarking, Discrete Cosine Transform, BCH Code, Ambiet Mode