ABSTRACT

These past years the growth of digital era and the ease of long distance communication become more faster.The ease of accessing digital data and exchanging informations with the others to every part of the world is an easy task at this era,But this capabilities comes with many negative side and one of it is the misuse of copyright. . Copyright abuse will affects many parties mainly the owner of the copyright, therefore it is necessary to make a method to protect the copyright of a digital data.

In this Final Project the digital technique that will be used is audio watermark. Audio watermark is a technique where an audio file that will be protected is inserted with a watermark data that can be audio,image or video file. The method that will be used is Centroid method at Frequenxy Domain The audio file will be converted to frequency domain using DCT, then the watermark file will be embedded using QIM with help from centroid method.

The Output from this Design of audio watermarking system is a watermarked audio with good Signal-to-Noise Ratio at 33 dB and the audio quality still good to hear after the watermark is embedded. The Robustness against attack is proven with the BER against MP3 Compression attack at 128k bitrate have the result at 0.1 and with payload size at 334 bits/s which is still a good result.

Keywords : Audio Watermark, DCT, QIM, Centroid.