## ABSTRACT

Audio compression is needed for reducing the usage of storage media or data bandwidth. *OggVorbis* is a new format of audio compression that is used to store and play digital audio with a good compression ratio but still have a high quality format.

Users or distributors of mp3 format need to pay a royalty to Fraunhofer because of using their patent. As the one and only audio compression that patent-free, *OggVorbis* is expected to replace mp3 format that most people used now. By using *OggVorbis* format, user or distributor never need to pay anything to anyone.

This final project is focused in discussing the encoding tehniques to produce an audio file in *OggVorbis* and mp3 format and doing some file-comparison analysis between *OggVorbis* and mp3 file to prove which format is better.

During the research process, will be developed a simple encoding software using Visual C++ 6 to produce a compressed file in OggVorbis format and compare the result with mp3 file.

Parameter that will be discussed on this final project are *OggVorbis* and mp3 compression tehniques and also comparison between *OggVorbis* and mp3 compression result. Output that hoped is a proof that *OggVorbis* audio file is better than mp3.

**Keywords** : *compression, audio, OggVorbis, encoding, format, mp3.*