ABSTRACT

Song search engine is a program designed to find the desired song more quickly and accurately. Until now, search engine input is still word. And to find the song only based on the title. Simulation aplication song search engine that designed in this final project will find a song based tone pattern as input system with tone pattern that saved in database.

In this final project, simulation application song search engine build by using Fast Fourier Transform (FFT) method with MATLAB programing language. This method was expected could analyse single tone pattern frequencies from output of segmentation process and saved them into the chords. In the searching process, the chords from input system will be compared with the chords in database. The output of system will be show as a hits, based on the highest number of common tones.

The result of this aplication simulation song search engine here is this application can find a song from the same instrument with percentage 100% and can find a song from the different instrument with percentage 95%. Using frame width 1024 and overlap 512, and minimal system input are 5 tones with the recent searching method. And also, this application simulation song search engine can sort songs based on the highest number of common tones.

Key Words *: Search Engine, Segmentation, Fast Fourier Transform, Chords,*