ABSTRACT

In this increasingly rapid technological development, human needs in facilitating information search are increasing, especially in the entertainment world such as music. So from that carried out research on signal processing information, especially music. The method of searching for song titles with humming sound input or humming requires the chorus pattern of a song. The chorus separation process takes a long time if done manually. Therefore a method for determining the position of the chorus and then separating it automatically is the solution to the problem.

In this study it is proposed to use the Mel-Frequency Ceftient Coefficient (MFCC) method on the audio signal frame and use the 2-D correlation coefficient calculation to get the chorus position. First of all the process starts by selecting an MP3 file and then getting the audio signal data. Then the process of cutting the audio signal into small pieces is called the frame, which is called the framing process. Then in each frame the MFCC transformation process is carried out to obtain the MFCC coefficient value. The MFCC feature here is a feature that distinguishes one frame from another. And the last process is the process of determining the position of the chorus using the 2-D correlation process.

The success parameter of this simulation is the accuracy of the data.The ACC results with the MFCC method produced an average ACC of 94,5 %. The average processingtime for one song is 0,24 seconds at 1 second frame size.

Keywords : Audio signal, chorus, mel-frequency cepstral coefficient (MFCC), 2-D correlation coefficient.