

ABSTRACT

Watermarking is one kind of steganography (a technique for hiding information on a medium without a significant change in the media). Watermarking techniques are used to insert digital information called watermark into a digital data called carrier / medium. The embedded watermark can be formed as plain text, audio, image and video media depends on the ability of the host.

Watermarking is also usually used for copyright protection of digital data in accordance with ITU-T standard H.751. This thesis explained about a video watermarking system which carrying a watermark that formed as video message as well. The method that used in this thesis is DWT (Discrete Wavelet Transform). From the results of the watermarking video, there would be objectively measured parameters such as MSE and PSNR, and also there would be subjectively valuation from MOS parameter to determine the quality of the video.

The outcomes of this thesis are the watermarking system which has good quality degradation tolerance, resistance of interference, and the watermarked video quality that approaching original video, with the amount of MSE 2.48 dB and amount of PSNR 44.26 dB.

Keywords: Watermarking, H.751, DWT, Video, MSE, PSNR.