ABSTRACT

Recently, the growth of information technology's, mainly through multimedia such internet increasing rapidly. The use of internet, globally, give more chance to every people to access public websites or personal websites to get data they need, like text, image, audio, or even audio. This access eventually can make invalid duplication and wrong way copyright. So, there is important to make a system that can protect the copyright or intellectual right, so we can claim the data if there is illegal way's like illegal copy with or without change the original data.

Image watermarking is a technique to infiltrate some information that show ownership, aim or other important data in multimedia data material, without change or less impact for quality. One of many methods of image watermarking on domain frequency is spread spectrum, similar with spread spectrum method in spread spectrum communication, and where watermark infiltration do on low frequency component from carrier image to watermark existing difficult to detect and there is a change to eliminate watermark will decrease quality of image.

The result of testing we get value of SNR for watermarking image can reach 46.43 dB with MSE 7.65 $\times 10^{-6}$ and detecting image can reach 0.9519 of coefficient corelation. Subjectively, the Mean Opinion Score (MOS), that show "passable to excellent" quality.