

## ABSTRACT

*Antenna is an important component in the world of telecommunications. Along with the development of wireless communication technology, the development of antennas in terms of design and performance is increasingly diverse. Conventional antenna designs have a simple shape and tend to lack in aesthetic value. So, an increase in aesthetic value can be done by changing the antenna design which was originally still in the form of conventional to more artistic without disturbing the performance of the antenna itself. Artistic antenna has more value, that is, it can be disguised as a work of art but has antenna performance as in general. The design approach of a traditional work of art such as batik certainly makes this artistic antenna as one of the media in preserving Indonesia's cultural heritage.*

*One kind of antenna that can be used is a microstrip antenna. This antenna is one antenna that is easy to use with a variety of designs and has inexpensive fabrication. These antennas generally have conventional shapes such as square, circle, ellipse, triangle and other shapes. In addition, this antenna can be developed in terms of design by adapting a work of art such as batik.*

*In this Final Project a microstrip antenna has been designed and simulated with a kawung sekar ageng batik-shaped patch with proximity coupled rationing. The design of the batik motif antenna is divided into 2 kinds of motifs, namely sub-motifs and full-motif batik.*

*From several variations that have been done, the most optimal results obtained from the design of sub-motif antennas are the s-parameter of -29,4 dB, 61,3 MHz bandwidth, 6,5262 dBi gain with 85,12% antenna efficiency. As well as the full-motive antenna design, the most optimal results are s-parameters of -12,301dB, bandwidth of 58,2 MHz, gain of 1,176 dBi with antenna efficiency of 20,17%.*

**Keywords: microstrip antenna, batik, kawung sekar ageng batik, proximity coupled**