ABSTRACT

Growing telecommunications technology, the antenna is one small part of the development of these technologies. The antenna used to radiate a guided wave to space propagation. Basically the antenna has many types, from simple to very complex forms, which each species has a characteristic of each. Usefulness of the antenna has been widely applied for the benefit of telecommunications, including wireless communications on certain frequencies.

Final project entitled "Design and Realization of Microstrip Antenna Multiband With Modified Fractal slot by Coplanar Waveguide" discusses the design of fractal antenna to form rectangular curve. Designed antenna is a fractal antenna printed on a plate of copper on FR4 epoxy substrate. Initial design of the antenna using a software simulator Ansof Hfss'11 assistance.

Antenna has been realized in this final project is the kind of fractal antenna. Fractal shapes are geometric shapes that can be fragmented or divided into smaller parts, which if the result of the division process is extended, will have a shape similar to the original form. Fractal antenna is created that has VSWR ≤ 2 with working frequency of 1.71 GHz-1.88 GHz, 3.30GHz-3.80GHz and 5.15GHz-5.35GHz, the antenna has a gain > 3dBi, antenna polarization is realized elips.

Keywords: ***Fractal, coplanar waveguide, VSWR, multiband***