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 Dipole Antenna Seirpinski Gasket Fractal Curves For WiFi Frequency (2:35 GHz -2.45 GHz)" discusses the design of fractal antenna to form seirpinski gasket. Designed antenna is a dipole antenna printed on a plate of copper on FR4 epoxy substrate. Initial design of the antenna using a software simulator Ansof Hfss'11 assistance and using CST Studio simulator.

Antenna has been realized in this thesis 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 is the form that has a gasket seirpinski VSWR $\leq$ 1.5 with working frequency of 2.25 GHz-2.501 GHz and 4.661GHz-4.807GHz, the antenna has a gain > 3dBi, antenna polarization is realized elipt.

Keywords: Fractal, seirpinski, gaskets, VSWR, dipole