## ABSTRACT

Frequency is source of energy or limited energy. In the studies that have been done before, it was stated that the frequency can be converted into voltage. To change the frequency to other resources, required antenna as a receiver for rectifier. it can be called Rectenna (Rectifier Antenna) that has a function to convert electromagnetic waves into DC current source. Radiation of electromagnetic waves emanating from the television and the Base Transceiver Station (BTS) can be exploited to become a new resource in the form of voltage by using a rectenna.

At this final project will be done the design and realization of the microstrip array antenna with rectangular patch form Sierpinski Carpet. This antenna is used to transmit power to absorb waves of dual band frequency, 1900 MHz and 2100 MHz at VSWR  $\leq 2$ 

**Keywords** : *Rectenna*, *Rectifier*, *Antenna*