ABSTRACT

One of the energy that is currently widely used is electrical energy. In general, the transfer of electrical energy that is usually used in the form of copper cable media. With the current technological developments, Wireless power transfer is one of the electrical energy that is transmitted through the medium of air. So that electrical energy can be transmitted from a power source to the load through the medium of air. Receiver circuit in the electrical energy transmission system is using principle of magnetic resonance induction.

In this thesis will discuss the design and implementation of Wireless Charging Battery 12 V 12 AH of Automatic Guided Vehicle (AGV). Voltage source to be connected to electronic circuits and copper wire. The copper wire functioned as an antenna for the sender and receiver are useful for delivering electrical energy in *battery charging 12 V 12 AH with frequency 50 KHz.*

The results of this thesis is a wireless charging which at a distance of more than 20 cm between the primary coil and the secondary coil has a voltage 0 V, while at a distance of 0 – 19 cm has a value of the output voltage is 18,3 V - 1,99 V. So the distance of wireless charging has an influence on the voltage value.

Keywords: WirelessCharging, electricalenergy, distance