

DESIGN AND CONTROL OF PUSH PULL TYPE INVERTER BASED ON PORK PEST EXTERMINATION

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ABSTRACT

Indonesia is an agricultural country with the livelihood of the majority of the population as farmers. As a country with a diversity of plant and animal species, especially in plantation areas, the existence of pig pests needs to be considered. Swine pests are a serious threat to farmers because they can cause crop failure, many farmers are already bothered by the presence of pig pests. Current technological developments have led to new innovations and solutions to create a security system on plantations which uses DC voltage, because if you use a 220 volt AC voltage as a swine repellent, this is very dangerous for humans where a current of 50mA AC can kill in seconds. , where 250 mA DC at the same time there are often survivors and can also cause death. Therefore here I make a high DC voltage with a small current, which with a small current can't harm humans but, can repel wild boar pests. Thus the explanation above, this study aims to make a Push Pull Type Inverter Design and Control tool based on Iot for Swine Pest Exterminators. can be activated remotely without having to manually activate the inverter. The monitoring system for this inverter circuit uses the Blynk application with a programmed system. Monitoring functions to determine the amount of voltage generated, current generated and control On / Off. The design results of the inverter which is made with a DC voltage input in the form of a battery and adapter of 12 volts can produce an AC voltage of 220 volts, and a DC voltage of 600 volts. This shows that the system created is running well.

Keywords : *Inverter Push Pull, 1 Phase, Monitoring.*