PROTOTYPE DEVELOPMENT OF CIGARETTE SMOKE NEUTRALIZER USING ARDUINO UNO MICROCONTROLLER

Name of Student : Muhamad Ferdinand

NIM : 2103201150

Advisor : Sunarto, S.Pd., M.T.

ABSTRACT

Currently the consumption of cigarettes is increasing. With the rapid population growth and the development of cigarette factories, it is possible for active smokers to increase. The tool that will be made in this research is a tool that can help reduce the impact of increasing air pollution due to the results of people who still like to smoke anywhere. This cigarette smoke neutralizer prototype is run using an Arduino Uno microcontroller automatic system and uses an ozonizer as a means of neutralizing air. When one of the sensors MQ-2 detects smoke above the threshold specified in the program, the relay is in LOW condition which makes the suction fan, exhaust fan and ozonizer active. When active, the smoke will be sucked in by the suction fan and then sterilized by the ozonizer and the result will be neutralized through the exhaust fan. Neutralization time is directly proportional to the number of cigarettes used in each test. It can be noted that the more the number of cigarettes, the longer the neutralization time of cigarette smoke in the trial box.

Keywords: Cigarette Smoke, Poluttion, sensors MQ-2, Ozonizer