GAS LEAKAGE DETECTION PROTOTYPE DESIGN BASED ON INTERNET OF THINGS (IOT) AND AUGMENTED REALITY (AR)

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ABSTRACT

Leakage in LPG (Liquefid Petroleum Gas) gas cylinder is one of the disasters that we cannot predict. LPG gas cylinder leakage is very dangerous when it smells but does not reach the owner, because if left unchecked it will be very flammable. To find out if there is a gas leak in the LPG gas cylinder, the author builds a prototype leak detector in the gas cylinder. This system aims to find out leaks in gas cylinders. To obtain information on this fire detector, several components are needed to make a prototype of a leak detector in LPG gas cylinders. The components needed are NodeMCU ESP8266 to transmit information via the internet network that has been obtained on the system, the MQ-2 sensor to detect gas in gas cylinders, and when the data value exceeds the specified limit, it uses a buzzer to turn on the sound. The system will later get information and send information to cell phones. Then the data is received and detected by the AR application that has been designed, whether or not there is a leak in the gas.

Keywords *: LPG Gas Cylinder Leak, NodeMCU ESP8266, MQ-2 Sensor, Buzzer*