DESIGN OF ARDUINO UNO-BASED AIR CIRCULATION CLEANER PROTOTYPE WITH THE AIR VACUM MIST CONCEPT

INDRA PRASETYA

Electrical Engineering Study Program, Faculty of Science & Technology
University of Technology Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail : X.indraprasetya99@gmail.com

ABSTRACT

We have been dealing with the corona virus and its impact on our health for more than a year. This of course raises the question of how we can protect ourselves from this highly contagious virus. The corona virus outbreak in the last year has become a topic of global conversation since the first case on December 8 2019 in Wuhan China (Kompas, 2020). In a relatively short period of time, on April 28 2020, 3,064,255 cases were identified with 211,537 deaths and 922,387 recovered patients worldwide (worldoemeters.info, 2020). With the increasing number of infected, the government is also taking several strategic steps as an effort to prevent the outbreak, including social distancing, spraying disinfectants, calling for the use of masks and so on. On the topic of this discussion the authors want to develop air filter technology which functions for air circulation which reduces and prevents the spread of viruses and bacteria as well as air pollutants Carbon Monoxide CO. By vacuuming the air or sucking it into the device through the air filter so that the air becomes clean, after that the air is irradiated with UltraViolet (UV) light which is useful for killing bacteria and viruses in the air, then the air is removed together with an aroma disinfectant therapy that has been misted with the Air Vacuum Mist system so that the air in the room becomes healthy and clean as well as fresh aromatherapy. The success rate of the system in carrying out the functions that have been made is quite good with a system success rate of 90% from the test results It is already done
Keywords : Smoke, MQ-135, Arduino, Mist Spray