Automatic Mask and Santizer Dispensor Vending Machine with Mask Disposal System

TaihseenNaz Desai[1] , Almas Patel[2], Naim Inamdar[3], Prof. S.B.Patil.[4]

Dept. of Electronics and Telecommunication,

Dr. J. J. Magdum College of Engineering, Jaysingpur, Maharashtra, India[1-4]

ABSTRACT: The infectious disease COVID-19, caused by a coronavirus, began in China in December,2019 [1] and in the following months the disease spread rapidly across the world. By the time that the World Health Organization announced that the disease had become a pandemic on March 11, 2020 [2 , 4], there had been 118,000 cases of the disease reported in 114 countries.Hand hygiene is one of the most important measures to prevent the spread of infection diseases.For that we did that project thati is Automatic Mask and sanitizer dispensor vending machine with mask diposal system.

INTRODUCTION

Hand sanitizer, also called hand antiseptic or hand rub, agent applied to the hand for the   purpose of removing disease-causing organism. Hand hygiene is one of the most important measures to prevent the spread of infection diseases. Thus we created a fullyautomatic vending machine system which will help us to avoid any sort of virus contacts while using the Covid-19 protective measures like face mask and hand sanitizers.

There are a lot of sanitizer projects are availiable around,but none of those ideas were having an all in one combo(Sanitizer+Face mask in one unit).

Mask disposal bin is project which is used to for disposal of mask. As the virus is becoming trouble for whole world and as per the researcher it has been noted that it will take a time up to few month and to that we have to use mask to fight with corona virus but the problem is with what

about the disposal of mask. If these masks are not disposed it can create many issues. They are many methods which used for decomposing the mask, but they cannot be used for larger amount of waste mask and also it is costlier.Burning is the only the option which has used.

LITERATURE SURVEY

1) Why we need mask and sanitizer dispenser vending machine!
In last two years whole world knows and understand the human health issues. We got unwanted virus which is corona virus. Nobody knows this virus. In two years world make the proper vaccination for, and also proper take care to how we recover, but in that it is only one thing our side decided.
2)The second thing which we done about our self,Because the WHO (world Health Organization) said that corona virus and human can live forever.So for that we need that such technology and terminology or tool and technology which can use every day and everywhere. Mask is very important for every time, sanitizer is also very important for every time.So we thought about a project and we make this project. We can use sanitizer and mask everywhere like school collages public place, bus stop etc. we can set a particular thing which can protect and save human through over technology.so we need this automatic mask and sanitizer dispenser.
3)Why we need mask disposal!We have done half of our project we get new mask and sanitizer, Yes, we can be reusing the mask it is not a compulsion but somehow the multiple uses are bad for health so it is very important. At this some stages time we use a mask to be destroy that one because it is very lated to health issue and virus too.And also second thing spared the virus and germs too, and WHO N95mask is used to protect from corona virus.

METHODOLOGY

In our framework, the vending machine is intended to distribute two types of face masks of varying. The delivery method is spiral coil rotation mechanism which is responsible for delivering the selected maskcollecting tray.
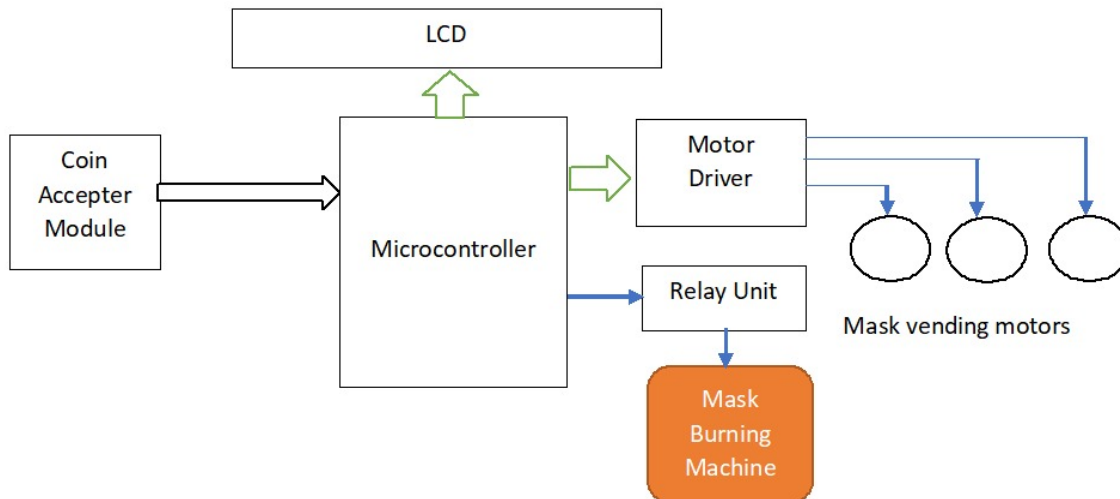
Fig 1 .Block diagram

This coil has a free end and fixed end and consisting of a plurality of continuously helical loops, said mechanism are spaced end being connected to DC motor, and said coil being rotated thereby, where in loop remote from said mechanism are spaced sufficiently closely to each other to allow product support there between and transported by the rotation therefore, whereby as said mechanism is rotatable opposite the product supported by said closely spaced loops is transported from said fee end to word said fixed end and reaches said stretched loop where the product falls there through.

Our vending mechanism has 2DC motors for two such spiral coils having two different types mask respectively. These motors are driven by the L298N motor drive which is controlled by Arduino Nano.

For handing the payment part, we have a coin acceptor module that accepts 5Rs coin.

CONCLUSION

Hence these type of bin can be used in public places to dispense hand sanitizer and mask,disposal masks as soon as possible,this type of bin avoid less human contact and can be sanitizers easily.Virus is destroyed at the same places which is prpdeced in th bin can easily be disposal.

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