
LESS CONSUMING WATER MOP

¹B.ARCHANA, ²K.SATHISH, ³B.SURESH RAM, ⁴M.DEEPTHI, ⁵N.UMA MAHESH

¹Assistant Professor, CSE Department, CMR College of Engineering & Technology

²Assistant Professor, MECH Department, CMR College of Engineering & Technology

³Associate Professor, ECE Department, CMR College of Engineering & Technology

⁴⁻⁵B-TECH, Dept. of MECH, CMR COLLEGE OF ENGINEERING & TECHNOLOGY

Abstract

In this project we are introducing “LESS CONSUMING WATER MOP” is a mop which is used to reduce water wastage and making cleaning work easier. The mop itself release water according to our control by using tap system, which prevents the wastage of water. Mop handle should be non rusted and long lasting and this can be maintained by using C p v c (CHLORINATED POLYVINYL CHLORIDE) which is strong and durable. Reduces hard work of carrying bucket of water with us. We can connect mop to the external water tap by water passage pipe, if there is large area of floor cleaning and carrying of water bucket is not required. It can be use at home, hospitals, working areas etc.

1. INTRODUCTION

The problem “LESS CONSUMING WATER MOP” is selected to reduce the wastage of water and to avoid the carriage of bucket while cleaning. A mop is a mass or bundle of coarse strings or yarn etc. attached to a pole or stick. It is used to soak up liquid, for cleaning floors and other surfaces, to mop up dust, or for other cleaning purposes. The first mop was invented in 1893. We have different types of mops to choose from. We have lot of options when it comes to cleaning of our floors.

FEW TYPES OF MOPS:

- 1-Flat mops
- 2-Sponge mops
- 3-Dust mops
- 4-String mops, etc.....

In this project, we have designed simple project called “LESS CONSUMING WATER MOP” for the development of string mops, where the water is sent directly into the mop to avoid carriage of bucket of water.

2. RELATED WORK

We all know that mop is used for cleaning floors and other surfaces. We know there are many types of mops can be used for cleaning of floors, but we are talking about cut end mop or string mop. In this the mop is like a heavy thread profile, this mop is basically used for the cleaning of wet and dried floors by dipping the cloth type thread into the water. On behalf of community we identified few problems at working areas, Educational institutes, hospitals, etc to the floor cleaning workers that they need to carry the bucket along

with them while cleaning the floor and we noticed that water is wasted after the usage of it. Out of all these problems we have decided and choose to make a “LESS CONSUMING WATER MOP”.

Abhishek Pandey, Anirudh Kaushik, Amit Kumar Jha, Girish Kapse, it had taken a technological Survey on autonomous home cleaning robots that while the robot is cleaning, it avoids steps (or any other kind of drop-off) using four infrared sensors on the front underside of the unit. These cliff sensors constantly send out infrared signals, and robot expects them to immediately bounce back. It performs (and repeats) the sequential actions of backing up, rotating and moving forward until it finds a clear path [1]. • Anusha PB, Disha Shetty, Reshma Marina D’Almeida, Shramika, Chaithra Shetty, has discussed the idea of LABVIEW Operated Robotic Vacuum Cleaner that described the concept has proven to be an efficient way of saving time and helping physically disabled people. This system is especially beneficial for working women and user can switch on the device and go for any other work and the cleaner robot will automatically clean the floor by detecting and avoiding the obstacles or hurdles on its way. My-Rio can be easily used to modify and enhance the various capabilities of any robot evolving its capabilities to explore new pathways of working efficiently [2]. • Jens-Steffen Gutmann, Kristen Culp Mario, E. Munich Paolo Pirjanian, has discussed the social impact of a systematic floor cleaner that using the Mint cleaner as an example. The product is in operation in several hundreds of thousand homes with very positive feedback from their owners. In this, there are indications that

systematic cleaning has utility and that people are comfortable in adapting their homes to accommodate robotic cleaners including setting up accessories that help

3. IMPLEMENTATION

As we have gone with the need statement ,we gone through a literature review so that we can know what exactly our working model must contain,what kind of updates it should have.While going through this process we came across constraints like:

The solution for this problem is “LESS CONSUMING WATER MOP” is selected to save the water and to reduce the work by avoiding carriage of bucket.

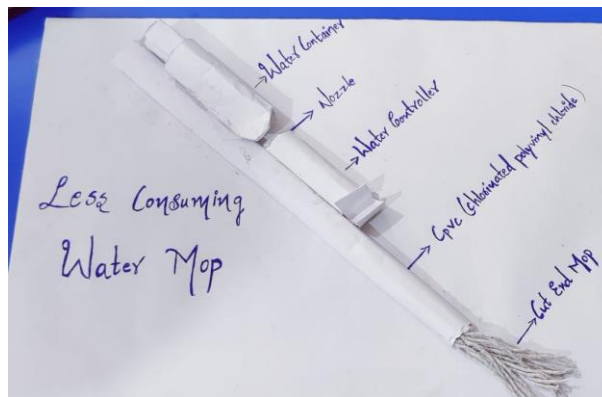
Objective

- 1-It must be used by everyone.
- 2-The cost must be economical.
- 3-Easily portable.
- 4-Water is used as per our requirement.

Methodology:

The mop is assembled to the CPVC pipe by using bolts and nuts, and tap controller is attached to the pipe where the long tube is connected between mop and a controller. Connection is done to the water controller button and water container .Water flows from the container into tap controller and by push button the water passes through the long tube and finally into the mop.

4. EXPERIMENTAL RESULTS



Paper Model



Proposed Solution Model Business Model

5. CONCLUSION

Here by we conclude that our less consuming mop reduces the wastage of water and work will be easier to handle. "LESS CONSUMING WATER MOP" can be used in the following areas:

1. Household
2. Malls
3. Hospitals
4. Educational institutions
5. Office

6. REFERENCE

- [1] Abhishek Pandey, Anirudh Kaushik, Amit Kumar Jha, Girish Kapse, "A Technological Survey on Autonomous Home Cleaning Robots", "International Journal of Scientific and Research Publications" Vol. 4, Issue 4, April 2014.
- [2] Anusha PB, Disha Shetty, Reshma Marina D'Almeida, Shramika, Chaithra Shetty, "LABVIEW Operated Robotic Vacuum Cleaner", "International Journal of Internet of Things" Vol. 6, Issue 2, 2017, pp. 43-46.
- [3] Jens-Steffen Gutmann, Kristen Culp Mario, E. Munich Paolo Pirjanian, "The Social Impact of a Systematic Floor Cleaner", "Proceedings of the 2012 IEEE International Workshop on Advanced

Robotics and its Social Impacts, Technische Universität München, Munich, Germany", May 21 - 23, 2012, pp. 50-53.

- [4] Manisha Kukde, Sanchita Nagpurkar, Akshay Dhakulkar, Akshay Amdare, "Automatic & Manual Vacuum Cleaning Robot", "International Research Journal of Engineering and Technology (IRJET)", Vol. 05, Issue: 02, Feb-2018, pp. 2196-2198.

- [5] Manreet Kaur and Preeti Abrol, "Design and Development of Floor Cleaner Robot (Automatic and Manual)", "International Journal of Computer Applications (0975 - 8887)", Vol. 97, No.19, July 2014.

- [6] Amarnath, G., Sudha, D., Krishna, D., Ghanate, S., Karthik, S., Vinod, A., "Analytical Model Development for Channel Potential in Junction-less Double-Gate FETs", Proceedings of IEEE International Conference on Advent Trends in Multidisciplinary Research and Innovation, ICATMRI 2020, 2020, Vol., Issue, PP.
- [7] Amarnath, G., Sudha, D., Hima Bindhu, S.K., "Analysis of Temperature Effect on Small-Signal-Equivalent-Circuit Parameters for AlInN/GaN MOS-HEMT", Proceedings of IEEE International Conference on Advent Trends in Multidisciplinary Research and Innovation, ICATMRI 2020, 2020, Vol., Issue, PP.
- [9] Amarnath, G., Sudha, D., Krishna, D., Karthik, S., Ghanate, S., Vinod, A., "Development of Threshold-Voltage Analytical-Model for Double-Gate-Junction-less FETs", Proceedings of IEEE International Conference on Advent Trends in Multidisciplinary Research and Innovation, ICATMRI 2020, 2020, Vol., Issue, PP.
- [10] Saba, L., Agarwal, M., Sanagala, S.S., Gupta, S.K., Sinha, G.R., Johri, A.M., Khanna, N.N., Mavrogeni, S., Laird, J.R., Pareek, G., Miner, M., Sfrikakis, P.P., Protogerou, A., Viswanathan, V., Kitis, G.D., Suri, J.S., "Brain MRI-based Wilson disease tissue classification: An optimised deep transfer learning approach", Electronics Letters, 2020, Vol. 56-Issue 25, PP-1395-1398.
- [11] Ramyasri, S., Mahalakshmi, M., "IOT Based Progressive Anti Theft ATM Security System", IOP Conference Series: Materials Science and Engineering, 2020, Vol. 981-Issue 4, PP.
- [12] REDDY, D.A., NARASIMHA, G., RAJU, V.R., "Computational analysis of microelectrode recording of sub thalamic nucleus neural signals with deep brain stimulation in parkinson's disease using multivariate techniques: Machine learning approach (a preliminary research report)", Journal of Theoretical and Applied Information Technology, 2020, Vol. 98-Issue 24, PP-4121-4139.
- [13] Kotishwar, A., "A STUDY ON AWARENESS OF GST FILING AMONG RETAIL BUSINESS IN HYDERABAD CITY IN TELANGANA", Academy of Accounting and Financial Studies Journal, 2020, Vol. 24-Issue 1, PP-1-21.
- [8] Challa, M.L., Malepati, V., Kolusu, S.N.R., "S&P BSE Sensex and S&P BSE IT return forecasting using ARIMA", Financial Innovation, 2020, Vol. 6-Issue 1, PP.
- [9] Nayak, S.C., Misra, B.B., "Extreme learning with chemical reaction optimization for stock volatility prediction", Financial Innovation, 2020, Vol. 6-Issue 1, PP.
- [14] Nair, D.V., Murty, M., "Reconfigurable control as actuator fault-tolerant control design for power oscillation damping", Protection and Control of Modern Power Systems, 2020, Vol. 5-Issue 1, PP.