UNIVERSITI TEKNOLOGI MARA

DESIGN AND FABRICATIONS OF WHITEBOARD CLEANER

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ABSTRACT

It’s exceptionally difficult to invest our energy dependably in cleaning of the white board. This project is implemented to make human work easier and can reduce the use of human power because of its potential applications. The report puts forward a kind of mechanism design scheme; this mechanism keeps the whiteboard clean. The duster which is mounted on a wooden block moves in forward and reverse direction vertically. Duster is mounted on a rack and pinion which receives power from a Dc motor, on which same on the other side attached with it so that effective drive is being done. This appertains to new and useful improvements and more particularly to an apparatus whereby whiteboards can be cleaned in an easy and convenient manner. The object of the present automatic whiteboard duster is to provide an attachment for whiteboards in the form of a power-driven erasing apparatus which can be set in operation, thus eliminating the drudgery of manually cleaning blackboards.

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INTRODUCTION

1.1 Background of Study

Whiteboards have become a common tool in classrooms worldwide, used for teaching, presenting, and collaborating. However, frequent use can lead to marker build-up, eraser residue, and other stains that make the board difficult to read and use. Regular cleaning of the whiteboard is necessary, but it can be time-consuming for teachers, and it exposes them to harmful chemicals present in cleaning agents, which can be a potential health hazard.

To address these issues, the auto whiteboard cleaner project was developed. The project aims to design and develop a device that can automatically clean whiteboards, reducing the workload and potential health risks associated with manual cleaning. The device is designed to be easy to use and cost-effective, making it suitable for use in classrooms and other settings.

The auto whiteboard cleaner project builds upon previous work in the field of automation and robotics, specifically in the development of motorized carriages and ultrasonic sensors. By combining these technologies with a microcontroller and an eraser, the auto whiteboard cleaner project seeks to provide an innovative solution to the problem of whiteboard cleaning.

The background of the study highlights the need for a more efficient and safe method of whiteboard cleaning and sets the stage for the development of the auto whiteboard cleaner device. The project aims to contribute to the field of automation and robotics while also providing a practical solution to a common problem faced by teachers and other. (1)