

SMART PAGE TURNER

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Abstract

The Aim of this project is to make reading comfortable for people without hands. Page turner has been designed, allowing a user to turn a page of printed matter by simply touching a switch with leg. Our model is effectively used to people who could not move their hands and wish to read books

1. INTRODUCTION

People with no hands face so much of difficulty in satisfying their basic needs like book reading so they require the support of others in to turn pages. Normal page turner's consists of stick having a rubber tip which helps in sliding pages of books that makes the user uncomfortable. Our page turner uses motors that can be controlled and powered by using the controllers and electrical power supply, A suitable foot pedal can be used to activate the page turning mechanism without hindrance. When user speaks his required (direction in which page has to be turned) page name in front of micro phone of voice recognition module, the controller

takes it as input and operates motor mechanism set to turn corresponding page. Hence the paper proposed is an excellent opportunity for people who could not move their hands and wish to read books is a simple solution.

2. RELATED WORK

The quad hand clip page turner has an aluminum clip that fits comfortably around the hand, and can be used on either the right or left hand. The long curved light aluminum bar has a rubber tip at the end to easily flip pages. For those with limited hand function or weak grip, gripping and turning thin pages can be difficult. The quad hand clip page turner features a

bright orange rubber tip that pushes pages to easily turn them.

- Efficiency is less
- It consists of a stick with rubber tip that helps in sliding the pages of book which makes the user inconvenient to use it for a long time.

An automatic page turner is designed to turn and hold a page on a book to promote independence in reading for people with disabilities and decreased hand functioning as well as turning sheet music for performing musicians.

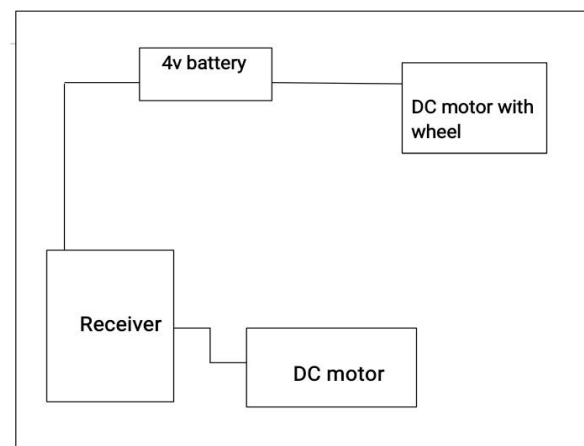
Page-turners based on digital media are more common in music applications. The reason for this stems from the increasing availability of tablet devices as well as digital sheet music. Page-turners for digital media can be subdivided into two further categories, namely, those that are fully autonomous and those that depend on some form of user input. Fully autonomous systems rely on preset timing, scrolling through the music sheets at a fixed tempo.

3. IMPLEMENTATION

As we have gone with the need statement, we gone through a literature review so that we can know what exactly our prototype must contain, what kind of updates it

should have. While going through this process we came across constraints like:

- 1 .more efficiency
2. Simple design
3. More comfortable to use



Block Diagram

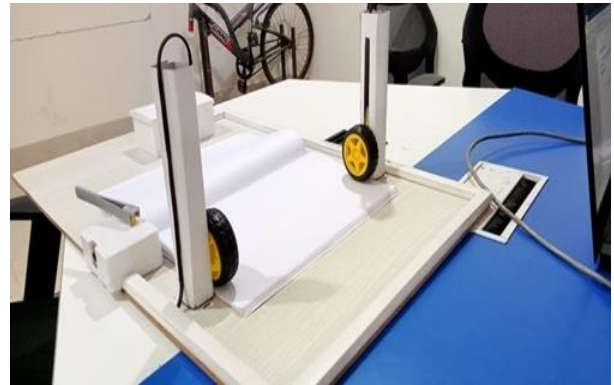
1. People without hands
2. People without fingers

Our model is effectively used to people who would not move their hands and wish to read books. It consists of a tyre placed at the edge of the page, the tyre is further connected to a geared motor through wires. On the other hand through a motor a strip (solid piece) is placed on it which helps in complete turning of a page. These motors are initially connected to 1.5v battery and then each single connection is given to receiver through a 9v battery. A pedal is kept near the user leg which is connected to a transmitter. When we

operate the transmitter it provides signal to receiver and receiver takes it and operates both the motors

4. EXPERIMENTAL RESULTS

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5. CONCLUSION

Conclusions of this project are summarized as follows. The automatic page turner is successfully implemented. The working model of page turning assistor for people without hands is an excellent application that who could not move their hands and wish to read books. The work combines the advantages of image processing into the mechanical movement to make the page to increase the interest of even avid readers.

6. REFERENCE

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