

“RFID BASED METRO TRAIN”

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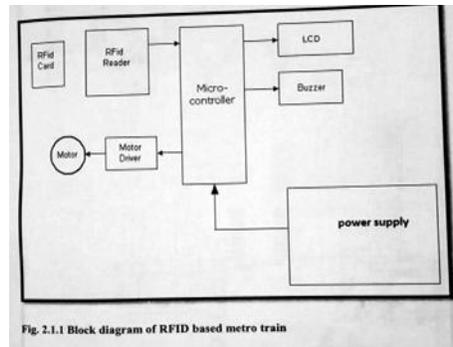
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ABSTRACT

Radio Frequency Identification (RFID) technology already plays a major role in many areas. In business applications, for example, the idea of exact position of coach with RFID technology has been around for some time now, especially for retailing. Current solutions, however, are designed to only identify coach of a particular train which is sufficient for most of the envisioned for platform. For other uses, however, not only the identification, but also the exact position and orientation of coach would be interesting, if not necessary. Good examples are miniature war games, where the current game state usually depends on what objects are located where and in some cases, how these objects are oriented.

CONTENT-

The power supply comprising of transformer that will receive 230 volt ac will step down to 12 volt dc and the regulator IC will provide 5 volt DC. The 5 volt dc will provide to the microcontroller IC. The rectifier circuit will be used for converting ac to dc and the capacitor of 1000mfd 25 volts will be use for supplying pure dc after the rectification circuit. The RFID reader will be attached to the microcontroller board and will take 5 volt dc when the passenger will move the ticket containing the RFID card inbuilt will detect by the reader attach on the train bogie and the gate will be opened automatically and will be closed. The LCD display will display the message of the coach. The buzzer will be start producing sound when the ticket has been identified and if it is correct and the RFID tag has been detected by the reader.



- **ADVANTAGES-**

- The other passengers who are without ticket will not be allowed to enter into the trains coach .Only the reserved ticket passenger can enter in the coach no. that has been programmed in the RFID based ticket. It is easy to find the exact coach instead of reading the reservation seat no. On the paper attach on the coach. The electrical motors of high torque with low rpm will be used. That has loads of gates can be easily pulled up and push down. The motor will be dc voltage so the electricity consumption will be less. The whole circuit will work on 5 volt dc.

- **REFERENCES-**

- “8051 and embedded system “ by Mazidi and Mazidi
- www.datasheetcatalog.com
- www.atmel.com
- www.wiclippedia.com
- www.engineersgarage.com