Abstract

The Indian Railways is world’s fourth largest railway network in the world after USA, Russia and China. There is a severe problem of collisions of trains. So Indian railway is working in this aspect to promote the motto of "SAFE JOURNEY". A RFID based railway track finding system for railway has been proposed in this paper. In this system the RFID tags and reader are used which are attached in the tracks and engine consecutively. So Train engine automatically get the data of path by receiving it from RFID tag and detect it. If path is correct then train continue to run on track and if it is wrong then a signal is generated and sent to the control station and after this engine automatically stop in a minimum time and the display of LCD show the "WRONG PATH". So the collision and accident of train can be avoided. With the help of this system the train engine would be programmed to move according to the requirement. The another feature of this system is automatic track changer by which the track jointer would move automatically according to availability of trains.
Railway Track Finding System with RFID Application

- Siror, J. K.; Compute. Sci. & Eng. Dept., Shanghai Jiao Tong Univ., Shanghai, China; Sheng Huanye; Wang Dong; Wu Jie, Use of Rfid Based Real Time Location Tracking System to Curb Diversion of Transit Goods in East Africa.
- Bhatt, Ajaykumar A., "An Anti-Collision Device Network – A train Collision Prevention System (TCPS)"
- Information about the working of RFID: http://www.eecs.harvard.edu/cs199/readings/rfidarticle.pdf
- Provide information about different frequencies used by RFID: http://www.ieee.org/about/technologies/emerging/rfid.pdf
- Passive RFID is used in project and quite good account of knowledge about it is provided: http://www.atlasrfid.com/Technology/ActivevsPassive.aspx
- Provide information about the human interfacing of the screen with the help of arduino: http://www.arduino.cc/
- Labview used as tool to make the user interface quite worthy and easy and this reference has contributed quite to enhance knowledge about LABVIEW: http://www.ni.com/labview/
- Transportation Management; XUE Xiaoping, College of Electronics and Information Engineering, Tongji University, Shanghai, China; MEI Su-ping, College of Electronics and Information Engineering, Tongji University, Shanghai, China; CHEN Chen-hui, Shanghai Shentie Information Engineering Co., Ltd. Shanghai, China; ZHANG Hai-juan, Jiangsu Normal University of Technology, Changzhou, China; China The 1st International Conference on Information Science and Engineering RFID and ATIS Information System based Railway Container (ICISE2009)

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