RTO E-Challan

Abstract

The Project detects any signal break by the vehicle on the traffic signals and generates the echallan through implementation of programming and hardware mechanism. Deploying the RFID technology which constitutes tags storing data and transferring that data to readers over a wireless interface. Microcontroller compares this reader's information with previously stored information of that vehicle after comparing. It sends the texted message (e-challan) to GSM. Which send it to registered mobile number of owner of that vehicle as well as RTO (Regional transport office) office. Owner has to pay the challan amount to the RTO office or can pay online if linked to online payment system. This system also provides the tracking of vehicle driven by anonymous vehicle driver. Since vehicle would be among traffic signals and database are linked online to RTO office as security purpose. Index Terms – Challan , anonymous , tracking , Radio frequency identification (RFID).

INTRODUCTION

These days in our country challan are done manually with pen and paper on the traffic premises. Which is often tedious and it takes lot of time and sometimes it turns into the corruption because traffic police write something else on challan paper and pay the government something else. However there has not been employed any system to exclude such issues in traffic. Since traffic has become an important event in the national interest. So according to this project when a vehicle jump the red signal beyond green, Then propose system identify the red signal jumping by the vehicle, generating an automatic echallan to that vehicle owner along with RTO. This concept is new at all. Since there is no need of pen and paper purely green technology. And this will remove the increasing day by day complexity in challan payment on the traffic signals. The system will also minimize the death occurrence due to collision on the traffic because drivers would be having of prior knowledge of signal jumping that if they pass the signal beyond green they have to pay the fine. In this project the signal pole is the target object for any vehicle to cross them. The RFID reader extract information form tags of vehicle. Whenever vehicle moves near the reader module. Information is passed to controller for the subsequent operation. Like ultimate to automatic generation of e-challan. RFID are categorized into two classes: active and passive. Components of RFID include Tags and RF tag readers. Its operational frequency decides the range of reader. It Support serial communication between microcontroller and GSM and RFID reader. 2. RELATED WORK There are lots of people working on automatic challan project using LCD. In most of the proposed project there has been discussion about automatic toll collection only. These project form the base of ''Electronic challan system using RFID technology '' project. One of the related Singh and Surendra Kumar•works is:- Paramjeet Singh Kaler, Sheetal Singh, Shubhangi Tripath. ''RFID based automatic challan system'' International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 5, May 2015. 2.1. ''RFID based automatic challan system'' In this related work it is gathered that RFID has broad importance in coming days, application of this technology in various fields like security, medicals, military, smart cards and identifying attack ranges. And the aim of this work is that RFID reader is liable to power and interact with the RFID tag. The reader does this by generating a high frequency

electromagnetic energy and a query signal. This energy is seized by tag antenna and transmits the tag's unique ID to the reader. Basic idea is to develop the automatic challan system that can check for signal break by any vehicle. The RFID Reader reads the information like vehicles no. and automatically sends a report on the site itself through LCD.