ABSTRACT

A toll road we used to know as a free obstacle way, in fact it is not clearly free from obstacle or traffic jam. Traffic that happens at toll road, most of all caused by conventional payment. Driver have to stop their car at a toll gate to take card or pay toll collection. As a consequence, every toll gate on busy hours in big city happens heavy traffic.

Hence, using an active RFID tag plant on a car will solve this problem. The car will automatically detected by RFID censor either on enter or exit toll gate without stop or open car window. A censor will receive signal from the tag and send it to the application. A hundred can detected at the same time on 3 - 5 metres range from RFID censor.

Since RFID censor can detect a lot of car at the same time, this final project design software expect to process the signal from censor equally fast. Then the application perform data required accurately for instance time enter the toll gate, time exit the toll gate, duration in toll, average speed, cost, etc. Subsequently, cost can accumulate per month and the consumer can pay through bank account. And in the future, traffic at the toll gate can decrease gradually.

Keyword : RFID censor, tag, toll road, application, car