

(54) Title of the invention : ENHANCEMENT OF TOLL OPERATIONS USING ZIGBEE COMMUNICATION, AUTHENTICATION AND DYNAMIC TRAFFIC MANAGEMENT

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(71)Name of Applicant :

1)Dr.N.BALAJI

Address of Applicant :Professor, Dept Of CSE, Velammal Institute of technology, Chennai- KolkataNational highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

2)Mr.R. SIVAGAR**3)Ms.PRATHEEBA.R.S****4)ANJEET KUMAR YADAV K****5)ARAVINTHAN R****6)HEMACHANDRAN R****7)KATURU PREM SAI****8)PILLI VIJAY****9)T. VAMSI KRISHNA REDDY**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr.N.BALAJI

Address of Applicant :Professor, Dept Of CSE, Velammal Institute of technology, Chennai- KolkataNational highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

2)Mr.R. SIVAGAR

Address of Applicant :Assistant Professor, Dept Of CSE, Velammal Institute of technology, Chennai - Kolkata National highway, Panchetti, Ponneri, Tiruvallur(DT)-601204 -----

3)Ms.PRATHEEBA.R.S

Address of Applicant :Assistant Professor, Dept Of CSE, Velammal Institute of technology, Chennai - Kolkata National highway, Panchetti, Ponneri, Tiruvallur(DT)-601204 -----

4)ANJEET KUMAR YADAV K

Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai- KolkataNational highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

5)ARAVINTHAN R

Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai- KolkataNational highway, Panchetti, ponneri, Thiruvallur(DT)-601204 -----

6)HEMACHANDRAN R

Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai- Kolkata National highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

7)KATURU PREM SAI

Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai- Kolkata National highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

8)PILLI VIJAY

Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai- Kolkata National highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

9)T. VAMSI KRISHNA REDDY

Address of Applicant :UG Scholar, Dept Of CSE, Velammal Institute of technology, Chennai- Kolkata National highway, Panchetti, Ponneri, Thiruvallur(DT)-601204 -----

(57) Abstract :

Our toll gate project uses Zigbee technology to enable wireless communication between different components, improving efficiency and reducing the need for physical wiring. The system includes motorized mechanisms to control the opening and closing of the toll gates, ensuring smooth operation of traffic flow. We've integrated GSM technology into the system, allowing for real-time data transmission and communication with a centralized database. With voice playback modules, the system provides audible instructions and information to drivers, enhancing user experience and ensuring clarity in toll collection procedures. Upon payment, lane information is promptly sent and played in a clear voice, guiding drivers through the toll process efficiently.

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