

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

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(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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