(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/08/2023

(21) Application No.202311054438 A
(43) Publication Date : 08/09/2023

(54) Title of the invention : DYNAMIC OPTIMIZATION AND REAL-TIME TRAFFIC DATA CHECK & COLLECTION SYSTEM

(51) International classification :G08G0001010000, G08G0001096800, G08G0001080000, G08G0001096700, G01C0021340000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Chitkara University
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------- ----------
2)Chitkara Innovation Incubator Foundation
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Teena Mittal
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------- ----------
2)Ms. N Bharathiraja
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------- ----------
3)Ms. Gaganpreet Kaur
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------- ----------
4)Ms. Neha Sharma
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------- ----------
5)Dr. Chander Prabha
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ---------- ----------

(57) Abstract :
ABSTRACT Dynamic Optimization and Real-Time Traffic Data Check & Collection System The present disclosure describes a dynamic optimization & real-time traffic data check & collection 100 for efficient traffic management. It comprises of traffic sensors 200 comprising of magnetic sensor 202, infrared sensor 204, acoustic sensor 206 and radar sensors 208,Central Control Unit 300 comprising real-time weather data analysis module 302, real time traffic analysis and route optimisation system 304 and noise cancelling algorithm 306, dynamic traffic lighting system 400, RFID-Based Number Plate Checking System 500 comprising of RFID reader 502 and RFID tag 504, Communication Infrastructure Unit 600, User interface 700. The system optimizes traffic flow, leading to reduced congestion and shorter waiting times at intersections. The system empowers drivers to make informed decisions, reducing travel time and fuel consumption.

No. of Pages : 20 No. of Claims : 10