

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411018387 A

(19) INDIA

(22) Date of filing of Application :14/03/2024

(43) Publication Date : 12/04/2024

(54) Title of the invention : AN AUTONOMOUS AND AGILE TRAFFIC MANAGEMENT SYSTEM

(51) International classification :G08G0001010000, H04L0045000000, G06N0020000000, G06N0003080000, H04W0004020000

(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. Mandeep Kaur
 Address of Applicant :Assistant Professor, DCSE, CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Dr. Rajni Aron
 Address of Applicant :Assistant Professor, Department of Data Science SVKM's NMIMS Mukesh Patel School of Technology Management & Engineering, NMIMS University, Mumbai Mumbai -----

3)Dr. Heena Wadhwa
 Address of Applicant :Associate Professor, DCSE, CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

4)Dr. Righa Tandon
 Address of Applicant :Assistant Professor, DCSE, CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

5)Dr. Htet Ne Oo
 Address of Applicant :Associate Professor, DCSE, CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

6)Ms. Gagandeep Kaur
 Address of Applicant :Assistant Professor, DCSE, CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

(57) Abstract :
 ABSTRACT An Autonomous and Agile Traffic Management System The present disclosure introduces an autonomous and agile traffic management system 100 representing a paradigm shift in urban mobility, offering an adaptive and autonomous system to address the challenges of modern traffic management. It comprises of sensors 102, cameras 104, traffic lights 106, network connectivity module 108, fog infrastructure 110, AI and Machine learning algorithms 112, user interface 114, and traffic incident detection and response system 116. Integrating sensors, cameras, and traffic lights with advanced fog computing and artificial intelligence technologies, the system dynamically analyzes real-time traffic data to optimize traffic flow and enhance safety on roadways. REFERENCE FIG 1

No. of Pages : 22 No. of Claims : 10