(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/10/2025
(21) Application No.202511100548 A
(43) Publication Date : 05/12/2025

(54) Title of the invention : AN IoT-BASED PLATFORM FOR REAL-TIME TRAFFIC FLOW MONITORING

(51) International classification :G08G0001080000, G08G0001010000, H04L0047120000, H04L0067120000, G08G0001081000
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :
Filing Date :01/01/1900
(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)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(72)**Name of Inventor :**
1)RAVIRAJ SINGH KURMI
2)Dr. MANALI GUPTA

(57) Abstract :
The invention discloses an IoT-based platform for real-time traffic flow monitoring comprising sensor units (101), IoT gateways (102), edge processing module (103), cloud analytics engine (104), traffic control interface (105), and user application module (106). The system integrates heterogeneous sensors, edge processing, and cloud analytics to enable real-time monitoring, predictive congestion management, emergency prioritization, and commuter updates. By dynamically adjusting traffic signals and disseminating live updates, the invention reduces congestion, improves mobility, and enhances overall urban traffic management efficiency.

No. of Pages : 14 No. of Claims : 6