

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511089198 A

(19) INDIA

(22) Date of filing of Application :18/09/2025

(43) Publication Date : 10/10/2025

(54) Title of the invention : TRAFFIC MANAGEMENT SYSTEM

(51) International classification	:E01F0009529000, G08G0001010000, E01F0013120000, F03G0007080000, B60W0040105000	(71) Name of Applicant : 1)Chitkara University Address of Applicant :Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura Punjab India 2)Chitkara Innovation Incubator Foundation
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)Dr. Amanpreet Kaur
(33) Name of priority country	:NA	2)Dr. Neha Sharma
(86) International Application No	:	3)Vidhi
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	

(57) Abstract :

A traffic management system, comprising a plurality of cavities 101 is formed within the road surface, each provided with a motorized door 102 to allow access to its interior, a speed bump 103 is retractably installed within each cavity 101 via a rack and pinion arrangement 104 to regulate vehicle speed, a sensing unit 105 is mounted within each cavity 101 and deployed using a sliding unit 106 to detect pollutant concentrations and illegal items in vehicles, an imaging unit 107 comprising a pair of opposing cameras, is mounted on a support 110 over the road to capture vehicle images, an alert unit sends alerts to authorities when pollutant levels exceed limits, a barrier unit 108 with an expandable plate 108a and a covering sheet 108c on an extendable framework 108d prevents vehicle movement.

No. of Pages : 25 No. of Claims : 10