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(57) Abstract :

An IOT-based vehicle emission standard monitoring system, comprises of a body 1 associated with the system mounted on a vertical support via a clamping unit 2, a first imaging unit 3 to detect presence of vehicles at tollbooth, multiple laser lights 4 to emit laser beam in front of vehicles in a pattern to allow smooth movement of vehicles, a circular plate 6 installed with a second imaging unit 7 to determine location of vehicle, a transparent cover 8 to prevent the imaging unit from damage, an ultrasonic sensor to detect distance of exhaust pipe of vehicle, a rotatable disc 9 to rotate for translating duct 10 in proximity to exhaust pipe, a suction unit to extract fumes from pipe, a sensory module to detect particulate particles concentration and percentage of greenhouse gasses and a wireless notification is sent to traffic regulatory authority regarding penalty imposed on vehicle.

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