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## (54) Title of the invention : SYSTEM AND METHOD FOR DETECTING, TRACKING, AND ESTIMATING THE SPEED OF VEHICLES FROM A MOBILE PLATFORM

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(57) Abstract :

The system (100) is a real-time vehicle detection, tracking, and speed estimation solution operating from a mobile platform. It comprises an imaging sensor (106, 108) capturing images of the surrounding environment, a powerful processor (110) equipped with advanced computer vision algorithms for analyzing the images, and a communication interface (124) enabling real-time data transmission. The system can detect and track multiple vehicles in the field of view of the imaging sensor, estimating their speeds based on the detected positions and time intervals. Real-time data and alerts are then transmitted to either a user or a remote system (126), providing valuable insights for enhanced safety and security measures in various traffic scenarios.

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