

Title (en)  
INTELLIGENT VEHICLE HIGHWAY SYSTEM SENSOR AND METHOD

Title (de)  
INTELLIGENTER AUTOBAHNVERKEHRSSENSOR UND VERFAHREN DAZU

Title (fr)  
DETECTEUR POUR SYSTEME INTELLIGENT DE REGULATION DE LA CIRCULATION SUR LES AUTOROUTES ET PROCEDE D'UTILISATION

Publication  
**EP 0823036 A1 19980211 (EN)**

Application  
**EP 95919056 A 19950428**

Priority  
US 9505714 W 19950428

Abstract (en)  
[origin: WO9634252A1] An object sensor (310) and method using pulsed laser range imaging technology is adapted for determining the velocity and three dimensional profile of a vehicle (327) passing the sensor for classifying the type of vehicle for use in Intelligent Vehicle Highway Systems. A pair of scanned laser beams are provided by splitting a continuously pulsed laser beam from a transmitter and an optical receiver determines the presence of a vehicle in a predetermined zone such as a highway weigh station or toll booth. Range, angle and time data are collected and stored for use in determining the speed of the vehicle passing the sensor and its three dimensional profile. Forward and backward scanned beams are provided using alternate embodiments of a rotating mirror and using two transmitters/receivers in another embodiment.

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