

Title (en)
Tunnel monitoring system in a tunnel

Title (de)
Tunnelüberwachungssystem in einem Tunnel

Title (fr)
Système de surveillance dans un tunnel

Publication
EP 1220181 B1 20050810 (DE)

Application
EP 00128758 A 20001230

Priority
EP 00128758 A 20001230

Abstract (en)
[origin: EP1220181A1] Tunnel monitoring system comprises ultrasonic sensors (7, 9, 10) arranged along the longitudinal path of a road lane (2, 4) so that vehicles (3, 5) pass through the beam transmission and receipt areas (11, 12). Corresponding sensor signals are output to an analysis unit where a speed measurement unit is provided with which the speed of each vehicle can be determined from its travel time between two sensors. <??>The monitoring system can be expanded to provide measurements of vehicle position, direction and density as well as enabling determination of vehicle types. Danger situations can be quickly detected and reactions to a current situation quickly implemented by control of traffic guidance and safety systems.

IPC 1-7
G08G 1/08

IPC 8 full level
E21F 11/00 (2006.01); **G08G 1/01** (2006.01); **G08G 1/04** (2006.01); **G08G 1/052** (2006.01); **G08G 1/08** (2006.01)

CPC (source: EP US)
G08G 1/04 (2013.01 - EP US); **G08G 1/052** (2013.01 - EP US); **G08G 1/08** (2013.01 - EP US)

Cited by
CN102959599A; RU2606554C2; CN106323231A; CN103309324A; EP2701133A1; CN104991488A; DE10243224B3; CN106200485A; CN109697473A; CN115981219A; CN107180533A; CN115773473A; CN103309323A; CN110146930A; DE102018251771A1; US9594158B2; USRE48914E; USRE47134E; US10488492B2; USRE48763E

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