

Title (en)

System and method for automatic detection of moving vehicles.

Title (de)

System und Verfahren zum automatischen Erfassen von sich bewegenden Fahrzeugen.

Title (fr)

Système et méthode de détection automatique de véhicules roulants.

Publication

EP 0585718 A1 19940309 (EN)

Application

EP 93113130 A 19930817

Priority

IT GE920092 A 19920903

Abstract (en)

A system for the automatic detection of moving vehicles, with data exchange, particularly with automatic toll charging, comprising a fixed receiving and transmitting station capable of communicating with a plurality of on-board transceiver units (3) each of which is associated with one vehicle. To avoid confinement to a single-carriageway transit lane of vehicles passing the transceiver station, the invention specifies that the transceiver station is provided with a plurality of aerials (A.1-A.n), each of which forms a coverage area (C.1-C.n) of dimensions considerably smaller than the dimensions of the vehicles, so that only one vehicle can pass through each coverage area at one time and consequently only one on-board unit (3) can communicate with each aerial (A.1-A.n) at one time, while the signals received by each aerial (A.1-A.n) are processed separately from each other. The invention also specifies a particular method of application. <IMAGE>

IPC 1-7

G07B 15/00

IPC 8 full level

G07B 15/06 (2011.01)

CPC (source: EP)

G07B 15/063 (2013.01)

Citation (search report)

- [XAY] EP 0401192 A1 19901205 - BAETS THIERRY DE [BE]
- [Y] FR 2563028 A1 19851018 - SESAME ILE DE FRANCE [FR]
- [A] EP 0413948 A1 19910227 - SIEMENS AG [DE]
- [A] EP 0416692 A2 19910313 - PHILIPS ELECTRONICS UK LTD [GB], et al
- [A] EP 0002469 A1 19790627 - SIEMENS AG [DE]
- [A] GB 2154832 A 19850911 - PLESSEY CO PLC
- [A] US 4325146 A 19820413 - LENNINGTON JOHN W
- [A] MANH ANH DO E.A.: "New automatic vehocle identification system for detection of traffic without lane discipline", ELECTRONICS AND COMMUNICATION ENGINEERING JOURNAL, vol. 3, no. 3, June 1991 (1991-06-01), LONDON GB, pages 99 - 107, XP000235792
- [A] WALKER E.A.: "Automatic vehicle identification (AVI) technology design considerations for highway applications", 41ST IEEE VEHICULAR TECHNOLOGY CONFERENCE, 19 May 1991 (1991-05-19), ST. LOUIS USA, pages 805 - 811, XP000260280, DOI: doi:10.1109/VETEC.1991.140606

Cited by

EP0779600A3; DE19605654B4; CN101872495A; US6140941A; DE4446662A1; EP0676727A3; EP0674293A3; US6081718A; EP0725368A3; US5675494A; EP1772970A4; US5774795A; EP0627718A1; US5710566A; EP0713201A3; US5710556A; CN106384395A; DE4446436A1; DE4446436C2; EP0627717A1; US5757285A; US5682603A; EP0677828A3; US5602375A; EP0834838A3; US9734462B2; EP0784302A1; US5839085A; US6088680A; GB2301471A; GB2301471B; US5857152A; EP0689169A3; WO9514982A1; WO2006011194A1; US8354916B2; KR100224143B1; WO9632698A1; WO9601459A1; WO9521424A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0585718 A1 19940309; EP 0585718 B1 19970611; AT E154457 T1 19970615; DE 69311467 D1 19970717; DE 69311467 T2 19971204; IT 1257419 B 19960115; IT GE920092 A0 19920903; IT GE920092 A1 19940303; SG 42755 A1 19971017

DOCDB simple family (application)

EP 93113130 A 19930817; AT 93113130 T 19930817; DE 69311467 T 19930817; IT GE920092 A 19920903; SG 1995000649 A 19930817