

Title (en)

METHOD FOR AUTOMATIC DEBITING OF TOLLS FOR VEHICLES

Title (de)

VERFAHREN ZUM AUTOMATISCHEN ABBUCHEN VON MAUTGEBÜHREN FÜR FAHRZEUGE

Title (fr)

PROCEDE POUR DEBITER AUTOMATIQUEMENT DES FRAIS DE PEAGE RELATIFS A DES VEHICULES

Publication

EP 1042738 B1 20050803 (EN)

Application

EP 98964589 A 19981209

Priority

- SE 9802264 W 19981209
- SE 9704853 A 19971222

Abstract (en)

[origin: WO9933027A1] A method for automatic debiting of tolls for vehicles (V1-V4) on traffic routes or in traffic zones, the vehicles being equipped with communication devices (1, 11) for communication (12) with a central unit (C) and a roadside unit (3) at a physical toll (4) station. At least one virtual toll charging station (7) is geographically predetermined in relation to the physical station. The vehicle's communication device comprises also a receiver (8) for a signal supplying GNSS system. A first processor (5) reads the position of the vehicle and detects the entry of the vehicle into a virtual toll charging station by comparing the read vehicle position with the positions of the virtual toll charging stations, which data are stored in the vehicle's memory (6), the communication device announcing, via a digital mobile transmitting network to the central unit, that a toll debit transaction is to be executed. The central unit carries out the toll debiting transaction and returns a receipt of the transaction to the vehicle. On entry to the physical toll station the vehicles communication sends, via a communication link to the roadside unit, the receipt as evidence that the correct toll has been paid.

IPC 1-7

G07B 15/00

IPC 8 full level

G07B 15/02 (2011.01); **G07B 15/06** (2011.01)

CPC (source: EP KR)

G07B 15/02 (2013.01 - KR); **G07B 15/063** (2013.01 - EP)

Cited by

CN106504354A; EP3418981A1; AU2012225135B2; AU2012225135C1; US11557154B2; US12008840B2; US12028744B2; US11908247B2; WO2012119255A1; WO2021081493A1; EP3410406B1

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

WO 9933027 A1 19990701; AT E301312 T1 20050815; AU 1988399 A 19990712; AU 748551 B2 20020606; BR 9813812 A 20001003; BR 9813812 B1 20110906; CN 1146831 C 20040421; CN 1283293 A 20010207; DE 69831096 D1 20050908; DE 69831096 T2 20060413; EP 1042738 A1 20001011; EP 1042738 B1 20050803; ES 2251792 T3 20060501; KR 100581114 B1 20060516; KR 20010024706 A 20010326; NO 20003227 D0 20000621; NO 20003227 L 20000621; NO 321129 B1 20060320; SE 510080 C2 19990419; SE 9704853 D0 19971222; SE 9704853 L 19990419; TW 365671 B 19990801

DOCDB simple family (application)

SE 9802264 W 19981209; AT 98964589 T 19981209; AU 1988399 A 19981209; BR 9813812 A 19981209; CN 98812498 A 19981209; DE 69831096 T 19981209; EP 98964589 A 19981209; ES 98964589 T 19981209; KR 20007006256 A 20000609; NO 20003227 A 20000621; SE 9704853 A 19971222; TW 88100177 A 19990107