Title (en)

ELECTRONIC TOLL SYSTEM FOR TRAFFIC ROUTES, AND METHOD FOR THE OPERATION THEREOF

Title (de)

ELEKTRONISCHES MAUTSYSTEM FÜR VERKEHRSWEGE UND VERFAHREN ZU DESSEN BETRIEB

Title (fr)

SYSTEME DE PEAGE ELECTRONIQUE POUR VOIES DE CIRCULATION ET PROCEDE POUR FAIRE FONCTIONNER CE DERNIER

Publication

EP 1725990 A1 20061129 (DE)

Application

EP 05735963 A 20050318

Priority

- DE 2005000512 W 20050318
- DE 102004013807 A 20040318

Abstract (en)

[origin: WO2005091229A1] The invention relates to an electronic toll system for traffic routes, said system being designed on the basis of commercial GSM/UMTS mobile telephones or comparable appliances such as a PDA, car phones etc., with a GSM function, and to a method for the operation thereof. In each mobile radio network, data of the respective radio cell is transmitted to the radio telephone via an organisation channel. According to the invention, said information supplied by the base transceiver stations is used to record the radio cells crossed by the toll customer. The collected data is transmitted to a central toll station. The toll traffic route taken by the vehicle can be deduced with high precision, by comparison with databases relating to existing traffic routes, on the basis of the series of crossed radio cells transmitted by the terminal of the toll customer. According to the invention, no changes need to be carried out on the hardware of current mobile radio systems and terminals. The existing mobile radio terminals, radio telephones etc., are generally available for toll customers and can be used thereby.

IPC 8 full level

G01C 22/00 (2006.01); **G07B 15/02** (2011.01); **G07B 15/06** (2011.01); **G07C 5/00** (2006.01); **G07C 5/08** (2006.01)

CPC (source: EP US)

G07B 15/02 (2013.01 - EP US); **G07B 15/063** (2013.01 - EP US); **G07C 5/085** (2013.01 - EP US)

Citation (search report)

See references of WO 2005091229A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005091229 A1 20050929; CA 2561136 A1 20050929; CA 2561136 C 20151027; CN 1934593 A 20070321; CN 1934593 B 20120328; DE 102004013807 A1 20051027; DE 102004013807 B4 20101209; EP 1725990 A1 20061129; JP 2007529798 A 20071025; JP 4839304 B2 20111221; RU 2006136787 A 20080427; RU 2378700 C2 20100110; US 2007275731 A1 20071129; US 7835753 B2 20101116

DOCDB simple family (application)

DE 2005000512 W 20050318; CA 2561136 A 20050318; CN 200580008686 A 20050318; DE 102004013807 A 20040318; EP 05735963 A 20050318; JP 2007503191 A 20050318; RU 2006136787 A 20050318; US 59322105 A 20050318