Title (en)

Vehicle device, ad-hoc network and method for a road toll system

Title (de)

Fahrzeuggerät, ad-hoc-Netzwerk und Verfahren für ein Strassenmautsystem

Title (fr)

Appareil de véhicule, réseau ad hoc et procédé pour un système de péage routier

Publication

EP 2490183 A1 20120822 (DE)

Application

EP 11450023 A 20110216

Priority

EP 11450023 A 20110216

Abstract (en)

The device (2) has a satellite navigation receiver for continuously generating location data for a processing and transmitting/receiving unit of the vehicle device. A trusted-element processor logs a time segment of the generated location data and cryptographically signs the time segment. The processor starts the logging upon detection of a predefined time or predefined location of vehicle device and carries out the logging for predefined time segment. The processor detects predefined location based on external location data received from proximate vehicle devices through ad hoc network. Independent claims are included for the following: (1) method for logging location data of location-recording vehicle device of road toll system; and (2) ad hoc network.

Abstract (de)

Fahrzeuggerät, Netzwerk und Verfahren für ein Straßenmautsystem, mit einem Satellitennavigationsempfänger (5) zur fortlaufenden Erzeugung von Ortsdaten (p i) für eine Verarbeitungs- und Sendeempfangseinheit (7, 8) des Fahrzeuggeräts (2) und einem gesonderten Trusted-Element-Prozessor (10) zur Protokollierung (s) eines Zeitabschnitts der erzeugten Ortsdaten (p i) und zur kryptographischen Signierung (s*) desselben, wobei der Trusted-Element-Prozessor (10) die genannte Protokollierung bei Detektion einer vorgegebenen Zeit (T) oder eines vorgegebenen Orts (P) des Fahrzeuggeräts (2) startet und für einen vorgegebenen Zeitabschnitt durchführt.

IPC 8 full level

G07B 15/06 (2011.01)

CPC (source: EP US)

G06Q 50/40 (2024.01 - EP US); **G07B 15/063** (2013.01 - EP US)

Citation (applicant)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2490183 A1 20120822; **EP 2490183 B1 20130605**; CA 2762615 A1 20120816; DK 2490183 T3 20130902; ES 2425777 T3 20131017; PL 2490183 T3 20131031; PT 2490183 E 20130823; SI 2490183 T1 20130731; US 2012209776 A1 20120816; US 8818895 B2 20140826

DOCDB simple family (application)

EP 11450023 A 20110216; CA 2762615 A 20111221; DK 11450023 T 20110216; ES 11450023 T 20110216; PL 11450023 T 20110216; PT 11450023 T 20110216; SI 201130039 T 20110216; US 201213353007 A 20120118