

Title (en)

Toll collection system capable of properly collecting a toll from a user without requiring any special equipment to be mounted in a vehicle

Title (de)

Mautgebühreneinzugssystem, das fähig ist, eine Mautgebühr ordnungsgemäss ohne irgendeine spezielle im Fahrzeug eingebaute Vorrichtung von einem Benutzer einzuziehen

Title (fr)

Système de perception de droits de péage capable de percevoir correctement une taxe d'un utilisateur sans nécessiter aucun équipement particulier monté dans un véhicule

Publication

EP 0784297 A2 19970716 (EN)

Application

EP 97100354 A 19970110

Priority

JP 291896 A 19960111

Abstract (en)

A mobile terminal (20) for mobile communication transmits a radio signal carrying a terminal number and a particular dial number. Each toll lane (12) of a tollgate is provided with an antenna (121) for receiving the radio signal and a vehicle's class detector (122) for detecting the vehicle's class of an automotive vehicle (11). Each tollgate is provided with a terminal information receiving unit (13) and an interface circuit (16). Responsive to the radio signal from the antenna (121), the interface circuit (16) identifies as lane information an entry lane which the automotive vehicle (11) is entering and acquires terminal information corresponding to the terminal number by accessing the mobile communication exchange system (30). The terminal information receiving unit (13) receives the lane information and the terminal information for transmission to a data memory unit (14). On the other hand, the processing unit (17) acquires vehicle's class information from the vehicle's class detector (122). The processing unit (17) then prepares and stores in the data memory unit (14) passage car information containing the lane information, the terminal information, the vehicle's class information, and a passage time. A central processing computer (15) obtains from every tollgate vehicle passage data including the passage vehicle information and tollgate information to prepare toll charge data. <IMAGE>

IPC 1-7

G07B 15/00

IPC 8 full level

G07B 15/00 (2006.01)

CPC (source: EP)

G07B 15/063 (2013.01)

Citation (applicant)

- JP H05242098 A 19930921 - FUJIKURA LTD
- JP H05120504 A 19930518 - OMRON TATEISI ELECTRONICS CO
- JP H05108916 A 19930430 - MITSUBISHI ELECTRIC CORP

Cited by

EP2927879A1; CN1111105512A; AU750065B2; US7227974B2; CN104932856A; US9715703B2; WO9948052A1; US10176646B2; US10685502B2; US6909876B2; DE102014115840A1; US10579887B2; US11250278B2

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