

Title (en)

ELECTRONIC TOLL COLLECTION SYSTEM, ON-BOARD UNIT AND DATA COMMUNICATION METHOD FOR ON-BOARD UNIT

Title (de)

ELEKTRONISCHES MAUTSAMMELSYSTEM, BORDEINHEIT UND DATENKOMMUNIKATIONSVERFAHREN FÜR DIE BORDEINHEIT

Title (fr)

SYSTÈME DE COLLECTE DE PÉAGE ÉLECTRONIQUE, UNITÉ EMBARQUÉE ET PROCÉDÉ DE COMMUNICATION DE DONNÉES POUR L'UNITÉ EMBARQUÉE

Publication

**EP 2503710 A4 20141231 (EN)**

Application

**EP 10834174 A 20100621**

Priority

- CN 200910188547 A 20091201
- CN 2010074179 W 20100621

Abstract (en)

[origin: EP2503710A1] An Electronic Toll Collection (ETC) system, an On-Board Unit (OBU) and a data communication method of the OBU are provided. An OBU receives an awakening frequency signal, and matches an awakening frequency of the awakening frequency signal with a response frequency preset by the OBU; when the response frequency preset by the OBU is matched with the awakening frequency of the awakening frequency signal, the OBU establishes data communication with a RSU. Only when the awakening frequency of the received awakening frequency signal is matched with the preset response frequency, the OBU establishes the data communication with the RSU; therefore, other communication data signals and the awakening frequency signals which do not meet requirements can not trigger the OBU to establish the data communication with the RSU. Error awakening rate of the OBU is greatly reduced, unnecessary power consumption is reduced and service life of the OBU is prolonged.

IPC 8 full level

**G07B 15/06** (2011.01); **H04B 7/26** (2006.01)

CPC (source: EP)

**G07B 15/063** (2013.01)

Citation (search report)

- [X1] US 5621412 A 19970415 - SHARPE CLAUDE A [US], et al
- [X1] US 5525992 A 19960611 - FROSCHEMERMEIER GUENTHER [DE]
- [A] US 5825007 A 19981020 - JESADANONT MONGKOL [TH]
- [A] US 6611785 B1 20030826 - YAMANAKA HIDEKI [JP], et al
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Designated contracting state (EPC)

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