

Title (en)

Access control system for persons and vehicles based on radio frequency identification (RFID)

Title (de)

Zutrittskontrollsysteem für Personen und Fahrzeuge basierend auf Radiofrequenz-Identifikation (RFID)

Title (fr)

Système de contrôle d'accès pour personnes et véhicules basé sur l'identification par radiofréquence (RFID)

Publication

EP 2230624 A1 20100922 (EN)

Application

EP 09382012 A 20090312

Priority

EP 09382012 A 20090312

Abstract (en)

The access control system for people and vehicles using UHF-RFID with reading order and hands-free functions operates in the frequency band ranging from 860MHz to 960MHz. The system consists of a UHF-RFID reader and several antennas of circular or linear polarization placed one on each side of the barrier or element that controls access (e.g. a door). Each user and/or vehicle has a UHF-RFID tag with a unique identifier associated with the identity of that user and/or vehicle. The user information may be stored either directly on the reader's internal memory or into an external database. When users and/or vehicles pass through the antennas reading field areas (these areas can be configurable), they read the ID number of the tag and send the information to the reader. The reader checks the validity of the identity by comparing the identifier with the data set stored and then validates the entry or exit. The reader can send a signal to turn on/off an electric latch to limit the access physically. Once access is authorized, if the user and/or vehicle continues on its way and pass through the second set of antennas, the system automatically determines the order of reading and hence the location (inside or outside) of the user and/or vehicle. If the user and/or vehicle does not follow its path (e.g. turn back and leave), the system does not register its arrival or departure.

IPC 8 full level

G06K 7/00 (2006.01); **G07C 9/00** (2006.01)

CPC (source: EP)

G07C 9/00309 (2013.01); **G07C 2209/63** (2013.01)

Citation (search report)

- [X] WO 0016564 A1 20000323 - KEY TRAK INC [US], et al
- [X] GB 2410347 A 20050727 - MANTIC POINT SOLUTIONS LTD [GB]
- [X] GB 2419776 A 20060503 - SALEM AUTOMATION LTD [GB]
- [X] WO 2007022802 A1 20070301 - AIDA CT S L [ES], et al

Cited by

CN110084183A; CN103854347A; CN106876876A; CN108648320A

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2230624 A1 20100922

DOCDB simple family (application)

EP 09382012 A 20090312