

Title (en)

System and method for checking the integrity of a multi-unit vehicle

Title (de)

System und Verfahren zur Überprüfung der Vollständigkeit eines mehrteiligen Fahrzeuges

Title (fr)

Système et procédé pour vérifier l'intégrité d'un véhicule à unités multiples

Publication

**EP 3000688 A1 20160330 (EN)**

Application

**EP 14380030 A 20140926**

Priority

EP 14380030 A 20140926

Abstract (en)

The present invention concerns a system and a method for controlling completeness of a multi-unit vehicle (2) comprising N units U<sub>i</sub>, with i= 1, ..., N, the system comprising: - at least N-1 RFID readers R<sub>k</sub> and N-1 RFID tags T<sub>k</sub>, with k = 1,...,N-1, wherein the RFID reader R<sub>k</sub> is configured for being installed on the vehicle unit U<sub>i=k</sub> and the RFID tag T<sub>k</sub> is configured for being installed on the vehicle unit U<sub>i=k+1</sub> so that the RFID tag T<sub>x</sub> and the RFID reader R<sub>k</sub> are able to exchange at least one data D<sub>k</sub> only if the vehicle units U<sub>i=k</sub> and U<sub>i=k+1</sub> are separated by a distance smaller than a predefined distance threshold d, each RFID reader R<sub>k</sub> being configured for providing a message M<sub>k</sub> comprising information related to the reception or non-reception of the data D<sub>k</sub>; - an integrity controller (11) configured for being installed on-board the multi-unit vehicle (2), wherein the integrity controller (11) is configured for communicating with at least one RFID reader R<sub>k</sub> for receiving said message M<sub>k</sub>, the integrity controller (11) being configured for controlling the completeness of the multi-unit vehicle (2) from the information comprised in each message M<sub>k</sub> he receives.

IPC 8 full level

**B61L 15/00** (2006.01); **B61L 25/02** (2006.01)

CPC (source: EP)

**B61L 15/0054** (2013.01); **B61L 25/028** (2013.01)

Citation (search report)

- [XI] EP 2420426 A2 20120222 - NOMAD SPECTRUM LTD [GB]
- [A] EP 2420427 A2 20120222 - ALSTOM TRANSPORT SA [FR]
- [A] EP 1205370 A1 20020515 - CIT ALCATEL [FR]
- [A] EP 2000387 A2 20081210 - DB SYSTEL GMBH [DE], et al

Cited by

CN110958968A; NL2018143B1; EP3501940A1; FR3075144A1; GB2560581A; GB2560581B; EP3789263A1; WO2018128545A1; WO2021043977A1

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 3000688 A1 20160330**

DOCDB simple family (application)

**EP 14380030 A 20140926**