Title (en)

DEVICE AND METHOD FOR CONTROLLING AND/OR MONITORING DECENTRALIZED INTELLIGENT FUNCTIONAL UNITS ARRANGED IN A RAIL NETWORK

Title (de)

EINRICHTUNG UND VERFAHREN ZUM STEUERN UND/ODER ÜBERWACHEN VON IN EINEM SCHIENENVERKEHRSNETZWERK ANGEORDNETEN DEZENTRALEN INTELLIGENTEN FUNKTIONSEINHEITEN

Title (fr)

DISPOSITIF ET PROCÉDÉ DE COMMANDE ET/OU DE SURVEILLANCE D'UNITÉS FONCTIONNELLES INTELLIGENTES DÉCENTRALISÉES AGENCÉES DANS UN RÉSEAU FERROVIAIRE

Publication

EP 3383723 A1 20181010 (DE)

Application

EP 16778781 A 20161005

Priority

- EP 15197939 A 20151204
- EP 2016073729 W 20161005

Abstract (en)

[origin: WO2017092911A1] The present invention is based on the object of specifying a device and method for controlling and/or monitoring decentralized functional units arranged in a rail network, which functional units can be operated more easily and cost effectively compared to contemporary systems and, under certain circumstances, also have a smaller footprint. This object is achieved according to the invention with a device and a method for controlling and/or monitoring decentralized functional units arranged in a rail network, comprising: a) a superordinate control system (30) which exchanges information with the decentralized functional units (DFE, EC, C1 to C4) by means of data telegrams (DT), b) a data transport network (TN) having a number of network access points (2 to 16), wherein the superordinate control system (30) is coupled to the data transport network (TN) by at least one network access point (2, 4); c) communication units (18 to 28) which are connected to a network access point (6 to 16) and provide the decentralized functional units (DFE, EC, C1 to C4) with access to the data transport network (TM), and d) the decentralized functional units (DFE, EC, C1 to C4) automatically carry out/or administer control, monitoring and closing functions and are logically connected according to the track plan principle to the respective immediately adjacent decentralized functional unit (DFE, EC, C1 to C4) and directly exchange data with said functional units for carrying out the control and/or monitoring and/or closing functions. In this way, the interlocking system functionalities are able to be exported partially or even completely from a central internal system into the decentralized functional units, permitting the internal systems either to be drastically reduced in size or even completely eliminated.

IPC 8 full level

B61L 19/06 (2006.01); **B61L 21/04** (2006.01); **B61L 27/00** (2006.01)

CPC (source: EP)

B61L 19/06 (2013.01); **B61L 21/04** (2013.01); **B61L 27/20** (2022.01)

Citation (search report)

See references of WO 2017092911A1

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 3176049 A1 20170607; EP 3383723 A1 20181010; WO 2017092911 A1 20170608

DOCDB simple family (application)

EP 15197939 A 20151204; EP 16778781 A 20161005; EP 2016073729 W 20161005