

Title (en)
DEVICE AND METHOD FOR OPERATING FUNCTIONAL UNITS ARRANGED IN A DECENTRALIZED MANNER

Title (de)
EINRICHTUNG UND VERFAHREN ZUM BETREIBEN VON DEZENTRAL ANGEORDNETEN FUNKTIONSEINHEITEN

Title (fr)
ÉQUIPEMENT ET PROCÉDÉ POUR FAIRE FONCTIONNER DES UNITÉS FONCTIONNELLES DÉCENTRALISÉES

Publication
EP 3016830 A1 20160511 (DE)

Application
EP 14747307 A 20140625

Priority

- EP 13174634 A 20130702
- EP 13178451 A 20130730
- EP 2014063358 W 20140625
- EP 14747307 A 20140625

Abstract (en)
[origin: CA2917091A1] The invention relates to a device (E) and a method for operating decentralized functional units (DFE, EC) arranged in an industrial system, comprising: a) a higher-level control system (30) which exchanges information with the decentralized functional units (DFE) by means of data telegrams (DT), b) a data transport network (TN) with a number or network access points (2 to 16), said higher-level control system (30) being coupled to the data transport network (TN) via 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 with access to the data transport network (TN); d) an energy transport network to which the decentralized functional units (DFE) are connected and which supplies electric energy to the decentralized functional units (DFE); e) a number of intelligent energy stores which are connected to the energy transport network (ETN) and which consume energy and/or output energy in accordance with the higher-level control system and/or with at least one of the remaining energy stores, said energy transport network (ETN) having energy supply points (IEK) which are distributed along a bus structure of the energy transport network, wherein selectively one of at least two independent energy backbones can supply corresponding electric power to the supply points.

IPC 8 full level
B61L 27/00 (2006.01); **B61L 19/06** (2006.01)

CPC (source: EP US)
B61L 19/06 (2013.01 - EP US); **B61L 27/04** (2013.01 - US); **B61L 27/40** (2022.01 - US); **B61L 27/70** (2022.01 - EP US);
G05B 15/02 (2013.01 - US)

Citation (search report)
See references of WO 2015000757A1

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 2821313 A2 20150107; EP 2821313 A3 20150506; AU 2014286412 A1 20160128; AU 2014286412 B2 20170223; CA 2917091 A1 20150108; CA 2917091 C 20180612; CN 105358403 A 20160224; CN 105358403 B 20171013; EP 3016830 A1 20160511; US 10407086 B2 20190910; US 2016167686 A1 20160616; WO 2015000757 A1 20150108

DOCDB simple family (application)
EP 13178451 A 20130730; AU 2014286412 A 20140625; CA 2917091 A 20140625; CN 201480038427 A 20140625; EP 14747307 A 20140625; EP 2014063358 W 20140625; US 201414902637 A 20140625