

Title (en)

DEVICE FOR THE ENERGY-EFFICIENT CONTROL OF A SYSTEM AND METHOD THEREFOR

Title (de)

VORRICHTUNG ZUR ENERGIEEFFIZIENTEN STEUERUNG EINER ANLAGE UND VERFAHREN HIERZU

Title (fr)

DISPOSITIF DE COMMANDE D'UNE INSTALLATION, EN VUE DE L'EFFICACITÉ ÉNERGÉTIQUE, ET PROCÉDÉ ASSOCIÉ

Publication

EP 2726945 A1 20140507 (DE)

Application

EP 11766956 A 20110929

Priority

EP 2011067007 W 20110929

Abstract (en)

[origin: WO2013044964A1] The invention relates to a device for controlling a system or part of a system, comprising system components. The control uses a structural model of the system and mode models of the components housed in the system. The used models also contain information relating to possible modes the system components can pass into, and to the respective energy consumption of the components in the respective state, together with additional information relating to the logical dependencies between the individual components in the respective energetic states. Using logical dependencies, it is understood that a connection process of at least one system component requires additional modes of other system components in order to control a system or part of a system in a controlled manner. The knowledge of the dependencies between the components of the system enable the device (the energy controller), to connect each component in the different modes thereof. The system can also be connected in predefined global modes (composed of combinations of component modes). The invention enables not only the system to be automatically connected and disconnected but it can also enables it to be switched to the defined energy-saving mode in non-productive operation, also known as standby mode, and to the energy-saving mode in productive operation, e.g. partial load operation.

IPC 8 full level

G05B 19/042 (2006.01); **G05B 19/045** (2006.01); **G06F 9/48** (2006.01)

CPC (source: EP)

G05B 17/02 (2013.01); **G05B 19/042** (2013.01); **G05B 19/045** (2013.01)

Citation (search report)

See references of WO 2013044964A1

Cited by

US2019011893A1; US10534338B2

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

DOCDB simple family (publication)

WO 2013044964 A1 20130404; EP 2726945 A1 20140507

DOCDB simple family (application)

EP 2011067007 W 20110929; EP 11766956 A 20110929