

Title (en)

METHOD FOR THE CONTROL OF AN ENERGY SYSTEM, AND ASSOCIATED DEVICE

Title (de)

VERFAHREN ZUR STEUERUNG EINES ENERGIESYSTEMS SOWIE ZUGEHÖRIGE VORRICHTUNG

Title (fr)

PROCÉDÉ DE COMMANDE D'UN SYSTÈME ÉNERGÉTIQUE ET DISPOSITIF ASSOCIÉ

Publication

EP 4100897 A1 20221214 (DE)

Application

EP 20829550 A 20201211

Priority

- DE 102020203853 A 20200325
- EP 2020085666 W 20201211

Abstract (en)

[origin: WO2021190778A1] The invention relates to a method for the control of the energy conversion, energy storage, energy transport and/or energy consumption of: - a plurality of energy installations (11) of an energy system (1), more particularly of a building, and/or - a plurality of flexible-load consumers (12) of the energy system (1), more particularly electric vehicles, which method is based on a mathematical optimization, wherein values of variables provided for the control, more particularly of power levels of the energy installations (11) and/or of the flexible consumers (12), are calculated by means of the optimization. The method according to the invention is characterized in that the optimization is based on a first and a second optimization quantity, wherein a plurality of solutions of the values of the variables, which solutions are optimal with respect to the first optimization quantity, is calculated by means of a first optimization (41), and one of the calculated solutions which is optimal with respect to the second optimization quantity is determined, by means of a second optimization (42), as values of the variables for the control and is used for the control. The invention also relates to an associated device (3).

IPC 8 full level

G06Q 10/04 (2012.01); **G06Q 50/06** (2012.01)

CPC (source: EP KR US)

G06Q 10/04 (2013.01 - EP KR); **G06Q 10/06315** (2013.01 - US); **G06Q 50/06** (2013.01 - EP KR US); **H02J 3/381** (2013.01 - US);
H02J 2300/22 (2020.01 - US); **H02J 2300/28** (2020.01 - US); **Y02B 70/30** (2013.01 - KR); **Y02B 70/3225** (2013.01 - EP);
Y02P 80/20 (2015.11 - EP); **Y02T 10/70** (2013.01 - EP); **Y04S 20/222** (2013.01 - EP)

Citation (search report)

See references of WO 2021190778A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102020203853 A1 20210930; AU 2020437492 A1 20221013; CN 115315712 A 20221108; EP 4100897 A1 20221214;
KR 20220156061 A 20221124; US 2023119377 A1 20230420; WO 2021190778 A1 20210930

DOCDB simple family (application)

DE 102020203853 A 20200325; AU 2020437492 A 20201211; CN 202080098921 A 20201211; EP 2020085666 W 20201211;
EP 20829550 A 20201211; KR 20227036377 A 20201211; US 202017914428 A 20201211