

Title (en)

ENERGY MANAGEMENT SYSTEM FOR AN ENERGY GENERATION SYSTEM

Title (de)

ENERGIEMANAGEMENTSYSTEM FÜR EIN ENERGIEERZEUGUNGSSYSTEM

Title (fr)

SYSTÈME DE GESTION D'ÉNERGIE POUR UN SYSTÈME DE PRODUCTION D'ÉNERGIE

Publication

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Application

**EP 16709702 A 20160311**

Priority

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Abstract (en)

[origin: WO2017001030A1] The invention relates to a DC-coupled energy management system (10) for an energy generation plant (100), in particular a photovoltaic system, comprising a control unit (30), a sensor unit (32) for measuring an electrical balance between consumer units (80) of the energy generation plant (100) and a mains power connection (20) of an energy supply network (200), and a DC/DC converter (22), which is connected by a first connector (24) to an electrical connecting line (16) of the energy generation plant (100) between an energy converter (12) and an inverter (14) coupled to the supply network, and is also connected by a second connector (26) to at least one energy storage unit (40). The control unit (30) is designed for communication connection to the sensor unit (32), to the energy storage unit (40), and to the DC/DC converter (22). The energy converter (12) is provided in order to supply a variable DC voltage power in accordance with operating conditions and/or environmental conditions. Furthermore, a withdrawal or a delivery of electrical energy by the DC/DC converter (22) can be controlled by means of the control unit (30), wherein the control unit (30) controls the DC/DC converter (22) according to the electrical balance specified by the sensor unit (32). The invention further relates to an energy generation plant (100) comprising such a DC-coupled energy management system (10), to a DC/DC converter for such a DC-coupled energy management system (10), and to a method for operating such an energy generation plant (100) having such a DC-coupled energy management system (10).

IPC 8 full level

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