Title (en)

METHOD FOR STABILIZING THE DC VOLTAGE IN A DC GRID, AND DC-TO-DC CONVERTER FOR CONNECTING A PV GENERATOR TO A DC GRID

Title (de)

VERFAHREN ZUR STABILISIERUNG DER GLEICHSPANNUNG IN EINEM GLEICHSTROMNETZ UND GLEICHSPANNUNGSWANDLER ZUR VERBINDUNG EINES PV-GENERATORS MIT EINEM GLEICHSTROMNETZ

Title (fr)

PROCÉDÉ DE STABILISATION DE LA TENSION CC DANS UN RÉSEAU CC, ET CONVERTISSEUR CC-CC POUR CONNECTER UN GÉNÉRATEUR PV À UN RÉSEAU CC

Publication

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Application

EP 21728049 A 20210521

Priority

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Abstract (en)

[origin: WO2021239616A1] The invention relates to a method for stabilizing a DC voltage in a DC grid (1) that comprises a DC bus (10) which is connected to a higher-order grid (11, 12) and to which an energy generating system (18) and at least one load (13) are connected. A variable electric grid output is exchanged between the DC bus and the higher-order grid in order to keep the DC voltage in the DC bus at a nominal voltage. The energy generating system comprises a PV generator (18a) which is connected to the DC bus via a DC-to-DC converter (18b) and which exchanges an electric generator output with the DC bus. In a normal operating mode, the generator output is set to a normal operating output by the DC-to-DC converter on the basis of an MPP output of the PV generator. In a grid support mode, the generator output is set to a grid support output on the basis of the DC voltage in the DC bus in order to counteract a power imbalance between the electric power supplied in total to the DC bus and the power drawn in total from the DC bus.

IPC 8 full level

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Citation (search report)

See references of WO 2021239616A1

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