

Title (en)

GRID CONVERTER AND REGULATION METHOD FOR OPERATION IN DISTORTED SINGLE-PHASE GRIDS

Title (de)

NETZUMRICHTER UND REGELUNGSVERFAHREN FÜR DEN BETRIEB AN VERZERRTEN EINPHASENNETZEN

Title (fr)

PROCÉDÉ DE RÉGULATION ET CONVERSION DE GRILLES POUR FONCTIONNEMENT DANS DES GRILLES À PHASE UNIQUE DÉFORMÉES

Publication

EP 4147336 A1 20230315 (DE)

Application

EP 21758375 A 20210811

Priority

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- EP 2021072339 W 20210811

Abstract (en)

[origin: WO2022034120A1] A power converter method is proposed, in which electrical energy is transmitted between a first (15) and a second side (16) of a power converter (13) in a controlled or regulated manner and at least one instantaneous electrical variable detected for at least one phase of an AC grid is subjected to a d/q transformation and control or regulation is carried out on the basis of the d/q-transformed variable in order to control or regulate at least one of a flow of active power from the first side (15) to the second side (16) or from the second side (16) to the first side (15) and a flow of reactive power from the first side (15) to the second side (16) or from the second side (16) to the first side (15). The power converter method is characterized in that a plurality of discrete frequency components comprising a fundamental frequency component and at least one harmonics component are extracted from the detected instantaneous electrical variable and the control or regulation is carried out on the basis of a phase position of the fundamental determined therefrom or/and by applying at least one d/q transformation on the basis of said frequency components. A power converter operating in accordance with said power converter method is also proposed.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2022034120A1

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