Title (en)
METHOD FOR PRECHARGING MODULES OF A MODULAR MULTILEVEL CONVERTER

Title (de)
VERFAHREN ZUM VORLADEN VON MODULEN EINES MODULAREN MULTILEVELSTROMRICHTERS

Title (fr)
PROCÉDÉ DE PRÉCHARGE DE MODULES D'UN CONVERTISSEUR MULTINIVEAU MODULAIRE

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Abstract (en)
[origin: WO2021037346A1] The invention relates to a method for precharging half bridge modules and full bridge modules of a modular multilevel converter (400), the modular multilevel converter (400) having at least one phase module branch (18) with half bridge modules (3_1, 3_2, 3_3) and full bridge modules (3_4, 3_5, 3_6, 3_7) connected electrically in a series circuit, and each of the half bridge modules (3_1, 3_2, 3_3) and full bridge modules (3_4, 3_5, 3_6, 3_7) having at least a first module connection (212), a second module connection (215, 315), two electronic switching elements (202, 206) and an electrical stored energy source (210). In the method, in a first charging phase (501) after the multilevel converter (400) is connected to an energy supply system (409) with the electronic switching elements (202, 206, 302, 306) of the half bridge modules and of the full bridge modules not actuated, the stored energy sources (210) of the half bridge modules and of the full bridge modules are charged up in an uncontrolled manner. In a second charging phase (502), the electronic switching elements (202, 206, 302, 306) of at least some of the full bridge modules (3_5, 3_6, 3_7) are actuated such that the half bridge modules (3_1, 3_2, 3_3) are charged up further.

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