Title (en)

POWER CONVERTER

Title (de)

STROMWANDLER

Title (fr)

CONVERTISSEUR ÉLECTRIQUE

Publication

EP 3381118 A1 20181003 (EN)

Application

EP 16804880 A 20161125

Priority

- GB 201520961 A 20151127
- GB 2016053713 W 20161125

Abstract (en)

[origin: WO2017089821A1] A power converter for converting direct current (DC) to alternating current (AC), comprising: a first input terminal (1) and a second input terminal (2); a first output terminal (3) and a second (4) output terminal; a first subcircuit (5) connecting the first input terminal (1) and the second output terminal (4) to the first output terminal (3), and a second subcircuit (6) connecting the second input terminal (2) and the second output terminal (4) to the first output terminal (3);a first capacitance (C1) connecting the first input terminal to the second output terminal;a second capacitance (C2) connecting the second input terminal (2) to the second output terminal (4); and a controller (10); in which each of the first (5) and the second (6) subcircuits comprises: a first current path (5a, 5b) joining the first (1) or second (2) input terminal respectively to the first output terminal (3) through a junction (7a, 7b); a second current path (6a, 6b) joining the second output terminal (4) to the first output terminal (4) through a junction (8a, 8b); a floating capacitor (C3, C4) joining the junctions (7a, 7b, 8a, 8b) of the first (5a, 5b) and second (6a, 6b) current paths; the first current path (5a, 5b) comprising first (S1, S2) and second (S5, S6) controllable switching elements, the first (S1, S2) and second (S5, S6) controllable switching elements being provided in series between the respective first (1) or second (2) input terminal to the first output terminal (3), either side of the junction (7a, 7b) of the first current path (5a, 5b); the second current path (6a, 6b) comprising a third controllable switching element (S3, S4) and first (D7, D8) and second (D9, D10) switching elements provided in series between the second output terminal (4) and the first output terminal (3), with the first switching element (D7, D8) being connected to the second output terminal (4), and the second switching element (D9, D10) and the third controllable switching element (S3, S4) being connected to the first output terminal (3) on the other side of the junction (8a, 8b) of the second current path (6a, 6b) to the first switching element (D7, D8); and in which the controller (10) is arranged so as to control the operation of each controllable switching element (S1, S2, S3, S4, S5,S6).

IPC 8 full level

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CPC (source: EP US)

H02M 7/483 (2013.01 - EP US); **H02M 7/4837** (2021.05 - EP US); H02M 1/0095 (2021.05 - EP US); H02M 7/487 (2013.01 - EP)

Citation (search report)

See references of WO 2017089821A1

Designated contracting state (EPC)

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