

Title (en)

VOLTAGE CONVERSION SYSTEM AND MOTOR VEHICLE COMPRISING SUCH A SYSTEM

Title (de)

SPANNUNGSWANDLUNGSSYSTEM UND KRAFTFAHRZEUG MIT SOLCH EINEM SYSTEM

Title (fr)

SYSTÈME DE CONVERSION DE TENSION ET VÉHICULE AUTOMOBILE COMPORTANT UN TEL SYSTÈME

Publication

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Application

EP 22743773 A 20220629

Priority

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Abstract (en)

[origin: WO2023275202A1] The invention relates to a system comprising: - input terminals (Vc+, G1) and main output terminals (V48+, G2); and - a first DC-DC converter (112) connected between the input terminals (Vc+, G1) and the main output terminals (V48+, G2) and comprising a first galvanic isolation transformer (T1, T2). It also comprises: - a second DC-DC converter (118) connected between the input terminals (Vc+, G1) and the output terminals (V48+, G2) and comprising a second galvanic isolation transformer (T3); and - a control device (126) designed, in a forward mode, to activate the first converter (112) and deactivate the second converter (118) so that the system (108) transfers electric power in a forward direction, that is to say from the input terminals (Vc+, GND1) to the main output terminals (V48+, G2), and, in a reverse mode, to activate the second converter (118) and deactivate the first converter (112) so that the system (108) transfers electric power in a reverse direction, that is to say from the main output terminals (V48+, G2) to the input terminals (Vc+, GND1). The second transformer (T3) has a transformation ratio (M'), in the reverse direction, that is larger than a transformation ratio (M), in the reverse direction, of the first transformer (T1, T2).

IPC 8 full level

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