

Title (en)
DC-TO-DC CONVERTER DEVICE FOR A WIND TURBINE, AN ELECTRIC DRIVE SYSTEM OR AN INDUSTRIAL DC SUPPLY SYSTEM, AND OPERATING METHOD

Title (de)
DC/DC-WANDLERVORRICHTUNG FÜR EINE WINDKRAFTANLAGE, EIN ELEKTRISCHES ANTRIEBSYSTEM, ODER FÜR EIN INDUSTRIELLES DC-VERSORGUNGSNETZ UND BETRIEBSVERFAHREN

Title (fr)
DISPOSITIF CONVERTISSEUR C.C.-C.C. POUR UNE ÉOLIENNE, SYSTÈME D'ENTRAÎNEMENT ÉLECTRIQUE OU SYSTÈME D'ALIMENTATION C.C INDUSTRIEL ET PROCÉDÉ DE FONCTIONNEMENT

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Application
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Abstract (en)
[origin: WO2022207512A1] Disclosed is a DC-to-DC converter device (1) for operating a wind turbine, an electric drive system or an industrial DC-to-DC supply system (3) with electric power, in particular by means of a DC link of an AC-to-DC converter (400) of a DC energy source or DC energy store (8), said DC link being able to be coupled to the DC-to-DC converter device (1) which comprises: - an input DC link (500) that includes a number of DC link capacitors (501, 502) which are connected between a positive input conductor (401) and a negative input conductor (402); and - a DC-to-DC converter (600) which is connected in series to the input DC link (500) and includes a first half-bridge (H1) connected to the positive input conductor (401) as well as a second half-bridge (H2) connected to the negative input conductor (402), the center tap (M1) of the first half-bridge (H1) and the center tap (M2) of the second half-bridge (H2) being connected via a choke (605). A secondary aspect of the invention relates to a method for operating the DC-to-DC converter device, in particular to operate a pitch drive or yaw drive of a wind turbine, of an electric drive or of an industrial DC supply system.

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