

Title (en)

CONTROL DEVICE, INVERTER, ASSEMBLY HAVING AN INVERTER AND AN ELECTRIC MACHINE, METHOD FOR OPERATING AN INVERTER AND COMPUTER PROGRAM

Title (de)

STEUEREINRICHTUNG, WECHSELRICHTER, ANORDNUNG MIT EINEM WECHSELRICHTER UND EINER ELEKTRISCHEN MASCHINE, VERFAHREN ZUM BETREIBEN EINES WECHSELRICHTERS SOWIE COMPUTERPROGRAMM

Title (fr)

DISPOSITIF DE COMMANDE, ONDULEUR, ENSEMBLE COMPRENANT UN ONDULEUR ET UNE MACHINE ÉLECTRIQUE, PROCÉDÉ DE FONCTIONNEMENT D'UN ONDULEUR ET PROGRAMME INFORMATIQUE

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Application

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Abstract (en)

[origin: WO2021018827A1] The invention relates to a control device (8) for an inverter (2) supplying an electric machine (3), wherein the control device (8) is designed to provide pulse-width modulated switch signals (15) with a carrier frequency for controlling switch elements (12) of the inverter (2), wherein the control device (8) is designed to determine the carrier frequency within at least one operating range (22, 23) according to operating point information describing an operating point defined by a rotational speed and a torque of the electric machine (3), in such a way that the carrier frequency within the at least one operating range (22, 23) is reduced relative to a maximum carrier frequency operating point, at which a maximum carrier frequency is specified in the operating range.

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