

Title (en)

CONTROL UNIT FOR AN INVERTER LOADED BY A RESONANT LOAD NETWORK

Title (de)

STEUEREINRICHTUNG FÜR EINEN MIT EINEM RESONANTEN LASTNETZWERK BELASTETEN WECHSELRICHTER

Title (fr)

DISPOSITIF DE COMMANDE POUR UN ONDULEUR CHARGÉ PAR UN RÉSEAU DE CHARGE RÉSONANT

Publication

EP 2795785 A1 20141029 (DE)

Application

EP 12815672 A 20121219

Priority

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- EP 2012076217 W 20121219

Abstract (en)

[origin: WO2013104503A1] The invention relates to an inverter having at least two switching means (S1, S2, S3, S4) for feeding a resonant circuit (LS, CS) from a source (Uin, Izk), wherein a control unit of the inverter controls the switching means (S1, S2, S3, S4), characterized in that the control unit controls the switching means (S1, S2, S3, S4) in such a manner that in a first mode A, the inverter feeds the resonant circuit (LS, CS) via the switching means from the source (Uin, Izk), and in a second mode B, the resonant circuit (LS, CS) is decoupled from the source (Uin, Izk), wherein the control unit switches back and forth between the two modes A and B for adjusting a nominal voltage (Ip_soll) in the resonant circuit (LS, CS) or a nominal voltage (Up_soll) on the resonant circuit (LS, CS).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2013104503A1

Citation (examination)

HIDEAKI FUJITA ET AL: "Pulse-Density-Modulated Power Control of a 4 kW, 450 kHz Voltage-Source Inverter for Induction Melting Applications", IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 32, no. 2, 1 April 1996 (1996-04-01), XP011021970, ISSN: 0093-9994

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