

Title (en)

DC-DC CONVERTER WITH BRIDGE CIRCUIT FOR VOLTAGE-FREE SWITCHING, AND ASSOCIATED METHOD

Title (de)

DC-DC-WANDLER MIT BRÜCKENSCHALTSTRECKE ZUM SPANNUNGSLOSEN SCHALTEN SOWIE ZUGEHÖRIGES VERFAHREN

Title (fr)

CONVERTISSEUR CONTINU-CONTINU COMPRENANT UN CIRCUIT DE PONT POUR LA MISE HORS TENSION AINSI QUE PROCÉDÉ CORRESPONDANT

Publication

**EP 3915186 A1 20211201 (DE)**

Application

**EP 20701433 A 20200120**

Priority

- DE 102019101748 A 20190124
- EP 2020051222 W 20200120

Abstract (en)

[origin: WO2020152076A1] The invention relates to a bridge circuit (101) having: a first (A) and a second (C) high-side switch; a first (B) and a second (D) low-side switch; a transformer (T1) having a primary coil (T1A) and a secondary coil (T1B); a coil (T3B); a current impressing device (T3A); wherein: the first high-side switch (A) and the first low-side switch (B) are connected in series at a first bridge connection (105) in order to form a first bridge branch (107); the second high-side switch (C) and the second low-side switch (D) are connected in series at a second bridge connection (106) in order to form a second bridge branch (108); the first (107) and second (108) bridge branches are connected in parallel at a first (102) and a second (103) input connection; the secondary coil (T1B) has a first (110a) and a second (110b) output connection; the primary coil (T1A) and the coil (T3B) are connected in series in order to connect the first bridge connection to the second bridge connection; and the current impressing device (T3A) is configured to impress a predefined current into the coil (T3B) at a predefined point in time.

IPC 8 full level

**H02M 3/335** (2006.01); **H02M 1/00** (2006.01); **H02M 3/337** (2006.01)

CPC (source: EP US)

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DOCDB simple family (publication)

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