

Title (en)

HALF-BRIDGE ELECTRONIC DEVICE COMPRISING TWO SYSTEMS FOR OPTIMISING DEAD-TIME BETWEEN THE SWITCHING OPERATIONS OF A HIGH LEVEL SWITCH AND OF A LOW LEVEL SWITCH

Title (de)

ELEKTRONISCHE HALBBRÜCKENVORRICHTUNG MIT ZWEI SYSTEMEN ZUR OPTIMIERUNG DER STILLSTANDSZEIT ZWISCHEN DEN SCHALTOperationen eines Hochpegelschalters und eines Niedrigpegelschalters

Title (fr)

DISPOSITIF ELECTRONIQUE EN DEMI-PONT COMPRENANT DEUX SYSTEMES POUR L'OPTIMISATION DES TEMPS MORTS ENTRE LES COMMUTATIONS D'UN INTERRUPTEUR NIVEAU HAUT ET D'UN INTERRUPTEUR NIVEAU BAS

Publication

EP 3797471 A1 20210331 (FR)

Application

EP 19732078 A 20190514

Priority

- FR 1854247 A 20180522
- FR 2019051091 W 20190514

Abstract (en)

[origin: WO2019224451A1] The invention relates to a half-bridge electronic device (100) comprising, in series, a low level switch (1) and a high level switch (2) connected at a central point (3), and respectively controlled by a first (SLS) and a second (SHS) activation/deactivation signal. The device (100) comprises: • a first (10) and a second (20) synchronisation system configured to interpret a variation in the voltage (Vm) at the central point (3), respectively following a falling edge and following a rising edge, and to respectively generate a first (ATON-LS) and a second (ATON-HS) synchronisation signal separate from the first; • a first (18) and a second (28) AND type logic gate respectively combining the first synchronisation signal (ATON-LS) with a first control signal (PWM-LS) and the second synchronisation signal (ATON-HS) with a second control signal (PWM-HS), in order to respectively form the first (SLS) and second (SHS) activation/deactivation signals.

IPC 8 full level

H02M 1/38 (2007.01); **H02M 3/158** (2006.01)

CPC (source: EP US)

H02M 1/38 (2013.01 - EP US); **H02M 3/158** (2013.01 - US); **H02M 3/1588** (2013.01 - EP); **Y02B 70/10** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019224451 A1 20191128; CN 112154594 A 20201229; EP 3797471 A1 20210331; FR 3081633 A1 20191129; FR 3081633 B1 20210618; US 11695326 B2 20230704; US 2021159774 A1 20210527

DOCDB simple family (application)

FR 2019051091 W 20190514; CN 201980034059 A 20190514; EP 19732078 A 20190514; FR 1854247 A 20180522; US 201917058101 A 20190514