

Title (en)
BOOSTER CIRCUIT WITH DC BUS PRECHARGE CIRCUIT

Title (de)
HOCHSETZSTELLER MIT GLEICHSTROMBUS-VORLADESCHALTUNG

Title (fr)
CIRCUIT ÉLEVATEUR DE TENSION AVEC CIRCUIT DE PRECHARGE DE BUS C.C.

Publication
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Application
EP 08872316 A 20081120

Priority
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• FR 0708144 A 20071120

Abstract (en)
[origin: WO2009101269A1] The present invention relates to a voltage step-up circuit (100). One particularly advantageous application of the invention is in the field of 12 V/42 V DC/DC power converters supplied by the power system onboard a motor vehicle (12 V battery voltage). The circuit (100) according to the invention comprises a voltage source (S) having a first terminal (+BAT) and a second terminal, at least one inductor (Lb), the first terminal of which is connected to the first terminal (+BAT) of the voltage source (S), at least one diode (Db), the anode of which is connected to the second terminal of the inductor (Lb), at least one capacitor (Cb), the first terminal of which is connected to the cathode of the diode (Db), at least one current switch (Mb) connected between the second terminal of the inductor (Lb) and the second terminal of the voltage source (S), and a second current switch (M) connected between the second terminal of the capacitor (Cb) and the second terminal of the voltage source (S). The circuit (100) according to the invention further includes means (D) for allowing the current to flow from the second terminal of the capacitor (Cb) to the first terminal (+BAT) of the voltage source (S).

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Citation (search report)
See references of WO 2009101269A1

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