

Title (en)

MOTOR CONTROL CIRCUIT FOR A RAIL VEHICLE AND METHOD FOR THE OPERATION THEREOF

Title (de)

MOTORANSTEUERSCHALTUNG FÜR EIN SCHIENENFAHRZEUG UND VERFAHREN ZU DEREN BETRIEB

Title (fr)

CIRCUIT DE COMMANDE DE MOTEUR POUR UN VÉHICULE SUR RAIL ET PROCÉDÉ POUR SON EXPLOITATION

Publication

EP 2250043 A1 20101117 (DE)

Application

EP 09721112 A 20090302

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Abstract (en)

[origin: WO2009112389A1] The invention relates to a motor activation circuit (10) for a rail vehicle having a boost converter, which is disposed at the input of the motor activation circuit, and which converts a mains DC voltage (U_{dc}), which is applied at the input of the motor activation circuit, into an intermediate circuit DC voltage (U_{zk}), a pulse rectifier, which is downstream from the boost converter, and which can be connected at the output to a drive motor of the rail vehicle and is capable of converting the intermediate circuit DC voltage of the boost converter into a motor drive voltage for driving the drive motor, and a control unit, which activates the boost converter and which activates the boost converter in operation such that said converter generates the predetermined rated intermediate circuit DC voltage for a mains DC voltage below a predetermined rated intermediate circuit DC voltage as the intermediate circuit DC voltage. According to the invention, the control unit is designed such that it activates the boost converter (20) for a mains DC voltage (U_{dc}) above the rated intermediate circuit DC voltage (U_{nenn}) such that said converter generates an intermediate circuit DC voltage (U_{zk}) identical to the mains DC voltage (U_{dc}) or an intermediate circuit DC voltage, which is greater at most by a predetermined offset value (U_{offset}), and feeds said intermediate circuit DC voltage into the pulse rectifier.

IPC 8 full level

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Citation (search report)

See references of WO 2009112389A1

Citation (examination)

- US 2005068001 A1 20050331 - SKAUG KENNETH [DK], et al
- US 2006119337 A1 20060608 - TAKAHASHI TOSHIO [US], et al
- JP S62200413 A 19870904 - TOSHIBA CORP
- CN 200969057 Y 20071031 - BEIJING SUPLET CO LTD [CN]

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