

Title (en)

DRIVE UNIT FOR AN ELECTRICALLY DRIVEN VEHICLE

Title (de)

ANTRIEBSEINHEIT FÜR EIN ELEKTRISCH ANGETRIEBENES FAHRZEUG

Title (fr)

UNITÉ D'ENTRAÎNEMENT POUR VÉHICULE À PROPULSION ÉLECTRIQUE

Publication

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Application

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Abstract (en)

[origin: WO2021239807A1] The invention relates to a drive unit (12) for an electrically driven vehicle (10), comprising an inverter module (22), an electric machine (18) and a stator (28) that can be actuated by the inverter module (22). The rotor (26) of the electric machine (18) is rotationally drivingly connected to at least one shaft (24) of the drive unit (12), which is rotatably mounted in a respective associated housing (18a) by means of a bearing assembly (50). The housing (18a) and the inverter module (22) are earthed. The drive unit (12) also has an earthed electrical connection with low impedance between the shaft (24) and the inverter module (22), in order to generate a short circuit when there is a potential difference between the shaft (24) and the inverter module (22), wherein potential balancing means (42) with low impedance are provided between the shaft (24) and the associated housing (18a). According to the invention, the shaft (24) is designed as a rotor shaft (24) or as a transmission shaft (36), wherein the bearing assembly (50) has two axially spaced apart bearings (50a, 50b) and wherein the potential balancing means (42) is formed axially between the two bearings (50a, 50b).

IPC 8 full level

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