

Title (en)

DRIVETRAIN SYSTEM FOR AN ELECTRIFIED VEHICLE AND METHOD OF COOLING THE DRIVETRAIN SYSTEM

Title (de)

ANTRIEBSSYSTEM FÜR EIN ELEKTRIFIZIERTES FAHRZEUG UND VERFAHREN ZUR KÜHLUNG DES ANTRIEBSSYSTEMS

Title (fr)

SYSTÈME DE CHAÎNE CINÉMATIQUE DESTINÉ À UN VÉHICULE ÉLECTRIFIÉ ET PROCÉDÉ DE REFROIDISSEMENT DU SYSTÈME DE CHAÎNE CINÉMATIQUE

Publication

EP 4082099 A4 20240207 (EN)

Application

EP 20896808 A 20201201

Priority

- CN 201911213242 A 20191202
- CN 2020133069 W 20201201

Abstract (en)

[origin: WO2021109980A1] Provided is a drivetrain system for an electrified vehicle. The drivetrain system comprises an electric motor (2) comprising a rotor and a stator; a power inverter (3) configured for supplying the stator with electric energy; a reducer (4) configured for receiving torque provided by the rotor and comprising a transmission shaft; the electric motor (2), the power inverter (3) and the reducer (4) are integrated as a drivetrain assembly (1). The drivetrain system further comprises: a cooling circuit (5) configured for being flowed through with coolant and distributing the coolant throughout the drivetrain assembly (1); the cooling circuit (5) comprising a cooling channel (33) arranged inside the power inverter (3), the cooling channel (33) comprising a coolant retaining section (35) for retaining the coolant from the cooling circuit (5), an inlet (31) for receiving the coolant and an outlet (32) for discharging the coolant. Also provided is a method of cooling the drivetrain system for an electrified vehicle.

IPC 8 full level

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CPC (source: CN EP)

B60K 11/02 (2013.01 - EP); **B60K 11/04** (2013.01 - CN EP); **H02K 5/203** (2021.01 - EP); **H02K 9/197** (2013.01 - EP); **H02K 11/33** (2016.01 - EP); **B60K 2001/003** (2013.01 - EP); **H02K 7/116** (2013.01 - EP); **H02K 2213/03** (2013.01 - EP); **Y02T 10/62** (2013.01 - EP); **Y02T 10/64** (2013.01 - EP)

Citation (search report)

- [X] US 2005211490 A1 20050929 - SHIMIZU HISAYA [JP], et al
- [X] US 2018159403 A1 20180607 - YOKOYAMA NOBUAKI [JP], et al
- [X] JP 4186109 B2 20081126
- See also references of WO 2021109980A1

Designated contracting state (EPC)

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