

Title (en)

DRIVE DEVICE FOR AN ELECTRICALLY DRIVEN AXLE OF A MOTOR VEHICLE

Title (de)

ANTRIEBSVORRICHTUNG FÜR EINE ELEKTRISCH ANGETRIEBENE ACHSE EINES KRAFTFAHRZEUGS

Title (fr)

DISPOSITIF D'ENTRAÎNEMENT POUR UN ESSIEU À ENTRAÎNEMENT ÉLECTRIQUE D'UN VÉHICULE AUTOMOBILE

Publication

**EP 3853054 A1 20210728 (DE)**

Application

**EP 19773758 A 20190917**

Priority

- DE 102018215918 A 20180919
- EP 2019074787 W 20190917

Abstract (en)

[origin: WO2020058235A1] The invention relates to a drive device (1) for an electrically driven axle (5) of a motor vehicle, comprising at least one electric machine (EM1, EM2) and a shiftable transmission (2) which is connected downstream of the at least one electric machine (EM1, EM2) in the direction of force flow in the traction mode and which is connected to a differential (3) for distributing the drive torque to the wheels (4) of the axle (5), wherein the transmission (2) comprises a first and a second planetary gear set (6, 7) which are connected one behind the other, wherein the drive of the transmission (2) is driven via an external toothing of the ring gear (8) of the first planetary gear set (6), wherein the output of the first planetary gear set (6) takes place via the planet carrier (9) which is connected to the sun gear (11) of the second planetary gear set (7) in a rotationally fixed manner, wherein the sun gear (10) of the first planetary gear set (6) can be detachably coupled to a housing (G) via a first switching element (14), wherein the ring gear (12) of the second planetary gear set (7) is coupled to a housing (G), wherein the output of the transmission (2) takes place via the planet carrier (13) of the second planetary gear set (7), and wherein a second shifting element (15) is provided, by the closure of which the first planetary gear set (6) of the transmission (2) can be blocked.

IPC 8 full level

**B60K 1/00** (2006.01); **B60K 1/02** (2006.01)

CPC (source: EP US)

**B60K 1/00** (2013.01 - EP); **B60K 1/02** (2013.01 - EP US); **B60K 17/046** (2013.01 - US); **B60K 2001/001** (2013.01 - EP US); **B60Y 2200/14** (2013.01 - EP); **B60Y 2400/4244** (2013.01 - EP); **B60Y 2400/73** (2013.01 - EP)

Citation (search report)

See references of WO 2020058235A1

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)

**DE 102018215918 A1 20200319**; CN 112752666 A 20210504; EP 3853054 A1 20210728; US 11780328 B2 20231010; US 2021347253 A1 20211111; WO 2020058235 A1 20200326

DOCDB simple family (application)

**DE 102018215918 A 20180919**; CN 201980061229 A 20190917; EP 19773758 A 20190917; EP 2019074787 W 20190917; US 201917277338 A 20190917