

Title (en)
ELECTRIC DRIVE FOR A VEHICLE

Title (de)
ELEKTRISCHER ANTRIEB FÜR EIN FAHRZEUG

Title (fr)
ENTRAÎNEMENT ÉLECTRIQUE POUR UN VÉHICULE

Publication
EP 4103418 A1 20221221 (DE)

Application
EP 21705463 A 20210211

Priority
• DE 102020201758 A 20200212
• EP 2021053285 W 20210211

Abstract (en)
[origin: WO2021160717A1] The invention relates to an electric drive for a vehicle, comprising at least one electric machine (EM) in a housing (1), the electric machine having a rotor shaft as a driveshaft (2), which can be coupled to an intermediate shaft (3) via at least one spur gear, wherein the intermediate shaft (3) is coupled to an output differential (4) for driving output shafts, wherein at least one oil pump (7) is provided in order to supply oil, wherein a pump shaft (8) of the oil pump (7) can be driven independently of the rotational direction of the intermediate shaft (3) in the same rotational direction via a first drive path with at least one first freewheel (9) and via a second drive path with at least one second freewheel (10) and with at least one differential gear (25), and wherein at least the first freewheel (9) and the second freewheel (10), as well as the differential gear (25), are arranged radially within the intermediate shaft (3) that is designed as a hollow shaft. The invention also relates to a vehicle comprising an electric drive.

IPC 8 full level
B60K 1/00 (2006.01); **B60K 17/04** (2006.01)

CPC (source: EP US)
B60K 1/00 (2013.01 - EP US); **B60K 17/043** (2013.01 - EP); **B60K 25/06** (2013.01 - US); **F16H 37/082** (2013.01 - US); **F16H 57/037** (2013.01 - US); **F16H 57/0436** (2013.01 - US); **B60K 2001/001** (2013.01 - EP US); **B60K 2001/003** (2013.01 - EP); **B60Y 2306/03** (2013.01 - EP); **B60Y 2306/05** (2013.01 - EP); **F16H 2057/02034** (2013.01 - US); **F16H 2057/02052** (2013.01 - US)

Citation (search report)
See references of WO 2021160717A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
DE 102020201758 A1 20210812; CN 115052773 A 20220913; EP 4103418 A1 20221221; US 2023271499 A1 20230831;
WO 2021160717 A1 20210819

DOCDB simple family (application)
DE 102020201758 A 20200212; CN 202180013046 A 20210211; EP 2021053285 W 20210211; EP 21705463 A 20210211;
US 202117904147 A 20210211