

Title (en)

HYBRID DRIVE TRAIN FOR A HYBRID-DRIVE MOTOR VEHICLE

Title (de)

HYBRIDANTRIEBSSTRANG FÜR EIN HYBRIDGETRIEBENES KRAFTFAHRZEUG

Title (fr)

GROUPE MOTOPROPULSEUR HYBRIDE D'UN VÉHICULE AUTOMOBILE À PROPULSION HYBRIDE

Publication

**EP 3532323 A1 20190904 (DE)**

Application

**EP 17788232 A 20171025**

Priority

- DE 102016221061 A 20161026
- EP 2017077219 W 20171025

Abstract (en)

[origin: WO2018077911A1] The invention relates to a hybrid drive train for a hybrid-drive vehicle, having a double clutch transmission (1), which can be shifted into different translation levels by means of shifting elements, and which has spur gear sets, which can be shifted by the shifting elements and which form wheel planes (E2, V3, E1, V4), each of which are allocated to a first sub-transmission (T1) and a second sub-transmission (T2), of which each sub-transmission (T1, T2) has one input shaft (37, 43) each, and the two sub-transmissions (T1, T2) have a common output shaft (17), wherein the two input shafts (37, 43) are arranged coaxially to each other and can each be connected by a power-shiftable clutch (LK1, LK2) alternating with an internal combustion engine shaft (3) of an internal combustion engine (7), and wherein an electric machine (11) can be connected on the double clutch transmission (1) by means of shifting elements (K1, K2, SE-E, SE-D). According to the invention, one of the wheel planes (E1, V4) of the first sub-transmission (T1) is designed as a first hybrid wheel plane (E1) and one of the wheel planes (E2, V3) of the second sub-transmission (T2) is designed as a second hybrid wheel plane (E2). The first and second hybrid wheel planes (E1, E2) can additionally each be drivingly connected to an electric machine shaft (9) of the electric machine (11) by means of the shifting elements (K1, K2, SE-E, SE-D).

IPC 8 full level

**B60K 6/36** (2007.10); **B60K 6/48** (2007.10); **B60K 6/547** (2007.10); **F16H 3/00** (2006.01); **F16H 3/089** (2006.01)

CPC (source: EP US)

**B60K 6/36** (2013.01 - EP US); **B60K 6/48** (2013.01 - EP US); **B60K 6/547** (2013.01 - EP US); **F16H 3/006** (2013.01 - EP US);  
**B60K 2006/4841** (2013.01 - EP US); **F16H 2200/0043** (2013.01 - EP US); **Y02T 10/62** (2013.01 - EP US)

Citation (search report)

See references of WO 2018077911A1

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 102016221061 A1 20180426; DE 102016221061 B4 20230517;** CN 109890638 A 20190614; EP 3532323 A1 20190904;  
US 10792989 B2 20201006; US 2019263246 A1 20190829; WO 2018077911 A1 20180503

DOCDB simple family (application)

**DE 102016221061 A 20161026;** CN 201780065579 A 20171025; EP 17788232 A 20171025; EP 2017077219 W 20171025;  
US 201716341657 A 20171025