

Title (en)

DRIVE UNIT HAVING COOLANT GUIDANCE SYSTEM FOR SUPPLYING AND DISTRIBUTING A FLUID FLOW BETWEEN TWO GEARBOX INPUT SHAFTS

Title (de)

ANTRIEBSEINHEIT MIT KÜHLMITTELLEITSYSTEM ZUR ZUFÜHRUNG UND AUFTEILUNG EINES FLUIDSTROMS ZWISCHEN ZWEI GETRIEBEEINGANGSWELLEN

Title (fr)

UNITÉ D'ENTRAÎNEMENT COMPRENANT UN SYSTÈME DE GUIDAGE DE FLUIDE DE REFROIDISSEMENT POUR L'ACHEMINEMENT ET LA RÉPARTITION D'UN FLUX DE FLUIDE ENTRE DEUX ARBRES D'ENTRÉE DE TRANSMISSION

Publication

EP 3994369 A1 20220511 (DE)

Application

EP 20740201 A 20200604

Priority

- DE 102019118079 A 20190704
- DE 2020100465 W 20200604

Abstract (en)

[origin: WO2021000988A1] The invention relates to a drive unit (1) for a motor vehicle drivetrain, having a double clutch (2), two gearbox input shafts (4, 5), which are arranged coaxially relative to each other and mounted rotatably relative to each other via a rolling bearing (3), wherein a first partial clutch (6a) of the double clutch (2) is operatively connected to a first gearbox input shaft (4) and a second partial clutch (6b) of the double clutch (2) is operatively connected to a second gearbox input shaft (5), which is slid onto the first gearbox input shaft (4) radially from the outside, and having a coolant guidance system (8), which is implemented in part by a radial gap (7) reserved radially between the two gearbox input shafts (4, 5). The coolant guidance system (8) is designed such that a first partial flow (9a), which leads axially to the rolling bearing (3), and a second partial flow (9b), which is axially opposed to the first partial flow (9a) and is larger than the first partial flow (9a), are generated during operation. The two gearbox input shafts (4, 5) and the rolling bearing (3) are designed such that a fluid flow (11) flowing radially inward through an input opening (10) of the second gearbox input shaft (5) is divided into the first and second partial flow (9a, 9b) during operation within the radial gap (7).

IPC 8 full level

F16D 21/06 (2006.01); **F16D 25/0638** (2006.01)

CPC (source: CN EP KR)

F16C 33/6674 (2013.01 - EP); **F16D 25/0638** (2013.01 - CN); **F16D 25/082** (2013.01 - EP KR); **F16D 25/10** (2013.01 - EP KR); **F16D 25/12** (2013.01 - CN); **F16D 25/123** (2013.01 - CN EP KR); **F16C 19/463** (2013.01 - EP); **F16C 2240/02** (2013.01 - EP); **F16C 2361/61** (2013.01 - EP); **F16D 2021/0661** (2013.01 - EP KR); **F16D 2300/08** (2013.01 - EP)

Citation (search report)

See references of WO 2021000988A1

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 102019118079 A1 20210107; **DE 102019118079 B4 20210318**; CN 113939667 A 20220114; EP 3994369 A1 20220511; KR 20220029583 A 20220308; WO 2021000988 A1 20210107

DOCDB simple family (application)

DE 102019118079 A 20190704; CN 202080042660 A 20200604; DE 2020100465 W 20200604; EP 20740201 A 20200604; KR 20217042376 A 20200604