

Title (en)

TORQUE TRANSMISSION UNIT, DRIVE TRAIN AND METHOD FOR OPERATING A TORQUE TRANSMISSION UNIT

Title (de)

DREHMOMENTÜBERTRAGUNGSEINRICHTUNG, ANTRIEBSSTRANG UND VERFAHREN ZUM BETRIEB EINER DREHMOMENTÜBERTRAGUNGSEINRICHTUNG

Title (fr)

UNITÉ DE TRANSMISSION DE COUPLES, CHAÎNE CINÉMATIQUE ET PROCÉDÉ D'ACTIONNEMENT D'UNE UNITÉ DE TRANSMISSION DE COUPLES

Publication

**EP 4048923 A1 20220831 (DE)**

Application

**EP 20756755 A 20200723**

Priority

- DE 102019128609 A 20191023
- DE 2020100654 W 20200723

Abstract (en)

[origin: WO2021078320A1] The invention relates to a torque transmission unit (15) and a drive train (10), wherein the torque transmission unit (15) comprises a first input side (35), a second input side (40), an output side (45), a hydrodynamic converter (65) and a lock-up clutch (70), wherein the first input side (35) can be torque-transmittingly connected to an internal combustion engine (20) and a first torque (M1) can be introduced into the first input side (35), wherein the torque transmission unit (15) has a freewheel (75), wherein the freewheel (75) is arranged downstream of the hydrodynamic converter (65) and the second input side (40) is arranged downstream of the freewheel (75) in a torque flow of the first torque (M1) from the first input side (35) to the output side (45), wherein the freewheel (75) is designed such that, in a first freewheel operating state, it torque-transmittingly connects the hydrodynamic converter (65) to the output side (45) for the transmission of the first torque (M1) from the first input side (35) to the output side (45) when the lock-up clutch (70) is open, and wherein the freewheel (75) is designed such that, in a second freewheel operating state, it decouples the hydrodynamic converter from the output side (45), in order to at least partially prevent a transmission of the second torque (M2) from the second input side (40) into the hydrodynamic converter (65).

IPC 8 full level

**F16H 45/02** (2006.01)

CPC (source: CN EP US)

**B60K 6/383** (2013.01 - CN US); **B60K 6/387** (2013.01 - US); **B60K 6/40** (2013.01 - US); **F16H 45/02** (2013.01 - CN EP US); **B60K 6/442** (2013.01 - US); **B60Y 2200/92** (2013.01 - US); **F16H 2045/005** (2013.01 - US); **F16H 2045/0226** (2013.01 - CN EP US); **F16H 2045/0247** (2013.01 - CN EP); **F16H 2045/0252** (2013.01 - US); **Y02T 10/62** (2013.01 - EP)

Citation (search report)

See references of WO 2021078320A1

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 102019128609 A1 20210429**; CN 114555978 A 20220527; EP 4048923 A1 20220831; US 2022379709 A1 20221201; WO 2021078320 A1 20210429

DOCDB simple family (application)

**DE 102019128609 A 20191023**; CN 202080072436 A 20200723; DE 2020100654 W 20200723; EP 20756755 A 20200723; US 202017770662 A 20200723