

Title (en)

CONNECTING DEVICE FOR OUTSIDE A VARIABLE-SPEED TRANSMISSION

Title (de)

VERBINDUNGSVORRICHTUNG FÜR AUSSERHALB EINES ZAHNRÄDERWECHSELGETRIEBES

Title (fr)

DISPOSITIF DE LIAISON POUR L'EXTÉRIEUR D'UNE BOÎTE DE VITESSES À ENGRÈNAGES

Publication

**EP 2721314 A1 20140423 (DE)**

Application

**EP 12718197 A 20120502**

Priority

- DE 102011077748 A 20110617
- EP 2012057966 W 20120502

Abstract (en)

[origin: WO2012171709A1] The invention relates to a connecting device of a vehicle drive train, outside a variable-speed transmission, for the rotary coupling of a vehicle shaft (12) and of a vehicle drive train element (13) which is rotatable relative thereto, having a sliding sleeve (10) which is arranged non-rotatably and axially displaceably between at least one first and second position on the vehicle shaft (12), wherein, in the first position, the sliding sleeve (10) brings about rotary decoupling of the vehicle shaft (12) from the vehicle drive train element (13) and, in the second position, brings about the rotary coupling thereof, and having actuating means (16, 17, 18) for displacing the sliding sleeve (10) between the first and second position, with at least one shift groove (16, 17) along a circumference of the sliding sleeve (10), and engagement means (18) for engaging in the shift groove (16, 17). According to the invention, the sliding sleeve (10) is moveable rotatably and axially with respect to the engagement means (18), wherein the shift groove (16, 17) is designed in the form of a radial cam such that, when the engagement means (18) engage in the shift groove (16, 17) and when the sliding sleeve (10) rotates with respect to the engagement means (18), the sliding sleeve (10) is moved axially by the shift groove (16, 17) between the first and second position.

IPC 8 full level

**F16D 11/10** (2006.01)

CPC (source: EP US)

**B60K 17/02** (2013.01 - EP US); **B60K 17/344** (2013.01 - EP US); **F16D 11/10** (2013.01 - EP US); **F16D 13/04** (2013.01 - EP US);  
**F16D 13/52** (2013.01 - EP US); **F16H 61/68** (2013.01 - US); **F16H 63/304** (2013.01 - EP US); **B60Y 2400/422** (2013.01 - EP US);  
**F16D 2023/123** (2013.01 - EP US); **F16H 63/18** (2013.01 - EP US); **F16H 2063/305** (2013.01 - EP US); **F16H 2063/3056** (2013.01 - EP US);  
**Y10T 74/20177** (2015.01 - EP US)

Citation (search report)

See references of WO 2012171709A1

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

DOCDB simple family (publication)

**DE 102011077748 A1 20121220**; EP 2721314 A1 20140423; US 2014116180 A1 20140501; US 9279497 B2 20160308;  
WO 2012171709 A1 20121220

DOCDB simple family (application)

**DE 102011077748 A 20110617**; EP 12718197 A 20120502; EP 2012057966 W 20120502; US 201214124775 A 20120502