

Title (en)

METHOD FOR SYNCHRONIZING A DOUBLE CLUTCH TRANSMISSION AND DOUBLE CLUTCH TRANSMISSION

Title (de)

VERFAHREN ZUR SYNCHRONISIERUNG EINES DOPPELKUPPLUNGSGETRIEBES UND DOPPELKUPPLUNGSGETRIEBE

Title (fr)

PROCÉDÉ DE SYNCHRONISATION D'UNE TRANSMISSION À DOUBLE EMBRAYAGE ET TRANSMISSION À DOUBLE EMBRAYAGE

Publication

EP 2689162 A1 20140129 (DE)

Application

EP 12703071 A 20120202

Priority

- DE 102011006004 A 20110324
- EP 2012051769 W 20120202

Abstract (en)

[origin: WO2012126663A1] A method for synchronizing a double clutch transmission and a double clutch transmission. In order to synchronize the rotational speed of at least nine forward gearspeeds of a transmission structure in which transmission input shafts (10, 11) are arranged coaxially one on top of the other and a transmission output shaft (12) is arranged coaxially behind the latter, in which the gearwheels (15, 16, 18, 19, 21, 22, 24, 25, 27, 28, 30, 31) of the forward gearspeeds are arranged in six wheel set levels (Z1, Z2, Z3, Z4, Z5, Z6), in which the gearwheels (32, 33, 34) of a reverse gearspeed are arranged in a separate wheel set level (ZR), in which at most eight gearspeed clutches (A, B, C, D, E, F, G, H) for the forward gearspeeds and one gearspeed clutch (I) for the reverse gearspeed are arranged in gearshift devices (1, 2, 3, 4, 5, 6) which can be activated to a certain extent in a double-sided fashion, in which at least partially progressive gearspeed increments can be formed between the forward gearspeeds, and in which the gearspeed clutches (A, C, D, E, F, G, H, I) are embodied as nonsynchronized shift elements, adaptation of the rotational speed of one or more of the gearspeed clutches (A, B, C, D, E, F, G, H), which is necessary for a change of gearspeed, is carried out, depending on demand, by actuating one or both of the input-side friction clutches (K1, K2) and controlling the rotational speed of the drive motor.

IPC 8 full level

F16H 3/00 (2006.01); **F16H 3/097** (2006.01); **F16H 61/04** (2006.01); **F16H 61/688** (2006.01)

CPC (source: EP US)

F16H 3/006 (2013.01 - EP US); **F16H 3/08** (2013.01 - US); **F16H 61/0403** (2013.01 - EP US); **F16H 61/688** (2013.01 - EP US); **F16H 63/502** (2013.01 - EP US); **F16H 2003/0933** (2013.01 - EP US); **F16H 2061/0407** (2013.01 - EP US); **F16H 2200/0065** (2013.01 - EP US); **Y10T 74/19233** (2015.01 - EP US)

Citation (search report)

See references of WO 2012126663A1

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 102011006004 A1 20120927; EP 2689162 A1 20140129; US 2014013881 A1 20140116; WO 2012126663 A1 20120927

DOCDB simple family (application)

DE 102011006004 A 20110324; EP 12703071 A 20120202; EP 2012051769 W 20120202; US 201214006831 A 20120202