

Title (en)
MULTI-STAGE TRANSMISSION

Title (de)
MEHRSTUFENGETRIEBE

Title (fr)
BOÎTE DE VITESSES À PLUSIEURS ÉTAGES

Publication
EP 2906856 A1 20150819 (DE)

Application
EP 13756488 A 20130904

Priority
• DE 102012218687 A 20121015
• EP 2013068234 W 20130904

Abstract (en)
[origin: WO2014060141A1] The invention relates to a multi-stage transmission comprising four planetary gear wheel sets (P1, P2, P3, P4), eight rotatable shafts (1, 2, 3, 4, 5, 6, 7, 8) and six shifting elements (03, 04, 05, 15, 17, 48), wherein the sun gear of the first planetary gear wheel set (P1) is connected to the fifth shaft (5), which can be connected to the drive shaft (1) by a first coupling (15) and can be coupled to the housing (G) via a third brake (05), wherein the drive shaft (1) can be connected via a second coupling (17) to the seventh shaft (7), connected to the web of the fourth planetary gear wheel set (P4) and the ring gear of the third planetary gear wheel set (P3), and is connected to the sun gear of the second planetary gear wheel set (P2), wherein the sixth shaft (6) is connected to the ring gear of the first planetary gear wheel set (P1), the web of the second planetary gear wheel set (P2) and the ring gear of the fourth planetary gear wheel set (P4) and the third shaft (3) is connected to the sun gear of the third planetary gear wheel set (P3) and the sun gear of the fourth planetary gear wheel set (P4) and can be coupled to the housing (G) via a first brake (03), wherein the fourth shaft (4) is connected to the web of the first planetary gear wheel set (P1), can be coupled to the housing (G) via a second brake (04) and can be connected via a third coupling (48) to the eighth shaft (8), which is connected to the ring gear of the second planetary gear wheel set (P2), and wherein the drive shaft (2) of the transmission is connected to the web of the third planetary gear wheel set (P3).

IPC 8 full level
F16H 3/66 (2006.01)

CPC (source: CN EP US)
F16H 3/66 (2013.01 - CN EP US); **F16H 2200/0065** (2013.01 - CN EP US); **F16H 2200/2012** (2013.01 - CN EP US);
F16H 2200/2046 (2013.01 - CN EP US); **F16H 2200/2094** (2013.01 - CN EP US)

Citation (search report)
See references of WO 2014060141A1

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 102012218687 A1 20140417; **DE 102012218687 B4 20210930**; CN 104718399 A 20150617; CN 104718399 B 20170419;
EP 2906856 A1 20150819; US 2015267782 A1 20150924; US 9377086 B2 20160628; WO 2014060141 A1 20140424

DOCDB simple family (application)
DE 102012218687 A 20121015; CN 201380053333 A 20130904; EP 13756488 A 20130904; EP 2013068234 W 20130904;
US 201314435956 A 20130904