

Title (en)

DIFFERENTIAL GEAR UNIT HAVING A CONTROLLED TORQUE AND SPEED DISTRIBUTION

Title (de)

DIFFERENTIALGETRIEBEEINHEIT MIT STEUERBARER DREHMOMENT- UND DREHZAHL VERTEILUNG

Title (fr)

ENSEMBLE DIFFERENTIEL A REPARTITION DU COUPLE ET DU REGIME COMMANDABLE

Publication

EP 1792104 A2 20070606 (DE)

Application

EP 05785260 A 20050915

Priority

- AT 2005000372 W 20050915
- AT 6752004 U 20040915

Abstract (en)

[origin: WO2006029434A2] The invention relates to a differential gear unit having a controlled torque and speed distribution, which comprises a housing (1), a differential gear (6), a superposition gear (7) and an auxiliary drive (8), whereby the differential gear (6) has an input member (11) driven by the vehicle engine, and two output members (15, 16) with an output shaft (3, 4). The superposition gear (7) is a planet gear that is connected to two members (15, 16) of the differential gear (6) and to the auxiliary drive (8). The aim of the invention is to provide a gear unit which allows to obtain an exact control even with a weak auxiliary drive. For this purpose, the superposition gear (7) comprises a first (22) and a second (27) sun gear, a first (20) and a second (25) internal gear and first (21) and second (26) planet gears mounted on a common planet carrier (28). The first (21) and the second (26) planet gears mesh with the first (22) and second sun gear (27), respectively, and with the first (20) and second internal gear (25), respectively.

IPC 8 full level

F16H 37/08 (2006.01); **B60K 6/365** (2007.10); **B60K 6/48** (2007.10); **B60K 17/16** (2006.01); **B60K 17/346** (2006.01); **B60K 23/04** (2006.01); **B60K 23/08** (2006.01); **F16H 48/30** (2012.01)

CPC (source: EP US)

B60K 6/365 (2013.01 - EP US); **B60K 6/48** (2013.01 - EP US); **B60K 17/16** (2013.01 - EP US); **B60K 17/3462** (2013.01 - EP US); **B60K 23/04** (2013.01 - EP US); **B60K 23/0808** (2013.01 - EP US); **F16H 37/0806** (2013.01 - EP US); **F16H 48/10** (2013.01 - EP US); **F16H 48/11** (2013.01 - EP US); **F16H 48/30** (2013.01 - EP US); **F16H 48/36** (2013.01 - EP US); **F16H 2048/204** (2013.01 - EP US); **F16H 2048/364** (2013.01 - EP US); **Y02T 10/62** (2013.01 - EP US)

Citation (search report)

See references of WO 2006029434A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006029434 A2 20060323; **WO 2006029434 A3 20060615**; EP 1792104 A2 20070606; JP 2008513713 A 20080501; US 2008064552 A1 20080313; US 7588511 B2 20090915

DOCDB simple family (application)

AT 2005000372 W 20050915; EP 05785260 A 20050915; JP 2007535944 A 20050915; US 66298305 A 20050915