

Title (en)
FRICTION CLUTCH FOR THE DRIVETRAIN OF A VEHICLE

Title (de)
REIBUNGSKUPPLUNG FÜR DEN ANTRIEBSSTRANG EINES FAHRZEUGS

Title (fr)
EMBRAYAGE À FRICTION POUR LA CHAÎNE CINÉMATIQUE D'UN VÉHICULE

Publication
EP 2089636 A1 20090819 (DE)

Application
EP 07846773 A 20071123

Priority
• EP 2007010172 W 20071123
• DE 102006058666 A 20061213

Abstract (en)
[origin: WO2008071302A1] A friction clutch for the drivetrain of a vehicle comprises a housing arrangement (12) which is to be coupled to a drive element for common rotation about a rotational axis (A) and which is or can be at least partially filled with fluid, a first group (30) of friction elements which are coupled by means of a first friction element carrier (26) to the housing arrangement (12) for common rotation about the rotational axis (A), a second group (34) of friction elements which can be placed in frictional engagement with the friction elements (28) of the first group (30) of first friction elements by means of a piston element (64) and which are coupled by means of a second friction element carrier (38) to a primary side (40) of a torsional vibration damper arrangement (42) for common rotation about the rotational axis (A), wherein the torsional vibration damper arrangement (42) has a secondary side (54) which is to be coupled to a drive element for common rotation about the rotational axis (A) and which is coupled to the primary side (40) by means of a damper element arrangement (52) for torque transmission and for relative rotation with respect to one another about the rotational axis (A), wherein the damper element arrangement (52) is arranged radially at the inside or radially at the outside with respect to the two groups (30, 34) of friction elements, wherein the piston element (64) serves to divide the interior space (66) of the housing arrangement (12) into a first partial space (68) which contains the torsional vibration damper arrangement (42) and a second partial space (70) in which the fluid pressure is to be increased in relation to the fluid pressure in the first partial space (68) in order to produce the frictional engagement of the friction elements (28, 36) of the two groups (30, 34) of friction elements, wherein there is no fluid-exchanging connection between the first partial space (68) and the second partial space (70) and wherein the torsional vibration damper arrangement (42) divides the first partial space (68) into a first space region (76), which contains the two groups (30, 34) of friction elements, and a second space region (78), and a fluid supply duct arrangement (72) is open to one of the two space regions (76, 78) and a fluid discharge duct arrangement (84) is open to the other of the two space regions (76, 78).

IPC 8 full level
F16D 25/0638 (2006.01); **F16D 25/12** (2006.01)

CPC (source: EP)
F16D 13/52 (2013.01); **F16D 13/72** (2013.01); **F16D 25/0638** (2013.01); **F16D 25/123** (2013.01)

Citation (search report)
See references of WO 2008071302A1

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 MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102006058666 A1 20080619; EP 2089636 A1 20090819; WO 2008071302 A1 20080619

DOCDB simple family (application)
DE 102006058666 A 20061213; EP 07846773 A 20071123; EP 2007010172 W 20071123