

Title (en)

CENTRAL VALVE OF A CAMSHAFT ADJUSTER OF AN INTERNAL COMBUSTION ENGINE

Title (de)

ZENTRALVENTIL EINES NOCKENWELLENVERSTELLERS EINER BRENNKRAFTMASCHINE

Title (fr)

SOUPAPE CENTRALE D'UN DÉPHASEUR D'ARBRE À CAMES D'UN MOTEUR À COMBUSTION INTERNE

Publication

EP 2452052 B1 20140423 (DE)

Application

EP 10724489 A 20100604

Priority

- EP 2010057819 W 20100604
- DE 102009031701 A 20090704

Abstract (en)

[origin: WO2011003682A1] The invention relates to a central valve (30) of a camshaft adjuster (11) of an internal combustion engine (1), comprising a valve housing (31), a control piston (32), and a mounting flange (42), wherein the valve housing (31) is arranged, at least in part, inside a receptacle (29) inside the camshaft adjuster (11), said valve housing comprising at least one inflow connection (P), one outflow connection (T), and one working connection (A, B). The control piston (32) is arranged axially slideable inside the valve housing (31). The pressure fluid flowing to and from the camshaft adjuster (11) can be controlled by the suitable positioning of the control piston (32) inside the valve housing (31), wherein the mounting flange (42) is fixedly connected to a wall section of the receptacle (29), thus determining the axial position of the valve housing (31) relative to the camshaft adjuster (11).

IPC 8 full level

F01L 1/344 (2006.01)

CPC (source: EP US)

F01L 1/344 (2013.01 - EP US); **F01L 1/3442** (2013.01 - EP US); **F01L 2001/0475** (2013.01 - EP US); **F01L 2001/34426** (2013.01 - EP US); **F01L 2001/34433** (2013.01 - EP US); **Y10T 137/86702** (2015.04 - EP US)

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 SE SI SK SM TR

DOCDB simple family (publication)

DE 102009031701 A1 20110105; CN 102472127 A 20120523; CN 102472127 B 20141119; EP 2452052 A1 20120516; EP 2452052 B1 20140423; KR 20120032510 A 20120405; US 2012111296 A1 20120510; US 8893676 B2 20141125; WO 2011003682 A1 20110113

DOCDB simple family (application)

DE 102009031701 A 20090704; CN 201080030115 A 20100604; EP 10724489 A 20100604; EP 2010057819 W 20100604; KR 20127000087 A 20100604; US 201013381185 A 20100604