

Title (en)

HYDRAULIC PLAY COMPENSATION ELEMENT FOR A VALVE GEAR OF AN INTERNAL COMBUSTION ENGINE

Title (de)

HYDRAULISCHES SPIELAUSGLEICHSELEMENT FÜR EINEN VENTILTRIEB EINES VERBRENNUNGSMOTORS

Title (fr)

ELEMENT HYDRAULIQUE DE COMPENSATION DE JEU DESTINE A L'ACTIONNEMENT DE SOUPAPE D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1397581 B1 20050817 (DE)

Application

EP 02747227 A 20020620

Priority

- DE 0202248 W 20020620
- DE 10129729 A 20010620

Abstract (en)

[origin: WO03001037A1] The aim of the invention is to functionally improve a hydraulic play compensation element for a valve gear of an internal combustion engine. To this end, the play compensation element is characterized by the following features. Both components (4; 6) enclose a pressure chamber (7) between them, which is sealed from the exterior and which has a volume that depends on the relative position of both components (4; 6). A pressure spring (5) that presses both components (4; 6) away from one another is mounted inside the pressure chamber (7). The pressure chamber (7) can be connected to the storage chamber (8) via a spring-loaded one-way valve (10) through which media can flow exclusively into the pressure space. An additional controllable stop valve (11) is provided in the connection of the pressure chamber (7) to the storage chamber (8). A throttling channel (17), which serves as a bypass to the one-way valve (10), is provided between the pressure chamber (7) and the controllable stop valve (11). The throttling channel (17) is connected to a reversibly size-changing buffer chamber (22).

IPC 1-7

F01L 1/24; **F01L 13/00**; **F01L 13/06**

IPC 8 full level

F01L 1/24 (2006.01); **F01L 13/00** (2006.01); **F01L 13/06** (2006.01)

CPC (source: EP US)

F01L 1/24 (2013.01 - EP US); **F01L 13/0031** (2013.01 - EP US); **F01L 13/06** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

WO 03001037 A1 20030103; DE 10129729 A1 20030123; DE 50203966 D1 20050922; EP 1397581 A1 20040317; EP 1397581 B1 20050817; US 2003192498 A1 20031016; US 6718923 B2 20040413

DOCDB simple family (application)

DE 0202248 W 20020620; DE 10129729 A 20010620; DE 50203966 T 20020620; EP 02747227 A 20020620; US 34372403 A 20030131