

Title (en)
HYDRAULIC DEVICE WITH SEALING ELEMENT

Title (de)
HYDRAULIKVORRICHTUNG MIT DICHELEMENT

Title (fr)
DISPOSITIF HYDRAULIQUE COMPRENANT UN ÉLÉMENT D'ÉTANCHÉITÉ

Publication
EP 3333381 B1 20210428 (DE)

Application
EP 17206837 A 20171212

Priority
DE 102016124104 A 20161212

Abstract (en)
[origin: US2018163542A1] A hydraulic device for an internal combustion engine or a gearing system, the hydraulic device including a housing featuring a chamber wall structure which delineates a pressure chamber for a pressurised hydraulic fluid; an actuating member which can be adjusted in the housing relative to the chamber wall structure in an actuating direction and in an actuating counter direction opposite to the actuating direction in order to adjust the delivery volume or phase position; and a sealing element including a sealing structure and a spring structure which is supported or moulded on one of the chamber wall structure and the actuating member, preferably the actuating member, and presses the sealing structure into sealing contact with the other of the chamber wall structure and the actuating member with a spring force in order to seal off the pressure chamber. The sealing structure and the spring structure are moulded in one piece.

IPC 8 full level
F01L 1/344 (2006.01); **F04C 15/00** (2006.01)

CPC (source: CN EP US)
F01C 1/344 (2013.01 - US); **F01C 19/12** (2013.01 - US); **F01L 1/3442** (2013.01 - CN EP US); **F04C 15/00** (2013.01 - CN); **F04C 15/0003** (2013.01 - CN); **F04C 15/0015** (2013.01 - EP US); **F01L 1/047** (2013.01 - US); **F01L 2001/34426** (2013.01 - CN); **F01L 2001/34433** (2013.01 - CN); **F01L 2001/34479** (2013.01 - EP US); **F04C 14/18** (2013.01 - US)

Citation (examination)
DE 102011086175 B3 20130516 - SHW AUTOMOTIVE GMBH [DE]

Cited by
US2024003346A1

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

DOCDB simple family (publication)
EP 3333381 A1 20180613; **EP 3333381 B1 20210428**; CN 108223365 A 20180629; CN 108223365 B 20211123;
DE 102016124104 A1 20180614; US 10975699 B2 20210413; US 2018163542 A1 20180614

DOCDB simple family (application)
EP 17206837 A 20171212; CN 201711319449 A 20171212; DE 102016124104 A 20161212; US 201715837473 A 20171211