

Title (en)

Hydraulic device, hydraulic appliance, hydraulic system and method for its use

Title (de)

Hydraulische Vorrichtung, hydraulisches Gerät, hydraulisches System und Verwendungsverfahren dafür

Title (fr)

Dispositif hydraulique, appareil hydraulique, système hydraulique et son procédé d'utilisation

Publication

EP 1832816 B1 20161228 (EN)

Application

EP 07103489 A 20070305

Priority

IT TO20060177 A 20060309

Abstract (en)

[origin: EP1832816A2] The present invention mainly relates to a hydraulic device (1', 1", 1'') for hydraulic systems, preferably for water heating systems, provided with a body (4', 4", 4'') comprising an inlet duct (6', 6", 6''), a first outlet duct (5', 5", 5'') and a second outlet duct (7', 7", 7''), as well as with on-off means (2', 2", 3', 3", 3'', 40", 40'') adapted to stop a fluid flow; the on-off means (2', 2", 3', 3", 3'', 40", 40'') comprise at least two on-off devices (2', 2", 2'', 3', 3", 3'', 40", 40'') adapted to affect a fluid flow in said second outlet duct (7', 7", 7''). The present invention also relates to a hydraulic appliance and to a hydraulic system, in particular for heating water, comprising said hydraulic device, as well as to a method of operating such a hydraulic system.

IPC 8 full level

F24D 3/10 (2006.01); **F24H 9/12** (2006.01)

CPC (source: EP)

F24D 3/10 (2013.01); **F24D 3/1083** (2013.01); **F24H 9/136** (2022.01)

Cited by

EP3919793A1; EP4431819A1; EP3222929A4; GB2551192B; NL2019988B1; US2010263754A1; CN106979612A; EP3693671A1; EP3260795A1; EP3671048A1; EP4431818A1; WO2017212226A1; EP2101123B1; EP2101123B2

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)

EP 1832816 A2 20070912; **EP 1832816 A3 20130403**; **EP 1832816 B1 20161228**; DK 1832816 T3 20170327; ES 2619158 T3 20170623; IT TO20060177 A1 20070910; PL 1832816 T3 20170731; PT 1832816 T 20170315

DOCDB simple family (application)

EP 07103489 A 20070305; DK 07103489 T 20070305; ES 07103489 T 20070305; IT TO20060177 A 20060309; PL 07103489 T 20070305; PT 07103489 T 20070305