

Title (en)

HYDRAULIC DEVICE FOR THE THERMO-PNEUMATIC INSULATION AND OPTIONAL AGITATION OF THE CONTENTS OF AN OPERATIVE CAVITY

Title (de)

HYDRAULISCHE VORRICHTUNG ZUM THERMOPNEUMATISCHEN ISOLIEREN UND OPTIONALEN SCHÜTTELN DES INHALTS EINES BETRIEBSHOHLRAUMS

Title (fr)

DISPOSITIF FLUIDIQUE PERMETTANT DE MANIERE THERMO-PNEUMATIQUE L'ISOLEMENT ET EVENTUELLEMENT L'AGITATION DU CONTENU D'UNE CAVITE OPERATOIRE

Publication

EP 1515794 A1 20050323 (FR)

Application

EP 03760784 A 20030624

Priority

- FR 0301946 W 20030624
- FR 0208038 A 20020624

Abstract (en)

[origin: WO2004000449A1] The invention relates to hydraulic device (1) produced from one or several components, for example from a support (12) comprising: an operative cavity (3), at least two ducts (41, 42), for example an inlet (41) and outlet (42) for a liquid of interest which communicate with said operative cavity (3), at least two valve bodies (51, 52) with no moving pieces for control of said cavity. The above is characterised in that said device further comprises two trapping chambers (81, 82) for a gas, for example, air, in communication only and respectively with the two ducts (41, 42), by means of two connecting channels (91, 92) respectively, both pertaining to thermal exchange with a heat source (21, 22).

IPC 1-7

B01F 13/00; B01L 3/00; B01F 11/00

IPC 8 full level

B01F 11/00 (2006.01); **B01F 13/00** (2006.01); **B01L 3/00** (2006.01); **F15C 1/04** (2006.01)

CPC (source: EP US)

B01F 31/65 (2022.01 - EP US); **B01F 33/30** (2022.01 - EP US); **B01L 3/502738** (2013.01 - EP US); **F15C 1/04** (2013.01 - EP US);
B01L 2200/0605 (2013.01 - EP US); **B01L 2200/0673** (2013.01 - EP US); **B01L 2300/0816** (2013.01 - EP US); **B01L 2400/0442** (2013.01 - EP US);
B01L 2400/06 (2013.01 - EP US); **B01L 2400/0688** (2013.01 - EP US)

Citation (search report)

See references of WO 2004000449A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2841158 A1 20031226; FR 2841158 B1 20070223; AU 2003253079 A1 20040106; AU 2003253079 A8 20040106;
CN 100377770 C 20080402; CN 1671467 A 20050921; EP 1515794 A1 20050323; JP 2005530608 A 20051013; US 2005196328 A1 20050908;
WO 2004000449 A1 20031231

DOCDB simple family (application)

FR 0208038 A 20020624; AU 2003253079 A 20030624; CN 03818009 A 20030624; EP 03760784 A 20030624; FR 0301946 W 20030624;
JP 2004514986 A 20030624; US 51834305 A 20050105