

Title (en)
HYDROPNEUMATIC ACCUMULATOR

Title (de)
HYDROPNEUMATISCHER DRUCKSPEICHER

Title (fr)
ACCUMULATEUR DE PRESSION HYDROPNEUMATIQUE

Publication
EP 1250533 A1 20021023 (DE)

Application
EP 01902324 A 20010117

Priority
• DE 10003648 A 20000129
• EP 0100442 W 20010117

Abstract (en)
[origin: WO0155602A1] The invention relates to a hydropneumatic accumulator comprising a bellow (19), which, inside the accumulator housing (1), separates a gas chamber (17) from an oil chamber (13) and which is fastened with one end thereof to the accumulator housing (1) so that the oil chamber (13) is delimited by the inside of the bellow (19). Said bellow is sealed on the other free end by means of a closing body (21) that moves according to changes in volume of the gas chamber (17) and of the oil chamber (13). The hydropneumatic accumulator also comprises a valve (31), which enables a hydraulic fluid to flow out of and into the oil chamber (13) or which blocks the flow of said hydraulic fluid. The valve can be transferred into its blocking position by the closing body (21) when the closing body (21) undergoes a movement corresponding to an increase in the volume of the gas chamber (17) that exceeds a predetermined maximum value. Said closing body is provided in the shape of a trough (21) which, with its edge (25) located on the open end (23), is connected to the assigned free end of the bellow (19). The trough (21) extends with its lateral wall (27) along the inside of the metal bellow (19), and the bottom (35) of the trough (21) is configured as a moveable valve element of the valve (31) that controls the flow of hydraulic fluid.

IPC 1-7
F15B 1/22; **F15B 1/10**

IPC 8 full level
F15B 1/08 (2006.01); **F15B 1/10** (2006.01); **F15B 1/22** (2006.01)

CPC (source: EP US)
F15B 1/103 (2013.01 - EP US); **F15B 1/22** (2013.01 - EP US); **F15B 2201/205** (2013.01 - EP US); **F15B 2201/3153** (2013.01 - EP US); **F15B 2201/411** (2013.01 - EP US); **F15B 2201/415** (2013.01 - EP US)

Citation (search report)
See references of WO 0155602A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0155602 A1 20010802; AT E295941 T1 20050615; DE 10003648 A1 20010809; DE 50106255 D1 20050623; EP 1250533 A1 20021023; EP 1250533 B1 20050518; ES 2240397 T3 20051016; JP 2003521643 A 20030715; JP 3971188 B2 20070905; US 2003000589 A1 20030102; US 6622755 B2 20030923

DOCDB simple family (application)
EP 0100442 W 20010117; AT 01902324 T 20010117; DE 10003648 A 20000129; DE 50106255 T 20010117; EP 01902324 A 20010117; ES 01902324 T 20010117; JP 2001555707 A 20010117; US 18172102 A 20020722