

Title (en)  
HYDROPNEUMATIC PISTON ACCUMULATOR

Title (de)  
HYDROPNEUMATISCHER KOLBENSPEICHER

Title (fr)  
ACCUMULATEUR À PISTON HYDROPNEUMATIQUE

Publication  
**EP 3475584 A1 20190501 (DE)**

Application  
**EP 17731805 A 20170619**

Priority  
• DE 102016007824 A 20160625  
• DE 102016007798 A 20160625  
• EP 2017000705 W 20170619

Abstract (en)  
[origin: WO2017220196A1] A hydropneumatic piston accumulator, with an accumulator housing (1) defining a housing longitudinal axis (11), in which a piston (9) is longitudinally movable between two housing covers (5, 7) positioned opposite each other. In the housing (1), the piston (9) separates a working chamber (13) for a compressible medium, such as a working gas, from a working chamber (15) for an incompressible medium, such as hydraulic fluid, and comprises at least a part (55) of a displacement measurement device continuously determining each position of the piston (9) in the housing (1). The invention is characterised in that a rod-like guide (29, 57) is stationarily positioned in the accumulator housing (1) and passes all the way through the piston (9) in each of its displacement positions in the accumulator housing (1), the piston (9) being movably guided therealong until it reaches the stop on one of the two housing covers (5, 7), and in that the piston (9) is sealed against this guide (29, 57) using a sealing device (49, 50).

IPC 8 full level  
**F15B 1/24** (2006.01)

CPC (source: EP US)  
**F15B 1/24** (2013.01 - EP US); **F15B 2201/31** (2013.01 - EP US); **F15B 2201/515** (2013.01 - EP US)

Citation (search report)  
See references of WO 2017220196A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2017220196 A1 20171228**; EP 3475583 A1 20190501; EP 3475583 B1 20230607; EP 3475583 C0 20230607; EP 3475584 A1 20190501; EP 3475584 B1 20220810; EP 4230874 A2 20230823; EP 4230874 A3 20230830; JP 2019519739 A 20190711; JP 2019521294 A 20190725; US 10781830 B2 20200922; US 10941789 B2 20210309; US 2019120257 A1 20190425; US 2020309158 A1 20201001; WO 2017220179 A1 20171228

DOCDB simple family (application)  
**EP 2017000705 W 20170619**; EP 17717082 A 20170411; EP 17731805 A 20170619; EP 2017000469 W 20170411; EP 23162104 A 20170411; JP 2018567180 A 20170411; JP 2018567701 A 20170619; US 201716310489 A 20170411; US 201716310878 A 20170619