

Title (en)  
PRESSURE ACCUMULATOR

Publication  
**EP 0078031 B1 19860709 (DE)**

Application  
**EP 82109758 A 19821022**

Priority  
US 31481281 A 19811026

Abstract (en)  
[origin: EP0078031A1] 1. Pressure accumulator having a housing (50) defining an elongated cylindrical chamber in which a multi-piston arrangement (52) is slidably disposed, with at least two pistons arranged in series in the longitudinal direction of the housing so as to enclose a generally incompressible fluid between them, each piston having a circumferential sealing arrangement (54, 58, 60 and 64, 68, 70, respectively), and so as to divide the chamber into a first and a second zone (72 and 74, respectively), the first of which is closed and sealed by an end cap (80) having a gas valve (92) and the second by an end cap (82) having a fluid connection bore (88), characterised in that the multipiston arrangement (52) consists of piston heads (52a, 52b) independent of one another and arranged to float freely and which are disposed at a mutual spacing in the longitudinal direction of the housing (50), the piston head (52a) facing the first zone (72) of the chamber has a continuous circumferential recess (54) with a connecting duct (56) extending from the recess (54) to that side of the piston head (52a) which faces away from the first zone (72) of the chamber and the sealing arrangement associated with this piston head has a sealing ring (58) between the recess (54) and the first zone (72) of the chamber, and the piston head (52b) facing the second zone (74) of the chamber has a continuous circumferential recess (64) with a connecting duct (66) extending from the recess (64) to that side of the piston head (52b) which faces the second zone (74) of the chamber and the sealing arrangement associated with this piston head has a sealing ring (68) between the recess (64) and that side of the piston head (52b) which faces away from the second zone (74) of the chamber.

IPC 1-7  
**F15B 1/053**

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

CPC (source: EP)  
**F15B 1/24** (2013.01); **F15B 2201/205** (2013.01); **F15B 2201/312** (2013.01); **F15B 2201/32** (2013.01); **F15B 2201/41** (2013.01); **F15B 2201/4155** (2013.01)

Citation (examination)  
US 4186777 A 19800205 - HAIGHT ROBERT E [US], et al

Cited by  
DE19701303A1; EP0854296A3; DE102007031525B4; DE102007031525A1; EP2012020A3; DE10207181A1; AU2006288011B2; EA010819B1; EP0854296A2; US8474253B2; US7066208B2; WO2007030017A1; WO2004003392A1

Designated contracting state (EPC)  
DE FR GB SE

DOCDB simple family (publication)  
**EP 0078031 A1 19830504; EP 0078031 B1 19860709**; CA 1180979 A 19850115; DE 3271950 D1 19860814; ES 516793 A0 19831016; ES 8400553 A1 19831016; JP S5881202 A 19830516

DOCDB simple family (application)  
**EP 82109758 A 19821022**; CA 413933 A 19821021; DE 3271950 T 19821022; ES 516793 A 19821025; JP 18664782 A 19821023