

Title (en)

Piston accumulator with sealing device comprising deep-bed filter

Title (de)

Kolbenspeicher mit Tiefenfiltrationsdichtung

Title (fr)

Accumulateur à piston avec dispositif d'étanchéité ayant un filtre à lit profond

Publication

EP 0902193 A3 19990707 (DE)

Application

EP 98113168 A 19980715

Priority

DE 19740150 A 19970912

Abstract (en)

[origin: EP0902193A2] A piston for separating the hydraulic side (14) of a pressure storage reservoir from a gas side (16) has piston sealing rings (18,20) of elastomer or of any other suitable sealing material. To protect the sealing rings from damage by debris in the hydraulic fluid a special felt ring (24) is fitted around the piston as the first ring seal to the hydraulic side. The felt collects any debris in the hydraulic fluid and ensures that only filtered fluid reaches the elastomer sealing rings. The main piston can be supplemented by a secondary piston on the gas side of the main piston, and connected to the main piston by a sprung coupling. The space between the two pistons is filled with clean hydraulic fluid.

IPC 1-7

F15B 1/24

IPC 8 full level

F15B 21/041 (2019.01); **F15B 1/24** (2006.01)

CPC (source: EP)

F15B 1/24 (2013.01); **F15B 21/041** (2013.01); **F15B 2201/205** (2013.01); **F15B 2201/21** (2013.01); **F15B 2201/312** (2013.01); **F15B 2201/32** (2013.01); **F15B 2201/41** (2013.01); **F15B 2201/411** (2013.01); **F15B 2201/415** (2013.01)

Citation (search report)

- [X] EP 0313539 A1 19890426 - VOLVO FLYGMOTOR AB [SE]
- [X] DE 3638640 A1 19870619 - STROEMHOLMENS MEKANISKA VERKST [SE]
- [X] DE 3619990 A1 19871217 - BOSCH GMBH ROBERT [DE]
- [A] DE 2019407 A1 19711104 - BAUMGARTEN HYDROTECH
- [A] CH 591020 A5 19770831 - GFELLER HANS

Cited by

DE10052665B4; CN103511402A; EP1342922A3

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0902193 A2 19990317; EP 0902193 A3 19990707; EP 0902193 B1 20031029; AT E253177 T1 20031115; DE 19740150 A1 19990325; DE 59810011 D1 20031204; DK 0902193 T3 20040223; ES 2210626 T3 20040701; NO 320760 B1 20060123; NO 984186 D0 19980911; NO 984186 L 19990315

DOCDB simple family (application)

EP 98113168 A 19980715; AT 98113168 T 19980715; DE 19740150 A 19970912; DE 59810011 T 19980715; DK 98113168 T 19980715; ES 98113168 T 19980715; NO 984186 A 19980911