

Title (en)  
DEVICE FOR DAMPING PRESSURE SURGES

Title (de)  
VORRICHTUNG ZUM DÄMPFEN VON DRUCKSTÖSSEN

Title (fr)  
DISPOSITIF POUR AMORTIR DES COUPS DE BELIER

Publication  
**EP 1685323 A1 20060802 (DE)**

Application  
**EP 04790081 A 20041001**

Priority  
• EP 2004010971 W 20041001  
• DE 10350941 A 20031031

Abstract (en)  
[origin: US2006225800A1] The invention relates to a device for damping pressure surges in a fluid with a housing ( 10 ) and a piston ( 14 ) that can be longitudinally displaced inside the housing ( 10 ) against the pretensioning force of a spring energy store ( 12 ). In order that the piston ( 14 ) interacts with another piston ( 24 ), which is guided in a connecting piece ( 26 ) of the housing ( 10 ) in a manner that enables it to be longitudinally displaced, and that, during the operation of the device, the piston ( 14 ) exerts a pressure force onto the other piston ( 24 ) when the latter is in any displacement position, even pressure surges occurring with a high frequency can be reliably controlled in a functionally reliable manner.

IPC 8 full level  
**F02M 37/00** (2006.01); **F02M 55/04** (2006.01); **F02B 3/06** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)  
**F02M 37/0041** (2013.01 - EP US); **F02M 55/04** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US); **F02M 2200/315** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005052348A1

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 PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2006225800 A1 20061012**; **US 7308910 B2 20071218**; AT E472053 T1 20100715; DE 10350941 A1 20050602;  
DE 502004011318 D1 20100805; EP 1685323 A1 20060802; EP 1685323 B1 20100623; JP 2007511695 A 20070510;  
WO 2005052348 A1 20050609

DOCDB simple family (application)  
**US 56796304 A 20041001**; AT 04790081 T 20041001; DE 10350941 A 20031031; DE 502004011318 T 20041001; EP 04790081 A 20041001;  
EP 2004010971 W 20041001; JP 2006537095 A 20041001