

Title (en)
MAGNETIC VALVE

Publication
EP 0309797 B1 19920506 (DE)

Application
EP 88114822 A 19880909

Priority
DE 3732553 A 19870926

Abstract (en)
[origin: JPH01113570A] PURPOSE: To obtain highly responsive opening and closing movements with a small-sized electromagnet by a structure in which a piston slide as a locking member is balanced in pressure not only in the closing state but also in an opening state. CONSTITUTION: A guide portion 11 of a piston slide 12 urged against a spring 32 by the excitation of an electromagnet 29 is engaged with a stepped aperture portion 4 formed on a valve casing 1. A seal edge 15 formed by an annular recess 14 arranged on the slide 12 is mountable with respect to a valve seat 7. The annular recess 14 is so arranged that it reaches the interior of a stepped aperture portion 5. A cylinder portion 16 of the slide 12 is inserted in the stepped aperture portion 5. An annular chamber 17 is formed adjacent to the valve seat 7. The annular chamber 17 is connected to a high pressure chamber of an injection pump or the like via a communication path 18. An annular groove 19 communicating with the annular recess 14 is formed in the exit aperture 5 and connected to a low pressure chamber of an injection pump or the like via a communication path.

IPC 1-7
F02M 59/46; F16K 31/02; F16K 31/06

IPC 8 full level
F02M 51/00 (2006.01); **F02M 59/46** (2006.01); **F16K 31/02** (2006.01); **F16K 31/06** (2006.01)

CPC (source: EP US)
F02M 59/466 (2013.01 - EP US)

Citation (examination)
DE 3302294 A1 19840726 - KLOECKNER HUMBOLDT DEUTZ AG [DE]

Cited by
EP0580325A1; DE4238727C2; US5370095A; EP0588475A3; AU709936B2; US5476245A; GB2285305A; GB2285305B; EP0652394A1; EP0840004A1

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