Title (en)
Return spring arrangement for valve operation of an internal combustion engine

Title (de)
Schliessfeder-Vorrichtung für den Ventiltrieb eines Gaswechselventils einer Brennkraftmaschine

Title (fr)
Dispositif de ressort pour l'opération d'une soupape d'un moteur à combustion interne

Publication
EP 1143115 A3 20030102 (DE)

Application
EP 01108364 A 20010403

Priority
DE 10016878 A 20000405

Abstract (en)
[origin: EP1143115A2] The device (1) has a mechanical spring (3) and a gas spring (4) that is controlled at a given engine rpm range, which are connected in parallel to close the gas shuttle valve (2). The gas spring has a piston (6) that moves to close a chamber (5). The gas spring piston is formed as a rammer (7) with a piston shroud (9) sealingly sliding in the chamber to separate it from the gas spring chamber. The gas spring is supplied from the pump space, which is controlled by a medium, over a controlled overflow channel (10) for the compressed medium during the maximum opening stroke of the gas shuttle valve.

IPC 1-7
F01L 3/10; F01L 1/46

IPC 8 full level
F01L 1/14 (2006.01); **F01L 1/46** (2006.01); **F01L 3/10** (2006.01)

CPC (source: EP)
F01L 1/143 (2013.01); **F01L 1/465** (2013.01); **F01L 3/10** (2013.01)

Citation (search report)
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DOCDB simple family (publication)
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