

Title (en)
VARIABLE ACTUATOR FOR A VALVE

Publication
EP 0309468 B1 19910612 (EN)

Application
EP 87903892 A 19870612

Priority
GB 8614310 A 19860612

Abstract (en)
[origin: WO8707677A1] A valve actuator such as an hydraulic tappet. In one embodiment the tappet comprises a cylinder (16) which defines by means of a central wall (17), upper and lower chambers (18, 19). These have respective pistons (20 and 21). Piston (20) is connected to an actuator rod (13) of a valve (11), whilst piston (21) rides on a cam (23). The central wall is formed with two flow paths (24 and 25). The first allows oil to flow from the chamber (19) to the chamber (18) during upward movement of the piston (21) and hence the cam can cause lifting movement of the piston (20) and opening of the valve (11). As the cam (23) falls away the valve (11) closes under the action of spring (14) which results in downward movement of the upper piston (20). The rate of this return is dictated by the rate at which oil can flow through the passage (25) which can be variably restricted by control element (27). Thus, by adjustment of the control element (27) the rate of closing of the valve (11) can be varied. Other embodiments are described but in each the return movement of the upper piston (20) is variably damped.

IPC 1-7
F01L 1/16; **F01L 9/02**; **F01L 31/22**

IPC 8 full level
F01L 1/16 (2006.01); **F01L 9/10** (2021.01); **F01L 13/00** (2006.01)

CPC (source: EP)
F01L 1/16 (2013.01); **F01L 9/10** (2021.01); **F01L 13/0031** (2013.01)

Citation (examination)
GB 2124701 A 19840222 - LUCAS IND PLC

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 8707677 A1 19871217; EP 0309468 A1 19890405; EP 0309468 B1 19910612; GB 2194587 A 19880309; GB 8614310 D0 19860716; GB 8713764 D0 19870715

DOCDB simple family (application)
GB 8700411 W 19870612; EP 87903892 A 19870612; GB 8614310 A 19860612; GB 8713764 A 19870612