Title (en)

ACTUATING MECHANISM FOR INLET OR EXHAUST VALVES OF INTERNAL-COMBUSTION ENGINES

Publication

EP 0023250 B1 19830601 (DE)

Application

EP 80103049 A 19800531

Priority

DE 2930337 A 19790726

Abstract (en)

[origin: EP0023250A1] 1. Valve control mechanism for inlet- or exhaust valves (1, 2) of internal combustion engines with at least one control lever (3, 4) which has a bearing bore (5) with a fixedly inserted bearing bushing (6) and is disposed pivotably over this on a bearing axis (7), which has an inlet bore (26) connected to a lubricating oil supply and at least one inlet duct (27) branching off from this, which duct is connected via throughflow apertures (34, 35) of the bearing bushing (6) and an annular oil distribution duct consisting of two separate chambers to several oil distribution bores (36) branching from this and leading to different lubricating positions and opening into the latter with outlet apertures, which lubricating positions are located on mutually co-operating surfaces (9, 10, 13, 18, 20, 22) of the bearing elements (8, 11, 12, 14, 17, 19, 21, 23) transmitting the force and the movement to and from the control lever (3, 4), characterised in that the annular oil distribution duct is divided into an upper oil distribution chamber (28), from which branch the oil distribution bores (36) leading to the lubricating positions, and a lower oil distribution chamber (29) spatially separated from this, from which at least one lubricating bore (32, 33), and a throughflow aperture (34, 35), passes respectively through the bearing bushing (6) to the bearing axis (7), in such a way that the upper oil distribution chamber (28) is connected to the lubricating oil supply only in the position of the control lever (3, 4) when the valves (1, 2) are open, and consequently with closed outlet apertures at the lubricating positions, and the lower oil distribution chamber (29) on the other hand is always connected via the supply duct (27) of the bearing axis (7) to the lubricating oil supply.

IPC 1-7

F01L 1/18

IPC 8 full level

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CPC (source: EP)

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Cited by

US4644914A; EP2090757A3; CN111102028A; CN114183217A; DE4235103B4; US4896635A; CN113039349A; WO0040840A1; WO9928602A1; US6177112B1; US8096274B2

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