

Title (en)

VALVE OPERATING DEVICE WITH A MAGNETIC VALVE FOR AN INTERNAL-COMBUSTION ENGINE

Publication

**EP 0341440 B1 19930120 (DE)**

Application

**EP 89106472 A 19890412**

Priority

DE 3815668 A 19880507

Abstract (en)

[origin: JPH01315605A] PURPOSE: To raise control response by integrating a liquid tank with a magnetic valve in a device for controlling the opening and closing time of an engine valve, which comprises a magnetic valve for controlling the supply to and discharge from a stroke transmission chamber arranged between a valve cam and a valve tappet. CONSTITUTION: A valve control device arranged between valve tappet 12 for retaining a valve member 11 and a valve cam 14 integrated with a camshaft 13 comprises a casing 20 carried by a valve casing 15, and a casing block 23 is engaged with a casing chamber 21 therein. A valve piston 25 and a cam piston 27 are engaged in a central casing port 24 of the block 23. They are pressed onto a valve cam 14 by a return spring 28. A stroke transmission chamber 29 is defined between the two pistons 25, 27. The chamber 29 is connected to a magnetic control valve 31 and a pump 34 via a conduit 30. In this case, a liquid tank 36 is integrated with the magnetic control valve 31. The liquid tank 36 is connectable with the stroke transmission chamber 29 by a valve member 38.

IPC 1-7

**F01L 9/02; F01L 31/22**

IPC 8 full level

**F01L 1/12** (2006.01); **F01L 1/24** (2006.01); **F01L 9/14** (2021.01); **F01L 13/00** (2006.01); **F01L 31/22** (2006.01)

CPC (source: EP US)

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Citation (examination)

EP 0196441 A1 19861008 - BOSCH GMBH ROBERT [DE]

Cited by

CN103953413A; EP0515307A1; CH681825A5; CN103953412A; WO2012139785A1; EP0441909B1

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