

## Title (en)

ELECTROMAGNETICALLY ACTUATED VALVE, IN PARTICULAR A FUEL INJECTION VALVE FOR A FUEL INJECTION PLANT

## Publication

**EP 0054108 A3 19831005 (DE)**

## Application

**EP 81107254 A 19810915**

## Priority

DE 3046889 A 19801212

## Abstract (en)

[origin: US4416423A] An electromagnetically actuatable valve is proposed, which serves in particular to inject fuel into the intake tube of internal combustion engines operating with fuel injection systems. The fuel injection valve includes a valve housing, a shell-type core having a magnetic coil, and a flat armature. The flat armature is firmly connected with a spherical valve element which passes through a central guide opening in a guide diaphragm and cooperates with a fixed valve seat. The guide diaphragm guides the valve element in the radial direction toward the valve seat. The flat armature contacts the guide diaphragm via a concentric shoulder providing tension thereto so that the armature is guided in a plane parallel to the end face of the shell core. The fuel supply to the valve is effected via radial inlet openings in the valve wall. The non-metered fuel, after flowing through the magnetic element, can flow into a fuel return flow line by way of radial outlet openings which are axially offset and sealed from the inlet openings.

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## IPC 8 full level

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## Citation (search report)

- [A] FR 1596356 A 19700615
- [A] DE 2739085 A1 19790308 - TECHNOLOGIEFORSCHUNG GMBH
- [A] DE 2246574 A1 19740328 - BOSCH GMBH ROBERT
- [A] US 3937242 A 19760210 - ECKERT KONRAD
- [AP] GB 2058466 A 19810408 - BOSCH GMBH ROBERT

## Cited by

GB2170270A; FR2515741A1; US5791531A; FR2505971A1; EP1760308A3; US7571891B2; WO9738798A1

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