

Title (en)  
ELECTROMAGNETIC VALVE.

Title (de)  
ELEKTROMAGNETISCH BETÄTIGBARES VENTIL.

Title (fr)  
SOUPAPE A COMMANDE ELECTROMAGNETIQUE.

Publication  
**EP 0683861 A1 19951129 (DE)**

Application  
**EP 95900659 A 19941124**

Priority  
• DE 9401389 W 19941124  
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• DE 4421947 A 19940623

Abstract (en)  
[origin: WO9516125A1] In already known fuel injection valves, wearing parts such as the armature and the core are provided with wear-resistant layers made for example of chromium, molybdenum or nickel. If the parts of the injection valve are galvanically coated, a desired wedge-shaped distribution of the layer thicknesses is achieved that creates only a small bearing area but which is physically predetermined and practically impossible to influence. The new valve has at least one part, for example the armature (27) that has a stepped surface before the wear-resistant layer is applied. The stepped surface may be produced in a variable manner depending on the desired optimum magnetic and hydraulic properties. The ring-shaped bearing section (69) formed by the step has a defined bearing surface or contact width (b) that remains constant during the whole service life of the part, as wearing of the bearing surface in continuous duty does not cause the contact width to increase. This valve is particularly suitable for use in fuel injection systems of mixture compressing, spark-ignited internal combustion engines.

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**F02M 51/06**

IPC 8 full level  
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Citation (search report)  
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Cited by  
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