

Title (en)  
Injector.

Title (de)  
Einspritzventil.

Title (fr)  
Soupape injectrice.

Publication  
**EP 0404357 A2 19901227 (EN)**

Application  
**EP 90305660 A 19900524**

Priority  
US 36950989 A 19890621

Abstract (en)

A solenoid-actuated valve assembly (10) has first and second valve members (18,24), first and second valve seats (26,28), a solenoid coil (40), a first permanent magnet armature (32) effective, when the coil (40) is energized with a positive current, to permit displacement of the first valve member (18) from the first valve seat (28); and a second permanent magnet armature (44) effective, when the coil (40) is energized with a negative current, to displace the second valve member (24) from the second valve seat (26). The first armature (32) is further effective, when the coil (40) is energized with a negative current, to bias the first valve member (18) into engagement with the first valve seat (28), and said second armature (44) is further effective, when the coil (40) is energized with a positive current, to bias the second valve member (24) into engagement with the second valve seat (26).

IPC 1-7  
**F02M 51/08; F02M 61/08; F02M 67/12**

IPC 8 full level  
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CPC (source: EP)  
**F02M 51/0625 (2013.01); F02M 51/0653 (2013.01); F02M 51/0689 (2013.01); F02M 51/08 (2019.01); F02M 61/08 (2013.01); F02M 67/12 (2013.01)**

Cited by  
EP3034853A1; EP1174604A3; EP3009656A1; WO9702425A1; WO2005045235A1; US7159801B2; US7182281B2; US7066141B2

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