

Title (en)  
VALVE MECHANISM

Title (de)  
VENTILMECHANISMUS

Title (fr)  
MECANISME DE SOUPAPE

Publication  
**EP 0925465 A1 19990630 (EN)**

Application  
**EP 98924550 A 19980612**

Priority  
• IL 9800272 W 19980612  
• IL 12106197 A 19970612

Abstract (en)  
[origin: WO9857082A1] The invention provides a pressure-opened magnetically-closed valve mechanism for fluids, comprising a housing (12) provided with at least one inlet (14), at least one outlet (16) and at least one chamber (18) connecting therebetween, the chamber (18) being provided with an elastically deformable sealing ring (20) defining an opening (22) for the passage of fluid (24) therethrough, a sealing body (26) positioned within the chamber (18) and moveable between a first, sealing position and a second position, the body (26) having at least one circular cross-sectional area (28) sized to be wedged in the opening (22) to effect the sealing thereof and to prevent the passage of fluid through the chamber (18), wherein in the first position the body (26) exerts a lateral force against the ring (20) greater than the force exerted by the body against the ring (20) in the direction facing the inlet (14), and wherein in the second position the sealing body (26) is sufficiently distanced from the seal ring (20) to allow free fluid flow from the inlet (14) to the outlet (16), and a permanent magnet component (29) and a ferromagnetic body component, one of the components (29) being rigidly mounted in the chamber between the inlet (14) and the seal ring (20), and the remaining component being a part of the sealing body (26), the permanent magnet component (29) comprising a magnetic body (30) flanked by a pair of ferromagnetic plates (31), ends of each of the plates (31) extending beyond an end of the magnetic body (30) to create an air space therebetween, whereby a magnetic flux flows through the magnetic body (30) and through the ends of the ferromagnetic plates (31) to securely hold the ferromagnetic body component (26), when brought into contact therewith, and to thereby retain the sealing body (26) in the first position until the application of a predetermined break pressure by the fluid against the sealing body (26), whereupon the sealing body is displaced to the second position.

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See references of WO 9857082A1

Cited by  
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