

Title (en)  
VALVE DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)  
VENTILVORRICHTUNG FÜR EINE VERBRENNUNGSKRAFTMASCHINE

Title (fr)  
DISPOSITIF DE SOUPAPE POUR UN MOTEUR À COMBUSTION INTERNE

Publication  
**EP 3423740 A1 20190109 (DE)**

Application  
**EP 17706762 A 20170222**

Priority

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Abstract (en)  
[origin: WO2017148769A1] The invention relates to valve devices for internal combustion engines, comprising a pneumatically actuated actuator (10) with a first membrane (16), a housing (20) with an inlet (22) and an outlet (24), a valve rod (32) which can be moved by the actuator (10), a valve closing element (34) which is secured to the valve rod (32) and which can be lowered onto a first valve seat (36) and raised from the first valve seat (36), a non-return plate (44) which is loaded in the direction of a second valve seat (42) by a spring force, and a pneumatically actuated spacer element (48) by means of which the non-return plate (44) is lifted from the second valve seat (42) against the spring force when the valve closing element (34) is resting on the first valve seat (36), wherein a flow cross-section (40) between the inlet (22) and the outlet (24) can be released or closed by the valve closing element (34) and the non-return plate (44). In order to provide an improved seal of the valve and increase the service life thereof, the spacer element (48) is connected to a second membrane (56) which delimits a control chamber (12) of the pneumatic actuator (10) on one side.

IPC 8 full level  
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