

Title (en)

FLAP DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

KLAPPENVORRICHTUNG FÜR EINE VERBRENNUNGSKRAFTMASCHINE

Title (fr)

DISPOSITIF DE CLAPET POUR UN MOTEUR À COMBUSTION INTERNE

Publication

**EP 2929166 A1 20151014 (DE)**

Application

**EP 13789334 A 20131112**

Priority

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- EP 2013073620 W 20131112

Abstract (en)

[origin: CA2889043A1] The invention relates to flap devices for internal combustion engines, comprising a flow housing (10) in which a flow channel (12) is formed; an actuating shaft (14); a flap body (16) which is arranged on the actuating shaft (14) in the flow channel (12); a bore (26) in the flow housing (10), said actuating shaft (14) protruding outwards through the bore; a first bearing bush (20) in which the actuating shaft is mounted and which is arranged in the bore (26), an axial end of the bearing bush (20) protruding beyond the end of the bore (26); and sealing means which radially surround the actuating shaft (14) and have at least one spring element. The aim of the invention is to obtain an even better seal even in the event of thermal expansion. This is achieved in that the sealing means have a first disk (30) and a second disk (40) between which at least one plate spring (42) is arranged as the spring element. The first disk (30) is rigidly secured on the actuating shaft (14) and is used as a support for the at least one plate spring (42), wherein the spring rests against the second disk (40) in a biased manner such that the second disk (40) rests against the first bearing bush (20) axial end protruding beyond the bore (26) in a spring-loaded manner.

IPC 8 full level

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CPC (source: EP US)

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