Title (en)

AIR FLAP FOR CONTROLLING FLOW WITHIN A CONDUIT

Title (de)

LUFTKLAPPE ZUR DURCHFLUSSREGELUNG INNERHALB EINER ROHRLEITUNG

Title (fr)

VOLET D'AÉRATION POUR RÉGULER L'ÉCOULEMENT À L'INTÉRIEUR D'UN CONDUIT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2008019519A1] The invention relates to a device (12), for controlling an airflow (A) in a ventilation duct (10), comprising a least one pivotable air flap (24), which prevents an airflow (A) in the duct (10) when in the closed position. A housing (32) of an actuator for the air flap (24), which may pivot freely about the relevant longitudinal mid plane (L_M), is mounted in the inner duct wall (34) of constant cross-section. The elastic air flap (24), symmetrically or approximately symmetrically curved about the longitudinal mid plane (L_M) of the ventilation duct (10) and supported under load in a stable position on the duct wall (34), is rigidly fixed to the driveshaft (18) of the actuator, by an angled lever arm (20), with a separation (a), in the region of the apex line (S) thereof. The air flap (24) rests roughly centrally, permanently on the points (36, 38) of contact with the inner duct wall (34), which move with the position of the flap, in a self-centring (36, 38) manner and, in the closed position, contacts the inner duct wall (34) along a sealed, endless peripheral sealing surface (58). The contact points (36, 38) lie on the virtual intersection of the longitudinal axis (L_W) of the drive shaft (18) with the duct wall (34). In order to fit or exchange the device (12), an opening (64), in particular, a long rectangle, is cut in the ventilation duct (10). The device (10) is fixed to a section (66) of duct material or transparent material extending beyond the opening in all directions, introduced with the elastic air flap (24) bent up and the opening (64) sealed again.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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Cited by

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