

Title (en)

Device for changing the volume of the air flow into a room.

Title (de)

Vorrichtung zur Beaufschlagung eines Raumes mit einem variablen Luftvolumenstrom.

Title (fr)

Dispositif pour varier le volume d'un courant d'air dans un local.

Publication

EP 0658728 A3 19960529 (DE)

Application

EP 94118179 A 19941118

Priority

DE 4342880 A 19931216

Abstract (en)

[origin: EP0658728A2] For changing the volume of the airflow into a room, there is proposed a device with a flap (4) which is pivotable about a shaft (3). The flap (4) is equipped with a carrying arm (7) which is fitted with a displaceable weight (8). Whereas the flap (4) is pivotable through an acute angle ϕ , the carrying arm (7) with the weight (8) can pivot through an angle $\phi + \phi_1$. On the basis of the characteristic curve, the flap (4) opens and closes automatically, given appropriate differential pressures and acting flow forces. Depending on the angular position of the carrying arm (7) with respect to the flap (4) and depending on the position of the weight (8) with respect to the shaft (3), the flap (4) opens at a differential pressure Δp_{max} . Owing to the mass inertia, the flap (4) swings open, the pivoting movement of the carrying arm (7) additionally through the angle ϕ_1 accelerating the opening and preventing undesired states of equilibrium in intermediate positions of the flap (4). <IMAGE>

IPC 1-7

F24F 13/14

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] GB 272215 A 19270901
- [A] US 4090434 A 19780523 - KRISKO MICHAEL L, et al
- [A] GB 2073404 A 19811014 - FAREX AS
- [A] FR 2309918 A1 19761126 - STIFAB AB [SE]
- [A] US 3066694 A 19621204 - SCHUTMAAT WAYNE H, et al

Cited by

GB2408793A; EP2339259A1; EP2051020A1; WO9931442A1

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