

Title (en)

Thermoregulation element for a room and its arrangement

Title (de)

Raumtemperierungselement und dessen Anordnung

Title (fr)

Élément de régulation de la température d'une enceinte et son agencement

Publication

EP 1411303 B1 20050706 (DE)

Application

EP 03023386 A 20031016

Priority

DE 20216099 U 20021019

Abstract (en)

[origin: EP1411303A1] Several fans (8) are distributed over the length of a contact device (7) for providing heat exchange with the air, each fan having an effective flow cross-section with a width approximately equal to the contact device width. The maximum distance between two adjacent fans is approximately four times the length of the effective flow cross-section of the fan. The temperature control device comprises at least one heat transfer profile (1), preferably in the form of a post or bar securable inside a cavity, the profile wall (2) defining a cavity (3) acting as an air supply channel with at least one inlet (4) and at least one outlet (5) for room air. At least one conduit (6) transporting a cooling or heating medium extends along the length of the cavity. At least one contact device with a given length, width and depth provides heat exchange with the air and is thermal communication with the conduit. At least one fan is used to generate a convection current in the air supply channel.

IPC 1-7

F24F 1/00; **F28D 1/02**

IPC 8 full level

F24F 1/0035 (2019.01); **F24F 1/0059** (2019.01); **F24F 1/0071** (2019.01); **F24F 1/0087** (2019.01); **F28D 1/02** (2006.01); **F28F 1/32** (2006.01)

CPC (source: EP US)

F24F 1/0029 (2013.01 - EP); **F24F 1/0033** (2013.01 - EP); **F24F 1/0035** (2019.02 - EP US); **F24F 1/0047** (2019.02 - EP); **F24F 1/0059** (2013.01 - EP US); **F24F 1/0071** (2019.02 - EP US); **F24F 1/0087** (2019.02 - EP US); **F28D 1/024** (2013.01 - EP); **F28F 1/32** (2013.01 - EP)

Cited by

DE102007021424A1; EP1462748A1; US2013105125A1; DE202007019266U1; WO2023089136A1; WO2007063355A1

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