

Title (en)

Convector with an electric resistance heater having air humidification means.

Title (de)

Konvektorofen mit elektrischem Heizwiderstand mit Luftbefeuchtungsmitteln.

Title (fr)

Convecteur à résistance électrique de chauffage comportant des moyens d'humidification de l'air.

Publication

EP 0190966 A1 19860813 (FR)

Application

EP 86400145 A 19860124

Priority

FR 8501290 A 19850130

Abstract (en)

1. A convector having an electric heating resistance, and comprising an enclosure (1) which forms a chimney and which as a bottom air inlet aperture (2) and a top air outlet aperture (3), the resistance (4) being disposed inside the enclosure (1) downstream of the air inlet aperture (2), the interior of said enclosure also containing a turbine (5) to extract some of the hot air formed by natural convection and blow said air through an additional hot air outlet aperture (7) formed in the enclosure (1), said turbine (5) being mounted for rotation in a compartment (11) which, on the turbine axis, has an aperture (12) communicating with the interior of the enclosure (1) and comprising a wall (13) partially surrounding the turbine and shaped to direct the air blown by the latter towards the additional outlet aperture (7), characterised in that said enclosure (1) also comprises a sheet (8) of water-impregnated absorbent material disposed in the path (F) of the air blown by the turbine (5), said sheet (8) being in contact with the water (9) contained in a water-tight tank (10), said sheet (8) extending beneath a recess (14) formed in said wall (13) beneath the turbine (5) and through which passes the air blown by the turbine, and in that said sheet (8) of water-impregnated absorbent material is disposed substantially in a plane extending between the edge (14a) of the recess (14) remote from the blown air outlet aperture (7), such plane being inclined downwards from said edge, said inclination being such that said plane forms a deflector with respect to the current of air (F) blown by the turbine (5).

Abstract (fr)

Le convecteur comprend une enceinte (1) formant cheminée, qui comporte une ouverture inférieure d'arrivée d'air et une ouverture supérieure de sortie d'air, la résistance étant disposée à l'intérieur de l'enceinte en aval de l'ouverture d'arrivée d'air. L'enceinte renferme en outre une turbine (5) pour extraire une partie de l'air chaud formé par convection naturelle et pour souffler cet air par une ouverture (7) additionnelle de sortie d'air chaud. L'enceinte (1) comprend en outre une feuille (8) en matière absorbante imprégnée d'eau, disposée sur le trajet (F) de l'air qui est soufflé par la turbine (5), cette feuille (8) étant en contact avec l'eau (9) contenue dans un réservoir étanche. Utilisation dans les convecteurs électrique pour humidifier les locaux d'habitation.

IPC 1-7

F24D 19/00; F24F 6/04

IPC 8 full level

F24D 19/00 (2006.01); **F24F 6/04** (2006.01)

CPC (source: EP)

F24D 19/0082 (2013.01); **F24F 6/043** (2013.01)

Citation (search report)

- [A] BE 643927 A 19640615
- [A] DE 2220869 B1 19731108 - KNERR FRANZ
- [A] PATENTS ABSTRACTS OF JAPAN, vol. 6, no. 242, 30 novembre 1982, page 1120 M 175; & JP - A - 57 139 229 (MATSUSHITA DENKI SANGYO K.K.) 28-08-1982

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