

Title (en)  
AIR HEATER AND METHOD OF USING THE SAME

Publication  
**EP 0136957 A3 19860219 (FR)**

Application  
**EP 84401993 A 19841004**

Priority  
FR 8315767 A 19831004

Abstract (en)  
[origin: ES8603058A1] The heater consists of a cylindrical casing (1), a fan (2), heat exchanger (5), vent flaps (8), and central dished part (6). In use the diameter of the dished part is varied to adjust the velocity through the vents, according to the height at which the heater is mounted. Thus the heated air arrives at the personal level at low velocity and without turbulence. By mounting the heater vertically, stratification of heated air is avoided as rising warm air is redirected downwards. The vents may be adjusted to direct air to specified areas.  
[origin: ES8603058A1] A unit heater for heating large volume premises. The heater includes a motor-ventilator unit mounted vertically in an expansion enclosure open at its upper and lower ends. Air is drawn downwardly through this expansion enclosure across a lower outlet orifice and a convex central bottom in the lower end of the enclosure. Air distribution is directed across fins with adjustable orientations. The heat exchange unit includes spirally-wound electric heating resistors, hot fluid radiators, or other equivalent means.

IPC 1-7  
**F28D 1/02**; **F24F 13/14**

IPC 8 full level  
**F24F 13/14** (2006.01); **F28D 1/02** (2006.01)

CPC (source: EP US)  
**F24F 13/142** (2013.01 - EP US); **F28D 1/024** (2013.01 - EP US)

Citation (search report)  
• [XD] US 2332762 A 19431026 - STEMPEL EDWARD H, et al  
• [XD] DE 1191536 B 19650422 - HELIOS APPBAU K G  
• [X] US 2362955 A 19441114 - CANTWELL JOHN D

Cited by  
EP0699875A3; FR2644562A1; US6287191B1; WO9010829A1

Designated contracting state (EPC)  
AT BE CH DE GB IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0136957 A2 19850410**; **EP 0136957 A3 19860219**; CA 1252442 A 19890411; ES 536483 A0 19851216; ES 8603058 A1 19851216; FR 2552861 A1 19850405; FR 2552861 B1 19890331; US 4628798 A 19861216

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**EP 84401993 A 19841004**; CA 464646 A 19841003; ES 536483 A 19841003; FR 8315767 A 19831004; US 83818286 A 19860304