

Title (en)  
ELECTRIC HEATING ELEMENT FOR HEATING A FLUID

Publication  
**EP 0123698 B1 19860102 (DE)**

Application  
**EP 83103976 A 19830422**

Priority  
EP 83103976 A 19830422

Abstract (en)  
[origin: EP0126858A1] 1. Electrical heater for heating a gaseous or liquid medium, with a holding device for receiving a resistance-wire coil (8, 9), the holding device consisting of individual heater elements (1) of circular cross-section, which are placed on top of one another in the axial direction and in which there are, in regions located opposite one another, recesses (7) in which the resistance-wire coil (8, 9) is located, and the outer walls (4) of the heater elements (1), when these are placed on top of one another, complementing each other to form a closed cylindrical outer wall of the holding device, characterized in that in the heater elements (1) there are webs (5) which extend radially inwards from the outer walls to a central region and have the recesses (7) for receiving the resistance-wire coil (8, 9), and which between themselves determine axial flow channels (10) for the medium to be heated, in that in the central region of the heater there is at least one further axial flow channel (14a, 14b, 14c) which is closed at the downstream end of the heater, and in that on at least one of the downstream heater elements (1e, 1f) at least one radially extending passage (17) is formed between the further axial flow channel (14a, 14b, 14c) and the axial channels (10) located between the webs (5).

IPC 1-7  
**H05B 3/16**; **H05B 3/46**

IPC 8 full level  
**H05B 3/06** (2006.01); **A45D 20/10** (2006.01); **H05B 3/16** (2006.01); **H05B 3/46** (2006.01)

CPC (source: EP)  
**H05B 3/16** (2013.01); **H05B 3/46** (2013.01)

Cited by  
FR2598847A1; EP0242340A3; EP0244374A3; WO0013467A1; DE102021215100A1; WO2023126156A1

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

DOCDB simple family (publication)  
**EP 0126858 A1 19841205**; **EP 0126858 B1 19871125**; AT E17297 T1 19860115; AU 1810383 A 19841025; AU 567504 B2 19871126; BR 8306525 A 19850312; DE 3361675 D1 19860213; DE 3467847 D1 19880107; DK 492483 A 19841023; DK 492483 D0 19831027; EP 0123698 A1 19841107; EP 0123698 B1 19860102; FI 75463 B 19880229; FI 75463 C 19880609; FI 832814 A0 19830804; FI 832814 A 19841023; JP H0226357 B2 19900608; JP H0358157 B2 19910904; JP S59203392 A 19841117; JP S6035489 A 19850223; NO 153789 B 19860210; NO 153789 C 19860528; NO 833004 L 19841023; ZA 836088 B 19840829; ZA 842952 B 19841128

DOCDB simple family (application)  
**EP 84102135 A 19840229**; AT 83103976 T 19830422; AU 1810383 A 19830818; BR 8306525 A 19831128; DE 3361675 T 19830422; DE 3467847 T 19840229; DK 492483 A 19831027; EP 83103976 A 19830422; FI 832814 A 19830804; JP 20610083 A 19831104; JP 8167784 A 19840423; NO 833004 A 19830819; ZA 836088 A 19830818; ZA 842952 A 19840419