

Title (en)

Electric heating element for heating a fluid.

Title (de)

Elektrischer Heizkörper zum Erhitzen eines Fluidstroms.

Title (fr)

Élément chauffant électrique pour le chauffage d'un fluide.

Publication

**EP 0123698 A1 19841107 (DE)**

Application

**EP 83103976 A 19830422**

Priority

EP 83103976 A 19830422

Abstract (en)

1. An electrical heater body for heating a fluid, comprising a support structure for supporting a helically wound resistance wire coil (9), said support structure consisting of individual heater body elements of circular cross-sectional shape stacked upon one another in the axial direction and being formed at mutually opposite locations with recesses (8) for supporting said resistance wire coil (9) therein, characterized in that in the stacked condition of said heater body elements (1) the outer walls (2) thereof cooperate to form a continuous cylindrical outer wall of said support structure, and in that within said heater body elements (1) there are provided webs (4) extending radially inwards from said outer walls (2) and formed with said recesses (8) for mounting said resistance wire coil (9), said radial webs defining axial flow channels for the fluid flow therebetween.

Abstract (de)

Bei diesem elektrischen Heizkörper ist die Heizdrahtwendel (9) in einem Körper (1; 11, 16) aus Keramik oder anderem hitzebeständigen Material gelagert. Zur leichteren Wärmeübertragung ist die Heizdrahtwendel (9) derart angeordnet, daß die Luftströmungsrichtung und die Wendelachse einen rechten Winkel miteinander einschließen. In einer ersten Ausführungsform sind zu diesem Zweck einzelne scheibenförmige Heizkörper-elemente (1) aufeinander gesetzt, die zwischen sich Teilabschnitte (9a) der Heizdrahtwendel (9) aufnehmen, während in einer zweiten Ausführungsform die Heizdrahtwendel spiralförmig um einen zylindrischen Körper (11) gewickelt ist, der in einen Hohlzylinder (16) eingebettet ist.

IPC 1-7

**H05B 3/16**; **H05B 3/46**

IPC 8 full level

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CPC (source: EP)

**H05B 3/16** (2013.01); **H05B 3/46** (2013.01)

Citation (search report)

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**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