

Title (en)  
Heating arrangement using a P.T.C. resistance.

Title (de)  
Kaltleiter-Heizeinrichtung.

Title (fr)  
Dispositif de chauffage utilisant une résistance C.T.P.

Publication  
**EP 0026456 A2 19810408 (DE)**

Application  
**EP 80105755 A 19800924**

Priority  
DE 2939470 A 19790928

Abstract (en)  
[origin: ES8105915A1] A heating device has a PTC resistor plate as the heating element and is covered with an insulating body. Between the heating element and the insulating body, on each of opposite surfaces of the heating element, ductile metal layers, preferably aluminum, are provided under a permanent pressure of at least 0.3x108 Pa, the layers being designed as current supply electrodes having electrical terminals. The resistor plate may advantageously have a surface roughness in the magnitude of 100 mu m.

Abstract (de)  
Kaltleiter-Heizelement ohne Metallisierung der im Betriebszustand als elektrische Kontaktflächen dienenden Oberflächen des Kaltleiterkörpers (1), wobei der elektrische Kontakt im eingebauten Zustand des Heizelements durch mit permanent aufrechthaltendem Druck angepreßte Metallkontakte (4, 5) erzeugt ist.

IPC 1-7  
**H05B 3/06; H05B 3/14**

IPC 8 full level  
**H01C 1/14** (2006.01); **H05B 3/06** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP US)  
**H01C 1/1406** (2013.01 - EP US); **H05B 3/06** (2013.01 - EP US); **H05B 3/14** (2013.01 - EP US); **H05B 2203/02** (2013.01 - EP US)

Cited by  
EP0487920A1; EP0398811A3; US5212466A; US5351390A

Designated contracting state (EPC)  
AT CH FR GB IT LI

DOCDB simple family (publication)  
**EP 0026456 A2 19810408; EP 0026456 A3 19810415**; DE 2939470 A1 19810402; DE 2939470 C2 19820408; ES 495392 A0 19810616;  
ES 8105915 A1 19810616; JP S5657288 A 19810519; US 4331861 A 19820525

DOCDB simple family (application)  
**EP 80105755 A 19800924**; DE 2939470 A 19790928; ES 495392 A 19800926; JP 13572380 A 19800929; US 18118880 A 19800825