

Title (en)
ELECTRIC HEATER HAVING A CONTACT HOT PLATE

Title (de)
ELEKTRISCHE HEIZUNG MIT KONTAKTKOCHPLATTE

Title (fr)
DISPOSITIF DE CHAUFFAGE ELECTRIQUE A PLAQUE CHAUFFANTE A CONTACT

Publication
EP 1602262 A1 20051207 (DE)

Application
EP 04716592 A 20040303

Priority
• EP 2004002125 W 20040303
• DE 10310255 A 20030305

Abstract (en)
[origin: WO2004080127A1] In one embodiment of the invention, an electric heater (11) can be provided with a contact hot plate (12), on which wire-shaped heating filaments (14) are arranged. At least one of the heating filaments (14b) is made of a material having a PTC effect, e.g. an iron-base alloy. This retains, during all operating states of the heating filament, a crystal structure that is centered in a cubically inward manner, and simultaneously has the PTC effect. In addition to its heating function, a heating element (14) of this type also comprises an independent temperature control for preventing excess temperature whereby enabling the elimination of separate temperature limiters with switching contacts.

IPC 1-7
H05B 3/26; **H05B 3/68**

IPC 8 full level
H05B 3/12 (2006.01); **H05B 3/74** (2006.01)

CPC (source: EP)
H05B 3/12 (2013.01); **H05B 3/74** (2013.01); **H05B 2203/02** (2013.01)

Citation (search report)
See references of WO 2004080127A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 10310255 A1 20040916; CN 1757265 A 20060405; EP 1602262 A1 20051207; WO 2004080127 A1 20040916; ZA 200505471 B 20070228

DOCDB simple family (application)
DE 10310255 A 20030305; CN 200480005893 A 20040303; EP 04716592 A 20040303; EP 2004002125 W 20040303;
ZA 200505471 A 20050707