

Title (en)

Tubular heating element with a conical heating spiral conductor

Title (de)

Rohrheizkörper mit konischer Heizleiterwendel

Title (fr)

Element de chauffage tubulaire avec un conducteur chauffant helicoidal tronconique

Publication

EP 1718115 A1 20061102 (DE)

Application

EP 06007617 A 20060411

Priority

DE 102005019211 A 20050425

Abstract (en)

The pipe heater (R) includes heating coil (22) that has two contact areas that are curved with respect to a longitudinal axis, and a work area formed between the contact areas to extend the contact areas. The diameter of the heating coil increases from one contact area towards the work area. The heating coil is embedded in an electrical isolation material (20), and arranged inside the jacket pipe (10) of a household appliance. A connector (24) couples the heating coil to a power source. An independent claim is included for the heating coil.

IPC 8 full level

H05B 3/48 (2006.01); **H05B 3/44** (2006.01)

CPC (source: EP US)

H05B 3/44 (2013.01 - EP US); **Y10T 29/49083** (2015.01 - EP US)

Citation (search report)

- [Y] US 3259732 A 19660705 - IVAR JEPSON
- [Y] US 3521352 A 19700721 - VOLKER JOHN F
- [Y] US 4281451 A 19810804 - MANN GAMDUR S
- [A] CH 360144 A 19620215 - BLECKMANN & CO [AT]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1718115 A1 20061102; **EP 1718115 B1 20090916**; AT E443423 T1 20091015; CN 1856192 A 20061101; CN 1856192 B 20101201; DE 102005019211 B3 20061130; DE 502006004833 D1 20091029; ES 2333147 T3 20100217; PL 1718115 T3 20100226; US 2006249508 A1 20061109; US 7538301 B2 20090526

DOCDB simple family (application)

EP 06007617 A 20060411; AT 06007617 T 20060411; CN 200610076244 A 20060421; DE 102005019211 A 20050425; DE 502006004833 T 20060411; ES 06007617 T 20060411; PL 06007617 T 20060411; US 37907406 A 20060418