

Title (en)

HEATING MEMBER WITH RESISTIVE SURFACE

Title (de)

WIDERSTANDSFLÄCHEN-HEIZELEMENT

Title (fr)

ELEMENT CHAUFFANT A SURFACE DE RESISTANCE

Publication

EP 1106033 B1 20030212 (DE)

Application

EP 99941575 A 19990810

Priority

- DE 19836148 A 19980810
- EP 9905842 W 19990810

Abstract (en)

[origin: US6426489B1] The present invention relates to a heating member with a resistive surface (1) that comprises at least one resistive layer (10), two conductive layers (20, 30) as well as isolation layers (40, 50) respectively arranged between said layers (10, 20, 30). The first conductive layer (30) is made in the form of a neutral conductor, while the second conductive layer (30) is made in the form of a protection conductor. In a preferred embodiment of this invention, the resistive layer (10) comprises respectively a contact electrode (11, 12) on both sides in the edge area, while the first and second conductive layers (20, 30) each include a contact electrode (21, 31) in the edge area. The contact electrodes (11, 12, 21, 31) protrude longitudinally and on at least one side above their respective layers (10, 20, 30). A contact electrode (12) of the first resistive layer (10) coincides with the contact electrode (31) of the first conductive layer (30). The second electrode (12) of the second conductive layer (10) are offset relative to each other and relative to the contact electrode (21) of the first conductive layer (20).

IPC 1-7

H05B 3/36

IPC 8 full level

H05B 3/36 (2006.01)

CPC (source: EP US)

H05B 3/36 (2013.01 - EP US); **H05B 2203/011** (2013.01 - EP US); **H05B 2203/016** (2013.01 - EP US); **H05B 2203/017** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 6426489 B1 20020730; AT E232676 T1 20030215; AU 5513999 A 20000306; AU 747734 B2 20020523; CA 2340164 A1 20000224; DE 19836148 A1 20000302; DE 59904286 D1 20030320; EA 002670 B1 20020829; EA 200100232 A1 20010827; EP 1106033 A1 20010613; EP 1106033 B1 20030212; ES 2193740 T3 20031101; WO 0010365 A1 20000224; ZA 200100940 B 20020204

DOCDB simple family (application)

US 74456401 A 20010323; AT 99941575 T 19990810; AU 5513999 A 19990810; CA 2340164 A 19990810; DE 19836148 A 19980810; DE 59904286 T 19990810; EA 200100232 A 19990810; EP 9905842 W 19990810; EP 99941575 A 19990810; ES 99941575 T 19990810; ZA 200100940 A 20010202