

Title (en)

Ceramic heating element, its manufacturing method and its uses

Title (de)

Keramische Heizeinrichtung, Verfahren zu deren Herstellung und deren Verwendung

Title (fr)

Élément chauffant en céramique, sa méthode de fabrication et ses applications

Publication

EP 0720416 B1 20040324 (DE)

Application

EP 95120498 A 19951222

Priority

- DE 4447074 A 19941229
- DE 19547373 A 19951219

Abstract (en)

[origin: EP0720416A2] The heating device has an electric heating element (13) embedded between a pair of ceramic carrier foils (11,12), provided by a resistance heating conductor (15) and a pair of end leads (16,17). The electric heating element can be stamped out in one piece from an electrically-conductive ceramics foil, which is then laminated with the carrier foils, or alternatively the resistance heating conductor is formed via a thick-film technique, before combining it with stamped out low-ohmic leads.

IPC 1-7

H05B 3/14; F23Q 7/22

IPC 8 full level

F23Q 7/22 (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP)

F23Q 7/22 (2013.01); **H05B 3/141** (2013.01)

Citation (examination)

DE 3924777 A1 19900208 - NGK SPARK PLUG CO [JP]

Cited by

EP1133214A4; EP1972878A4; WO2009012239A3; WO2007080909A1; US8411723B2; US6452137B1; US8061402B2; US8070899B2; US8089337B2; US8557082B2; US9486988B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0720416 A2 19960703; EP 0720416 A3 19961120; EP 0720416 B1 20040324

DOCDB simple family (application)

EP 95120498 A 19951222