Title (en)

Alloy as material for control and heating elements having a positive temperature coefficient

Title (de)

Legierung als Werkstoff für Regel- oder Heizelemente mit positivem Temperaturkoeffizienten

Title (fr)

Alliage en tant que matériau pour des éléments de régulation ou de chauffage à coefficient de température positif

Publication

EP 0355431 B1 19970115 (DE)

Application

EP 89113621 A 19890724

Priority

DE 3825012 A 19880722

Abstract (en)

[origin: EP0355431A2] Material for an electrical resistance element having a positive temperature coefficient and heating plug having such a resistance element, the material having a resistance ratio, in relation to a temperature ratio of 20 DEG /1000 DEG C, of more than approximately 7.5 and a sudden resistance change occurring, in particular in the range of approximately 400 DEG to 900 DEG C.

IPC 1-7

H01C 7/02; F23G 7/00

IPC 8 full level

H05B 3/12 (2006.01); **C22C 19/00** (2006.01); **C22C 38/10** (2006.01); **F23G 7/00** (2006.01); **F23Q 7/00** (2006.01); **H01C 3/04** (2006.01); **H01C 7/02** (2006.01)

CPC (source: EP US)

H01C 7/02 (2013.01 - EP US)

Citation (examination)

- SIEMENS FORSCHUNGS-UND ENTWICKLUNGSBERICHT, Band 4, Nr. 5, 1975, Seiten 257-264, Springer Verlag, F.GEYER et al.: "Magnetisch halbharte Legierungen auf Co-Fe-Ni-Basis mit 40% bis 60% Kobalt-Massengehalt"
- PHYSICAL REVIEWS, Band 65, II, 1.Januar - 15.Juni 1944, Seite 347, B2, S.SIEGEL et al.: "Anamalous behavior of the electrical resistivity of some iron-cobalt alloys"
- PATENT ABSTRACTS OF JAPAN, Band 6, Nr. 210 (M-166)(1088), 22. Oktober 1982;& JP-A-57115622

Cited by

EP0785396A1; US5767485A; CN1054004C

Designated contracting state (EPC)

AT BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0355431 A2 19900228; **EP 0355431 A3 19911106**; **EP 0355431 B1 19970115**; AT E147881 T1 19970215; DE 3825012 A1 19900125; DE 58909765 D1 19970227; ES 2099694 T3 19970601; JP 2961124 B2 19991012; JP H02133901 A 19900523; US 5093555 A 19920303

DOCDB simple family (application)

EP 89113621 A 19890724; AT 89113621 T 19890724; DE 3825012 A 19880722; DE 58909765 T 19890724; ES 89113621 T 19890724; JP 19041889 A 19890721; US 38463289 A 19890721