

Title (en)

High temperature thermistor containing rare earth metals

Title (de)

Seltenerdmetallhaltiger Hochtemperatur-Thermistor

Title (fr)

Thermistance pour des températures élevées contenant des métaux du groupe de terres rares

Publication

EP 0810611 B1 19991006 (DE)

Application

EP 97201494 A 19970516

Priority

DE 19621934 A 19960531

Abstract (en)

[origin: EP0810611A1] A semiconductor ceramic, consisting of a rare earth metal oxide solid solution of composition (I), is new. (Y_aGd_bSm_cTb_d)₂O₃ (I), in which a = 0 to 0.995, b = 0 to 0.995, c = 0 to 0.995, d = 0.01 to 0.995 and a = greater than 0, when b = 0, or b = greater than 0, when a = 0. Preferably, the oxide solid solution has a cubic crystalline structure of C-M₂O₃ type and may contain further doping elements selected from Nd, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu. Also claimed is a thermistor with a semiconductor ceramic of the above composition (I).

IPC 1-7

H01C 7/04; **C04B 35/50**

IPC 8 full level

C04B 35/50 (2006.01); **H01C 7/04** (2006.01)

CPC (source: EP KR US)

H01C 7/02 (2013.01 - KR); **H01C 7/043** (2013.01 - EP US)

Cited by

US7138901B2; DE102008055108A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0810611 A1 19971203; **EP 0810611 B1 19991006**; CN 1118834 C 20030820; CN 1175778 A 19980311; DE 19621934 A1 19971204; DE 59700516 D1 19991111; JP H1087367 A 19980407; KR 100427900 B1 20040804; KR 970076910 A 19971212; TW 353233 B 19990221; US 5955937 A 19990921

DOCDB simple family (application)

EP 97201494 A 19970516; CN 97105512 A 19970530; DE 19621934 A 19960531; DE 59700516 T 19970516; JP 14003197 A 19970529; KR 19970022085 A 19970530; TW 86108431 A 19970617; US 86399097 A 19970528