

Title (en)

Alloy type thermal fuse and material for a thermal fuse element

Title (de)

Thermische Sicherung auf Legierungsbasis und Material für ein Sicherungselement

Title (fr)

Fusible thermique à alliage et matériau pour un élément fusible

Publication

EP 1429359 A2 20040616 (EN)

Application

EP 03019768 A 20030829

Priority

JP 2002361701 A 20021213

Abstract (en)

An alloy type thermal fuse of an operating temperature of 75 to 120 DEG C is provided in which a fuse element of a Bi-In-Sn alloy is used, excellent aging and heat cycle resistances for a long term can be ensured, and satisfactory operating characteristic can be ensured. <??>A material for a thermal fuse element has an alloy composition in which In is 15% or larger and smaller than 37%, Sn is 5% or larger and 28% or smaller, and balance Bi, and in which, with respect to each of reference points of ternary Bi-In-Sn eutectic points of 57.5%Bi-25.2%In-17.3%Sn and 54.0%Bi-29.7%In-16.3%Sn, a range of +/-2%Bi, +/-1%In, and +/-1%Sn is excluded. <IMAGE>

IPC 1-7

H01H 37/76; **C22C 12/00**

IPC 8 full level

C22C 12/00 (2006.01); **C22C 30/04** (2006.01); **H01H 37/76** (2006.01); **H01H 69/02** (2006.01)

CPC (source: EP US)

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Cited by

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EP 1429359 A2 20040616; **EP 1429359 A3 20040908**; CN 100349243 C 20071114; CN 1506990 A 20040623; JP 2004190113 A 20040708; JP 3953947 B2 20070808; US 2004184947 A1 20040923

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