

Title (en)

Improvements relating to thermal controls for electric heating elements

Title (de)

Verbesserung für eine thermische Regelung eines elektrischen Heizelements

Title (fr)

Perfectionnement concernant la régulation thermique pour un élément électrique chauffant

Publication

**EP 1517346 A1 20050323 (EN)**

Application

**EP 04028228 A 19990414**

Priority

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- GB 9807924 A 19980414

Abstract (en)

A contact thermal sensor comprising a sprung electrical conductor (5) serving at opposite ends thereof as the moving contacts of first and second sets of switch contacts which, in use, are held in closed condition against the bias of said sprung electrical conductor, the first set of switch contacts being arranged to be held in closed condition by a bimetallic switch actuator (1,2) which is adapted to allow the first contacts to open at a predetermined temperature, and the second set of switch contacts being arranged to be held in closed condition by a member (17) of fusible material which is adapted to allow the second contacts to open at a temperature above the operating temperature of the bimetallic switch actuator, the arrangement being such that, in use of the sensor, in the event of failure of the bimetallic switch actuator to open the first set of switch contacts the second set of switch contacts can be opened in response to melting of said member of fusible material. <IMAGE>

IPC 1-7

**H01H 37/00**

IPC 8 full level

**H01H 37/00** (2006.01)

CPC (source: EP)

**H01H 37/002** (2013.01)

Citation (search report)

- [A] EP 0014102 A1 19800806 - EATON SPA [IT]
- [A] WO 9216003 A1 19920917 - OTTER CONTROLS LTD [GB]
- [A] FR 2239751 A1 19750228 - THERMOSTAT & SCHALTGERAETEBAU [DE]
- [A] FR 2656952 A1 19910712 - SEB SA [FR]
- [A] US 3943480 A 19760309 - SCHMITT DONALD J
- [A] US 4472705 A 19840918 - CARLSON RICHARD H [US]

Cited by

CN103824727A; CN102969199A; CN103367035A; WO2007033537A1

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**WO 9953513 A1 19991021**; AU 3435499 A 19991101; CN 1134807 C 20040114; CN 1304539 A 20010718; DE 69928517 D1 20051229; DE 69928517 T2 20060810; DE 69934338 D1 20070118; DE 69934338 T2 20070628; EP 1072048 A1 20010131; EP 1072048 B1 20051123; EP 1517346 A1 20050323; EP 1517346 B1 20061206; GB 0216281 D0 20020821; GB 2338110 A 19991208; GB 2338110 B 20020828; GB 2373926 A 20021002; GB 2373926 B 20021113; GB 9807924 D0 19980610; HK 1038829 A1 20020328

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