

Title (en)

IMPROVEMENTS RELATING TO THERMALLY-RESPONSIVE ACTUATORS

Title (de)

VERBESSERUNGEN AN THERMISCH ANSPRECHENDE AUSLÖSER

Title (fr)

AMELIORATIONS APPORTEES A DES ACTIONNEURS A SENSIBILITE THERMIQUE

Publication

EP 1034552 A1 20000913 (EN)

Application

EP 98956996 A 19981130

Priority

- GB 9803571 W 19981130
- GB 9725401 A 19971128
- GB 9811400 A 19980527

Abstract (en)

[origin: WO9928935A1] A steam sensor switch for an automatic kettle employs a snap-acting bimetallic actuator to operate an overcentre arrangement by means of a push rod, the overcentre arrangement comprising a C-spring and a trip lever sprung between spaced-apart abutments. Whereas in prior arrangements of this type the trip lever has been arranged to interact with cantilevered spring contact elements which are mechanically deformed in switch operations, in the steam sensor of the invention the spring contact elements are integrally formed with the C-spring so that they pivot about a fulcrum when the overcentre arrangement switches between its two stable conditions and are not subject to mechanical deformation. This contact arrangement, which makes use of an E-shaped spring having the C-spring as the middle one of its three horizontal strokes, enables greater contact separation to be achieved in a small size switch than does the conventional cantilevered arrangement and thereby enhances electrical safety.

IPC 1-7

H01H 5/18; H01H 37/60

IPC 8 full level

H01H 5/18 (2006.01); **H01H 5/22** (2006.01); **H01H 5/24** (2006.01); **H01H 37/04** (2006.01); **H01H 37/54** (2006.01); **H01H 37/60** (2006.01)

CPC (source: EP)

H01H 5/18 (2013.01); **H01H 5/22** (2013.01); **H01H 5/24** (2013.01); **H01H 37/043** (2013.01); **H01H 37/54** (2013.01); **H01H 37/60** (2013.01);
H01H 2037/5472 (2013.01)

Citation (search report)

See references of WO 9928935A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

WO 9928935 A1 19990610; AU 1342799 A 19990616; CN 1132206 C 20031224; CN 1286798 A 20010307; DE 69810963 D1 20030227;
DE 69810963 T2 20030605; EP 1034552 A1 20000913; EP 1034552 B1 20030122; GB 0121868 D0 20011031; GB 2363908 A 20020109;
GB 2363908 B 20020306

DOCDB simple family (application)

GB 9803571 W 19981130; AU 1342799 A 19981130; CN 98813182 A 19981130; DE 69810963 T 19981130; EP 98956996 A 19981130;
GB 0121868 A 19980527