

Title (en)
Improvements relating to thermal switches.

Title (de)
Thermische Schalter.

Title (fr)
Interrupteurs thermiques.

Publication
EP 0376660 A2 19900704 (EN)

Application
EP 89313539 A 19891222

Priority
GB 8830299 A 19881228

Abstract (en)
A snap-acting bimetal blade for use as a thermally-responsive switch actuator has a generally rectangular outer shape and has a generally rhomboidal cut-out defining two spaced-apart and tapering legs connected together at their opposite ends. Such a blade shape has advantageous characteristics as regards the forces and movement that can be developed in switching operations. A thermally-responsive switch incorporating such a bimetal blade has first and second spaced-apart metal parts, one of which is formed of rigid, electrically-resistive material and the other of which is a spring member, first and second contacts provided on such parts, a bimetal blade as aforesaid welded to one of the parts, and an insulating push rod arranged for transferring switch-operating movement of the bimetal to the spring member for operating the switch. When used as a motor protection switch, the bimetal operation is dependent upon heat generated by current flow in the electrically-resistive part of the switch and the switch can be made relatively insensitive to large currents flowing for short durations, but sensitive to longer term lower currents, and can have a high ratio of "off" time to "on" time.

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CPC (source: EP)
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Cited by
EP1296344A3; DE19545998A1; DE19545998C2; US5835001A; WO9212524A1

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