

Title (en)
Temperature switch.

Title (de)
Temperaturschalter.

Title (fr)
Interrupteur thermique.

Publication
EP 0416335 A1 19910313 (DE)

Application
EP 90115626 A 19900816

Priority
DE 3929965 A 19890908

Abstract (en)
[origin: JPH03205725A] PURPOSE: To make switching amplitude larger and preheating period longer, in a temperature switch for a radiant heating means having a sensor tube enclosed by an electrically insulating outside tube by providing the outside tube with a ceramic material absorbing and reflecting the radiation from a radiation source. CONSTITUTION: In a temperature switch for a radiant heating means 11 having a sensor tube 43 enclosed by an electrically insulating outside tube 45, the outside tube 45 has a ceramic material at least substantially absorbing and/or reflecting the radiation from radiation sources 18, 20. On one end of the tube 45 of steatite, a heater and a glass ceramic plate are electrically insulated, and on the other end, reflection, absorption and radiation by a heat medium are shielded. A temporary response delay and a large switching hysteresis are imparted to a sensor 27. Thus, the thermal inertia in the outside tube is increased to increase the response delay, and this increase in thermal inertial is effective to precisely hold a set temperature.

Abstract (de)
Ein Temperaturschalter (28) für die Temperaturbegrenzung einer Glaskeramikplatte (12) gegen die von Hell- und Dunkelstrahlern (18, 20) herrührende Strahlung hat einen Fühler (27), der aus einem metallischen Fühlerrohr (43) und einem innen liegenden keramischen Stab (44) besteht. Über den Fühler (27) ist ein Steatitrohr (45) gezogen, das einerseits für die elektrische Isolierung zwischen den Heizkörpern und der Glaskeramikplatte sorgt und andererseits die Strahlung durch Reflektion und Absorption und thermische Masse so abschirmt, daß der Fühler eine temporäre Ansprechverzögerung und eine größere Schalthysterese bekommt.

IPC 1-7
F24C 15/10; **H01H 37/48**; **H05B 1/02**; **H05B 3/74**

IPC 8 full level
F24C 15/10 (2006.01); **H01H 37/48** (2006.01); **H05B 1/02** (2006.01); **H05B 3/74** (2006.01)

CPC (source: EP US)
F24C 15/105 (2013.01 - EP US); **H01H 37/48** (2013.01 - EP US); **H05B 1/0216** (2013.01 - EP US); **H05B 3/742** (2013.01 - EP US); **H01H 2037/326** (2013.01 - EP US)

Citation (search report)

- [YD] FR 2435796 A3 19800404 - EGO ELEKTRO BLANC & FISCHER [DE]
- [Y] DE 2839161 A1 19800320 - EGO REGELTECH
- [YD] EP 0348716 A2 19900103 - EGO ELEKTRO BLANC & FISCHER [DE]
- [A] GB 2172749 A 19860924 - COTHERM SA

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DOCDB simple family (application)
EP 90115626 A 19900816; AT 90115626 T 19900816; DE 3929965 A 19890908; DE 59009395 T 19900816; ES 90115626 T 19900816; JP 23346990 A 19900905; US 57835490 A 19900906