

Title (en)
Temperature switch.

Title (de)
Temperaturschalter.

Title (fr)
Interrupteur thermique.

Publication
EP 0416335 B1 19950712 (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 inertia is effective to precisely hold a set temperature.

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

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 (examination)
DE 2500586 B

Cited by
GB2333430A; GB2333430B; DE102004023787A1; DE102004023787B4; DE102004023787C5; EP0544244A3; US5420398A; TR26583A; EP1791395A2

Designated contracting state (EPC)
AT CH DE ES FR GB IT LI SE

DOCDB simple family (publication)
EP 0416335 A1 19910313; **EP 0416335 B1 19950712**; AT E125097 T1 19950715; DE 3929965 A1 19910314; DE 59009395 D1 19950817; ES 2074503 T3 19950916; JP H03205725 A 19910909; US 5113170 A 19920512

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