

Title (en)

Device for protection of electrical heated vacuum furnace.

Title (de)

Einrichtung zum Schutz elektrisch beheizter Vakuumöfen.

Title (fr)

Appareil pour la protection de fours à vide à chauffage électrique.

Publication

EP 0468203 A1 19920129 (DE)

Application

EP 91110222 A 19910621

Priority

DE 4020818 A 19900629

Abstract (en)

[origin: JPH04227472A] PURPOSE: To provide a protector taking a appropriate measure for protecting a facility by detecting gaseous discharge in an electrically heated vacuum furnace. CONSTITUTION: An electrically heated vacuum furnace is provided with special lead-through devices 3 for transmitting current to the heating elements 4. In place of recognizing gas discharges which can occur between a lead-through 3 and a tank wall 1 directly, an auxiliary electrode 7 surrounding the insulation 6 of the lead through is provided and short circuit between the auxiliary electrode 7 and tank wall 1 is detected by means of a safety resistor detector, or the like. A thermocouple may be substituted for the surrounding auxiliary electrode.

Abstract (de)

Ein elektrisch beheizter Vakuumofen ist mit speziellen Durchführungen (3) zur Übertragung von Strom zu Heizelementen (4) versehen. Um Gasentladungen, welche zwischen einer Durchführung und der Kesselwand (1) stattfinden können, zu erkennen, ist die Isolation (6) der Durchführung von einer Hilfselektrode (7) umgeben. Anstelle einer Hilfselektrode kann auch ein Thermoelement verwendet werden. <IMAGE>

IPC 1-7

F27B 14/20; **F27D 21/00**; **H05B 7/101**

IPC 8 full level

F27D 11/02 (2006.01); **F27D 21/00** (2006.01); **H05B 3/00** (2006.01); **H05B 3/62** (2006.01)

CPC (source: EP US)

F27D 11/02 (2013.01 - EP US); **F27D 21/00** (2013.01 - EP US); **H05B 3/62** (2013.01 - EP US); **F27D 2021/0071** (2013.01 - EP US)

Citation (search report)

- [A] DE 1565534 A1 19720302 - FINKL CHARLES W, et al
- [A] DE 3228471 A1 19840209 - DEHN & SOEHNE [DE]
- [A] DD 120275 A1 19760605

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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