

Title (en)

Tube and process for compression-fitting of functional elements in such a tube

Title (de)

Rohr und Verfahren zum Verspannen von Funktionselementen in einem solchen

Title (fr)

Tube et procédé pour haubanner des éléments fonctionnels dans un tel tube

Publication

**EP 1545157 A3 20051012 (DE)**

Application

**EP 04029778 A 20041216**

Priority

DE 10360159 A 20031220

Abstract (en)

[origin: EP1545157A2] Method for clamping PTC heating elements etc. in hollow holder (1), such as tube, with two concave ceiling wall region (1.5,1.6) opposite to each other and to flat sides of PTC heating elements (2). PTC heating elements are clamped by pressure application to further side walls, orthogonally to ceiling wall regions. Preferably side walls are pressurised in direction of their surface normal. Pressure application typically reduces spacing of side walls in application direction, with regions of side walls providing clamping of PTC elements. Independent claims are included for tube holding PTC heating elements and its use and heater.

IPC 1-7

**H05B 3/52**; **H01C 7/02**

IPC 8 full level

**H01C 1/01** (2006.01); **H01C 7/02** (2006.01); **H05B 3/50** (2006.01); **H05B 3/52** (2006.01)

CPC (source: EP US)

**F24H 9/1872** (2013.01 - EP); **H01C 1/01** (2013.01 - EP US); **H01C 7/02** (2013.01 - EP US); **H05B 3/50** (2013.01 - EP US); **H05B 2203/017** (2013.01 - EP US); **H05B 2203/02** (2013.01 - EP US)

Citation (search report)

- [A] US 4942289 A 19900717 - ROLLER HANNO [DE], et al
- [A] DE 3942266 C1 19910307 - TUERK & HILLINGER GMBH [DE]
- [A] US 6169472 B1 20010102 - KAHR WERNER [AT]
- [A] US 4814584 A 19890321 - BOHLENDER FRANZ [DE], et al

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DOCDB simple family (application)

**EP 04029778 A 20041216**; AT 04029778 T 20041216; DE 10360159 A 20031220; DE 502004002082 T 20041216; US 1499004 A 20041220