

Title (en)

OBTURATING ELEMENT FOR SEALING A DEFECTIVE HEAT-EXCHANGER PIPE

Title (de)

ROHRSTOPFEN ZUM VERSCHLIESSEN EINES DEFEKTN WÄRMETAUSCHERROHRES

Title (fr)

ELEMENT D'OBTURATION POUR TUBES D'ECHANGE DE CHALEUR DEFECTUEUSE

Publication

**EP 0447391 B2 19970108 (DE)**

Application

**EP 88909985 A 19881129**

Priority

DE 8800738 W 19881129

Abstract (en)

[origin: WO9006483A1] An obturating element (1) for sealing one end of a heat-exchanger pipe (2) consists of a hollow cylindrical part (3) which merges smoothly into a hollow conical part (4) and which has an outer diameter slightly smaller than that of the heat-exchanger pipe (2) to be sealed. The obturating element (1) is inserted in the heat-exchanger pipe (2) and expanded or rolled in order to bring it into sealing contact with the inner surface of the heat-exchanger tube (2). Means (6) for inserting a drawing tool (15) are mounted in the conical part (4). The cylindrical part (3) is roughened in the region which expands. In a process for removing the obturating element (1), a track (12a) is traced by welding along the wall of the element; as the wall shrinks, it retracts, thus releasing the obturating element (1).

IPC 1-7

**F28F 11/02**

IPC 8 full level

**F28F 9/04** (2006.01); **F28F 11/02** (2006.01)

CPC (source: EP)

**F28F 11/02** (2013.01)

Citation (opposition)

Opponent :

- EP 0137984 A2 19850424 - LUMMUS CREST SARL [FR]
- US 4513786 A 19850430 - SODERGREN JAN H [US], et al
- US 4502511 A 19850305 - ZAFRED PAOLO R [US]
- US 4178966 A 19791218 - ROHRBERG RODERICK G [US], et al

Designated contracting state (EPC)

CH DE FR LI NL SE

DOCDB simple family (publication)

**WO 9006483 A1 19900614**; DE 3874152 D1 19921001; EP 0447391 A1 19910925; EP 0447391 B1 19920826; EP 0447391 B2 19970108;  
ES 2017441 A6 19910201

DOCDB simple family (application)

**DE 8800738 W 19881129**; DE 3874152 T 19881129; EP 88909985 A 19881129; ES 8904076 A 19891129