

Title (en)

NEAT-EXCHANGER APPARATUS, ESPECIALLY FOR A GAS OR OIL FIXED WATER HEATER

Publication

**EP 0401543 B1 19930811 (DE)**

Application

**EP 90108956 A 19900512**

Priority

- DE 8907029 U 19890608
- DE 8911236 U 19890921

Abstract (en)

[origin: EP0401543A1] The invention relates to a heat exchanger apparatus with at least one outer pipe (80) carrying a first heat exchange medium, in which outer pipe there extends at least one inner pipe (82) of lesser diameter for a second heat exchange medium. It is proposed that, in order for the inner pipe (82) to be supported without play, the outer pipe (81) be provided with inward-directed local projections (88) which press the inner pipe (82) against the inside wall of the outer pipe (80) or against other inward-directed projections of the outer pipe. <IMAGE>

IPC 1-7

**F24H 1/52**

IPC 8 full level

**F24H 1/52** (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP)

**F24H 1/52** (2013.01); **F24H 1/526** (2013.01); **F28D 7/10** (2013.01)

Cited by

EP0775876A1; EP0932009A3; CN101846470A; GB2409261A; EP1703213A1; DE19601179A1; EP0784191A3; FR2741426A1; EP0784191A2

Designated contracting state (EPC)

DE ES FR GB IT NL

DOCDB simple family (publication)

**EP 0401543 A1 19901212**; **EP 0401543 B1 19930811**; DE 59002270 D1 19930916; DE 8911236 U1 19901004; ES 2044304 T3 19940101; PT 94301 A 19910208

DOCDB simple family (application)

**EP 90108956 A 19900512**; DE 59002270 T 19900512; DE 8911236 U 19890921; ES 90108956 T 19900512; PT 9430190 A 19900607