

Title (en)

HEAT-EXCHANGER WITH END PLATE AND SLEEVE CONNECTION

Publication

**EP 0437825 A3 19920108 (DE)**

Application

**EP 90125371 A 19901222**

Priority

- DE 4000823 A 19900113
- DE 4005576 A 19900222

Abstract (en)

[origin: EP0437825A2] Provided in a heat exchanger for the purpose of connecting the tubes (2) to the tube plate (1) are separate connecting elements (3) whose sleeve connections (7) engage friction-tight in the widened end of the tube (2), and whose flanges (5) are connected to the tube plate (1) in a liquid-tight and gas-tight fashion. <??>As a result, the production of the individual parts is rendered more favourable, as is also the assembly, the properties of the tube connections are improved, and it is possible to use arbitrary tube shapes and material combinations. <IMAGE>

IPC 1-7

**F28F 9/06**

IPC 8 full level

**B21D 39/06** (2006.01); **F16L 41/08** (2006.01); **F28F 9/16** (2006.01)

CPC (source: EP US)

**F28F 9/167** (2013.01 - EP US); **F28F 2275/14** (2013.01 - EP US); **Y10S 165/492** (2013.01 - EP US)

Citation (search report)

- [A] FR 2509031 A1 19830107 - SUEDEDEUTSCHE KUEHLER BEHR [DE]
- [A] DE 8323074 U1 19881027
- [A] NL 7016348 A 19720512
- [A] FR 878494 A 19430121

Cited by

CN111288834A; DE4338959A1; DE9403848U1; DE4309360A1; DE102016116245A1; EP3596406A4; WO2018170514A1

Designated contracting state (EPC)

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