

Title (en)

Device for setting insertion slits for flat tubes in a header tube

Title (de)

Verfahren zum Einbringen von Flachrohreinsteckschlitzten in ein Sammelrohr

Title (fr)

Dispositif pour placer des fentes d'insertion pour tubes plats dans un tube collecteur

Publication

EP 1225410 A3 20040818 (DE)

Application

EP 01129674 A 20011213

Priority

DE 10103176 A 20010122

Abstract (en)

[origin: EP1225410A2] To form at least one insertion slit (6) in a collection tube (9), for the insertion of a flat tube in an air conditioning system, initially a cut is made with a saw in the required length (S1) and depth (d). In a second stage, a die punches the cut slit to form a passage (10), using a die with a greater width and/or length than the sawn slit.

IPC 1-7

F28F 9/02; **F28F 9/16**; **B21D 53/08**

IPC 8 full level

B23P 15/26 (2006.01); **B21D 28/10** (2006.01); **B21D 28/24** (2006.01); **B21D 28/28** (2006.01); **B21D 53/06** (2006.01); **F28F 9/02** (2006.01); **F28F 9/16** (2006.01); **F28F 9/18** (2006.01)

CPC (source: EP US)

B21D 28/28 (2013.01 - EP US); **F28F 9/0202** (2013.01 - EP US); **F28F 9/0214** (2013.01 - EP US); **F28F 9/16** (2013.01 - EP US); **F28F 9/18** (2013.01 - EP US); **F28F 2265/32** (2013.01 - EP US); **Y10T 29/49373** (2015.01 - EP US); **Y10T 29/49389** (2015.01 - EP US); **Y10T 29/49391** (2015.01 - EP US); **Y10T 29/49995** (2015.01 - EP US); **Y10T 29/49996** (2015.01 - EP US)

Citation (search report)

- [DY] DE 4442040 A1 19960530 - BEHR GMBH & CO [DE]
- [Y] DE 19911334 A1 20000921 - BEHR GMBH & CO [DE]
- [A] EP 0903555 A2 19990324 - BEHR GMBH & CO [DE]
- [A] US 3689972 A 19720912 - MOSIER JAMES A, et al

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WO2007092204A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1225410 A2 20020724; **EP 1225410 A3 20040818**; DE 10103176 A1 20020725; DE 10103176 B4 20100602; JP 2002273532 A 20020925; US 2002095789 A1 20020725; US 2004103535 A1 20040603; US 6772518 B2 20040810

DOCDB simple family (application)

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