

Title (en)

METHOD OF MAKING THE PLATES OF A PLATE HEAT EXCHANGER, AND HEAT EXCHANGER MADE WITH THESE PLATES

Publication

EP 0159685 A3 19861203 (DE)

Application

EP 85104838 A 19850422

Priority

DE 3415733 A 19840427

Abstract (en)

[origin: EP0159685A2] 1. Method for manufacturing of the plates of a plate heat exchanger designed of plates (1) stacked upon one another and being provided with embossed projections (2a, 2b) which protrude out of the plane of the plate towards one side or the other side and are located on the lines of a lattice (10), whereby the plates are supported against one another via their projections and whereby the projections define parallel flow channels between adjacent plates, characterized in that the projections are embossed in the plate by at least two consecutive embossing steps by the same tool, with the plate being moved between each two embossing steps relative to the tool by an intergral multiple n of a pitch (T) of the pattern of the projections recurring in the feed direction, that the tool (20) has an active length in the feed direction of the plate which length is equals to said integral multiple n of the pitch (T) of the pattern of the projections plus the length of the pitch (t) of an adjacent projection, that the embossing punches on the first and the last embossing punch line (21, 24) of the tool, which lines extend perpendicular to the feed direction, are mutually displaced perpendicular to the feed direction, and that the number and the position of the embossing punches on the first and the last embossing punch line (21, 24) of the tool (20) are arranged such that the embossing punches of these two lines together form a fully occupied line (for example 16) of embossing punches.

IPC 1-7

B21D 53/04; **F28F 3/08**

IPC 8 full level

B21D 53/04 (2006.01); **F28F 3/08** (2006.01)

CPC (source: EP)

B21D 53/04 (2013.01); **F28D 9/00** (2013.01); **F28F 3/044** (2013.01)

Citation (search report)

- [X] GB 827063 A 19600203 - ROLLS ROYCE
- [A] DE 1777061 A1 19710408 - BLANC & CO
- [A] US 2306526 A 19421229 - BROWN DALZELL CHARLES, et al
- [A] US 1826344 A 19311006 - DALGLIESH HERBERT V
- [A] US 3233665 A 19660208 - ROSENBLAD CURT F

Cited by

FR2596700A1; EP3006884A1; USD840958S; WO9428367A1; US6510870B1; US6957487B1; US6935418B1

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