

Title (en)

METHOD AND APPARATUS FOR MAKING A HEAT EXCHANGER UNIT

Publication

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Application

EP 89103242 A 19890224

Priority

DE 3807055 A 19880304

Abstract (en)

[origin: EP0331026A2] The invention discloses a method for making a heat exchanger unit, in which at least one portion of a collecting pipe (1) is produced and simultaneously firmly and fluid-tightly connected to ends of pre-positioned profile tubes (4) of a heat exchanger matrix (3) by pouring a molten metallic material into a cavity (9) formed between a central mould core (7) and an outer shell; the outer shell to be used here is a perforated sheet (15), by means of which the profile tubes (4) are pre-positioned and centred at the ends projecting into the cavity (9) and the surface of which is melted into the material of the collecting pipe during the casting operation.

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CPC (source: EP)

B22D 19/0063 (2013.01); B22D 19/04 (2013.01); F28F 9/162 (2013.01)

Citation (search report)

- [A] GB 2014069 A 19790822 - FOERENADE FABRIKSVERKEN
- [A] DE 2343310 A1 19750306 - DAIMLER BENZ AG
- [AD] DE 521654 C 19310324 - AURELIO POSSENTI, et al
- [A] DE 157134 C
- [AD] DE 3146090 A1 19830526 - MTU MUENCHEN GMBH [DE]

Cited by

GB2411855A; GB2411855B; DE4139104C1; US5318110A; EP3217136A1; WO2004058430A3

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