

Title (en)

Device for forming helical fins on the external wall of tubes.

Title (de)

Vorrichtung zur Formung von schraubenförmigen Rippen an der Aussenfläche eines Rohres.

Title (fr)

Dispositif permettant le formage d'ailettes hélicoïdales sur la paroi extérieure de tubes.

Publication

EP 0569307 A1 19931110 (FR)

Application

EP 93420180 A 19930504

Priority

FR 9205762 A 19920506

Abstract (en)

The device according to the invention relates to the production, by rolling, of helical fins on tubes for a heat exchanger so as to increase their capability of heat transfer. It comprises four rollers (6, 7, 8, 9) distributed over two carriages (4, 5) which can move translationally towards each other by means of a ram enabling the four rollers to be simultaneously brought to bear against the wall of a tube (2). The four rollers, distributed around the tube, are rotationally driven at the same speed by a single motor means (50) and can be oriented about an axis (X2, X3, X4, X5) perpendicular to their forming zones. The tube (2) is driven by the rollers along a running axis (X1-X1). Application to the finning of tubes (2) made of stainless (non-oxidisable) metals or alloys. <IMAGE>

IPC 1-7

B21D 15/04; **B21C 37/20**

IPC 8 full level

B21C 37/22 (2006.01); **B21C 37/20** (2006.01); **B21D 15/04** (2006.01); **B21H 3/00** (2006.01)

CPC (source: EP US)

B21C 37/207 (2013.01 - EP US); **B21D 15/04** (2013.01 - EP US)

Citation (search report)

- [A] FR 1515321 A 19680301 - GEN ELECTRIC
- [A] FR 2137491 A2 19721229 - FELTEN & GUILLEAUME KABELWERK
- [A] FR 1527259 A 19680531 - VULCAN ELECTRICS PROPRIETARY L
- [A] FR 891580 A 19440310 - OPEL ADAM AG

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CN117564382A

Designated contracting state (EPC)

AT BE CH DE DK ES GB IT LI LU NL PT SE

DOCDB simple family (publication)

EP 0569307 A1 19931110; **EP 0569307 B1 19961227**; AT E146706 T1 19970115; DE 69306851 D1 19970206; DE 69306851 T2 19970710; DK 0569307 T3 19970616; ES 2096896 T3 19970316; FR 2690858 A1 19931112; FR 2690858 B1 19940701; JP 2807803 B2 19981008; JP H0639469 A 19940215; US 5365763 A 19941122

DOCDB simple family (application)

EP 93420180 A 19930504; AT 93420180 T 19930504; DE 69306851 T 19930504; DK 93420180 T 19930504; ES 93420180 T 19930504; FR 9205762 A 19920506; JP 12989093 A 19930506; US 5525493 A 19930503