Title (en)
METHOD OF FORMING ALUMINIUM HEAT EXCHANGERS HEADER TANKS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON ALUMINIUMWÄRMETAUSCHERSAMMELKÄSTEN

Title (fr)
PROCÉDÉ DE FORMAGE DE COLLECTEURS D'ÉCHANGEURS THERMIQUES EN ALUMINIUM

Publication
EP 2349602 B1 20121107 (EN)

Application
EP 09783331 A 20090923

Priority
• EP 2009062326 W 20090923
• SE 0802120 A 20081008

Abstract (en)
[origin: WO2010040642A1] The invention relates to a method for producing a heat exchanger header tank comprising the steps of providing a tube having a core made from a AA3XXX-aluminium alloy; optionally pre-heating the tube; inserting the tube into a forming tool having a forming cavity with the shape of the final header tank; plugging the ends of the tube; internally pressurising the tube by the use of a gas so as to make it conform to the shape of the tool cavity, thus obtaining the final header tank; removing the header tank from the tool; and cooling the header tank. This method allows an efficient production of header tanks of irregular shapes made of AA3XXX aluminium alloy. The invention also relates to a method for producing a heat exchanger, where the header tank is connected to a plurality of tubes and corrugated fins inserted between the tubes, followed by brazing of the fins to the tubes.

IPC 8 full level
B21D 26/02 (2011.01); **B21D 26/033** (2011.01); **B21D 26/053** (2011.01); **B21D 53/02** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP SE US)
B21D 26/033 (2013.01 - EP SE US); **B21D 26/049** (2013.01 - SE); **B21D 26/053** (2013.01 - EP US); **B21D 53/02** (2013.01 - EP US);
B21D 53/06 (2013.01 - SE); **F28F 9/02** (2013.01 - EP US); **F28F 21/084** (2013.01 - EP US); F28F 2255/10 (2013.01 - EP US);
Y10T 29/4935 (2015.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
WO 2010040642 A1 20100415; BR PI0920023 A2 20160726; CA 2738747 A1 20100415; CN 102202812 A 20110928; DK 2349602 T3 20121210;
EA 022670 B1 20160229; EA 201170542 A1 20111031; EP 2349602 A1 20110803; EP 2349602 B1 20121107; ES 2400074 T3 20130405;
JP 2012505080 A 20120301; KR 20110069843 A 20110623; MX 2011003224 A 20110421; PL 2349602 T3 20130430; SE 0802120 A1 20100409;
SE 533223 C2 20100727; TW 201028229 A 20100801; TW I516319 B 20160111; US 2011240277 A1 20111006; ZA 201101793 B 20130828

DOCDB simple family (application)
EP 2009062326 W 20090923; BR PI0920023 A 20090923; CA 2738747 A 20090923; CN 200980137983 A 20090923; DK 09783331 T 20090923;
EA 201170542 A 20090923; EP 09783331 A 20090923; ES 09783331 T 20090923; JP 2011530447 A 20090923; KR 20117010415 A 20090923;
MX 2011003224 A 20090923; PL 09783331 T 20090923; SE 0802120 A 20081008; TW 98132383 A 20090925; US 200913121053 A 20090923;
ZA 201101793 A 20110308