

Title (en)

IMPROVED METHOD FOR MANUFACTURING A BENT HEAT EXCHANGER

Title (de)

VERBESSERTES VERFAHREN ZUR HERSTELLUNG EINES GEBogenEN WÄRMETausCHERS

Title (fr)

PROCÉDÉ AMÉLIORÉ POUR FABRIQUER UN ÉCHANGEUR DE CHALEUR PLIÉ

Publication

EP 2323781 A4 20140409 (EN)

Application

EP 09805526 A 20090806

Priority

- US 2009052910 W 20090806
- US 18844008 P 20080808

Abstract (en)

[origin: WO2010017336A2] An improved bending apparatus for bending a radiused corner at a window in a brazed heat exchanger core where no tubes and fins are located. A cylindrical mandrel and sliding pressure die are designed to completely surround the manifold in the areas of the window and provide a continuous, rolling contact area or profile support around the manifold as the bending moment is applied.

IPC 8 full level

F28D 1/053 (2006.01); **B21D 7/024** (2006.01); **B21D 11/10** (2006.01); **B21D 53/08** (2006.01)

CPC (source: EP US)

B21D 7/024 (2013.01 - EP US); **B21D 11/10** (2013.01 - EP US); **B21D 53/08** (2013.01 - EP US); **F28D 1/05383** (2013.01 - EP US);
F28D 2001/0273 (2013.01 - EP US); **F28D 2001/028** (2013.01 - EP US); **Y10T 29/4935** (2015.01 - EP US)

Citation (search report)

- [YD] JP 2005090806 A 20050407 - MATSUSHITA ELECTRIC IND CO LTD
- [Y] JP 2000154992 A 20000606 - DAIKIN IND LTD
- [Y] US 4727737 A 19880301 - BRYANT RALPH S [US]
- See references of WO 2010017336A2

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 2010017336 A2 20100211; WO 2010017336 A3 20110623; CN 102215995 A 20111012; EP 2323781 A2 20110525;
EP 2323781 A4 20140409; US 2011185574 A1 20110804

DOCDB simple family (application)

US 2009052910 W 20090806; CN 200980130890 A 20090806; EP 09805526 A 20090806; US 200913056155 A 20090806