

## Title (en)

A heat exchanger manifold and method of forming a heat exchanger manifold

## Title (de)

Wärmetauscherverteiler und Verfahren zur Herstellung eines Wärmeaustauscherverteilers

## Title (fr)

Collecteur d'échangeur thermique et son procédé de fabrication

## Publication

**EP 2098313 A1 20090909 (EN)**

## Application

**EP 08152405 A 20080306**

## Priority

EP 08152405 A 20080306

## Abstract (en)

The invention relates to a method of forming a heat exchanger manifold from a single sheet of base material. The method comprises forming a longitudinal locating groove (21; 121) in the central portion (20; 120) of the heat exchanger base material (12; 112) and forming tube insertion slots (36; 136) therein. The tube insertion slots (36; 136) have extruded walls (38; 138) which create locating channels (40; 140) between corresponding walls (38; 138) of adjacent tube insertion slots (36; 136). A series of protrusions (24; 124) are provided along opposed edges of the first and second partitioning wall portions (14; 114) to form ridged edges (22; 122) thereon, the series of protrusions (24; 124) being positioned along the ridged edges (22; 122) to correspond with portions of the longitudinal locating groove (21; 121) and the series of channels (40; 140) of the central portion (20; 120). When the walls of the base material are folded to form the heat exchanger, the protrusions (24; 124) of the ridged edges (22; 122) are located in the groove (21; 121) of the channels (40; 140) between the series of tube insertion slots (36; 136) and are securely brazed thereto.

## IPC 8 full level

**B21D 53/04** (2006.01); **F28F 9/02** (2006.01)

## CPC (source: EP)

**B21D 53/02** (2013.01); **F28D 1/05391** (2013.01); **F28F 9/0214** (2013.01); **F28F 2225/08** (2013.01)

## Citation (applicant)

- US 2004182558 A1 20040923 - WATANABE FUTOSHI [JP], et al
- WO 2004005827 A1 20040115 - BEHR GMBH & CO KG [DE], et al

## Citation (search report)

- [X] WO 2004005827 A1 20040115 - BEHR GMBH & CO KG [DE], et al
- [X] US 2006283583 A1 20061221 - NITTA TAKEYOSHI [US]
- [A] EP 1526351 A2 20050427 - BEHR GMBH & CO KG [DE]
- [A] WO 02079708 A2 20021010 - SHOWA DENKO KK [JP], et al
- [DA] US 2004182558 A1 20040923 - WATANABE FUTOSHI [JP], et al
- [A] EP 1191298 A2 20020327 - VISTEON GLOBAL TECH INC [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 MT NL NO PL PT RO SE SI SK TR

## Designated extension state (EPC)

AL BA MK RS

## DOCDB simple family (publication)

**EP 2098313 A1 20090909**

## DOCDB simple family (application)

**EP 08152405 A 20080306**