

Title (en)  
A HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 3907459 A1 20211110 (EN)**

Application  
**EP 20461532 A 20200504**

Priority  
EP 20461532 A 20200504

Abstract (en)  
A high pressure heat exchanger (100) comprising a first manifold (101) and a second manifold connected fluidly by a plurality of tube sets (20) arranged in a spaced manner along the manifolds, wherein at least one of the manifold comprises a rear cover (102), a header (103) with slots (104) receiving tube end sections (11b) of the tube sets and several internal plates (105) interposed between the header and the rear cover and configured to create a flow path within the manifold, this flow path being in fluid connection with the tubes to allow a circulation of a refrigerant in the tubes and the manifold, and wherein the header (103) has preferably at least a first area (110) adjacent to at least one of the slots and having a first thickness w1 and at least a second area (111) surrounding at least partially the first area and having a second thickness w2, first thickness w1 being smaller than second thickness w2.

IPC 8 full level  
**F28F 1/02** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)  
**F28D 7/16** (2013.01 - US); **F28D 7/1692** (2013.01 - EP); **F28F 1/025** (2013.01 - EP); **F28F 9/0221** (2013.01 - EP); **F28F 9/0246** (2013.01 - US); **F28D 7/1684** (2013.01 - EP)

Citation (search report)  
• [X] WO 03054467 A1 20030703 - BEHR GMBH & CO [DE], et al  
• [X] EP 2090851 A1 20090819 - DELPHI TECH INC [US]  
• [A] EP 2372283 A1 20111005 - DELPHI TECH INC [US]  
• [A] EP 3534104 A1 20190904 - VALEO AUTOSYSTEMY SP ZOO [PL]

Cited by  
WO2023126075A1

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3907459 A1 20211110**; CN 115698621 A 20230203; US 2023168048 A1 20230601; WO 2021223944 A1 20211111

DOCDB simple family (application)  
**EP 20461532 A 20200504**; CN 202180039054 A 20210401; EP 2021058586 W 20210401; US 202117997451 A 20210401