

Title (en)

HEAT EXCHANGER WITH SEALING STRUCTURE

Title (de)

WÄRMETAUSCHER MIT DICHTUNGSSTRUKTUR

Title (fr)

ÉCHANGEUR DE CHALEUR AVEC STRUCTURE D'ÉTANCHÉITÉ

Publication

EP 2629042 B1 20190327 (EN)

Application

EP 11832619 A 20111014

Priority

- JP 2010233072 A 20101015
- JP 2011073662 W 20111014

Abstract (en)

[origin: EP2629042A1] Provided is a sealing structure for a heat exchanger using caps which make installation processing of the caps easy and prevents liquid leakage, and a heat exchanger which, by working in combination with a flow channel member which impedes deformation, prevents space from forming between the cap and the flow channel member, thereby preventing liquid leakage. The heat exchanger (H) is provided with caps (2) which are installed by being inserted with pressure into the tubular flow channel member (1) and the openings on both ends of the flow channel member (1). The caps (2) are provided with a flow passage route (222) and diverging routes (271-278) for a heat medium to flow through, and an engaging member (23, 23b) which is a part to be engaged with the heat exchanger (H). The engaging member (23) has a larger radius than the inner diameter of the flow channel member (1), and concave grooves (251, 252) are formed along the entire perimeter of the engaging member in the longer direction of the circumference surface of the engaging member (23). The circumference surface of the engaging member (23) closely contacts the inner wall (12) of the flow channel member, and an open space (14) is formed

IPC 8 full level

F28F 11/02 (2006.01); **F28F 1/40** (2006.01); **F28D 1/053** (2006.01); **F28F 9/02** (2006.01); **F28F 13/06** (2006.01); **F28F 13/18** (2006.01)

CPC (source: EP)

F28D 1/053 (2013.01); **F28F 9/026** (2013.01); **F28F 13/06** (2013.01); **F28F 13/18** (2013.01); **F28F 2220/00** (2013.01); **F28F 2230/00** (2013.01)

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

DOCDB simple family (publication)

EP 2629042 A1 20130821; EP 2629042 A4 20150121; EP 2629042 B1 20190327; CN 103261830 A 20130821; CN 103261830 B 20150715; JP 2012087955 A 20120510; JP 4854803 B1 20120118; WO 2012050189 A1 20120419

DOCDB simple family (application)

EP 11832619 A 20111014; CN 201180060395 A 20111014; JP 2010233072 A 20101015; JP 2011073662 W 20111014