

Title (en)

Heat exchanger, more particularly oil cooler for motor vehicle.

Title (de)

Wärmetauscher, insbesondere Ölkühler für Kraftfahrzeuge.

Title (fr)

Echangeur de chaleur, en particulier refroidisseur d'huile pour véhicule automobile.

Publication

**EP 0444595 B1 19940504 (DE)**

Application

**EP 91102802 A 19910226**

Priority

DE 9002440 U 19900302

Abstract (en)

[origin: EP0444595A1] Heat exchanger, more particularly oil cooler for motor vehicles, which consists of a plurality of flat tube sections (2) through which a first heat exchange medium flows, which are closed on both sides by flat crimping and/or by a flat-crimped standing seam and are situated parallel to one another with the interposition of gill-like ribs (3) onto which a second heat exchange medium flows. The seam edges (8) provided at the tube ends have a corrugated contour extending in the longitudinal direction of the seam. This configuration produces, on the one hand, a very stable sealing seam. Again, because of the inherently stable seam they ensure its tightness, to be precise even when the heat exchanger is subjected to relatively high mechanical loads during operation, as is the case when it is used for oil coolers of motor vehicles. <IMAGE>

IPC 1-7

**F28D 1/03**; **F28F 3/10**

IPC 8 full level

**F28D 1/03** (2006.01); **F28F 3/04** (2006.01); **F28F 3/10** (2006.01)

CPC (source: EP)

**F28D 1/0325** (2013.01); **F28F 3/046** (2013.01); **F28F 3/10** (2013.01); **F28F 2220/00** (2013.01)

Cited by

DE102004007510B4; CN109612102A; CN100365371C; DE19723878B4; EP0692691A1; DE19605340A1; DE19605340C2; IT201800005663A1; WO2019224767A1; WO9727619A3; US7201216B2

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

**DE 9002440 U1 19900503**; DE 59101527 D1 19940609; EP 0444595 A1 19910904; EP 0444595 B1 19940504

DOCDB simple family (application)

**DE 9002440 U 19900302**; DE 59101527 T 19910226; EP 91102802 A 19910226