Title (en)

FLAT TUBE HEAT EXCHANGER WITH MORE THAN TWO FLOWS AND A DEFLECTING BOTTOM FOR MOTOR VEHICLES, AND PROCESS FOR MANUFACTURING THE SAME

Title (de)

MEHR ALS ZWEIFLUTIGER FLACHROHRWÄRMETAUSCHER FÜR KRAFTFAHRZEUGE MIT UMLENKBODEN SOWIE HERSTELLUNGSVERFAHREN

Title (fr)

ECHANGEUR DE CHALEUR A TUBES APLATIS AVEC DEUX FLUX OU DAVANTAGE ET UN FOND DE DEVIATION POUR VEHICULES A MOTEUR, AINSI QUE SON PROCEDE DE FABRICATION

Publication

EP 0912869 A1 19990506 (DE)

Application

EP 98925532 A 19980505

Priority

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- EP 9802637 W 19980505

Abstract (en)

[origin: DE19719256A1] A flat tube heat exchanger for motor vehicles has two or more flows and a deflecting bottom for deflecting adjacent flows (12) of the flat tubes. According to the invention, the deflecting bottom is subdivided into deflecting cups (20) individually associated to each flat tube (2) and interconnected only via their connection to their corresponding flat tubes (2). Also disclosed is a process for manufacturing such a flat tube heat exchanger by drawing, straightening and cutting flat tubes into sections from a coil, mechanically pre-assembling the flat tube heat exchanger from its component parts, including the flat tubes, and welding. The deflecting cups (20) are mechanically pre-assembled together with the flat tubes, after they are cut into sections and before the flat tube heat exchanger is pre-assembled together with the flat tubes.

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F28F 9/26; F28D 1/053

IPC 8 full level

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CPC (source: EP US)

F28D 1/05391 (2013.01 - EP US); **F28F 9/262** (2013.01 - EP US)

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Cited by

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DOCDB simple family (publication)

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DE 19719256 A 19970507; BR 9804890 A 19980505; CN 98800599 A 19980505; EP 9802637 W 19980505; EP 98925532 A 19980505; US 21445799 A 19990105