

Title (en)

MOTOR VEHICLE FLAT TUBE HEAT EXCHANGER WITH FLAT TUBES RETAINED ON COLLARS OF A TUBE BOTTOM

Title (de)

FLACHROHRWÄRMETAUSCHER FÜR KRAFTFAHRZEUGE MIT AN KRÄGEN EINES ROHRBODENS GEHALTENEN FLACHROHREN

Title (fr)

ECHANGEUR DE CHALEUR A TUBES APLATIS RETENUS SUR DES COLLETS D'UN FOND A TUBES POUR VEHICULES A MOTEUR

Publication

EP 0929784 A1 19990721 (DE)

Application

EP 98925533 A 19980505

Priority

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- EP 9802640 W 19980505

Abstract (en)

[origin: DE19719259A1] In a motor vehicle flat tube heat exchanger, the flat tubes (2) are inserted with an inner projection (66) into reversed collars (64) of slits (62) in the tube bottom of a collecting tank (18) for the inner heat exchange fluid and the collecting tank (18) has at least one partition (32) which separates different chambers of the collecting tank (18) and crosses the flat tubes. The partition extends next to the flat tubes (2) and the inward projecting collars at least down to the bottom of the tube bottom and has recesses which surround the free ends of the flat tubes (2) in the region of the free ends of the flat tubes (2) in the collecting tank. The free ends (66) of the flat tubes (2) in the collecting tank (18) are arranged with an undercut relative to the reversed collars (64), preventing the flat tubes (2) from being drawn out of the tube bottom. According to the invention, the free ends (66) of the flat tubes are pressed into the bottom of the associated recesses, compensating for tolerances and causing the material displaced (82) from the wall of the flat tube to form the undercut at its free end.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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