

Title (en)

HEAT EXCHANGER, HEAT EXCHANGER HEADER TANK AND MANUFACTURING METHOD THEREOF

Title (de)

WÄRMETAUSCHER, WÄRMETAUSCHERSAMMELKASTEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ECHANGEUR THERMIQUE, COLLECTEUR D'ECHANGEUR THERMIQUE ET PROCEDE DE FABRICATION ASSOCIE

Publication

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Application

**EP 02785936 A 20021115**

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Abstract (en)

[origin: WO03042611A1] In the present invention, a header tank 10 includes a header tank main body 11 and a cover plate 20. The header tank main body 11 is provided with a refrigerant inlet passage 12a and a refrigerant outlet passage 12b arranged in parallel, connecting apertures 14a and 14b formed on a tube connecting side 13 and communicating with the passages 12a and 12b, and a communicating aperture communicating with the passages 12a and 12b. The cover plate 20 has insertion apertures 24a and 24b corresponding to the connecting apertures 14a and 14b. The tubes 1a and 1b, the cover plate 20 and the header tank main body 11 are integrally joined in a state in which each end of the tube 1a and 1b is inserted into the insertion aperture 24a and 24b of the cover plate 20 disposed on the tube connecting side 13a of the header tank main body 11 and connected to the connecting apertures 14a and 14b of the header tank main body 11. Thus, a heat exchanger using CO<sub>2</sub> refrigerant capable of decreasing refrigerant flow resistance and enough strength against the inner pressure can be obtained.

[origin: WO03042611A1] In the present invention, a header tank 10 includes a header tank main body 11 and a cover plate 20. The header tank main body 11 is provided with a refrigerant inlet passage 12a and a refrigerant outlet passage 12b arranged in parallel, connecting apertures 14a and 14b formed on a tube connecting side 13 and communicating with the passages 12a and 12b, and a communicating aperture communicating with the passages 12a and 12b. The cover plate 20 has insertion apertures 24a and 24b corresponding to the connecting apertures 14a and 14b. The tubes 1a and 1b, the cover plate 20 and the header tank main body 11 are integrally joined in a state in which each end of the tube 1a and 1b is inserted into the insertion aperture 24a and 24b of the cover plate 20 disposed on the tube connecting side 13a of the header tank main body 11 and connected to the connecting apertures 14a and 14b of the header tank main body 11. Thus, a heat exchanger using CO<sub>2</sub> refrigerant capable of decreasing refrigerant flow resistance and enough strength against the inner pressure can be obtained.

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