

Title (en)
THREE-FLUID HEAT EXCHANGER AND AIR-CONDITIONING/WATER-HEATING SYSTEM USING SAME

Title (de)
WÄRMETAUSCHER MIT DREI FLÜSSIGKEITEN UND KLIMAANLAGE/WASSERERHITZUNGSSYSTEM DAMIT

Title (fr)
ÉCHANGEUR DE CHALEUR À TROIS FLUIDES ET SYSTÈME DE CLIMATISATION/CHAUFFAGE DE L'EAU UTILISANT CET ÉCHANGEUR

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Application
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Priority
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Abstract (en)
[Problem] To enhance the heat-transfer performance of a heat exchanger among three fluids used in an air conditioning cycle, a hot-water supply cycle and a natural energy cycle and to miniaturize the heat exchanger. [Solution] The heat exchanger is used for an air-conditioning hot-water supply system provided with a refrigerant circuit for air conditioning, a refrigerant circuit for hot-water supply and a warm-water refrigerant circuit utilizing natural energy, the three-fluid heat exchanger that exchanges heat among a refrigerant for air conditioning, a refrigerant for hot-water supply and a warm-water refrigerant includes plural inner tubes 101, 102 in which the refrigerant for air conditioning and the refrigerant for hot-water supply respectively flow and a outer shell 103 which involves the plural inner tubes and in which the warm-water refrigerant 113 flows, the inner tubes 101, 102 have a planar winding shape configured by straight parts and bends in the outer shell 103, a partition plate 104 that partitions each straight part of the inner tubes has a rectangular shape in the outer shell 103 in parallel with the straight part, and the partition plate has a hole for passing the bend of the inner tube.

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CPC (source: EP)
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