

Title (en)

HEAT EXCHANGER FOR WATER HEATER USING HEAT PUMP

Title (de)

WÄRMETAUSCHER FÜR WASSERHEIZER MIT EINER WÄRMEPUMPE

Title (fr)

ECHANGEUR DE CHALEUR DESTINE A UN CHAUFFE-EAU UTILISANT UNE POMPE A CHALEUR

Publication

EP 1029205 A1 20000823 (EN)

Application

EP 98952433 A 19981105

Priority

- AU 9800926 W 19981105
- AU PP021197 A 19971105

Abstract (en)

[origin: WO9924765A1] A water heater comprises a water tank (21) and a heat pump system (20). The heat exchanger (26) includes an inlet manifold (27) connected to the compressor (22), an outlet manifold (28) connected to the evaporator (25) and a plurality of heat exchange tubes (29, 30) connected in parallel between the inlet and outlet manifolds (27, 28). The heat exchange tubes (29, 30) are wound helically around the water tank (21) and are secured to the tank wall (32) in a heat conductive relation with the tank (21). Heat from condensation of the refrigerant liquid circulating through the heat pump system (20) is transferred to water contained in the tank (21). The provision of two or more heat exchange tubes (29, 30) in parallel provides more rapid and efficient heating of water in the tank (21) compared to a single coiled heat exchanger.

IPC 1-7

F24H 9/18; **F24H 4/04**; **F24H 1/18**; **F24D 17/02**

IPC 8 full level

F24H 4/04 (2006.01); **F28D 1/06** (2006.01); **F25B 30/02** (2006.01); **F25B 39/04** (2006.01)

CPC (source: EP KR)

F24H 4/04 (2013.01 - EP KR); **F24H 9/0005** (2013.01 - KR); **F28D 1/06** (2013.01 - EP); **F25B 30/02** (2013.01 - EP); **F25B 39/04** (2013.01 - EP)

Citation (search report)

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