

Title (en)

IMPROVED WATER HEATER

Title (de)

VERBESSERTER WASSERERHITZER

Title (fr)

CHAUFFE-EAU AMELIORE

Publication

EP 1446615 A4 20050720 (EN)

Application

EP 02802249 A 20021024

Priority

- AU 0201444 W 20021024
- AU PR865801 A 20011102
- AU PR923101 A 20011130

Abstract (en)

[origin: WO03038342A1] This invention relates to a water heater comprising a water tank (1) having a wall (2) formed from material having heat transfer properties and a cold water inlet (5) adjacent one end of the tank. A tube (8), adapted to carry a refrigerant fluid, is secured externally about the tank wall (2). Heat-conductive material is provided along the length of the tube, with the tube and the heat-conductive material in heat-conductive contact with the external surface of the wall of the tank to transfer heat from condensation of the refrigerant fluid in the tube through the wall to the water contained in the tank (1). An evaporator (15) is positioned so as to be exposed to ambient conditions for absorbing heat energy from the ambient conditions. The evaporator is provided with a passage for carrying the refrigerant fluid whereby the fluid may be heated by the ambient conditions. A compressor (12) is connected to the passage and to the tube (8) so as to circulate the refrigerant fluid through the tube and to the evaporator (15).

IPC 1-7

F24D 17/02; F24H 4/04; F24J 2/24; F24J 2/20; F24J 2/51; F25B 30/06; F25B 39/02; F25B 39/04; F28D 1/06

IPC 8 full level

F24H 1/00 (2006.01); **F24H 1/18** (2006.01); **F24H 4/04** (2006.01); **F24H 9/00** (2006.01); **F24J 2/51** (2006.01); **F24S 10/50** (2018.01);
F24S 10/70 (2018.01); **F24S 10/75** (2018.01); **F25B 30/06** (2006.01); **F25B 39/02** (2006.01); **F25B 39/04** (2006.01); **F28D 1/06** (2006.01)

CPC (source: EP KR US)

F24D 17/02 (2013.01 - KR); **F24H 1/181** (2013.01 - EP US); **F24H 4/04** (2013.01 - EP US); **F24S 10/755** (2018.04 - EP US);
F28D 1/06 (2013.01 - EP US); **Y02E 10/44** (2013.01 - EP US)

Citation (search report)

- [Y] EP 0336751 A2 19891011 - SIDDONS RAMSET LTD [AU]
- [Y] EP 0172372 A2 19860226 - BOSCH SIEMENS HAUSGERAETE [DE], et al
- See references of WO 03038342A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03038342 A1 20030508; AU 2008203073 A1 20080731; AU 2010202723 A1 20100715; CA 2465538 A1 20030508; CA 2465538 C 20110104;
CN 1417527 A 20030514; EP 1446615 A1 20040818; EP 1446615 A4 20050720; JP 2005507069 A 20050310; KR 100929951 B1 20091204;
KR 20050039729 A 20050429; NZ 532679 A 20051223; US 2004237557 A1 20041202

DOCDB simple family (application)

AU 0201444 W 20021024; AU 2008203073 A 20080710; AU 2010202723 A 20100629; CA 2465538 A 20021024; CN 02145785 A 20021017;
EP 02802249 A 20021024; JP 2003540574 A 20021024; KR 20047006736 A 20021024; NZ 53267902 A 20021024; US 49412504 A 20040430