

Title (en)

SAFETY HEAT EXCHANGER FOR COMBINING A HEAT PUMP WITH A DEVICE OF A PUBLIC DRINKING WATER SUPPLY FACILITY

Title (de)

SICHERHEITSWÄRMETAUSCHER FÜR DIE KOMBINATION EINER WÄRMEPUMPE MIT EINER EINRICHTUNG EINER ÖFFENTLICHEN TRINKWASSERVERSORGUNGSANLAGE

Title (fr)

ÉCHANGEUR THERMIQUE DE SÉCURITÉ POUR LA COMBINAISON D'UNE POMPE À CHALEUR AVEC UN DISPOSITIF D'UNE INSTALLATION PUBLIQUE D'ALIMENTATION EN EAU POTABLE

Publication

EP 2193313 B1 20150121 (DE)

Application

EP 08801224 A 20080826

Priority

- DE 2008001403 W 20080826
- DE 102007040629 A 20070827

Abstract (en)

[origin: CA2697642A1] The invention relates to a safety heat exchanger for combining a heat pump with a device of a drinking water supply facility, said heat exchanger having a primary circuit (4) containing drinking water, a secondary safety circuit (6) containing a substance not hazardous to people's health as an antifreeze, and a tertiary circuit (7) containing a coolant. The safety heat exchanger is intended to prevent an impairment of the drinking water in the public drinking water supply. The safety heat exchanger comprises a primary circuit (4) having a feed pipe (3) connected to the drinking water supply facility and a discharge pipe (5) having electrically controllable solenoid valves (16). The primary circuit (4), or the coolant circuit (7), has a higher pressure than the safety circuit (6). The safety circuit (6) is provided with a pressure control device, which in terms of a control system is connected to the solenoid valves (16) such that the feed pipe (3) and the discharge pipe (5) of the drinking water to the drinking water facility are closed in the event of a pressure loss in the primary circuit (4) or in the coolant circuit (7).

IPC 8 full level

F24D 17/02 (2006.01)

CPC (source: EP US)

F24D 17/02 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102007040629 A1 20090305; CA 2697642 A1 20090305; CA 2697642 C 20131217; CN 101821553 A 20100901; CN 101821553 B 20130612; EP 2193313 A1 20100609; EP 2193313 B1 20150121; US 2010288482 A1 20101118; US 8302675 B2 20121106; WO 2009026900 A1 20090305

DOCDB simple family (application)

DE 102007040629 A 20070827; CA 2697642 A 20080826; CN 200880111391 A 20080826; DE 2008001403 W 20080826; EP 08801224 A 20080826; US 67483408 A 20080826