

Title (en)

Apparatus to circulate and heat liquid.

Title (de)

Gerät zum Umwälzen und Erhitzen einer Flüssigkeit.

Title (fr)

Appareil pour faire circuler et chauffer du liquide.

Publication

**EP 0260242 A2 19880316 (EN)**

Application

**EP 87850274 A 19870908**

Priority

FI 863669 A 19860910

Abstract (en)

Apparatus to circulate and heat liquid, such as water, which apparatus includes an incorporated or separate source of heat (2) and a liquid inlet pipe (10) and a liquid outlet pipe (12), and inside which apparatus is arranged, connected to the outlet pipe (12), a preferably spiral pipe (11) for heating the liquid to its final temperature. In known heating systems, it is not enough to heat the water, also a circulation water pump is needed. With this invention, the need for a circulation water pump is eliminated by that the inlet pipe (10) and the outlet pipe (12) are each equipped with a back-pressure valve (13, 14), and that inside the apparatus, between the inlet pipe (10) and the spiral pipe (11) is installed an element (7) comprising a liquid space (8) with a direct connection to the inlet pipe (10) and the spiral pipe (11) and, connected with said space, a vaporizing space (9) which quickly vaporizes the liquid.

IPC 1-7

**F24H 1/06**

IPC 8 full level

**F24H 1/06** (2006.01)

CPC (source: EP)

**F24H 1/06** (2013.01)

Cited by

EP0514922A1; US5282740A; WO2016192683A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0260242 A2 19880316; EP 0260242 A3 19880824**; DK 470487 D0 19870909; FI 863669 A0 19860910; NO 873772 D0 19870909

DOCDB simple family (application)

**EP 87850274 A 19870908**; DK 470487 A 19870909; FI 863669 A 19860910; NO 873772 A 19870909