

Title (en)

HOT WATER BOILING APPARATUS

Publication

**EP 0309199 B1 19930203 (EN)**

Application

**EP 88308704 A 19880920**

Priority

JP 23685987 A 19870921

Abstract (en)

[origin: EP0309199A2] A hot water boiling apparatus includes a hot water tank (11) filled with water. A water supply pipe (14) and a hot water supply pipe (17) are connected to the bottom and top of the tank, respectively. A bubble pump unit (20) is arranged in parallel with the tank. The pump unit includes a body (27) having a boiling chamber (67), electric heaters (24a, 24b) for heating the water in the chamber, a first connecting pipe (30) for guiding water from the tank to the body, a guide pipe (36) for feeding the water, guided through the first connecting pipe, into the boiling chamber, and a second connecting pipe (33) for guiding the water heated in the boiling chamber into the upper portion in the tank. The guiding pipe is arranged so that heat is exchanged between the water in the boiling chamber and the water flowing through the guide pipe.

IPC 1-7

**F24H 1/18; F24H 9/12**

IPC 8 full level

**F24H 1/18 (2006.01); F24H 9/12 (2006.01)**

CPC (source: EP)

**F24H 1/185 (2013.01); F24H 9/13 (2022.01)**

Cited by

CN109269088A; AT409791B; CN104075433A; EP0686816A1; CN111981166A; EP3394510A4

Designated contracting state (EPC)

DE FR GB SE

DOCDB simple family (publication)

**EP 0309199 A2 19890329; EP 0309199 A3 19900808; EP 0309199 B1 19930203;** DE 3878118 D1 19930318; DE 3878118 T2 19930715;  
JP H0373792 B2 19911122; JP S6479542 A 19890324; NO 167105 B 19910624; NO 167105 C 19911002; NO 884181 D0 19880920;  
NO 884181 L 19890322

DOCDB simple family (application)

**EP 88308704 A 19880920;** DE 3878118 T 19880920; JP 23685987 A 19870921; NO 884181 A 19880920