

Title (en)

Expansion vessel for a heating installation with a heat exchanger for sanitary water production

Title (de)

Ausdehnungsgefäß für eine Heizungsanlage mit einem Wärmeübertrager zur Brauchwasserbereitung

Title (fr)

Vase d'expansion pour installation de chauffage avec échangeur de chaleur pour la préparation d'eau sanitaire

Publication

**EP 0870994 A3 20000621 (DE)**

Application

**EP 98104432 A 19980312**

Priority

DE 29706318 U 19970409

Abstract (en)

[origin: EP0870994A2] The expansion unit is divided into two compartment containing separate charges of water and gas. The warm water pipe is ducted through the water section to transfer heat to the system eg. for space heating. The effective surface area of the water pipe inside the system is enhanced by coiling the pipe and by either changing the cross sectional profile of the pipe or by inserts into the pipe. The cross section change can be into an ellipse or oval, giving the same effective cross sectional area for water flow but with a larger heat transfer surface. The inserts in the pipe are held in place by spacers inside the pipe.

IPC 1-7

**F24D 3/10**; **F24D 3/08**

IPC 8 full level

**F24D 3/08** (2006.01); **F24D 3/10** (2006.01)

CPC (source: EP)

**F24D 3/087** (2013.01); **F24D 3/1008** (2013.01)

Citation (search report)

- [DY] DE 19633236 A1 19970227 - BOSCH GMBH ROBERT [DE]
- [Y] AT 343320 B 19780526 - HERMES WERKE LEOPOLD HERRMANN [AT]

Cited by

EP1703213A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**DE 29706318 U1 19980806**; EP 0870994 A2 19981014; EP 0870994 A3 20000621

DOCDB simple family (application)

**DE 29706318 U 19970409**; EP 98104432 A 19980312