

Title (en)  
APPARATUS FOR CONTROLLING THE SUPERHEATING AND CALCINATION OF A FLUID HEATER, AND FLUID HEATER PROVIDED WITH SUCH AN APPARATUS

Publication  
**EP 0275776 B1 19910213 (FR)**

Application  
**EP 87402942 A 19871221**

Priority  
FR 8618169 A 19861224

Abstract (en)  
[origin: US4850427A] An overheating and scaling control device for a fluid heating apparatus, such as a domestic water heater, removes the hot fluid in the heater when demand ceases. A piston (46) mobile within a case (28) separates the latter into two compartments (32, 36) respectively connected to the cold water supply pipe (16) and to the hot water discharge pipe (22). In operation, the pressure in pipe (16) is higher than the pressure in pipe (22) and piston (46) is moved to the left. On stopping, the pressures are equal in both pipes and spring (40) moves piston (46) to the right. Cold water is fed into the exchanger tube (20), so that the hot water contained in the latter is discharged into pipe (38) and compartment (36).

IPC 1-7  
**F24H 1/12**; **F24H 9/20**

IPC 8 full level  
**F24H 1/10** (2006.01); **F23N 1/08** (2006.01); **F24H 1/12** (2006.01); **F24H 9/20** (2006.01)

CPC (source: EP KR US)  
**F23N 1/087** (2013.01 - EP US); **F24H 1/124** (2013.01 - EP US); **F24H 9/00** (2013.01 - KR); **F24H 9/2035** (2013.01 - EP KR US); **F23N 2241/04** (2020.01 - EP US)

Cited by  
CN105587896A

Designated contracting state (EPC)  
AT BE CH DE ES GB GR IT LI LU NL

DOCDB simple family (publication)  
**US 4850427 A 19890725**; AT E60883 T1 19910215; AU 600324 B2 19900809; AU 8252587 A 19880630; BR 8707038 A 19880802; CA 1320667 C 19930727; CN 1006660 B 19900131; CN 87101238 A 19880615; DE 3768028 D1 19910321; EP 0275776 A1 19880727; EP 0275776 B1 19910213; ES 2021743 B3 19911116; FR 2609162 A1 19880701; FR 2609162 B1 19890630; GR 3001688 T3 19921123; JP S63169442 A 19880713; KR 880007982 A 19880830; KR 950012158 B1 19951014; MA 21138 A1 19880701; PT 86429 A 19890117; PT 86429 B 19930831; TN SN87143 A1 19900101; TR 23066 A 19890221; ZA 879374 B 19880608

DOCDB simple family (application)  
**US 13167187 A 19871211**; AT 87402942 T 19871221; AU 8252587 A 19871214; BR 8707038 A 19871223; CA 555151 A 19871222; CN 87101238 A 19871221; DE 3768028 T 19871221; EP 87402942 A 19871221; ES 87402942 T 19871221; FR 8618169 A 19861224; GR 910400343 T 19910329; JP 32302087 A 19871222; KR 870015028 A 19871224; MA 21380 A 19871221; PT 8642987 A 19871221; TN SN87143 A 19871217; TR 2587 A 19871224; ZA 879374 A 19871214