

Title (en)
STEAM DESUPERHEATING VALVE

Title (de)
DAMPFUMFORMVENTIL

Title (fr)
SOUPAPE PERMETTANT DE DESURCHAUFFER LA VAPEUR

Publication
EP 0685054 B1 19970108 (DE)

Application
EP 94907564 A 19940214

Priority
• DE 4304972 A 19930218
• EP 9400411 W 19940214

Abstract (en)
[origin: WO9419646A1] The steam desuperheating valve has a housing (4) with a steam inlet (1), a cooling water inlet (3) and a steam outlet (2). In the housing (4) there are a perforated basket (11) forming a depressurising chamber and an axially movable control piston (5) controlling the flow of steam and cooling water to the depressurising chamber. The control piston (5) is rigidly coupled to a perforated cylinder (6) axially movable in the perforated basket (11). This perforated cylinder (6) releases or blocks the steam inlet (D) into the perforated basket (11) and the steam outlet into a second depressurising chamber (10) arranged around the perforated basket (11). Into the perforated basket (11) projects a coaxial nozzle pipe (14) which is connected outside the perforated basket (11) to the cooling water inlet (3). Inside the perforated basket (11) the nozzle pipe (14) has injection apertures (15) for the cooling water (W). Outside the perforated basket (11) the nozzle pipe (14) projects into the steam outlet (2) and has an injection nozzle (16) at that point for the cooling water (W). A first piston section (7) movable with the control piston (5) in the nozzle pipe (14) alternately opens and closes the injection apertures (15) in the nozzle pipe (14). A second piston section (8) regulates the cooling water inlet (3) in the size of the through-flow cross-section (X) for the flow of cooling water into the injection apertures (15) in the depressurising chamber and/or into the injection nozzle (16) in the steam outlet (2). The second depressurising chamber (10) surrounding the perforated basket (11) is connected via through-flow apertures (17) to the steam outlet (2) forming a third depressurising chamber.

IPC 1-7
F22G 5/12

IPC 8 full level
F16K 47/04 (2006.01); **F22G 5/12** (2006.01)

CPC (source: EP)
F22G 5/126 (2013.01)

Cited by
DE19917246C2

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB IT LI NL PT SE

DOCDB simple family (publication)
WO 9419646 A1 19940901; AT E147494 T1 19970115; AU 6109294 A 19940914; CN 1118189 A 19960306; DE 4304972 A1 19940825; DE 4304972 C2 19961205; DE 59401539 D1 19970220; DK 0685054 T3 19970714; EP 0685054 A1 19951206; EP 0685054 B1 19970108; ES 2098924 T3 19970501; JP H08506886 A 19960723; RU 2118749 C1 19980910

DOCDB simple family (application)
EP 9400411 W 19940214; AT 94907564 T 19940214; AU 6109294 A 19940214; CN 94191212 A 19940214; DE 4304972 A 19930218; DE 59401539 T 19940214; DK 94907564 T 19940214; EP 94907564 A 19940214; ES 94907564 T 19940214; JP 51862194 A 19940214; RU 95119996 A 19940214