

Title (en)

STEAM DESUPERHEATING VALVE.

Title (de)

DAMPFUMFORMVENTIL.

Title (fr)

SOUPAPE PERMETTANT DE DESURCHAUFFER LA VAPEUR.

Publication

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Application

EP 94907564 A 19940214

Priority

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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.

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