

Title (en)
Injection attemperator for temperature control of superheated steam

Title (de)
Einspritzkühler zur Temperaturregelung von überhitztem Dampf

Title (fr)
Désurchauffeur à injection pour la régulation de la température de la vapeur surchauffée

Publication
EP 0971168 A3 20010822 (DE)

Application
EP 99108381 A 19990429

Priority
DE 19830244 A 19980707

Abstract (en)
[origin: EP0971168A2] A nozzle pipe (3) protrudes into the steam pipe and branches off from the cooling water supply unit (2) which has a regulator valve (4) regulating the water pressure (P2) in the nozzle (5)-pipe. Each nozzle has a tubular nozzle-pot (10) fixed in the nozzle pipe and crossing it. At least one water inlet (11) inside the nozzle-pipe is in the pot-casing. A spring-tensioned (12) nozzle pin (13) is positioned in the pot. A cap (15) is screwed onto the open end of the pot protruding from the pipe and has a spray hole (14) with which the end point (16) of the pin cooperates. The other end of the pin protruding from the pot base forms a piston surface exposed to steam pressure.(P1)

IPC 1-7
F22G 5/12

IPC 8 full level
F22G 5/12 (2006.01)

CPC (source: EP)
F22G 5/123 (2013.01)

Citation (search report)
• [A] US 3331590 A 19670718 - WERNER BATTENFELD, et al
• [A] WO 9808025 A1 19980226 - COPES VULCAN INC [US]
• [A] GB 2320319 A 19980617 - COPES VULCAN LIMITED [GB]
• [PA] DE 19719120 A1 19981112 - SCHNEIDER BOCHUMER MASCHF A [DE]
• [AD] EP 0682762 A1 19951122 - HOLTER REGELARAMTUREN GMBH & C [DE]
• [A] US 4442047 A 19840410 - JOHNSON ROGER E [US]
• [A] US 5045245 A 19910903 - CHAWLA JOGINDAR M [DE]

Cited by
US9492829B2; US11346545B2; EP2623743A1; CN103090362A; EP2554902A1; GB2483616B; CN111174196A; US2014252125A1;
US11454390B2; WO2013020829A1; WO2013117268A1; WO2014163810A1; KR101456247B1; US11353210B2; US11767973B2

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