

Title (en)
DESCALING DEVICE FOR STEAM GENERATOR

Title (de)
ENTKALKUNGSVORRICHTUNG FÜR DAMPFERZEUGER

Title (fr)
DISPOSITIF DE DETARTRAGE POUR UN GENERATEUR DE VAPEUR

Publication
EP 1170567 A1 20020109 (EN)

Application
EP 00902850 A 20000203

Priority
JP 0000593 W 20000203

Abstract (en)
Disclosed is a scale removing device for removing scale adhering to the interior of a shell-and-tube-heat-exchanger-type steam generator. The scale removing device is provided with a flexible lance (58) holding a high-pressure water hose (91) and movable with respect to the tube plate, the tube support plates, and the heat-transfer tubes, and a cleaning head (60) mounted to the forward end of the flexible lance. Formed inside the cleaning head is a cavitation generating nozzle hole (99a, 99b) communicating with the high-pressure water hose. Bubbles are generated at the time of cleaning, and the impact pressure generated when the bubbles collapse is propagated to remove scale over a wide range. <IMAGE>

IPC 1-7
F28G 9/00

IPC 8 full level
B08B 3/02 (2006.01); **B08B 3/10** (2006.01); **C02F 1/00** (2006.01); **F22B 37/47** (2006.01); **F22B 37/48** (2006.01); **F28G 1/16** (2006.01);
F28G 9/00 (2006.01); **F28G 13/00** (2006.01); **F28G 15/04** (2006.01)

CPC (source: EP KR)
B08B 3/102 (2013.01 - EP); **F22B 37/475** (2013.01 - EP); **F22B 37/483** (2013.01 - EP); **F28G 1/166** (2013.01 - EP); **F28G 9/00** (2013.01 - KR);
F28G 13/00 (2013.01 - EP)

Cited by
CN102401609A; US10099264B2; US9952008B2; EP4067739A1; WO2012131552A1; US9206380B2; US9845447B2

Designated contracting state (EPC)
BE DE FR

DOCDB simple family (publication)
EP 1170567 A1 20020109; EP 1170567 A4 20040428; EP 1170567 B1 20090617; CA 2369481 A1 20010809; CA 2369481 C 20060328;
CN 1130545 C 20031210; CN 1345410 A 20020417; DE 60042400 D1 20090730; KR 100446826 B1 20040904; KR 20010111290 A 20011217;
WO 0157462 A1 20010809

DOCDB simple family (application)
EP 00902850 A 20000203; CA 2369481 A 20000203; CN 00805617 A 20000203; DE 60042400 T 20000203; JP 0000593 W 20000203;
KR 20017012557 A 20010929