

Title (en)

Process and device for cleaning heat exchangers, recovery boilers and combustion chambers

Title (de)

Verfahren und Vorrichtung zur Reinigung von Verschmutzungen in Wärmetauschern, Abhitzeesseln und Brennkammern

Title (fr)

Procédé et dispositif de nettoyage d'échangeur de chaleur, de chaudières de récupération et de chambres de combustion

Publication

EP 1544567 A3 20081022 (DE)

Application

EP 04030137 A 20041220

Priority

DE 10360705 A 20031219

Abstract (en)

[origin: EP1544567A2] The explosive cleaning system uses a first fixed tube (Rohr-1) with a water inlet (Wassereinlass) and an air inlet (Lufteinlass). The mixture of water and air flows through this tube, and passes through a flexible link (Gelenk) to a second movable tube (Rohr-2). It flows into the space between the boiler tubes (8,9) to be cleaned. A wire (Zundleitung) passes through the first tube and the link to an igniter (Zunder) and an explosive cord (Sprengschnur) in the second tube. The tubes may be made of cardboard or copper and burst with the water and air scattered by explosion of elongated cord.

IPC 8 full level

F28G 13/00 (2006.01); **F23J 1/00** (2006.01); **F23J 3/02** (2006.01); **F28G 7/00** (2006.01)

CPC (source: EP)

B08B 7/0007 (2013.01); **F23J 3/023** (2013.01); **F28G 7/00** (2013.01); **F28G 7/005** (2013.01)

Citation (search report)

- [X] EP 1226881 A2 20020731 - STADTWERKE ROSENHEIM GMBH & CO [DE]
- [X] EP 1067349 A2 20010110 - ZILKA FRANCIS [US], et al
- [X] EP 0109351 A1 19840523 - DIEDERICHSMIEIER KLAUS
- [X] US 2839435 A 19580617 - BOSWELL ARTHUR D

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EP2548662A1; DE102008019300A1; WO2013014097A1; DE102016202422A1; DE102013210251A1; DE102020003958A1; EP2110188A2; DE102016202421A1; DE202016008755U1; DE202016008806U1; DE202016008807U1

Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1544567 A2 20050622; **EP 1544567 A3 20081022**; **EP 1544567 B1 20110921**; AT E525623 T1 20111015; DE 10360705 A1 20050714; DE 20321732 U1 20090528; DK 1544567 T3 20120116; DK 2383534 T3 20140519; EP 2383534 A1 20111102; EP 2383534 B1 20140219; EP 2682706 A1 20140108; ES 2373655 T3 20120207; PL 1544567 T3 20120229; PL 2383534 T3 20140731

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EP 04030137 A 20041220; AT 04030137 T 20041220; DE 10360705 A 20031219; DE 20321732 U 20031219; DK 04030137 T 20041220; DK 11173818 T 20041220; EP 11173818 A 20041220; EP 13187411 A 20041220; ES 04030137 T 20041220; PL 04030137 T 20041220; PL 11173818 T 20041220