

Title (en)

Device for cleaning heat exchangers, recovery boilers and combustion chambers

Title (de)

Vorrichtung zur Reinigung von Verschmutzungen in Wärmetauschern, Abhitzeesseln und Brennkammern

Title (fr)

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

Publication

EP 1544567 B1 20110921 (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 (examination)

- EP 0516386 A1 19921202 - MERCK & CO INC [US]
- WO 2007023176 A2 20070301 - DYNAENERGETICS GMBH & CO KG [DE], et al
- US 5056587 A 19911015 - JONES LINZA J [US], et al
- US 5211135 A 19930518 - CORREIA PAUL A [US], et al

Cited by

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

Designated contracting state (EPC)

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DOCDB simple family (application)

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