

Title (en)

DEVICE FOR AND METHOD OF CLEANING THE INTERNALS OF INSTALLATIONS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR REINIGEN VON EINBAUTEN VON ANLAGEN

Title (fr)

DISPOSITIF ET PROCÉDÉ DE NETTOYAGE INTERNE DES INSTALLATIONS

Publication

**EP 4160134 A1 20230405 (EN)**

Application

**EP 21200240 A 20210930**

Priority

EP 21200240 A 20210930

Abstract (en)

The invention relates to a device (1) for on- or offline cleaning the internals of installations, such as a furnace heat exchanger and/or a flue gas heat exchanger in a boiler of an incinerator, the heat exchanger comprising bundles of tubes or a membrane wall formed by or containing tubes, which device (1) comprises a tube (2) containing an explosive (3) and/or pyrotechnical charge, and a detonator (4) to cause explosion and/or deflagration of the charge. The wall of the tube (2) comprises two or more materials (8,9,10), preferably two or more layers (8,9,10) of different materials.

IPC 8 full level

**F28D 7/16** (2006.01); **F28G 7/00** (2006.01)

CPC (source: EP)

**F28G 7/005** (2013.01); **F28D 7/16** (2013.01)

Citation (applicant)

- EP 2383534 A1 20111102 - ONLINE CLEANING B V [NL]
- DE 102016202421 A1 20170706 - STEINBERG BERTHOLD [DE]
- DE 202017001549 U1 20180628 - KRUSE VOLKER [DE]
- EP 1275925 A1 20030115 - HANS EICHNER GMBH & CO KG [DE]
- US 5307743 A 19940503 - JONES LINZA J [US]

Citation (search report)

- [XAI] US 9636717 B2 20170502 - FLURY RAINER [CH], et al
- [XI] US 2004216698 A1 20041104 - ZILKA FRANCIS [US], et al
- [A] US 2020094296 A1 20200326 - BÜRGIN MARKUS [CH]

Designated contracting state (EPC)

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