

Title (en)
Pulse detonation cleaning apparatus

Title (de)
Detonative Impuls-Reinigungsvorrichtung

Title (fr)
Appareil de nettoyage à détonation à impulsion

Publication
EP 1995547 A2 20081126 (EN)

Application
EP 08251798 A 20080523

Priority
US 75380107 A 20070525

Abstract (en)
The burning of fuel (e.g., coal) in industrial equipment generates an exhaust flow containing airborne particulate. The flow is passed through a rotary heat exchanger (50) to preheat inlet air. The heat exchanger element is subject to fouling and is cleaned by a pulsed combustion device (222,223). The device is operated by introducing a fuel and oxidizer charge to at least one conduit (224) and initiating combustion of the charge. The combustion generates a shock wave to which the element is exposed, dislodging and/or otherwise removing the deposits.

IPC 8 full level
F28G 7/00 (2006.01)

CPC (source: EP US)
F28G 7/00 (2013.01 - EP US); **F28G 7/005** (2013.01 - EP US)

Citation (applicant)
• US 4487252 A 19841211 - NATALE JOSEPH J [US]
• US 5950707 A 19990914 - KOZACKA WAYNE R [US], et al
• US 7011047 B2 20060314 - AARNIO MICHAEL J [US], et al
• US 2005112516 A1 20050526 - AARNIO MICHAEL J [US], et al
• US 2005199743 A1 20050915 - HOCHSTEIN JAMES R JR [US], et al

Cited by
US8651066B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

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