

Title (en)
Energy recovery apparatus

Title (de)
Vorrichtung zur Rückgewinnung von Energie

Title (fr)
Dispositif de récupération d'énergie

Publication
EP 2221539 A1 20100825 (EN)

Application
EP 10153858 A 20100217

Priority
IT TV20090025 A 20090223

Abstract (en)
An energy recovery apparatus (1) particularly for heating or industrial systems that entail the combustion of products, consisting of at least one tubular element (2), which is arranged at a portion of a stack or flue (6) and is provided with a delivery (10) for feeding water for scrubbing the exhaust gases. The tubular element (2) has an outlet (15) for collecting the treated water that can be conveyed to a recuperator/heat exchanger (50). The apparatus (1) allows reduction of the emission of particulates and pollutants into the environment and makes it possible to achieve a reduction in the temperature of the exhaust gases as well as heat energy recovery.

IPC 8 full level
F23J 15/04 (2006.01)

CPC (source: EP US)
F23J 15/04 (2013.01 - EP US); **F23J 2217/50** (2013.01 - EP US); **F23J 2219/40** (2013.01 - EP US)

Citation (applicant)
• US 3530807 A 19700929 - ZALMAN SOLOMON
• US 4269812 A 19810526 - EDWARDS WILLIAM M, et al
• US 5403568 A 19950404 - STOWE JR DONALD H [US]

Citation (search report)
• [XY] US 3530807 A 19700929 - ZALMAN SOLOMON
• [XY] US 4269812 A 19810526 - EDWARDS WILLIAM M, et al
• [X] US 5403568 A 19950404 - STOWE JR DONALD H [US]

Cited by
ITUA20164296A1; ITTV20120153A1; RU2640859C2; EP3537045A1; WO2017212387A1; WO2014020456A3; WO2014020466A3

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 MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

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EP 2221539 A1 20100825; IT 1395291 B1 20120905; IT TV20090025 A1 20100824; US 2010212606 A1 20100826

DOCDB simple family (application)
EP 10153858 A 20100217; IT TV20090025 A 20090223; US 65691310 A 20100219