

Title (en)  
A HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR THERMIQUE

Publication  
**EP 3101340 A1 20161207 (EN)**

Application  
**EP 15170106 A 20150601**

Priority  
EP 15170106 A 20150601

Abstract (en)

A heat exchanger comprises a casing (1) forming a channel (2) for flue gases, and a tube arrangement (10) for a fluid to be heated by the flue gases. The tube arrangement comprises four tubes (11-14) provided in the channel (2) for conveying the fluid. The tubes comprises a respective helical coil having a longitudinal center axis, a plurality of turns and a default pitch. A soot blowing device (30) comprises a first ejection pipe (31) having a plurality of nozzle openings (32) for ejecting a cleaning medium onto the tubes. The first intermediate ejection pipe is provided at an intermediate position in the helical coil of the tubes between two adjacent turns of the helical coil of the tubes.

IPC 8 full level  
**F22B 37/48** (2006.01); **F23J 3/02** (2006.01); **F28G 1/16** (2006.01)

CPC (source: EP)  
**F22B 37/486** (2013.01); **F23J 3/023** (2013.01); **F28D 7/024** (2013.01); **F28F 9/0132** (2013.01); **F28G 1/166** (2013.01)

Citation (applicant)

- US 4346674 A 19820831 - MERRITT JR JOHN H
- US 4351277 A 19820928 - RYAN JERRY E, et al
- JP H09287889 A 19971104 - MIURA KOGYO KK

Citation (search report)  
• [XI] DE 10144304 A1 20030327 - ALSTOM POWER BOILER GMBH [DE]  
• [AD] US 4351277 A 19820928 - RYAN JERRY E, et al

Cited by  
CN110645577A; CN112032748A; CN108036341A; CN112714857A; US11920873B2; WO2020225465A1; WO2020074117A1

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
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DOCDB simple family (application)  
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