

Title (en)

Waste heat boiler and method for cooling synthesis gas

Title (de)

Abhitzeessel und Verfahren zur Abkühlung von Synthesegas

Title (fr)

Caisson de refroidissement et procédé de refroidissement de gaz de synthèse

Publication

EP 2312252 B1 20130320 (DE)

Application

EP 09012697 A 20091007

Priority

EP 09012697 A 20091007

Abstract (en)

[origin: EP2312252A1] The boiler has an inlet (1) and an inlet chamber (2) for introducing a hot gas stream into an inlet end of a bypass pipe (3). The gas stream is passed through a heat transfer tube (4), and is cooled in indirect heat exchange with water at a side of a shell (11). An outlet (10) and an outlet chamber (9) discharge the cooled exhaust gas stream. The outlet is opened in a nozzle (7) that is deviated into the outlet chamber. A center line of the bypass pipe includes a bend angle with a longitudinal axis of the boiler. An end of the nozzle is fixed with a closure device i.e. closure flap. The nozzle and the closure device are made of ceramic materials. An independent claim is also included for a method for cooling hot synthesis gas.

IPC 8 full level

F28D 7/16 (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP)

F28D 7/16 (2013.01); **F28F 27/02** (2013.01); **F28F 2250/06** (2013.01)

Cited by

DE102016120170A1; DE102015013517A1; EP2944913A1; CN105089860A; DE102016013459A1; WO2018086759A1; WO2016135299A1; US10782073B2; EP3267100A1; WO2018007024A1; US11226159B2; EP3262363B1

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