

Title (en)

METHOD OF PRODUCING STEAM IN A GAS TUBE STEAM BOILER AND GAS TUBE STEAM BOILER

Title (de)

VERFAHREN FÜR DIE ERZEUGUNG VON DAMPF IN EINEM GASROHR-DAMPFKESSEL UND GASROHR-DAMPFKESSEL

Title (fr)

MÉTHODE POUR LA PRODUCTION DE VAPEUR DANS UNE CHAUDIÈRE À TUBES DE GAZ ET CHAUDIÈRE À TUBES DE GAZ

Publication

EP 2044365 B1 20130515 (EN)

Application

EP 07764471 A 20070705

Priority

- DK 2007000342 W 20070705
- EP 06388049 A 20060705
- EP 07764471 A 20070705

Abstract (en)

[origin: EP1876390A1] A gas tube steam boiler comprising a heat exchange compartment (2) filled with water forming a water surface (2A), a steam head space (8) above the water surface and delimited by a cylindrical wall (1) with a substantially vertical axis (10) and a top plate (4), a steam outlet (6) communicating with the steam head space (8), gas tubes (3) extending through the heat exchange compartment (2) and the steam head space (8), means for supplying heated gas to the gas tubes (3) for generating a flow of steam from said water surface (2A) by heat exchange between the gas tubes (3) and the water, and a steam flow conduit (7',7'') arranged in the steam head space (8) for conducting the flow of steam from the water surface (2A) to the steam outlet (6), at least one of the gas tubes (3) extending transversely through the conduit such that the flow of steam flows in a direction transverse, preferably generally orthogonal, to the gas tubes (3), the configuration of the conduit being such that more than half, preferably substantially all, of the steam in the flow is constrained to flow along a flow path which when projected on a horizontal surface has a length at least equal to the shortest distance between a first point of the wall (1) and a second point of the wall (1) horizontally opposite the first point, said distance, in the case the wall (1) is circular cylindrical, being the diameter D of the circular cylindrical wall.

IPC 8 full level

F22B 1/18 (2006.01); **F22B 9/04** (2006.01); **F22G 3/00** (2006.01); **F28D 1/02** (2006.01); **F28D 7/16** (2006.01); **F28F 9/22** (2006.01); **F28F 13/08** (2006.01)

CPC (source: EP KR)

F22B 1/18 (2013.01 - KR); **F22B 1/1884** (2013.01 - EP); **F22B 9/04** (2013.01 - EP); **F22G 3/00** (2013.01 - KR); **F22G 3/006** (2013.01 - EP); **F28D 1/02** (2013.01 - KR); **F28D 1/0213** (2013.01 - EP); **F28D 7/16** (2013.01 - EP); **F28F 9/22** (2013.01 - EP KR)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1876390 A1 20080109; CN 101512223 A 20090819; CN 101512223 B 20111207; DK 2044365 T3 20130812; EP 2044365 A1 20090408; EP 2044365 B1 20130515; JP 2009541705 A 20091126; KR 101009212 B1 20110119; KR 20090031606 A 20090326; WO 2008003322 A1 20080110

DOCDB simple family (application)

EP 06388049 A 20060705; CN 200780032644 A 20070705; DK 07764471 T 20070705; DK 2007000342 W 20070705; EP 07764471 A 20070705; JP 2009516904 A 20070705; KR 20097002269 A 20070705