

Title (en)
WASTE HEAT BOILER

Publication
EP 0357590 B1 19930721 (DE)

Application
EP 89890214 A 19890818

Priority
AT 211688 A 19880829

Abstract (en)
[origin: EP0357590A1] Waste heat boiler in vertical construction with a drum (2) which is linked into a circulation system consisting of downpipes (3), evaporator heating surface (1) and riser pipes (4). To achieve a water circulation without use of a circulating pump, the downpipes (3) are connected to the evaporator heating surface (1) or its inlet collector (7) via a lower deviation (29). Moreover, the riser pipes (4) can be directly connected to the steam chamber (26) of the drum (2) via an upper deviation (9) and/or to the water chamber (11) of the drum (2).

IPC 1-7
F22B 1/18; **F22B 29/04**

IPC 8 full level
F22B 1/18 (2006.01); **F22B 29/04** (2006.01)

CPC (source: EP KR)
F22B 1/1815 (2013.01 - EP); **F22B 29/04** (2013.01 - EP KR)

Citation (examination)
K. Schröder "Die Kraftwerkausrüstung", 1966, Springer-Verlag, Seiten 62-63.

Cited by
US9982881B2; EP0936404A3; CN103518099A; DE4441008A1; EP3835653A1; EP0764813A1; DE19534802A1; DE19524727A1; EP0752556A1; DE19524727C2; BE1005793A3; US5575244A; EP2944873A4; EP3091280A1; US2016312997A1; US9638066B2; WO2012134926A3; WO9323702A1; WO9616298A1; WO2015140361A1; US10125972B2; US9518731B2; US11885487B2; WO2021115663A1; JP2014512505A

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0357590 A1 19900307; **EP 0357590 B1 19930721**; AT 392683 B 19910527; AT A211688 A 19901015; CN 1018574 B 19921007; CN 1041438 A 19900418; DE 58904955 D1 19930826; DK 169109 B1 19940815; DK 422389 A 19900301; DK 422389 D0 19890828; ES 2043114 T3 19931216; FI 893754 A0 19890809; FI 893754 A 19900301; FI 93055 B 19941031; FI 93055 C 19950210; KR 0142330 B1 19980701; KR 900003582 A 19900326

DOCDB simple family (application)
EP 89890214 A 19890818; AT 211688 A 19880829; CN 89106681 A 19890812; DE 58904955 T 19890818; DK 422389 A 19890828; ES 89890214 T 19890818; FI 893754 A 19890809; KR 890012272 A 19890828