

Title (en)  
HEATER AND PROCESS FOR OPERATING THIS HEATER

Publication  
**EP 0275401 A3 19881109 (DE)**

Application  
**EP 87117187 A 19871121**

Priority  
DE 3701439 A 19870120

Abstract (en)  
[origin: US4796569A] A process for operating a furnace boiler with a firebox having a cooled wall and at least one blowpipe to direct flame into the firebox, and heat exchangers connected to the firebox through which the flue gases flow, consisting of the steps of extracting heat from the flue gases essentially only by the heat exchangers and cooling the wall of the firebox only to the extent that, at maximum burner output, the temperature on the inner side of the wall does not exceed approximately 600 DEG C. and, when the burner output is reduced to about 1/10 of maximum output, the temperature does not fall below approximately 180 DEG C.

IPC 1-7  
**F24H 9/20**; **F24H 1/24**; **F24H 1/44**

IPC 8 full level  
**F24H 1/24** (2006.01); **F24H 1/44** (2006.01); **F24H 9/20** (2006.01)

CPC (source: EP US)  
**F24H 1/24** (2013.01 - EP US); **F24H 1/44** (2013.01 - EP US); **F24H 9/2035** (2013.01 - EP US); **F24H 15/36** (2022.01 - EP US)

Citation (search report)  
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• [A] FR 520171 A 19210621 - JUNKERS HUGO [DE]  
• [A] DE 950315 C 19561004 - RUDOLF HINGST DIPL ING  
• [AD] DE 3205121 A1 19830825 - VIESSMANN HANS  
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• [A] PATENT ABSTRACTS OF JAPAN, Band 6, Nr. 249 (M-177)[1127], 8. Dezember 1982; & JP-A-57 144 842 (OSAKA GAS K.K.) 07-09-1982

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

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**EP 0275401 A2 19880727**; **EP 0275401 A3 19881109**; **EP 0275401 B1 19920129**; AT E72319 T1 19920215; DE 3701439 A1 19880728; DE 3701439 C2 19890524; DE 3701439 C3 19940728; DE 3776543 D1 19920312; US 4796569 A 19890110

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**EP 87117187 A 19871121**; AT 87117187 T 19871121; DE 3701439 A 19870120; DE 3776543 T 19871121; US 14454088 A 19880115