

Title (en)
RADIATION SHIELD FOR BOILERS FOR SOLID FUEL

Publication
EP 0110906 B1 19860402 (EN)

Application
EP 83901588 A 19830517

Priority
DK 236582 A 19820526

Abstract (en)
[origin: WO8304296A1] A boiler (1) with suspended arch at the firing opening and constructed for the combustion of solid fuel which, when heated and/or burned gives off combustible gasses, is provided with a radiation shield (3). The smoke and gas-tight radiation shield (3) branches from the front wall (6) of the firing chamber (11) and extends sloping downwards and with smoke and gas-tight connection to the front wall (6) and the side walls of the firing chamber in over that part of the hearth (10) from which the main part of the combustible gasses are given off. During operation, the radiation shield forms a firing chamber section which, for a water boiler, has a relatively high surface temperature, and where the ignition timeperature of the combustible gasses is exceeded and wherein these gasses with secondary air which is introduced through an inlet (9) above the hearth (10) and under the radiation shield (3) are burned, with the consequent possibility of increasing the thermal efficiency of the boiler (1) when compared with the efficiency which can be achieved with known water boilers.

IPC 1-7
F23M 9/06

IPC 8 full level
F23B 99/00 (2006.01); **F23L 9/00** (2006.01); **F23L 9/02** (2006.01); **F23M 9/00** (2006.01); **F23M 9/06** (2006.01)

CPC (source: EP)
F23B 5/02 (2013.01); **F23L 9/02** (2013.01); **F23M 9/06** (2013.01)

Citation (examination)

- US 637791 A 18991128 - HOWE WILLIAM R [US]
- US 645193 A 19000313 - SIMMONS ALLEN [US]
- US 660788 A 19001030 - CONWAY WILLIAM J [US]
- US 676894 A 19010625 - HIGGINS JOSEPH C [US]
- US 755779 A 19040329 - IRWIN HERBERT E [US]
- US 762998 A 19040621 - HIGGINS JOSEPH C [US]
- US 904193 A 19081117 - FILLIEZ HERMAN J [US]
- US 943146 A 19091214 - FILLIEZ HERMAN J [US]
- SE 8597 C1 18971231
- US 1141726 A 19150601 - RYAN PATRICK J [US]
- US 1151797 A 19150831 - KENT WILLIAM J [US]

Cited by
CN103032870A; CN102721039A; CN103062757A

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

DOCDB simple family (publication)
WO 8304296 A1 19831208; DE 3362762 D1 19860507; DK 148668 B 19850826; DK 148668 C 19860127; DK 236582 A 19831127; EP 0110906 A1 19840620; EP 0110906 B1 19860402; FI 73813 B 19870731; FI 73813 C 19871109; FI 840189 A0 19840118; FI 840189 A 19840118; JP S59500983 A 19840531; NO 153346 B 19851118; NO 153346 C 19860226; NO 840227 L 19840123

DOCDB simple family (application)
DK 8300052 W 19830517; DE 3362762 T 19830517; DK 236582 A 19820526; EP 83901588 A 19830517; FI 840189 A 19840118; JP 50196783 A 19830517; NO 840227 A 19840123