

Title (en)
Combustion grate, especially for waste incinerators

Title (de)
Feuerungsrost, insbesondere für Müllverbrennungsanlagen

Title (fr)
Grille de combustion, de préférence pour incinérateurs de déchets

Publication
EP 0790464 A3 19971126 (DE)

Application
EP 97100975 A 19970122

Priority
DE 19606107 A 19960219

Abstract (en)
[origin: US5722334A] A fire grate has tensioning devices (3) inserted in recesses (2) of an oven wall (1), with each device acting upon one grate side plate. The tensioning device (3) includes a cylinder (4) inserted into the oven wall, a hollow piston (7) guided therein and a spring (26), which can be adjusted in its tension. The grate side plate has a carrying plate (12) directly fastened to the piston bottom (10) with a grate border plate (13) suspended, or hanging, on the carrying plate (12). The piston (7) has diameter and length dimensions such that it can support and guide the grate side plate without further guiding devices. Neighboring pistons (7) are connected flexibly to each other by guiding bars (36), so that the pistons (7) can influence each other reciprocally. An upper edge of the grate side plate, particularly the grate border plate (13), has a flange (17) extending toward the oven wall. The flange (17) sealingly engages an elastical seal (19), fastened onto the oven wall. An additional covering ledge (21) covers the flange (17) and includes a shaped part or angle (22) which bounds a hollow space (23) between these two parts, just like a labyrinth seal.

IPC 1-7
F23H 17/00

IPC 8 full level
F23H 17/08 (2006.01); **F23G 5/44** (2006.01); **F23H 7/08** (2006.01); **F23H 11/00** (2006.01); **F23H 11/06** (2006.01); **F23H 17/00** (2006.01)

CPC (source: EP US)
F23H 17/00 (2013.01 - EP US)

Citation (search report)

- [A] BE 371535 A
- [AD] DE 4105331 C1 19920416
- [A] DE 1451519 A1 19690116 - MARTIN JOHANNES JOSEF [DE]

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CN109060352A

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

DOCDB simple family (publication)
US 5722334 A 19980303; AT E201926 T1 20010615; BR 9701004 A 19981027; CA 2197741 A1 19970820; CA 2197741 C 20000530; CZ 292636 B6 20031112; CZ 48797 A3 19970917; DE 19606107 C1 19970213; DE 59703704 D1 20010712; DK 0790464 T3 20010917; EP 0790464 A2 19970820; EP 0790464 A3 19971126; EP 0790464 B1 20010606; ES 2159780 T3 20011016; JP 2948769 B2 19990913; JP 3103066 B2 20001023; JP H09318033 A 19971212; JP H11218319 A 19990810; NO 308712 B1 20001016; NO 970720 D0 19970217; NO 970720 L 19970820; PL 182698 B1 20020228; PL 318519 A1 19970901; PT 790464 E 20011130; RU 2116572 C1 19980727; SG 52919 A1 19980928; SI 0790464 T1 20011231; TW 316287 B 19970921; UA 29508 C2 20001115

DOCDB simple family (application)
US 80058397 A 19970218; AT 97100975 T 19970122; BR 9701004 A 19970218; CA 2197741 A 19970217; CZ 48797 A 19970218; DE 19606107 A 19960219; DE 59703704 T 19970122; DK 97100975 T 19970122; EP 97100975 A 19970122; ES 97100975 T 19970122; JP 32234698 A 19981112; JP 3409097 A 19970218; NO 970720 A 19970217; PL 31851997 A 19970217; PT 97100975 T 19970122; RU 97102497 A 19970218; SG 1997000424 A 19970218; SI 9730185 T 19970122; TW 86100465 A 19970117; UA 97020662 A 19970217