

Title (en)

GRATE AREA ELEMENT FOR THE CONSTRUCTION OF A GRATE SURFACE AS WELL AS HEAT TREATING PROCESS

Publication

EP 0167658 B1 19880622 (DE)

Application

EP 84110432 A 19840901

Priority

DE 3332592 A 19830908

Abstract (en)

[origin: US4600380A] The combustion, cooling or other treatment of solids with the aid of gas may take place on a grate carrying or conveying said solids while the gas is passed through openings provided in the surface of the grate. In order to retain said solids entirely above said grate surface, to cool the grate surface sufficiently and to distribute the gas evenly in the solids to be treated, thin slots, inclined in the direction of transport, curved in the manner of a siphon and maintaining a high resistance to gas penetration are provided in grate plates composed to form a grate. The slots are formed between elements of such grate plates which can be manufactured by casting. The design of these grate plates avoids the necessity of handling dribblings passing said grates. The grate plates can be aerated through grate beams carrying them.

IPC 1-7

F23H 17/12

IPC 8 full level

F23H 17/12 (2006.01); **F23H 1/00** (2006.01); **F23H 1/02** (2006.01); **F27B 21/02** (2006.01); **F27D 1/00** (2006.01); **F27D 13/00** (2006.01); **F27D 15/02** (2006.01)

CPC (source: EP US)

F27D 1/0009 (2013.01 - EP US); **F27D 15/022** (2013.01 - EP US)

Cited by

DE102011080998A1; EP3252413A1; EP1992897A1; EP0337383A1; DE3844493C1; DE10359400A1; DE19633969A1; DE19622636A1; FR2621686A1; US5299555A; TR26157A; DE10133973A1; DE10133973B4; EP0677714A1; CN102954688A; DE102011080998B4; DE102007019530C5; EP2559961A1; US9513058B2; EP3581867A1; WO2019238835A1; US10989476B2; DE102007019530A1; WO2021004852A1; EP4394249A2

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

US 4600380 A 19860715; AT E35310 T1 19880715; AU 3281084 A 19850314; AU 575341 B2 19880728; BR 8404492 A 19850806; CS 8406766 A2 19911112; CZ 278615 B6 19940413; DD 232539 A5 19860129; DD 232539 B5 19950420; DE 3332592 C1 19850515; DE 3472292 D1 19880728; DK 162954 B 19911230; DK 162954 C 19920525; DK 408984 A 19850309; DK 408984 D0 19840828; EP 0167658 A1 19860115; EP 0167658 B1 19880622; ES 293841 U 19870616; ES 293841 Y 19871201; IN 161737 B 19880130; JP H063351 B2 19940112; JP S6091188 A 19850522; TR 22619 A 19880111; ZA 846987 B 19850424

DOCDB simple family (application)

US 64803084 A 19840907; AT 84110432 T 19840901; AU 3281084 A 19840907; BR 8404492 A 19840906; CS 676684 A 19840907; DD 26711784 A 19840907; DE 3332592 A 19830908; DE 3472292 T 19840901; DK 408984 A 19840828; EP 84110432 A 19840901; ES 293841 U 19840907; IN 680MA1984 A 19840905; JP 18729984 A 19840908; TR 2261984 A 19840910; ZA 846987 A 19840906