

Title (en)
SLIDING GRATE FOR A COMBUSTION FURNACE

Title (de)
SCHUBROST FÜR EINEN VERBRENNUNGSOFEN

Title (fr)
GRILLE COULISSANTE CONÇUE POUR UN FOUR À COMBUSTION

Publication
EP 4048951 A2 20220831 (DE)

Application
EP 20808009 A 20201016

Priority
• DE 102019128536 A 20191022
• DE 2020100897 W 20201016

Abstract (en)
[origin: WO2021078330A2] The invention relates to a sliding grate (100) for a combustion furnace (101), comprising multiple grate bar rows (2a, 2b), each of which has a grate bar support (5a, 5b), multiple grate bars (3a, 3b) being connected to said grate bar support via first ends (4a, 4b) of the grate bars, wherein surfaces (7a, 7b) of the grate bars (3a, 3b) form a grate bar surface (8) for transporting a layer of fuel (1) along a flow direction (F), and the grate bars (3a, 3b) of adjacent grate bar rows (2a, 2b) lie one over the other in the manner of roof tiles such that the second end (6a, 6b) of each grate bar (3a, 3b) is supported on a surface (7a, 7b) of an adjacent grate bar (3a, 3b) in the flow direction (F). At least some of the grate bar rows (2a, 2b) are grate bar rows (2a) which are driven by a driving means (9), and a first drive movement (A1) can be introduced into the grate bars (3a) of the driven grate bar rows (2a) via the driving means (9) so that a relative movement is produced between the grate bars (3a) of the driven grate bar rows (2a) and the grate bars (3b) of the non-driven grate bar rows (2b). According to the invention, the surfaces (7a, 7b) of the grate bars (3a, 3b) of at least some grate bar rows (2a, 2b) have a nonplanar surface contour (13a, 13b) such that a second drive movement (A2) can be introduced into the grate bars (3a, 3b) that have second ends (6a, 6b) supported on the nonplanar surface contour (13a, 13b) as a result of the relative movement between the grate bars (3a, 3b) of driven and non-driven grate bar rows (2a, 2b).

IPC 8 full level
F23H 7/08 (2006.01); **F23G 5/00** (2006.01); **F23H 17/12** (2006.01)

CPC (source: EP)
F23G 5/002 (2013.01); **F23H 7/08** (2013.01); **F23H 17/12** (2013.01); **F23G 2203/101** (2013.01)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102019128536 A1 20210422; **DE 102019128536 B4 20210923**; EP 4048951 A2 20220831; JP 2021067453 A 20210430; JP 6986612 B2 20211222; WO 2021078330 A2 20210429; WO 2021078330 A3 20210624

DOCDB simple family (application)
DE 102019128536 A 20191022; DE 2020100897 W 20201016; EP 20808009 A 20201016; JP 2020175206 A 20201019