

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

LIGHTING; HEATING

F23 COMBUSTION APPARATUS; COMBUSTION PROCESSES (NOTE omitted)

F23H GRATES (inlets for fluidisation air for fluidised bed combustion apparatus [F23C 10/20](#)); CLEANING OR RAKING GRATES

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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|--------------|--|----------------|--|
| 1/00 | Grates with solid bars | 11/10 | • with special provision for supply of air from below and for controlling air supply |
| 1/02 | • having provision for air supply or air preheating, e.g. air-supply or blast fittings which form a part of the grate structure or serve as supports | 11/12 | • inclined travelling grates; Stepped travelling grates |
| 1/04 | • having a variable burning surface | 11/14 | • serving as auxiliary grates |
| 1/06 | • having bars at different levels (double grates F23H 5/00) | 11/16 | • for multi-layer stoking |
| 1/08 | • Vertical grates | 11/18 | • Details |
| | | 11/20 | • . Driving-means |
| | | 11/22 | • . Moving fuel along grate; Cleaning of grate |
| 3/00 | Grates with hollow bars | 11/24 | • . Removal of ashes; Removal of clinker |
| 3/02 | • internally cooled | 11/26 | • . . by dumping |
| 3/04 | • externally cooled, e.g. with water, steam or air | 11/28 | • . Replaceable burning-surface |
| 5/00 | Double grates | 13/00 | Grates not covered by any preceding group |
| 7/00 | Inclined {or stepped} grates (inclined travelling grates F23H 11/12) | 13/02 | • Basket grates, e.g. with shaking arrangement |
| 7/02 | • with fixed bars | 13/04 | • Telescoping-grates |
| 7/04 | • . in parallel disposition | 13/06 | • Dumping-grates |
| 7/06 | • with movable bars disposed parallel to direction of fuel feeding | 13/08 | • Grates specially adapted for gas generators and also applicable to furnaces |
| 7/08 | • . reciprocating along their axes | 15/00 | Cleaning arrangements for grates (not forming part of the grate F23J 1/00); Moving fuel along grate (rocking-grates modified for moving fuel F23H 9/10; for travelling-grates F23H 11/22) |
| 7/10 | • . rocking about their axes | | |
| 7/12 | • with movable bars disposed transversely to direction of fuel feeding | 17/00 | Details of grates |
| 7/14 | • . reciprocating along their axis | 17/02 | • End fittings on bars |
| 7/16 | • . rocking about their axes | 17/04 | • . of travelling-grates |
| 7/18 | • . reciprocating in an upward direction | 17/06 | • Provision for vertical adjustment of grate |
| 9/00 | Revolving-grates; Rocking-grates (F23H 7/00 takes precedence) | 17/08 | • Bearers; Frames; Spacers; Supports |
| 9/02 | • Revolving cylindrical grates | 17/10 | • . Dead plates; Imperforate fuel supports |
| 9/04 | • Grates rocked as a whole | 17/12 | • Fire-bars |
| 9/06 | • the bars being rocked about axes transverse to their lengths | 2700/00 | Grates characterised by special features or applications |
| 9/08 | • the bars being rocked about their longitudinal axes | 2700/001 | • Grates specially adapted for steam boilers |
| 9/10 | • . and modified to move fuel along the grate | 2700/002 | • Inclined grates with longitudinally movable gratebars |
| 9/12 | • the bars being vertically movable in a plane | 2700/003 | • Stepped grates with rotatable or slidable gratebars |
| 11/00 | Travelling-grates | 2700/004 | • Rotary grates with horizontal axis |
| 11/02 | • with the bars disposed on transverse bearers | 2700/005 | • Rotary grates with vertical axis |
| 11/04 | • with the bars pivoted at one side | 2700/006 | • Grates of basket-type |
| 11/06 | • with the bars movable relatively to one another | 2700/007 | • Basket grates with shaking arrangement |
| 11/08 | • with several individually-movable grate surfaces | 2700/008 | • Mobile grates |

F23H

2700/009 . Grates specially adapted for incinerators

2900/00 Special features of combustion grates

2900/03021 . Liquid cooled grates

2900/09041 . Vibrating grates for solid fuels ([specially adapted for incinerators F23G 2203/107](#))

2900/17001 . Specific materials therefor

2900/17002 . Detachable or removable worn-out parts