

**CPC****COOPERATIVE PATENT CLASSIFICATION****F23H**

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

**F23H 1/00****Grates with solid bars**

## F23H 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

## F23H 1/04

- having a variable burning surface

## F23H 1/06

- having bars at different levels ([double grates F23H 5/00](#))

## F23H 1/08

- Vertical grates

**F23H 3/00****Grates with hollow bars**

## F23H 3/02

- internally cooled

## F23H 3/04

- externally cooled, e.g. with water, steam or air

**F23H 5/00****Double grates****F23H 7/00****Inclined { or stepped } grates** ([inclined travelling grates F23H 11/12](#))

## F23H 7/02

- with fixed bars

## F23H 7/04

- .. in parallel disposition

## F23H 7/06

- with movable bars disposed parallel to direction of fuel feeding

## F23H 7/08

- .. reciprocating along their axes

## F23H 7/10

- .. rocking about their axes

## F23H 7/12

- with movable bars disposed transversely to direction of fuel feeding

## F23H 7/14

- .. reciprocating along their axis

## F23H 7/16

- .. rocking about their axes

## F23H 7/18

- .. reciprocating in an upward direction

**F23H 9/00****Revolving-grates; Rocking-grates** ([F23H 7/00](#) takes precedence)

## F23H 9/02

- Revolving cylindrical grates

## F23H 9/04

- Grates rocked as a whole

F23H 9/06 . the bars being rocked about axes transverse to their lengths

F23H 9/08 . the bars being rocked about their longitudinal axes

F23H 9/10 . . and modified to move fuel along the grate

F23H 9/12 . the bars being vertically movable in a plane

## **F23H 11/00 Travelling-grates**

F23H 11/02 . with the bars disposed on transverse bearers

F23H 11/04 . with the bars pivoted at one side

F23H 11/06 . with the bars movable relatively to one another

F23H 11/08 . with several individually-movable grate surfaces

F23H 11/10 . with special provision for supply of air from below and for regulating air supply

F23H 11/12 . inclined travelling grates; Stepped travelling grates

F23H 11/14 . serving as auxiliary grates

F23H 11/16 . for multi-layer stoking

F23H 11/18 . Details

F23H 11/20 . . Driving-means

F23H 11/22 . . Moving fuel along grate; Cleaning of grate

F23H 11/24 . . Removal of ashes; Removal of clinker

F23H 11/26 . . . by dumping

F23H 11/28 . . Replaceable burning-surface

## **F23H 13/00 Grates not covered by any preceding group**

F23H 13/02 . Basket grates, e.g. with shaking arrangement

F23H 13/04 . Telescoping-grates

F23H 13/06 . Dumping-grates

F23H 13/08 . Grates specially adapted for gas generators and also applicable to furnaces

**F23H 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](#))

**F23H 17/00**      **Details of grates**

- F23H 17/02      .    End fittings on bars
- F23H 17/04      . .    of travelling-grates
- F23H 17/06      .    Provision for vertical adjustment of grate
- F23H 17/08      .    Bearers; Frames; Spacers; Supports
- F23H 17/10      . .    Dead plates; Imperforate fuel supports
- F23H 17/12      .    Fire-bars

**F23H 2700/00**      **Grates characterised by special features or applications**

- F23H 2700/001      .    Grates specially adapted for steam boilers
- F23H 2700/002      .    Inclined grates with longitudinally movable gratebars
- F23H 2700/003      .    Stepped grates with rotatable or slidable gratebars
- F23H 2700/004      .    Rotary grates with horizontal axis
- F23H 2700/005      .    Rotary grates with vertical axis
- F23H 2700/006      .    Grates of basket-type
- F23H 2700/007      .    Basket grates with shaking arrangement
- F23H 2700/008      .    Mobile grates
- F23H 2700/009      .    Grates specially adapted for incinerators

**F23H 2900/00**      **Special features of combustion grates**

- F23H 2900/03021      .    Liquid cooled grates
- F23H 2900/09041      .    Vibrating grates for solid fuels ([specially adapted for incinerators F23G 2203/107](#))
- F23H 2900/17001      .    Specific materials therefor
- F23H 2900/17002      .    Detachable or removable worn-out parts