

SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

F23 COMBUSTION APPARATUS; COMBUSTION PROCESSES

F23J REMOVAL OR TREATMENT OF COMBUSTION PRODUCTS OR COMBUSTION RESIDUES; FLUES (precipitating dust from flue gases B01D; composition of fuels C10; combustion apparatus for consuming smoke or fumes, e.g. exhaust gases, F23G 7/06)

Note(s)

1. This subclass covers also the cleaning of surfaces of furnace tubes, flame tubes, water tubes, flues or the like of boilers, heat-exchange or heat-transfer conduits, which surfaces are contaminated by combustion products or combustion residues.
2. This subclass does not cover the cleaning of surfaces of boilers, heat exchange or heat-transfer conduits contaminated by other than combustion products or combustion residues, which is covered by subclass F28G.

Subclass index

REMOVAL OF SOLID COMBUSTION PRODUCTS OR RESIDUES

From combustion chamber.....1/00

From places beyond the fire.....3/00

TREATMENT OF COMBUSTION PRODUCTS OR RESIDUES

Supply of chemicals; preventing solidification; Treating smoke or fumes.....7/00, 9/00, 15/00

FLUES, FITTINGS FOR CHIMNEYS OR FLUES.....11/00, 13/00

SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....99/00

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| 1/00 | Removing ash, clinker, or slag from combustion chambers (devices for removal of material from the bed of fluidised bed combustion apparatus F23C 10/24) | 11/04 | • in locomotives; in road vehicles; in ships |
| 1/02 | • Apparatus for removing ash, clinker, or slag from ash-pits, e.g. by employing trucks or conveyers, by employing suction devices | 11/06 | • • for conducting smoke horizontally |
| 1/04 | • Hand tools, e.g. rakes, prickers, tongs | 11/08 | • for portable apparatus |
| 1/06 | • Mechanically-operated devices, e.g. clinker pushers (forming part of the grate F23H) | 11/10 | • for tents; for log huts; for other inflammable structures |
| 1/08 | • Liquid slag removal [3] | 11/12 | • Smoke conduit systems for factories or large buildings |
| 3/00 | Removing solid residues from passages or chambers beyond the fire, e.g. from flues by soot blowers | 13/00 | Fittings for chimneys or flues (staying, stiffening E04H; means for facilitating climbing E06C; draught-inducing apparatus associated with chimneys or flues F23L) |
| 3/02 | • Cleaning furnace tubes; Cleaning flues or chimneys (by means which do not differ materially from the cleaning of any other tube once the fire is out B08B) | 13/02 | • Linings; Jackets; Casings |
| 3/04 | • Traps | 13/04 | • Joints; Connections (pipe joints in general F16L) |
| 3/06 | • Systems for accumulating residues from different parts of furnace plant | 13/06 | • Mouths; Inlet holes |
| 7/00 | Arrangement of devices for supplying chemicals to fire (supplying chemicals to fire C10L) | 13/08 | • Doors or covers specially adapted for smoke-boxes, flues, or chimneys (in general E06B) |
| 9/00 | Preventing premature solidification of molten combustion residues | 15/00 | Arrangements of devices for treating smoke or fumes (such devices <u>per se</u> , methods for treating smoke or fumes, <u>see</u> the relevant places for the treatment, e.g. B01D 53/00) |
| 11/00 | Devices for conducting smoke or fumes, e.g. flues (heat insulation therefor E04B 1/94; chimneys E04H 12/28; removing cooking fumes from domestic stoves or ranges F24C 15/20) [5] | 15/02 | • of purifiers, e.g. for removing noxious material (traps for solid residues F23J 3/04) [6] |
| 11/02 | • for conducting smoke or fumes originating from various locations to the outside, e.g. in locomotive sheds, in garages | 15/04 | • • using washing fluids [6] |
| | | 15/06 | • of coolers [6] |
| | | 15/08 | • of heaters [6] |
| | | 99/00 | Subject matter not provided for in other groups of this subclass [2006.01] |