

## 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

1/00	<b>Removing ash, clinker, or slag from combustion chambers</b> (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	<b>Removing solid residues from passages or chambers beyond the fire, e.g. from flues by soot blowers</b>	13/00	<b>Fittings for chimneys or flues</b> (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	<b>Arrangement of devices for supplying chemicals to fire</b> (supplying chemicals to fire C10L)	13/08	• Doors or covers specially adapted for smoke-boxes, flues, or chimneys (in general E06B)
9/00	<b>Preventing premature solidification of molten combustion residues</b>	15/00	<b>Arrangements of devices for treating smoke or fumes</b> (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	<b>Devices for conducting smoke or fumes, e.g. flues</b> (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	<b>Subject matter not provided for in other groups of this subclass [2006.01]</b>