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

F02 COMBUSTION ENGINES; HOT-GAS OR COMBUSTION-PRODUCT ENGINE PLANTS

F02F CYLINDERS, PISTONS, OR CASINGS FOR COMBUSTION ENGINES; ARRANGEMENTS OF SEALINGS IN COMBUSTION ENGINES (specially adapted for rotary-piston or oscillating-piston internal-combustion engines F02B; specially adapted for gas-turbine plants F02C; specially adapted for jet-propulsion plants F02K) **[2]**

Note(s)

1. Attention is drawn to the Notes preceding class F01.
2. Class F16 takes precedence over this subclass, except for subject matter specific to combustion engines.

1/00 **Cylinders; Cylinder heads** (in general F16J) **[1, 2006.01]**
1/02 • having cooling means (cylinder heads F02F 1/26) **[1, 2006.01]**
1/04 • • for air cooling **[1, 2006.01]**
1/06 • • • Shape or arrangement of cooling fins; Finned cylinders **[1, 2006.01]**
1/08 • • • • running-liner and cooling-part of cylinder being different parts or of different material **[1, 2006.01]**
1/10 • • for liquid cooling **[1, 2006.01]**
1/12 • • • Preventing corrosion of liquid-swept surfaces **[1, 2006.01]**
1/14 • • • Cylinders with means for directing, guiding, or distributing liquid stream **[1, 2006.01]**
1/16 • • • Cylinder liners of wet type **[1, 2006.01]**
1/18 • Other cylinders **[1, 2006.01]**
1/20 • • characterised by constructional features providing for lubrication **[1, 2006.01]**
1/22 • • characterised by having ports in cylinder wall for scavenging or charging **[1, 2006.01]**
1/24 • Cylinder heads **[1, 2006.01]**
1/26 • • having cooling means **[1, 2006.01]**
1/28 • • • for air cooling **[1, 2006.01]**
1/30 • • • • Finned cylinder heads **[1, 2006.01]**
1/32 • • • • • the cylinder heads being of overhead-valve type **[1, 2006.01]**
1/34 • • • • • with means for directing or distributing cooling medium (F02F 1/32 takes precedence) **[1, 2006.01]**
1/36 • • • for liquid cooling **[1, 2006.01]**
1/38 • • • • the cylinder heads being of overhead-valve type **[1, 2006.01]**
1/40 • • • • cylinder heads with means for directing, guiding, or distributing liquid stream (F02F 1/38 takes precedence) **[1, 2006.01]**
1/42 • • Shape or arrangement of intake or exhaust channels in cylinder heads **[1, 2006.01]**

3/00 **Pistons** (in general F16J) **[1, 2006.01]**
3/02 • having means for accommodating or controlling heat expansion **[1, 2006.01]**
3/04 • • having expansion-controlling inserts **[1, 2006.01]**
3/06 • • • the inserts having bimetallic effect **[1, 2006.01]**
3/08 • • • the inserts being ring-shaped **[1, 2006.01]**
3/10 • having surface coverings (F02F 3/02 takes precedence) **[1, 2006.01]**
3/12 • • on piston heads **[1, 2006.01]**
3/14 • • • within combustion chambers **[1, 2006.01]**
3/16 • having cooling means **[1, 2006.01]**
3/18 • • the means being a liquid or solid coolant, e.g. sodium, in a closed chamber in piston **[1, 2006.01]**
3/20 • • the means being a fluid flowing through or along piston **[1, 2006.01]**
3/22 • • • the fluid being liquid **[1, 2006.01]**
3/24 • having means for guiding gases in cylinders, e.g. for guiding scavenging charge in two-stroke engines **[1, 2006.01]**
3/26 • having combustion chamber in piston head (the surface thereof being covered F02F 3/14) **[1, 2006.01]**
3/28 • Other pistons with specially-shaped head **[1, 2006.01]**

5/00 **Piston rings, e.g. associated with piston crown [1, 2006.01]**

7/00 **Casings, e.g. crankcases** (engine casings in general F16M) **[1, 2006.01]**

11/00 **Arrangements of sealings in combustion engines** (piston rings F02F 5/00; sealings per se F16J) **[1, 2006.01]**