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

F03 MACHINES OR ENGINES FOR LIQUIDS; WIND, SPRING, OR WEIGHT MOTORS; PRODUCING MECHANICAL POWER OR A REACTIVE PROPULSIVE THRUST, NOT OTHERWISE PROVIDED FOR

F03C POSITIVE-DISPLACEMENT ENGINES DRIVEN BY LIQUIDS (positive-displacement engines for liquids and elastic fluids F01; positive-displacement machines for liquids F04; fluid-pressure actuators F15B; fluid gearing F16H)

Note(s)

Attention is drawn to the Notes preceding class F01, especially as regards the definitions of "positive displacement", "rotary-piston machines", "oscillating-piston machines", "rotary-piston", "co-operating members", "movement of co-operating members", "teeth or tooth-equivalents", and "internal axis".

1/00 Reciprocating-piston liquid engines [1, 2006.01]

1/007 • with single cylinder, double-acting piston **[5, 2006.01]**

1/013 • with single cylinder, single-acting piston **[5, 2006.01]**

1/02 • with multiple cylinders, characterised by the number or arrangement of cylinders (with movable cylinders F03C 1/22; of flexible-wall type F03C 7/00) **[1, 2006.01]**

1/03 • • with movement in two directions being obtained by two single-acting piston liquid engines, each acting in one direction **[5, 2006.01]**

1/04 • • with cylinders in star- or fan-arrangement **[1, 2006.01]**

1/047 • • • the pistons co-operating with an actuated element at the outer ends of the cylinders **[5, 2006.01]**

1/053 • • • the pistons co-operating with an actuated element at the inner ends of the cylinders **[5, 2006.01]**

1/06 • • with cylinder axes generally coaxial with, or parallel or inclined to, main shaft axis **[1, 2006.01]**

1/08 • Distributing valve-gear peculiar thereto (for multiple-cylinder engines F03C 1/34; for engines with positive displacement in general F01L) **[1, 2006.01]**

1/10 • • actuated by piston or piston-rod **[1, 2006.01]**

1/12 • • • mechanically **[1, 5, 2006.01]**

1/14 • • actuated by the driving liquid of the engine **[1, 5, 2006.01]**

1/16 • • Speed controlling, equalising, or cushioning **[1, 5, 2006.01]**

1/20 • • specially adapted for engines generating vibration only **[1, 2006.01]**

1/22 • with movable cylinders **[1, 2006.01]**

1/24 • • in which the liquid exclusively displaces one or more pistons reciprocating in rotary cylinders **[1, 2006.01]**

1/247 • • • with cylinders in star- or fan-arrangement **[5, 2006.01]**

1/253 • • • with cylinder axes generally coaxial with, or parallel to, main shaft axis **[5, 2006.01]**

1/26 • adapted for special use or combined with apparatus driven thereby (aspects predominantly concerning the driven apparatus, see the relevant classes for such apparatus) **[1, 2006.01]**

1/28 • Pistons specially adapted therefor **[5, 2006.01]**

1/30 • Cams specially adapted therefor **[5, 2006.01]**

1/32 • Cylinders specially adapted therefor **[5, 2006.01]**

1/34 • Distribution members specially adapted for multiple-cylinder engines **[5, 2006.01]**

1/36 • • Cylindrical distribution members **[5, 2006.01]**

1/38 • • Plate-like distribution members **[5, 2006.01]**

1/40 • Control specially adapted therefor **[5, 2006.01]**

2/00 Rotary-piston engines (in which the liquid exclusively displaces one or more piston reciprocating in rotary cylinders F03C 1/24) **[3, 2006.01]**

Note(s) [3]

Group F03C 2/30 takes precedence over groups F03C 2/02-F03C 2/24.

2/02 • of arcuate-engagement type, i.e. with circular translatory movement of co-operating members, each member having the same number of teeth or tooth-equivalents **[3, 2006.01]**

2/08 • of intermeshing-engagement type, i.e. with engagement of co-operating members similar to that of toothed gearing **[3, 2006.01]**

2/22 • of internal-axis type with equidirectional movement of co-operating members at the points of engagement, or with one of the co-operating members being stationary, the inner member having more teeth or tooth-equivalents than the outer member **[3, 2006.01]**

2/24 • of counter-engagement type, i.e. the movement of co-operating members at the points of engagement being in opposite directions **[3, 2006.01]**

2/30 • having the characteristics covered by two or more of groups F03C 2/02, F03C 2/08, F03C 2/22, F03C 2/24 or having the characteristics covered by one of these groups together with some other type of movement between co-operating members **[3, 2006.01]**

4/00 Oscillating-piston engines [3, 2006.01]

7/00 Engines of flexible-wall type [2010.01]

99/00 Subject matter not provided for in other groups of this subclass [2010.01]