

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

### F15 FLUID-PRESSURE ACTUATORS; HYDRAULICS OR PNEUMATICS IN GENERAL

**F15C FLUID-CIRCUIT ELEMENTS PREDOMINANTLY USED FOR COMPUTING OR CONTROL PURPOSES** (transducers F15B 5/00; fluid dynamics in general F15D; computers comprising fluid elements G06D, G06G)

#### Note(s)

Attention is drawn to the Notes following the titles of class B81 and subclass B81B relating to "micro-structural devices" and "micro-structural systems".

**1/00 Circuit elements having no moving parts**

- 1/02 • Details
- 1/04 • • Means for controlling fluid streams to fluid devices, e.g. by electric signals
- 1/06 • • Constructional details; Selection of specified materials

#### Note(s)

Group F15C 1/22 takes precedence over groups F15C 1/08-F15C 1/20.

- 1/08 • Boundary-layer devices, e.g. wall-attachment amplifiers [2]
- 1/10 • • for digital operation, e.g. to form a logical flip-flop, OR-gate, NOR-gate
- 1/12 • • • Multiple arrangements thereof for performing operations of the same kind, e.g. majority gates, identity gates
- 1/14 • Stream-interaction devices; Momentum-exchange devices, e.g. operating by exchange between two orthogonal fluid jets
- 1/16 • Vortex devices, i.e. devices in which use is made of the pressure drop associated with vortex motion in a fluid
- 1/18 • Turbulence devices, i.e. devices in which a controlling stream will cause a laminar flow to become turbulent

- 1/20 • Direct-impact devices, i.e. devices in which two collinear opposing power streams are impacted
- 1/22 • Oscillators [2]

**3/00 Circuit elements having moving parts** (valves, construction of valves F16K)

#### Note(s)

Group F15C 3/16 takes precedence over groups F15C 3/02-F15C 3/10.

- 3/02 • using spool valves
- 3/04 • using diaphragms (connection of valves to inflatable elastic bodies B60C 29/00)
- 3/06 • using balls
- 3/08 • using reeds
- 3/10 • using nozzles or jet pipes
- 3/12 • • the nozzle or jet pipe being movable
- 3/14 • • the jet from the nozzle being intercepted by a flap
- 3/16 • Oscillators [2]

**4/00 Circuit elements characterised by their special functions**

**5/00 Manufacture of fluid-circuit elements; Manufacture of assemblages of such elements**

**7/00 Hybrid elements, i.e. circuit elements having features according to groups F15C 1/00 and F15C 3/00 [2]**