

# CPC COOPERATIVE PATENT CLASSIFICATION

**F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING**  
(NOTE omitted)

## ENGINES OR PUMPS

**F03 MACHINES OR ENGINES FOR LIQUIDS** (for liquid and gases [F01](#); positive-displacement machines for liquids [F04](#)); **WIND, SPRING WEIGHT AND MISCELLANEOUS MOTORS; PRODUCING MECHANICAL POWER; OR A REACTIVE PROPULSIVE THRUST, NOT OTHERWISE PROVIDED FOR**

**F03H PRODUCING A REACTIVE PROPULSIVE THRUST, NOT OTHERWISE PROVIDED FOR** (from combustion products [F02K](#))

### WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

- 1/00 Using plasma to produce a reactive propulsive thrust** (generating plasma [H05H 1/00](#)) {ion sources per se [H01J 27/02](#), ion sources for plasma processing or ion beams [H01J 37/08](#)}
- 1/0006 . {Details applicable to different types of plasma thrusters (arrangements specially adapted for fitting plasma engines in or to cosmonautic vehicles [B64G 1/405](#))}
- 1/0012 . . {Means for supplying the propellant}
- 1/0018 . . {Arrangements or adaptations of power supply systems (for cosmonautic vehicles [B64G 1/42](#))}
- 1/0025 . . {Neutralisers, i.e. means for keeping electrical neutrality}
- 1/0031 . . {Thermal management, heating or cooling parts of the thruster (temperature control for cosmonautic vehicles [B64G 1/50](#))}
- 1/0037 . {Electrostatic ion thrusters}
- 1/0043 . . {characterised by the acceleration grid (extraction optics for ion sources [H01J 27/024](#))}
- 1/005 . . {using field emission, e.g. Field Emission Electric Propulsion [FEEP]}
- 1/0056 . . {with an acceleration grid and an applied magnetic field}
- 1/0062 . . {grid-less with an applied magnetic field}
- 1/0068 . . . {with a central channel, e.g. end-Hall type}
- 1/0075 . . . {with an annular channel; Hall-effect thrusters with closed electron drift}
- 1/0081 . {Electromagnetic plasma thrusters}
- 1/0087 . {Electro-dynamic thrusters, e.g. pulsed plasma thrusters}
- 1/0093 . {Electro-thermal plasma thrusters, i.e. thrusters heating the particles in a plasma (resistojets per se [B64G 1/406](#))}
- 3/00 Use of photons to produce a reactive propulsive thrust**
- 99/00 Subject matter not provided for in other groups of this subclass**