## F03H

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

## References

References out of a residual place
Examples of places in relation to which this place is residual:

| Marine propulsion or steering | B63H |
| :--- | :--- |
| Propellers for aeroplanes | B64C 11/00 |
| Rotors for helicopters | B64C 27/32 |
| Jet-propulsion plants | F02K |
| Machines or engines for liquids | F03B |

## Informative references

Attention is drawn to the following places, which may be of interest for search:

| Spring, weight, inertia or like motors; mechanical-power-producing <br> mechanisms, not otherwise provided for or using energy sources not <br> otherwise provided for | F03G |
| :--- | :--- |
| Electric generators or motors not provided for elsewhere; Alleged <br> perpetua mobilia obtained by electric or magnetic means | H02N 11/00 |

## F03H 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)\}

## Definition statement

This place covers:
Engines exhausting ions or a plasma (ions and electrons) to produce a reactive propulsive thrust.
Details thereof.

## Relationships with other classification places

Multi-purpose ion sources which can be used inter alia as ion thruster should be classified only in H01J 27/00 and lower.

## References

## Limiting references

This place does not cover:

| Adaptations of ion or plasma engines for fitting in or to, cosmonautic <br> vehicles | B64G 1/413 |
| :--- | :--- |
| Ion sources for plasma processing or for ion beams | H01J 37/08 |


| Apparatus for generating ions to be introduced into non-enclosed gases | H01T 23/00 |
| :--- | :--- |
| Plasma accelerators | H05H 1/54 |

## Informative references

Attention is drawn to the following places, which may be of interest for search:

| Arcjets and other resistojets for fitting in or to cosmonautic vehicles | B64G 1/415 |
| :--- | :--- |
| Electromagnetic launchers; Plasma-actuated launchers (railguns) | F41B 6/00 |

## Special rules of classification

Aspects related to the generation of ions (resp. plasma) should be classified in H01J $27 / 02$ (resp. H05H 1/24) and lower.

For example, a microwave ion thruster with a peculiar acceleration grid should be classified in H01J 27/16 and F03H 1/0043.

## Synonyms and Keywords

In patent documents, the following abbreviations are often used:

| FEEP | Field Emission Electric Propulsion |
| :--- | :--- |
| HET | Hall-Effect Thruster |
| MPD | Magneto Plasma Dynamic |
| PPT | Pulsed Plasma Thruster |
| SPT | Stationary Plasma Thruster, a kind of Hall-Effect Thruster |

## F03H 3/00

## Use of photons to produce a reactive propulsive thrust

## Definition statement

This place covers:
Engines exhausting photons to produce a reactive propulsive thrust .

## References

## Limiting references

This place does not cover:

| Vehicle lighting | B60Q |
| :--- | :--- |
| Arrangements or adaptations of signal or lighting devices for fitting in or to <br> aircraft | B64D 47/02 |
| Adaptations of propulsion systems for fitting in or to, cosmonautic <br> vehicles | B64G 1/40 |
| Lighting in general | F21 |
| Devices using stimulated emission, e.g. lasers | H01S |
| Electric lighting | H05B |

## F03H 99/00

## Subject matter not provided for in other groups of this subclass

## Definition statement

This place covers:
Engines producing a reactive propulsive thrust without exhausting a fluid, a plasma or photons .
Engines allegedly producing a reactive propulsive thrust without exhausting anything, in violation of the Newtonian law of action and reaction.

## References

## Limiting references

This place does not cover:

| Using plasma to produce a reactive propulsive thrust | F03H $1 / 00$ |
| :--- | :--- |
| Using photons to produce a reactive propulsive thrust | F03H 3/00 |
| Jet-propulsion plants | F02K |

## Informative references

Attention is drawn to the following places, which may be of interest for search:

| Unconventional spacecraft propulsion systems | B64G 1/409 |
| :--- | :--- |
| Spring, weight, inertia or like motors; Mechanical-power producing <br> mechanisms, not otherwise provided for or using energy sources not <br> otherwise provided for | F03G |

