(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 132 065**
A3

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **84304344.9**

(22) Date of filing: **27.06.84**

(51) Int. Cl.⁴: **F 03 H 1/00**

(30) Priority: **13.07.83 GB 8318919**

(43) Date of publication of application: **23.01.85 Bulletin 85/4**

(84) Designated Contracting States: **BE DE FR IT NL SE**

(88) Date of deferred publication of search report: **28.05.86 Bulletin 86/22**

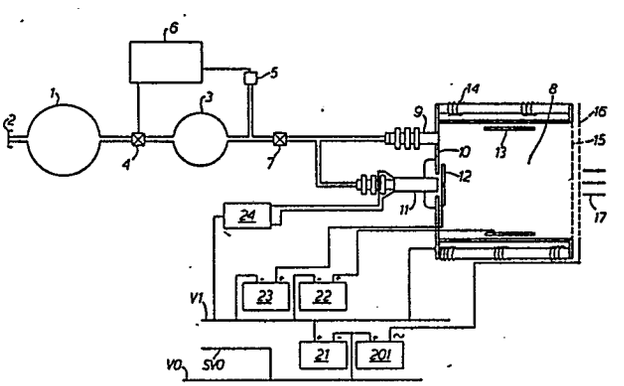
(71) Applicant: **THE MARCONI COMPANY LIMITED, The Grove Warren Lane, Stanmore Middlesex HA7 4LY (GB)**

(72) Inventor: **Smith, Peter, 4 Hazel Road, Clanfield Hampshire (GB)**

(74) Representative: **Dolwin, John Davison, Central Patent Department Wembley Office The General Electric Company, p.l.c. Hirst Research Centre East Lane, Wembley Middlesex HA9 7PP (GB)**

(54) Electric thruster for space propulsion.

(57) An electric thruster for spacecraft propulsion has an ionisation chamber (8), an inlet (9) for supplying gaseous propellant into the chamber (8) via a valve (7) when thrust is required, a hollow cathode electron emitter (11) and keeper (12) and an anode (13) for ionising the propellant by electron collision, an accelerating grid (16) at one end of the chamber (8), and an alternating voltage supply (201) connected to the grid (16) such that positive propellant ions and electrons are alternately accelerated out of the chamber (8) to provide an exhaust beam (17) which gives the required thrust and has a predetermined net electrical charge (typically zero).



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EUROPEAN SEARCH REPORT

Application number

EP 84 30 4344

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	DE-A-2 052 014 (MESSERSCHMITT-BÖLKOW-BLOHM) * Page 3, lines 3-33; page 4, lines 1-6; page 5, line 9 - page 6, line 19; page 7, lines 11-26; claims 1,2; figures 1-3 *	1-3	F 03 H 1/00

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

F 03 H
H 01 J

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	20-02-1986	WINKELMAN, A.M.E.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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