

Title (en)
ELECTRIC THRUSTER

Title (de)
ELEKTRISCHES TRIEBWERK

Title (fr)
PROPULSEUR ÉLECTRIQUE

Publication
EP 4243576 A1 20230913 (EN)

Application
EP 23159635 A 20230302

Priority
IT 202200004391 A 20220308

Abstract (en)
It is presented an electric thruster (1) comprising an inlet conduit (2) defining an inlet section (1b) of atmospheric gas; an expulsion section (1c) of atmospheric gas from said electric thruster (1); an ioniser (3) configured to generate a first magnetic field and an accelerator (4) configured to generate a second magnetic field; and an assembly (5) generating a stream of electrons which, by interacting with said magnetic fields, ionises and accelerates the atmospheric gas defining the thrust of said electric thruster.

IPC 8 full level
H05H 1/54 (2006.01); **F03H 1/00** (2006.01)

CPC (source: EP)
F03H 1/0012 (2013.01); **F03H 1/0075** (2013.01); **H05H 1/54** (2013.01)

Citation (search report)

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- [A] US 2006290287 A1 20061228 - KUNINAKA HITOSHI [JP]
- [A] ANDREUSSI TOMMASO ET AL: "Development and Experimental Validation of a Hall Effect Thruster RAM-EP Concept RAM-EP = Air-Breathing Electric Propulsion RAM-HET = Air-Breathing Hall Effect Thruster VLEO = Very Low Earth Orbit", GEORGIA INSTITUTE OF TECHNOLOGY, 8 October 2017 (2017-10-08), pages 1 - 11, XP055965519, Retrieved from the Internet <URL:http://electricrocket.org/IEPC/IEPC_2017_377.pdf> [retrieved on 20220927]
- [A] DIAMANT KEVIN D.: "A 2-Stage Cylindrical Hall Thruster for Air Breathing Electric Propulsion", 46TH AIAA/ASME/SAE/ASEE JOINT PROPULSION CONFERENCE & EXHIBIT, 28 July 2010 (2010-07-28), pages 1 - 9, XP055965542
- [A] ZHENG PENG ET AL: "A Comprehensive Review of Atmosphere-Breathing Electric Propulsion Systems", vol. 2020, 7 October 2020 (2020-10-07), pages 1 - 21, XP055965514, ISSN: 1687-5966, Retrieved from the Internet <URL:http://downloads.hindawi.com/journals/ijae/2020/8811847.xml> DOI: 10.1155/2020/8811847

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

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