

Title (en)
ELECTRONEGATIVE PLASMA THRUSTER

Title (de)
ELEKTRONEGATIVES PLASMATRIEBWERK

Title (fr)
PROPULSEUR A PLASMA ELECTRONEGATIF

Publication
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Application
EP 06830423 A 20061206

Priority
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• FR 0512417 A 20051207

Abstract (en)
[origin: WO2007065915A1] The subject of the invention is a plasma motor comprising the extraction of a stream of positive ions, characterized in that it comprises: a single ionization stage (1); feed means (6), for feeding said ionization stage with an ionizable electronegative gas; means for creating an electric field so as to ionize the gas in the ionization stage; and first extraction means, for extracting a stream of negative ions, and second extraction means, for extracting a stream of positive ions, which are connected to the ionization stage, the extraction of a stream of positive ions and the extraction of a stream of negative ions with the same amplitude ensuring electrical neutrality of the motor. According to the invention, the extraction of a stream of positive ions and the extraction of a stream of negative ions make it possible to ensure neutrality of the motor without having to use a neutralizer, as in the prior art. Application: propulsion of spacecraft.

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