

Title (en)
ELECTRONEGATIVE PLASMA THRUSTER WITH OPTIMIZED INJECTION

Title (de)
ELEKTRONEGATIVES PLASMATRIEBWERK MIT OPTIMIERTER EINSPRITZUNG

Title (fr)
PROPULSEUR A PLASMA ELECTRONEGATIF A INJECTION OPTIMISEE

Publication
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Application
EP 09756319 A 20091124

Priority
• EP 2009065688 W 20091124
• FR 0858077 A 20081128

Abstract (en)
[origin: WO2010060887A1] The invention relates to a plasma thruster involving the extraction of a stream of positive ions, characterized in that it comprises: - a single ionisation stage; - means of injecting ionisable gas for said ionisation stage, said means comprising at least first means of injecting a first gas (G1) and second means of injecting an electronegative second gas (G2); - means of creating an electrical field (Pe, RF) so as to cause the gases to ionise in the ionisation stage, said means creating a first zone known as a hot zone in the ionisation stage, whereby the first gas is distributed in the first zone (Z1) known as the hot zone and the second gas is distributed in a second zone (Z2) that is not as hot as the first zone; - first means (40) of extracting a stream of negative ions and second means (50) of extracting a stream of positive ions, which are both connected to the ionisation stage, the extraction of a stream of positive ions and the extraction of a stream of negative ions ensuring that the thruster is electrically neutral.

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F03H 1/0012 (2013.01 - EP US); **F03H 1/0025** (2013.01 - EP US); **H05H 1/54** (2013.01 - EP US)

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