Miniature Electrostatic Ion Thruster With Magnet

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A miniature electrostatic ion thruster is proposed that, with one exception, would be based on the same principles as those of the device described in the previous article, "Miniature Bipolar Electrostatic Ion Thruster" (NPO-21057). The exceptional feature of this thruster would be that, in addition to using electric fields for linear acceleration of ions and electrons, it would use a magnetic field to rotationally accelerate slow electrons into the ion stream to neutralize the ions.

This work was done by Frank T. Hartley of Caltech for **NASA's Jet Propulsion Laboratory**. *Further information is contained in a TSP (see page 1).* *NPO-21058*