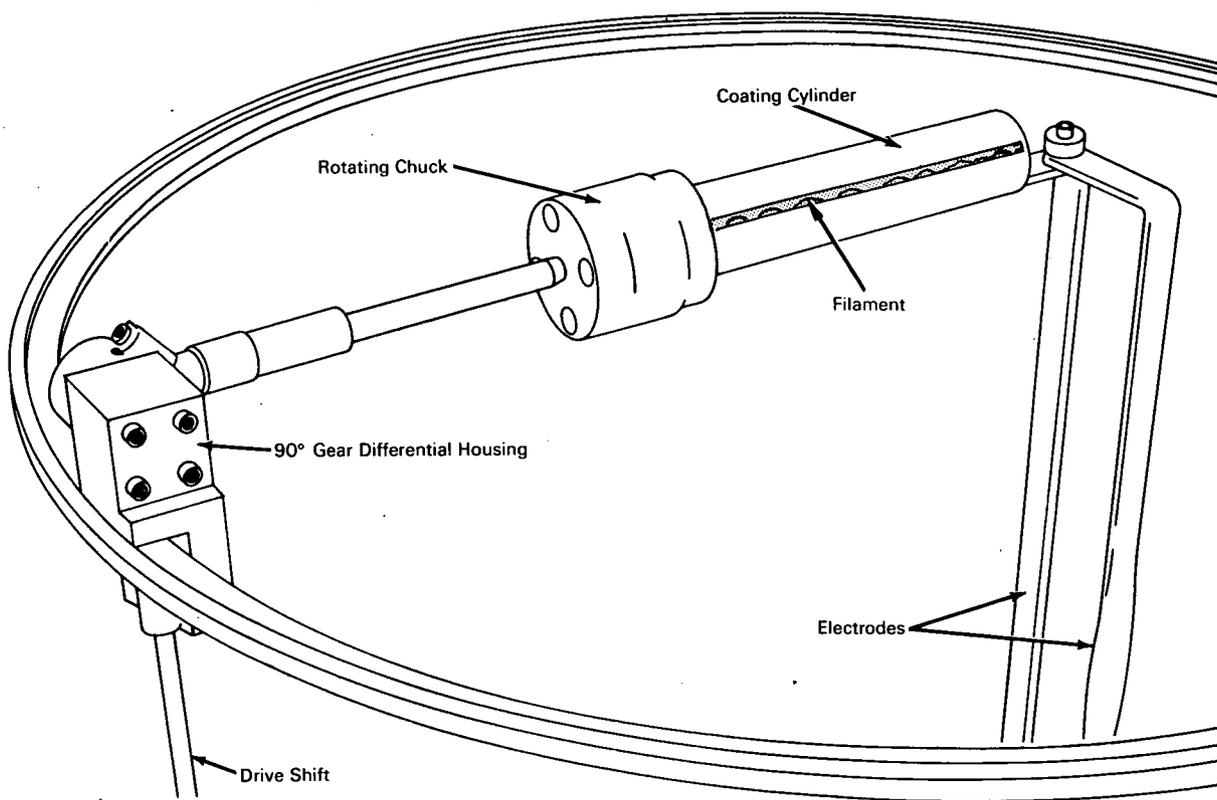


NASA TECH BRIEF



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Mechanism Facilitates Coating Inner Surfaces of Metal Cylinders



The problem :

To develop a method for vapor depositing thin coatings of aluminum or other metallic substances on the inner surface of a cylinder.

The solution :

Rotate the cylinder about a shielded hot filament to provide a uniform coating on the internal surfaces.

How it's done :

The coating equipment consists of a rotating mechanism, an adapter to hold the cylinder to be coated, and an aluminum tube with a longitudinal slot. The tube houses a tungsten filament. Two copper electrodes are connected to the filament, completing the electrical circuit. The cylinder to be coated is mounted on the aluminum tube containing the filament and is rotated around it. The aluminum tube serves as a

(continued overleaf)

heat sink and the only vapors that can escape pass through the slot to the inner surface of the cylinder to be coated.

Note:

Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Goddard Space Flight Center
Greenbelt, Maryland 20771
Reference: B66-10698

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

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(GSFC-515)