METHOD AND APPARATUS FOR CATHODIC ARC DEPOSITION OF MATERIALS ON A SUBSTRATE

ABSTRACT OF THE DISCLOSURE

A method for applying a coating by a cathodic is provided. The method includes the steps of: a) providing a cathodic arc coater that includes a power source and utilizes a disk-shaped cathode, the cathode having an evaporative surface extending between a first end surface and a second end surface, wherein the evaporative surface has an area; b) determining a maximum acceptable power density for the evaporative surface; and c) applying a magnitude of electrical current from the power source to the cathode, wherein the electrical current magnitude divided by the area is equal to or less than the maximum acceptable power density for the evaporative surface.

Figure 1