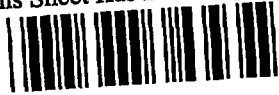


This Sheet Has Been Replaced



P-2061

- 20 -

TUBE HAVING REGIONS OF DIFFERENT SURFACE
CHEMISTRY AND METHOD THEREFOR

ABSTRACT OF THE DISCLOSURE

5 In a method to modify the chemistry of a portion
of the surface of an article, the surface is placed
adjacent an electrode in a plasma chamber, the distance
to the wall of the chamber being at least five times
the size of the electrode. A plasma of very high power
density is generated in a discharge volume surrounding
the electrode so that the surface area closest to the
electrode receives a very intense plasma which
diminishes with increasing distance from the discharge
10 volume thus forming a chemical gradient on the article
surface. The preferred article is a tube having one
closed end, and the gradient may be formed from either
the closed end or the open end. The gradient may be of
decreasing glass-like character or decreasing
15 plastic-like character.

This Sheet Has Been Replaced.

