

ABSTRACT**METHOD FOR MANUFACTURING WORKPIECES WITH ION-ETCHED SURFACE**

Planetary carriers (22) for workpieces mounted on a carousel (19) are provided within a vacuum chamber. A source (24) for a cloud comprising ions (CL) is provided so that a central axis (ACL) of the cloud intercepts the rotary axis (A20) of the carousel (19). The cloud (CL) has an ion density profile at the moving path (T) of planetary axes (A22) which drops to 50 % of the maximum ion density at a distance from the addressed center axis (ACL) which is at most half the diameter of the planetary carriers (22). When workpieces upon the planetary carriers (22) are etched by the cloud comprising ions material which is etched off is substantially not redeposited on neighboring planetary carriers but rather ejected towards the wall of the vacuum chamber.

FIG. 8