

ABSTRACT

METHOD FOR THE SURFACE TREATMENT OF PARTICLES OF A
METAL POWDER AND METAL POWDER PARTICLES OBTAINED
THEREBY

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The invention relates to a method for the surface treatment of a metal material in the powder state, said method comprising the step of obtaining a powder formed from a plurality of particles of the metal material to be
10 treated, and of subjecting said metal powder particles to an ion implantation process by directing a singly-charged or multi-charged ion beam (14) towards an outer surface of said particles, said ion beam being produced by a singly-charged or multi-charged ion source, for example of the ECR electron cyclotron resonance type, whereby said particles have an overall
15 spherical shape with a radius (R).

The invention further relates to a material in the powder state formed from a plurality of particles having a ceramic outer layer (26) and a metal core (24), said particles having an overall spherical shape with a radius (R).

20 Fig. 2