

Polycrystalline material, method for the production thereof and
articles made therefrom

ABSTRACT

The proposed material consists of the needle or plate-shaped crystallites of tetragonal modification of zirconium dioxide not more than 0.05 mm in size, which are situated parallel to their long axes and form rectangular lattice. Such a structure of the material insures its high resistance to the beginning of cracking. It promotes high physical and mechanical characteristics of the material. The material is obtained in conditions of lowered pressure by the method of melting in the cold container with its horizontal moving relatively to the inductor. Physical and mechanical characteristics of the material allow to produce high sharp blades, which ensure working resources up to 60 operations on dense tissues. The blade can be resharpened up to 10 times without any changes of its profile. 3 f., table, 13 pict.



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This translation from Russian into English was done by me,
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SIGNATURE