Title (en)

GRINDING WHEEL, GRINDING SYSTEM AND METHOD FOR GRINDING A BLADE

Title (de)

SCHLEIFSCHEIBE, SCHLEIFSYSTEM UND VERFAHREN ZUM SCHLEIFEN EINES MESSERS

Title (fr)

MEULE, SYSTEME D'AFFUTAGE ET PROCEDE POUR AFFUTER UNE LAME

Publication

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Application

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Abstract (en)

[origin: US6726542B1] The invention relates to a grinding wheel for grinding a blade, on the surface of which ions are deposited by means of a plasma-supported method and containing silicon carbide as abrasive medium with a grain size ranging from 100 to 500 mesh, said material being deposited in a ceramic based binding agent with aluminum silicate. The abrasive medium grains are thermally hardened and bonded in the porous aluminum silicate bond. Abrasive medium concentration in the grinding wheel is higher than 1 volume %. Said grinding wheel is used in a grinding system for rough grinding the blade. Polishing is then cared out with a second grinding wheel containing pure corundum as abrasive medium with a grain size ranging from 400 to 800 mesh, which is deposited a in multicomponent synthetic resin, preferably a phenol resin based resin with a concentration of more than 1 volume %, preferably 30 to 50%. The abrasive medium contains polishing-active filling materials with a volume fraction ranging between 3% and 10%.

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