

Title (en)

METHOD FOR OBTAINING WELL-DEFINED EDGE RADII BY ELECTROPOLISHING

Title (de)

VERFAHREN ZUR ERZIEHLUNG GENAU DEFINIERTER KANTENRADIEN MITTELS ELEKTROPOLIEREN

Title (fr)

PROCEDE PERMETTANT D'OBTENIR DES RAYONS D'ARRONDIS BIEN DEFINIS PAR POLISSAGE ELECTROLYTIQUE

Publication

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Application

EP 97927531 A 19970522

Priority

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- SE 9602278 A 19960607

Abstract (en)

[origin: WO9746741A1] The present invention relates to a method for edge rounding of cutting tool inserts, in combination with a high surface finish over the whole insert, of cemented carbide or titanium based carbonitride alloys. An electrolytic method is used with an electrolyte which provides an even removal of both binder phase and hard constituent phases such as perchloric (HClO₄) or sulphuric (H₂SO₄) acid, 15-50 vol %, in methanol or other organic liquid. The method is easier to control than conventional mechanical methods and is particularly useful for providing very small edge radii of about 10 µm in combination with a high surface finish over the whole insert which can not be made by mechanical or other electrolytic methods.

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