Process For Preparing A Support Substrate Made Of Polycrystalline Material And Process For Manufacturing A Composite Structure Including Said Support Substrate

Abstract

The invention relates to a method for preparing a support substrate made of polycrystalline material, the preparation method comprising the following steps: a) providing a raw disc made of polycrystalline material, having two faces; b) rough grinding of at least one of the faces of the raw disc, with a grinding wheel, the abrasive grit of which has an average size greater than or equal to 10 μm, to obtain a surface-ground disc having at least one surface-ground face; c) applying a heat treatment to the surface-ground disc, at a temperature above a growth temperature of the raw disc employed in step a), and below a melting temperature of the polycrystalline material, so as to obtain an annealed disc, d) thinning the annealed disc, from the at least one surface-ground face, said thinning including fine grinding with a grinding wheel, the abrasive grit of which has an average size of less than 10 μm, so as to obtain the support substrate.

Fig. 1a