

Title (en)

Method and device for the surface treatment and for the pre-stressing of the inner wall of a cavity

Title (de)

Verfahren und Vorrichtung für die Oberflächenbehandlung und für die Vorspannung der Innenwand eines Hohlraumes

Title (fr)

Procédé et dispositif pour le traitement de surface et la mise en précontrainte de la paroi intérieure d'une cavité

Publication

**EP 0666142 B1 19981118 (FR)**

Application

**EP 95400207 A 19950201**

Priority

FR 9401275 A 19940204

Abstract (en)

[origin: EP0666142A1] The method, esp. for pre-stressing and hardening the inner surfaces of cavities, e.g. to receive turbine blade fixing pins, consists of blasting the cavity with shot set in motion by ultra-sound. The shot is made from balls of a pre-determined diameter, resonated by a vibrator (20) positioned adjacent to the orifice (25) of a cavity (24). The vibrator is in the shape of a pot with tapering and tubular (22) sections which is resonated at one of its own frequencies. It can be shaped so that its tip can be introduced slightly into the cavity or it can have a flange which abuts the end of the cavity, while the other end of the cavity is covered by a reflector (27) in the form of a metal plate to return the shot back to the cavity.

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CPC (source: EP US)

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Cited by

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