Title (en)

Installation for ultrasonic peening of workpieces comprising at least one projectile

Title (de)

Einrichtung zum Ultraschall-Kugelstrahlen von Werkstücken mit mindestens einem Strahl-Körper

Title (fr)

Installation de grenaillage par ultrasons comportant und sonotrode et au moins un projectile

Publication

EP 1621288 B1 20100908 (FR)

Application

EP 05300625 A 20050727

Priority

FR 0408493 A 20040730

Abstract (en)

[origin: EP1621288A2] The projectile (1) has a surface made up of a non-ferrous material e.g. tungsten carbide. Hardness of the projectile is greater than or equal to 1300 HV, and density of the projectile is greater than or equal to 12 grams per cubic centimeter. Dimension of the projectile is lesser than or equal to 1.5 millimeters. The projectile is driven by a sonotrode (11), and is spherical in shape with optimum tolerance of about 60 micrometer. Independent claims are also included for the following: (A) a peening installation including a peening device with a sonotrode (B) a method of treating a base of a blade in a peening installation (C) a workpiece treated in a peening installation (D) a device of treating a workpiece by peening.

IPC 8 full level

B24C 1/10 (2006.01); **B06B 3/00** (2006.01); **B24B 1/04** (2006.01); **B24B 39/00** (2006.01); **B24C 5/08** (2006.01); **B24C 11/00** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP)

B24B 1/04 (2013.01); **B24B 39/006** (2013.01); **B24C 1/10** (2013.01); **B24C 3/325** (2013.01); **B24C 5/005** (2013.01); **B24C 5/08** (2013.01); **B24C 11/00** (2013.01); **F01D 5/286** (2013.01)

Cited by

EP2848367A1; US9027375B2; US8578745B2; WO2007128278A1; WO2007137902A1; WO2009100709A1; WO2009067978A1; WO2008071163A1; WO2007056978A1

Designated contracting state (EPC)

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