

Title (en)

Ultra sonic cross shot peening of vanes on a rotor

Title (de)

Ultraschallquerstrahlhämmern der Schaufeln eines Rotors

Title (fr)

Grenaillage transversal par ultrasons des aubes sur un rotor

Publication

EP 1203637 A1 20020508 (FR)

Application

EP 01402410 A 20010920

Priority

FR 0012017 A 20000921

Abstract (en)

[origin: WO0224411A1] The invention concerns a method for transverse ultrasound peening of blades (2) on a rotor which consists in driving in rotation the wheel (3) bearing the blades (2) about its geometrical axis (6) arranged substantially vertically and in causing the blades (2) to pass through a mist of microbeads produced by a vibrating surface (20) in an active chamber (12) arranged laterally relative to the wheel. The active surface (20) is located beneath the path of the blades (2). Preferably, the active chamber (12) comprises a second vibrating surface above the path of the blades (2). The invention also concerns a machine for implementing said method.

Abstract (fr)

Le procédé de grenaillage transversal par ultrasons des aubes (2) sur un rotor consiste à faire tourner la roue (3) portant les aubes (2) autour de son axe géométrique (6) disposé sensiblement à la verticale et à faire passer les aubes (2) dans un brouillard de microbilles entretenu par une surface vibrante (20) dans une enceinte active (12) disposée latéralement à la roue. La surface active (20) se trouve sous le chemin des aubes (2). De préférence l'enceinte active (12) comporte une deuxième surface vibrante au-dessus du chemin des aubes (2). L'invention concerne également une machine pour la mise en oeuvre du procédé. <IMAGE>

IPC 1-7

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Citation (search report)

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WO 0224411 A1 20020328; AT E409101 T1 20081015; CA 2392138 A1 20020328; CA 2392138 C 20070213; CN 1171701 C 20041020; CN 1392822 A 20030122; DE 60135895 D1 20081106; EP 1203637 A1 20020508; EP 1203637 B1 20080924; ES 2309044 T3 20081216; FR 2814099 A1 20020322; FR 2814099 B1 20021220; IL 149738 A0 20021110; IL 149738 A 20070603; JP 2004508963 A 20040325; JP 4202126 B2 20081224; NO 20022368 D0 20020516; NO 20022368 L 20020711; NO 320828 B1 20060130; PL 200776 B1 20090227; PL 354253 A1 20031229; RU 2002116366 A 20040120; RU 2222419 C1 20040127; US 2003115922 A1 20030626; US 6837085 B2 20050104

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