

Title (en)  
MICRO-BURNISHING APPARATUS USING ULTRASONIC VIBRATION

Title (de)  
PRÄGEPOLIERVORRICHTUNG UNTER ANWENDUNG VON ULTRASCHALLSCHWINGUNGEN

Title (fr)  
APPAREIL DE MICRO-BRUNISSAGE UTILISANT DES VIBRATIONS ULTRASONORES

Publication  
**EP 1303380 A4 20040414 (EN)**

Application  
**EP 00955133 A 20000823**

Priority  
• KR 0000947 W 20000823  
• KR 20000040177 A 20000713

Abstract (en)  
[origin: WO0206007A1] A micro burnishing apparatus using ultrasonic vibration wherein a structure is contacted at a surface thereof by a ball of a burnishing head while the burnishing head is inserted into a horn, the horn being coupled to an ultrasonic oscillator for generating ultrasonic by oscillating high frequency received from a high frequency generator and the horn being pressurized by a spring, where the ball touches the structure and is vibrated to burnish the surface of the structure, such that surface hardness is increased with improved degree of surface roughness and sharp reduction of processing time.

IPC 1-7  
**B24B 39/00**; **B24B 1/04**

IPC 8 full level  
**B24B 39/02** (2006.01); **B24B 1/04** (2006.01); **B24B 35/00** (2006.01); **B24B 39/00** (2006.01); **B24B 39/04** (2006.01)

CPC (source: EP KR)  
**B24B 1/04** (2013.01 - EP); **B24B 35/00** (2013.01 - KR); **B24B 39/00** (2013.01 - EP KR)

Citation (search report)  
• [X] DATABASE WPI Derwent World Patents Index; AN 1991-049649, XP002269876  
• [X] DATABASE WPI Derwent World Patents Index; AN 1994-340112, XP002269877  
• See references of WO 0206007A1

Cited by  
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AT BE CH CY DE ES FR GB IT LI

DOCDB simple family (publication)  
**WO 0206007 A1 20020124**; AU 6737100 A 20020130; CA 2384002 A1 20020124; CN 1373698 A 20021009; EP 1303380 A1 20030423; EP 1303380 A4 20040414; JP 2004504166 A 20040212; KR 100316003 B1 20011220; KR 20000063450 A 20001106

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