

Title (en)  
IMPROVEMENTS RELATING TO CUTTING DEVICES

Title (de)  
Verbesserungen an Ultraschallmesser

Title (fr)  
PERFECTIONNEMENTS DES DISPOSITIFS DE DECOUPE

Publication  
**EP 0625086 B1 19970402 (EN)**

Application  
**EP 93902457 A 19930125**

Priority  
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• GB 9300159 W 19930125

Abstract (en)  
[origin: WO9314912A1] A cutting device comprises an annular cutting member (6) provided with a flat drive face (8) on one side of a diametral plane, by which the cutting member (6) is attached to an ultrasonic horn (10) providing a source of ultrasonic vibrations. The face (8) is arranged to constitute an anti-node of the device (a portion of maximum displacement), and the centre of the aperture 12 of the member (6) provides a theoretical node (portion of no displacement). The relative values of R1, the radius of the hole of the cutting member (6), and R2, the outer diameter thereof, are selected, in dependency on the physical characteristics of the cutting member itself, such that the member (6) vibrates radially inwardly and outwardly, in a pulsating manner. The member (6) is provided with a circumferential cutting edge (14) subtending an angle of about 180 DEG on the opposite side of the drive face (8) by which a cutting action may be obtained.

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