

Title (en)  
Stone machining tool with improved first cut behavior

Title (de)  
Steinbearbeitungswerkzeug mit verbessertem Anschnittverhalten

Title (fr)  
Outil pour l'usinage de la pierre avec amélioration du comportement à l'attaque

Publication  
**EP 0857552 B1 20001025 (DE)**

Application  
**EP 98200161 A 19980122**

Priority  
AT 10997 A 19970127

Abstract (en)  
[origin: EP0857552A2] In a stone working (e.g. core drilling) tool with multilayer abrasive elements consisting of sintered metal-bonded cutting material, preferably diamond, each abrasive element (1) has a leading initial cutting zone (3) with a different composition and increased wear compared with the regular portion (4) of the element. Preferably, the initial cutting zone (3) contains a wear promoting filler selected from tungsten disulphide, tungsten carbide, molybdenum disulphide, lime, corundum, silicon carbide, carbon particles, glass, ceramic and pore formers. It contains more fragile and easily worn diamond particles, has a lower concentration of diamond particles and/or has a binder with lower hardness and/or wear resistance, compared with the regular portion (4) of the abrasive element.

IPC 1-7  
**B28D 1/12; B28D 1/04; B24D 3/34**

IPC 8 full level  
**B24D 3/34** (2006.01); **B24D 7/14** (2006.01); **B28D 1/04** (2006.01); **B28D 1/12** (2006.01)

CPC (source: EP)  
**B24D 3/34** (2013.01); **B24D 7/14** (2013.01); **B28D 1/041** (2013.01); **B28D 1/12** (2013.01)

Cited by  
EP1980346A1; DE10005064A1; EP1480781A4; US7373997B2; US6712062B2; US10308559B2

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AT CH DE ES FR GB IT LI SE

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