

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

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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

Designated contracting state (EPC)

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EP 0857552 A2 19980812; **EP 0857552 A3 20000209**; **EP 0857552 B1 20001025**; AT E197133 T1 20001115; DE 59800309 D1 20001130; ES 2154072 T3 20010316

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