

Title (en)
Tool

Title (de)
Werkzeug

Title (fr)
Outil

Publication
EP 0925881 B1 20011212 (DE)

Application
EP 98811050 A 19981021

Priority
DE 19757271 A 19971222

Abstract (en)
[origin: EP0925881A1] The tool has working (B), shaft (S), insertion (E), and impact zones. The core area of the shaft zone and/or the core area of the insertion zone is softer than the edge area of the zones. The hardness of the core areas is a maximum of 35 HRc, and the hardness of the edge areas is at least 50 HRc. The hardness of the working zone and/or the impact zone is at least 50 HRc. The working zone consists of a material different from that of the other zones, and is friction welded to the shaft zone.

IPC 1-7
B25D 17/02

IPC 8 full level
B25D 17/02 (2006.01); **B28D 1/26** (2006.01)

CPC (source: EP)
B25D 17/02 (2013.01)

Cited by
CN103009344A; US7363922B2; EP4275856A1; WO2023217542A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 0925881 A1 19990630; EP 0925881 B1 20011212; CN 1124918 C 20031022; CN 1220935 A 19990630; DE 19757271 A1 19990624; DE 59802425 D1 20020124; HU 221837 B1 20030128; HU 9802993 D0 19990201; HU P9802993 A2 19990628; HU P9802993 A3 20000428; JP H11245222 A 19990914

DOCDB simple family (application)
EP 98811050 A 19981021; CN 98125383 A 19981221; DE 19757271 A 19971222; DE 59802425 T 19981021; HU P9802993 A 19981221; JP 36249998 A 19981221