

Title (en)  
Rotary drill bit

Title (de)  
Rotationsbohrerspitze

Title (fr)  
Mèche rotative

Publication  
**EP 1191000 A2 20020327 (EN)**

Application  
**EP 01307636 A 20010907**

Priority  
• US 23407500 P 20000920  
• US 28105401 P 20010402  
• EP 01307636 A 20010907

Abstract (en)  
A rotary drill bit includes cutters arranged in a series of concentric rings, the cutters of one of the rings having a different wear resistance to the cutters of another of the rings with the result that the stability of the drill bit improves with wear. Although the wear resistance is different, the cutters have substantially the same impact toughness.

IPC 1-7  
**C04B 35/52**; C04B 41/53; B23B 27/14; B23B 27/20

IPC 8 full level  
**B22F 7/06** (2006.01); **B23B 27/14** (2006.01); **C04B 35/52** (2006.01); **C04B 37/02** (2006.01); **C04B 41/45** (2006.01); **C04B 41/53** (2006.01); **C04B 41/81** (2006.01); **C04B 41/91** (2006.01); **E21B 10/00** (2006.01); **E21B 10/42** (2006.01); **E21B 10/43** (2006.01); **E21B 10/56** (2006.01); **E21B 10/567** (2006.01); **E21B 10/573** (2006.01); **E21B 10/60** (2006.01)

CPC (source: EP US)  
**E21B 10/006** (2013.01 - EP); **E21B 10/62** (2013.01 - EP US); **B22F 2005/001** (2013.01 - EP); **B22F 2999/00** (2013.01 - EP)

Designated contracting state (EPC)  
BE DE FR GB IE

DOCDB simple family (publication)  
**EP 1191000 A2 20020327**; **EP 1191000 A3 20020403**; **EP 1191000 B1 20040609**; DE 60103711 D1 20040715; DE 60103711 T2 20050630

DOCDB simple family (application)  
**EP 01307636 A 20010907**; DE 60103711 T 20010907