

Title (en)  
Reinforced rotary drill bit.

Title (de)  
Verstärkter Drehbohrmeissel.

Title (fr)  
Trépan rotatif renforcé.

Publication  
**EP 0326176 A2 19890802 (EN)**

Application  
**EP 89101527 A 19890130**

Priority  
US 14937488 A 19880128

Abstract (en)  
A rotary drill bit (10) for boring earth formations is provided which includes a main body portion of a hard metal matrix material and at least one protrusion (24) or shoulder formed of the same matrix material. On the protrusion (24) is mounted a cutting element (22). Means for reinforcing (32) the protrusion (24) are provided and extend between the main body portion of the bit and the protrusion (24). The reinforcements (32) add impact strength to the bit and increase the resistance of the bit to cracking in areas supporting the cutting element (22).

IPC 1-7  
**E21B 10/46**

IPC 8 full level  
**E21B 10/56** (2006.01); **E21B 10/567** (2006.01)

CPC (source: EP US)  
**E21B 10/567** (2013.01 - EP US)

Cited by  
EP0534370A1; US5007493A; AU612224B2

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0326176 A2 19890802; EP 0326176 A3 19900321**; AU 2887589 A 19890803; AU 612224 B2 19910704; CA 1314866 C 19930323

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**EP 89101527 A 19890130**; AU 2887589 A 19890127; CA 589326 A 19890127