

Title (en)

Tungsten carbide inserts for rock bits.

Title (de)

Wolframkarbideinsätze für Gesteinsbohrmeissel.

Title (fr)

Éléments rapportés au carbure de tungstène pour trépan de roche.

Publication

**EP 0527506 A2 19930217 (EN)**

Application

**EP 92113930 A 19920814**

Priority

- US 74477791 A 19910814
- US 76688291 A 19910926
- US 79843591 A 19911126

Abstract (en)

A tungsten carbide chisel insert for rolling cone rock bits has a cylindrical base section and a cutting tip section, the top of the tip section having an elongated or chisel crest. The remainder of the cutting tip section below the crest is formed having cross-sections having no non-tangential intersections along their outer periphery. Such an insert used on the gage of a rock bit has a larger nose radius at the outer end of the insert crest than at the inner end, thereby providing more mass on the portion of the insert that contacts the borehole sidewall. Another chisel insert has a crest with a "dog bone" shape rounded with the crest ends flaring out to a larger dimension than the middle thereof. The crest is also convex upwardly along its median line, thereby making a shorter moment arm at the ends of the crest. <IMAGE>

IPC 1-7

**E21B 10/52**

IPC 8 full level

**E21B 10/52** (2006.01); **E21B 10/56** (2006.01)

CPC (source: EP)

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Cited by

US6290007B2; EA017754B1; CN110185397A; CN100359126C; CN108798529A; GB2290095A; GB2290095B; US7040424B2; US7757789B2; US6997273B2; US7624825B2; US7013999B2; US8205692B2; US11828108B2; US6883624B2; US7086489B2; US7631709B2; US6929079B2; US7686106B2; US7798258B2

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