

Title (en)

Diamond/boron nitride coated excavating tool cutting insert

Title (de)

Bornitrid- oder diamantbeschichteter Schneideinsatz für Baggerwerkzeug

Title (fr)

Élément de coupe rapporté pour outil d'excavation revêtu de nitrure de bore ou diamant

Publication

**EP 0651133 B1 19990107 (EN)**

Application

**EP 94850192 A 19941028**

Priority

US 14522393 A 19931103

Abstract (en)

[origin: EP0651133A2] A diamond/cubic boron nitride coated low energy cutting insert for an excavating tool. The insert includes a generally conical tip portion, an elongated intermediate portion, a shoulder and a contact surface which attaches to a supporting surface of the tool body. The intermediate portion of the insert includes a concave surface portion and the coating is provided on the tip portion and optionally on the intermediate portion and the shoulder. <IMAGE>

IPC 1-7

**E21C 35/183**; **E21B 10/46**

IPC 8 full level

**E21C 35/18** (2006.01); **E21B 10/56** (2006.01); **E21C 35/183** (2006.01)

CPC (source: EP)

**E21B 10/56** (2013.01); **E21C 35/183** (2013.01); **E21C 35/1837** (2020.05)

Cited by

AU704833B2; US8210618B2; EP2254718A4; US8678517B2; WO9728353A1

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

**EP 0651133 A2 19950503**; **EP 0651133 A3 19950809**; **EP 0651133 B1 19990107**; AU 7759294 A 19950518; CA 2134396 A1 19950504; DE 69415764 D1 19990218; DE 69415764 T2 19990520; JP H07197768 A 19950801; ZA 948306 B 19950622

DOCDB simple family (application)

**EP 94850192 A 19941028**; AU 7759294 A 19941103; CA 2134396 A 19941026; DE 69415764 T 19941028; JP 26966394 A 19941102; ZA 948306 A 19941021