

Title (en)  
Rock bit.

Title (de)  
Gesteinsbohrmeissel.

Title (fr)  
Trépan de roche.

Publication  
**EP 0511547 A2 19921104 (EN)**

Application  
**EP 92106450 A 19920414**

Priority  
US 69390091 A 19910501

Abstract (en)

A rock bit is disclosed having a plurality of rolling cone cutters each having a gage row of inserts oriented to face the borehole bottom for crushing the same, and a second row of heel gage inserts which are oriented to face the borehole sidewall for scraping the same. The heel row inserts are interleaved between the gage row inserts and the cutting surface profile of the heel row inserts overlaps the cutting surface profile of the gage inserts in order to alleviate most of the scraping action normally encountered by gage inserts. The crowns of the heel row inserts are within four millimeters up hole from the crowns of the gage row inserts. The heel inserts are made of a harder material than the gage row inserts for resisting the scraping action against the sidewall of the borehole. <IMAGE>

IPC 1-7  
**E21B 10/16; E21B 10/52**

IPC 8 full level  
**E21B 10/16** (2006.01); **E21B 10/52** (2006.01)

CPC (source: EP)  
**E21B 10/16** (2013.01); **E21B 10/52** (2013.01)

Cited by  
US6651758B2; RU2473770C1; US5542485A; EP0723066A3; US5589443A; EP0633387A3; US5668092A; GB2273726A; GB2273726B; GB2363143A; GB2363143B; US5819861A; GB2274129A; GB2274129B; US6986395B2; US6374930B1; US6918455B2

Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**EP 0511547 A2 19921104; EP 0511547 A3 19930414; EP 0511547 B1 19961211**; CA 2066296 A1 19921102; DE 69215746 D1 19970123;  
MX 9201958 A 19921101; NO 921667 D0 19920429; NO 921667 L 19921102

DOCDB simple family (application)  
**EP 92106450 A 19920414**; CA 2066296 A 19920416; DE 69215746 T 19920414; MX 9201958 A 19920428; NO 921667 A 19920429