

Title (en)

Underground borer with down hammer.

Title (de)

Erdbohrer mit Imlochhammer.

Title (fr)

Machine de forage du sol avec marteau de fond de puits.

Publication

EP 0627543 A3 19950802 (EN)

Application

EP 94303286 A 19940506

Priority

KR 930094015 A 19930601

Abstract (en)

[origin: EP0627543A2] In an underground borer with down hammer having a vehicle body 1. a guide stilt 2 standing on the vehicle body, and a rotary machine 4 having its bottom coupled with a screw shaft 3 and a down hammer B. a supply unit 5 is interposed between the rotary machine 4 and the screw shaft 3, a fluid conduit 6 is formed centrally of the screw shaft 3, compressed air conduits 7 and 7' are formed to surround the fluid conduit 6. and a fluid jetting pipe 8 is arranged centrally of the down hammer B to extend until the inside of a bit body 9 so that water may be discharged, along with high-pressure compressed air, from a central portion of the bottom surface of the bit body during boring to cool the bit body, promote anti-wear properties, suppress powdery dirts, reduce noises and increase the boring speed. <IMAGE>

IPC 1-7

E21B 4/14

IPC 8 full level

E21B 4/14 (2006.01); **E21B 4/20** (2006.01); **E21B 15/00** (2006.01); **E21B 21/02** (2006.01); **E21B 21/12** (2006.01); **E21B 21/14** (2006.01)

CPC (source: EP)

E21B 4/14 (2013.01); **E21B 4/20** (2013.01); **E21B 15/00** (2013.01); **E21B 21/02** (2013.01); **E21B 21/12** (2013.01); **E21B 21/14** (2013.01)

Citation (search report)

- [Y] EP 0168368 A1 19860115 - ATLAS COPCO AB [SE]
- [Y] US 3198267 A 19650803 - MADSON LEO D
- [A] GB 609633 A 19481005 - PADLEY & VENABLES LTD, et al
- [A] US 3061024 A 19621030 - THOMPSON ROBERT L

Cited by

DE10005941A1; DE10005941C2; EP0928876A1; US6102139A; AU722803B2; WO9734070A1

Designated contracting state (EPC)

CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0627543 A2 19941207; EP 0627543 A3 19950802

DOCDB simple family (application)

EP 94303286 A 19940506