

Title (en)

BORING TOOL FOR REVERSE CIRCULATION

Title (de)

BOHRWERKZEUG FÜR DAS LUFTHEBEVERFAHREN

Title (fr)

OUTIL DE FORAGE POUR PROCEDE DE CIRCULATION INVERSE

Publication

EP 0909362 B1 20020313 (DE)

Application

EP 97924882 A 19970514

Priority

- DE 9700966 W 19970514
- DE 19626591 A 19960702

Abstract (en)

[origin: WO9800624A1] The invention relates to a process for drilling of bores in the ground, removing the drilled material by reverse circulation. A boring tool (100, 200, 300) with a boring head (10; 110; 210) equipped on the lower surface with cutting members is used, has hollow drill rods (50; 150, 250) with an inner conveying channel (51) connected to the upper surface thereof, and drilled material mixed with the flushing liquid is removed through the conveying channel (51) from the lower surface of said boring head. A transverse stream (Q) of the flushing liquid at a high flow speed is achieved to carry the drilled material and is located on the lower surface of the boring tool head (10, 110, 210), in a radial channel connected to the guide channel (51).

IPC 1-7

E21B 10/28

IPC 8 full level

E21B 3/00 (2006.01); **E21B 10/04** (2006.01); **E21B 10/06** (2006.01); **E21B 10/18** (2006.01); **E21B 10/28** (2006.01); **E21B 21/12** (2006.01); **E21B 21/14** (2006.01)

CPC (source: EP KR US)

E21B 10/04 (2013.01 - EP KR US); **E21B 10/06** (2013.01 - EP KR US); **E21B 10/18** (2013.01 - EP KR US); **E21B 10/28** (2013.01 - EP KR US); **E21B 21/12** (2013.01 - EP KR US); **E21B 21/14** (2013.01 - EP KR US); **E21D 1/06** (2013.01 - EP KR)

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

WO 9800624 A1 19980108; AU 3023897 A 19980121; DE 19626591 C1 19980416; DE 59706615 D1 20020418; EP 0909362 A1 19990421; EP 0909362 B1 20020313; JP 2000500201 A 20000111; JP 3260766 B2 20020225; KR 100311925 B1 20020219; KR 20000022364 A 20000425; US 6405812 B1 20020618

DOCDB simple family (application)

DE 9700966 W 19970514; AU 3023897 A 19970514; DE 19626591 A 19960702; DE 59706615 T 19970514; EP 97924882 A 19970514; JP 50371498 A 19970514; KR 19980710794 A 19981229; US 68578600 A 20001010