

Title (en)
Drill string

Title (de)
Bohrgestänge

Title (fr)
Tige de forage

Publication
EP 0845576 A3 19990512 (DE)

Application
EP 97111050 A 19970702

Priority
DE 19649572 A 19961129

Abstract (en)
[origin: EP0845576A2] The borer comprises a multi section structure with a boring head to drive the bore to the target point. The boring head is fitted with a grip, attached via a swivel mounting to pull the pipeline back to the start position. The boring head widens the bore during the retraction process and clears debris from the bore. The boring sections are gripped by a chuck to pull each section back to the start point. The swivel grip ensures a low friction drag for the pipeline with reduced risk of damage. The chuck is operated by a polygonal drive for rapid deployment.

IPC 1-7
E21B 7/28

IPC 8 full level
E21B 7/06 (2006.01); **E21B 7/20** (2006.01); **E21B 7/28** (2006.01); **E21B 17/07** (2006.01); **E21B 19/08** (2006.01)

CPC (source: EP)
E21B 7/28 (2013.01); **E21B 17/07** (2013.01)

Citation (search report)

- [A] EP 0299624 A2 19890118 - CHERRINGTON MARTIN D [US], et al
- [A] US 4117895 A 19781003 - WARD HOWARD, et al
- [A] US 5242026 A 19930907 - DEKEN ARTHUR D [US], et al

Cited by
CN113153172A; CN111794694A

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0845576 A2 19980603; **EP 0845576 A3 19990512**; **EP 0845576 B1 20030604**; DE 19649572 A1 19980604; DE 19649572 C2 19991104; DE 59710213 D1 20030710

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