

Title (en)
DEVICE FOR PRODUCING BOREHOLES AT AN INACCESSIBLE CROSS-SECTION

Publication
EP 0169393 B1 19890607 (DE)

Application
EP 85107857 A 19850625

Priority
DE 3423842 A 19840628

Abstract (en)
[origin: US4688854A] The invention relates to an apparatus for making small-bore underground tunnels. It contains a working tube which can be advanced in the direction of the developing tunnel, and an excavating unit mounted in the working tube and having an excavating tool. The excavating unit is displaceable in the working tube. The excavating tool has a substantially smaller effective outside cross section than corresponds to the internal cross section of the working tube, and is mounted on the excavating unit so as to be displaceable in directions perpendicular to the working tube axis. Drive means serve for moving the excavating tube within a range of action whose maximum cross section, measured perpendicular to the working tube axis, corresponds at least to the outside cross section of the working tube.

IPC 1-7
E21D 9/08

IPC 8 full level
E21B 7/20 (2006.01); **E21D 9/08** (2006.01); **E21D 9/10** (2006.01)

CPC (source: EP US)
E21B 7/208 (2013.01 - EP US); **E21D 9/1093** (2013.01 - EP US)

Citation (examination)
WIRTH - Techn. Beschreibung des Rohrvortriebssystems HBG 700, Typ 1

Cited by
US5575537A; US11625665B1; US11595623B2; US11711497B2; US11882389B2

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0169393 A1 19860129; EP 0169393 B1 19890607; AT E43884 T1 19890615; DE 3423842 A1 19860109; DE 3423842 C2 19860528; DE 3570904 D1 19890713; US 4688854 A 19870825

DOCDB simple family (application)
EP 85107857 A 19850625; AT 85107857 T 19850625; DE 3423842 A 19840628; DE 3570904 T 19850625; US 74980285 A 19850628