

Title (en)  
TUNNEL-BORING MACHINE

Title (de)  
TUNNELBOHRMASCHINE

Title (fr)  
MACHINE A PERCER DES TUNNELS

Publication  
**EP 0985082 A1 20000315 (DE)**

Application  
**EP 98934751 A 19980519**

Priority  
• DE 9801382 W 19980519  
• DE 19722000 A 19970527

Abstract (en)  
[origin: US6431653B1] The tunnel rock drill (100) for driving a tunnel bore optionally in open or shielded mode comprises a shield tail (33), which is connected to the drill head (10) and which covers optionally the bore wall over a defined length; a bracing device (20), which can be optionally fixed in the tunnel bore; at least one optionally activatable advancement device (25), which, on the one hand, rests on the bracing device (20) and , on the other hand, acts on the drill head (10); and an optionally activatable force generator (35), which has a variable length and which, on the one hand, rests on a tubbing support (32) and, on the other hand, acts on the drill head (10). To introduce the advancement forces into the drill head in open mode, there is an inner kelly (16), which can be moved in the direction of boring in relation to the bracing device (20) and to which the advancement generator (25) is hinged and whose breast-sided end bears the drill head (10).

IPC 1-7  
**E21D 9/10**; **E21D 9/06**

IPC 8 full level  
**E21D 9/06** (2006.01); **E21D 9/087** (2006.01); **E21D 9/10** (2006.01)

CPC (source: EP KR US)  
**E21D 9/0621** (2013.01 - EP US); **E21D 9/10** (2013.01 - KR); **E21D 9/1093** (2013.01 - EP US)

Citation (search report)  
See references of WO 9854442A1

Cited by  
CN109281675A; CN107448206A; US6926368B2; WO0248506A3

Designated contracting state (EPC)  
AT CH DE ES FI FR GB GR IT LI PT SE

DOCDB simple family (publication)  
**US 6431653 B1 20020813**; AT E213807 T1 20020315; AU 738574 B2 20010920; AU 8430198 A 19981230; BR 9809164 A 20000801; CA 2291043 A1 19981203; DE 19722000 A1 19981203; DE 59803200 D1 20020404; EP 0985082 A1 20000315; EP 0985082 B1 20020227; KR 20010013098 A 20010226; WO 9854442 A1 19981203; ZA 984521 B 19981229

DOCDB simple family (application)  
**US 42436300 A 20000211**; AT 98934751 T 19980519; AU 8430198 A 19980519; BR 9809164 A 19980519; CA 2291043 A 19980519; DE 19722000 A 19970527; DE 59803200 T 19980519; DE 9801382 W 19980519; EP 98934751 A 19980519; KR 19997011077 A 19980519; ZA 984521 A 19980527