

Title (en)
Drilling apparatus with a feed control device

Title (de)
Bohrgerät mit einer Vorschubsteuereinheit

Title (fr)
Appareil de forage avec un dispositif de contrôle de l'avance

Publication
EP 0825329 A3 20021009 (DE)

Application
EP 97113626 A 19970807

Priority
DE 19632401 A 19960812

Abstract (en)
[origin: EP0825329A2] The machine has a hydraulic motor (22) driving the boring bit (34) connected to the hydraulic supply (64) by a control unit (46) which varies the speed of the motor. The axial thrust on the boring bit is provided by a hydraulic ram (11) also controlled by a control unit. The control system monitors the action of the boring bit and adjusts the drive to generate maximum boring speed for the particular soil conditions. The working rate applied to the borer is derived from the product of the boring speed and the applied torque taking into account the applied axial thrust and the resulting axial speed. The control system calculates the soil resistance. The actual boring settings for particular soil conditions are stored in a memory for simple recall.

IPC 1-7
E21B 44/00; **E21B 44/04**

IPC 8 full level
E21B 44/06 (2006.01); **E21B 41/00** (2006.01)

CPC (source: EP US)
E21B 44/06 (2013.01 - EP US); **E21B 2200/22** (2020.05 - EP US)

Citation (search report)

- [X] US 4165789 A 19790828 - ROGERS CHARLES D [US]
- [X] US 4195699 A 19800401 - FOWLER JOSEPH A [US], et al

Cited by
CN102996139A; WO0017487A1

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)
DE 19632401 A1 19980219; EP 0825329 A2 19980225; EP 0825329 A3 20021009; US 6029754 A 20000229

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DE 19632401 A 19960812; EP 97113626 A 19970807; US 91024097 A 19970812