

Title (en)  
Drilling device for subsoil improvement by columns in soil

Title (de)  
Bohrwerkzeug zur Baugrundverbesserung durch Materialsäulen im Boden

Title (fr)  
Outil de forage pour améliorer le terrain des fondations avec des colonnes de matériel dans le sol

Publication  
**EP 1698731 A1 20060906 (DE)**

Application  
**EP 05010922 A 20050520**

Priority  
DE 102005010555 A 20050304

Abstract (en)  
The boring tool has a pipe body (11) with an underlying outlet opening (25) and a controllable locking section (26) for opening and closing the outlet opening. There is also a boring crown (12) located at the lower end of the pipe body. The boring crown may be bracket-like or bonnet-like set on the lower end of the pipe body. The boring crown may be made up of a boring chisel carrier (14) and two or more axially parallel struts (15, 16) on the outside of the pipe body and between which are through bridges (18). The locking section may be axially slidable. There may be a number of boring chisels (17, 19, 22) interchangeably held in the boring chisel carrier.

IPC 8 full level  
**E02D 3/12** (2006.01)

CPC (source: EP US)  
**E02D 5/48** (2013.01 - EP); **E21B 27/00** (2013.01 - EP US)

Citation (applicant)  
DE 102005001227 A1 20060720 - KELLER GRUNDBAU GMBH [DE]

Citation (search report)  
• [Y] US 5919005 A 19990706 - RUPIPER STAN [US]  
• [XY] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 08 29 September 1995 (1995-09-29)  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 004, no. 161 (M - 040) 11 November 1980 (1980-11-11)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09 31 July 1998 (1998-07-31)

Cited by  
US11981853B2; EP2843138A1

Designated contracting state (EPC)  
AT CH DE FR GB LI

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