

Title (en)  
Magnet rod-manipulator device for earth-drilling

Title (de)  
Magnetischer Bohrstangenführer für Erdbohrungen

Title (fr)  
Dispositif de manipulation de barre magnétique pour forages

Publication  
**EP 1978205 A3 20111130 (EN)**

Application  
**EP 08006078 A 20080328**

Priority  
IT TO20070242 A 20070405

Abstract (en)  
[origin: EP1978205A2] A magnet rod-manipulator device for earth-drilling machines, comprising two permanent magnets (12) constrained to the rotary (14) of the machine, the magnets (12) having the shape of plates provided with cradles (13) and being mobile between a resting position and a position for engagement of a rod (25) for drilling into the earth between said cradles (13).

IPC 8 full level  
**E21B 19/084** (2006.01); **E21B 19/15** (2006.01); **E21B 19/16** (2006.01); **E21B 19/24** (2006.01)

CPC (source: EP)  
**E21B 19/06** (2013.01); **E21B 19/084** (2013.01); **E21B 19/155** (2013.01); **E21B 19/16** (2013.01); **E21B 19/24** (2013.01)

Citation (search report)  
• [X] US 6374928 B1 20020423 - TELLER TOM [US], et al  
• [X] US 6135674 A 20001024 - NEILSON BRAD [AU]  
• [A] US 3659661 A 19720502 - YOUNG JAMES W, et al  
• [A] US 3147652 A 19640908 - GEORGE ALBERT L  
• [A] US 4342487 A 19820803 - FOWLER J ALAN, et al  
• [A] DE 19605139 A1 19970814 - IBERL PETER [DE]

Cited by  
CN104552304A; CN106930708A; US8747045B2; WO2011056711A3

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 1978205 A2 20081008; EP 1978205 A3 20111130; EP 1978205 B1 20150715**; IT TO20070242 A1 20081006

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**EP 08006078 A 20080328**; IT TO20070242 A 20070405