

Title (en)  
AUTOMATIC RAM DRILL DEVICE

Publication  
**EP 0391161 A3 19910320 (DE)**

Application  
**EP 90105472 A 19900323**

Priority  
DE 3910515 A 19890401

Abstract (en)  
[origin: EP0391161A2] The horizontal earth jacking drill is self-propelled by an impact drive. It has a cylindrical housing (16) and a head (18) which is impacted by a spring-loaded mass (1) rotated by a motor (7). A helical groove (4) engages a projection (12) on the inside of the housing wall. The projection causes the mass to move against the force of a spring (17) until the projection is aligned with a longitudinal groove (4.2) which allows the spring to drive the mass forwards so that it strikes the head.

IPC 1-7  
**E21B 11/00**

IPC 8 full level  
**E21B 4/10** (2006.01); **E21B 7/26** (2006.01)

CPC (source: EP US)  
**E21B 4/10** (2013.01 - EP); **E21B 7/26** (2013.01 - EP US)

Citation (search report)  
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Designated contracting state (EPC)  
BE CH DE FR GB IT LI NL

DOCDB simple family (publication)  
**EP 0391161 A2 19901010; EP 0391161 A3 19910320**; DE 3910515 A1 19901004; DE 3910515 C2 19910808; JP 2965315 B2 19991018; JP H0317388 A 19910125

DOCDB simple family (application)  
**EP 90105472 A 19900323**; DE 3910515 A 19890401; JP 8473990 A 19900330