

Title (en)  
**MOLE**

Publication  
**EP 0182551 B1 19890531 (EN)**

Application  
**EP 85308116 A 19851107**

Priority  
GB 8429287 A 19841120

Abstract (en)  
[origin: EP0182551A2] A ground boring tool known as a mole is fitted within its conical head (1) with a pneumatic-powered rotatory vibrator (8) which generates severe radial vibrations. As a result the progress of the mole through resistant ground is speeded or made possible. The mole also may be used for upgrading existing ducts with or without the destruction of an existing lining to such ducts. For destruction of existing linings elongate ridges (16) may be positioned on the surface of the cone.

IPC 1-7  
**E21B 7/24**; **E21B 7/28**; **F16L 55/16**

IPC 8 full level  
**E21B 7/24** (2006.01); **E21B 7/26** (2006.01); **E21B 7/30** (2006.01)

CPC (source: EP)  
**E21B 7/24** (2013.01); **E21B 7/26** (2013.01); **E21B 7/30** (2013.01)

Cited by  
EP0402167A1; EP0356666A3; EP0370183A3; EP0291011A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0182551 A2 19860528**; **EP 0182551 A3 19870930**; **EP 0182551 B1 19890531**; AU 4999985 A 19860529; DE 3570717 D1 19890706; GB 8429287 D0 19841227; NO 854621 L 19860521; NZ 214234 A 19870529

DOCDB simple family (application)  
**EP 85308116 A 19851107**; AU 4999985 A 19851118; DE 3570717 T 19851107; GB 8429287 A 19841120; NO 854621 A 19851119; NZ 21423485 A 19851118