

Title (en)
Tunnel boring machine

Title (de)
Tunnelbohrmaschine bzw. Rohrvortriebmaschine

Title (fr)
Machine de perforation des tunnels

Publication
EP 0677643 B1 20020703 (DE)

Application
EP 95890085 A 19950412

Priority
DE 4413235 A 19940415

Abstract (en)
[origin: EP0677643A1] The tunnel boring machine, or tube advance feed machine, has a full cut drill head (19) rotatably located and supporting drilling tools (8,18). The drill head has a dia. which is smaller than the dia. of the bore and the geometrical axis of the cover circle of the tools of the full cut drill head is eccentrically located relatively to the rotary axis (21) or to the tunnel longitudinal axis (22). The tools are arranged relatively to the axis of the drill head asymmetrically and partic. along a spiral. The tunnel advance feed machine is supported on sliding or negotiable supports (24,29) in the tunnel tubes. <IMAGE>

IPC 1-7
E21D 9/10

IPC 8 full level
E21D 9/087 (2006.01); **E21D 9/10** (2006.01); **E21D 9/11** (2006.01)

CPC (source: EP US)
E21D 9/104 (2013.01 - EP US); **E21D 9/1093** (2013.01 - EP US); **E21D 9/112** (2013.01 - EP US)

Cited by
FR2754561A1; CN113374490A; CN102287203A; CN102748034A; US6431653B1; WO9854442A1

Designated contracting state (EPC)
CH DE IT LI SE

DOCDB simple family (publication)
EP 0677643 A1 19951018; EP 0677643 B1 20020703; DE 4413235 A1 19951019; DE 4413235 C2 19990429; DE 59510254 D1 20020808; US 5575537 A 19961119; ZA 952982 B 19951221

DOCDB simple family (application)
EP 95890085 A 19950412; DE 4413235 A 19940415; DE 59510254 T 19950412; US 41705395 A 19950405; ZA 952982 A 19950411