

Title (en)  
Device for drilling tunnels, shafts and the like.

Title (de)  
Vorrichtung zum Bohren von Tunneln, Schächten od.dgl.

Title (fr)  
Dispositif pour le forage des tunnels, des puits, etc.

Publication  
**EP 0207056 A1 19861230 (DE)**

Application  
**EP 86890147 A 19860521**

Priority  
AT 156085 A 19850523

Abstract (en)  
[origin: US4746169A] The apparatus for excavating passages such as tunnels, shafts and the like, is continually and/or intermittently movable in a predetermined driving direction and contains at least one boring head, possibly, a multipart boring head. In its operative position, the boring head substantially covers the cross-section of the passage to be excavated. The boring head is constructed so as to be thrust or pressed by means of fluid-operated cylinders, tooth racks or the like against the face to be excavated. The apparatus possesses one or a number of drive units for the boring head and at least one device for removing the excavated material. There are further provided a support device for supporting the boring head in the passage and at least one drilling mount possessing a bore motor and a thrust motor for drilling anchor holes and/or blast holes and/or for placing anchors transversely to a predetermined driving direction. When viewed in the driving direction, the drilling mount is located forwardly of the boring head, preferably between the boring head support device and the boring head. At least one, if desired, two drilling mounts possessing a bore motor and a thrust motor, mounted at a carrier which can be rotationally and positionally fixed substantially relative to the driving direction, especially substantially relative to the passage lengthwise axis. Preferably the drilling mounts are pivotable and/or displaceable in a drilling direction defined by the drilling mounts, especially by means of fluid-operated cylinders.

Abstract (de)  
Die Erfindung betrifft eine Vorrichtung zum Bohren von Tunneln (1) od. dgl., welche in Vortriebsrichtung bewegbar ist, mit zumindest einem, gegebenenfalls mehrteiligen Bohrkopf (8), welcher in Arbeitsstellung den auszubrechenden Querschnitt des zu bohrenden Tunneln (1) od. dgl. bestreicht, wobei der Bohrkopf (8) über Fluidzylinder (4) od. dgl. gegen das Abzubauende schieb- und/oder drückbar ausgebildet ist, mindestens einer Antriebseinheit (7) für den Bohrkopf (8), zumindest einer Einrichtung zum Abtransport abgebauten Gesteins, einer Abstützung (11) des Bohrkopfes im Tunnel (1) od. dgl. und zumindest einer Bohrlafette (15, 16) mit Bohr- und Vorschubmotor zur Anfertigung von Anker- und/oder Sprenglöchern und/oder zum Setzen von Ankern quer zur Vortriebsrichtung, welche, in Vortriebsrichtung gesehen, vor dem Bohrkopf (8), vorzugsweise zwischen Abstützung (11) und Bohrkopf (8) angeordnet ist, wobei zumindest eine, gegebenenfalls zwei Bohrlafette (n) (15, 16) mit Bohr- und Vorschubmotor auf einem um die Vortriebsrichtung, insbesondere um die Tunnel- bzw. Schachtachse (a), dreh- und lagefixierbaren, Träger (12), vorzugsweise schwenk- und/oder in Bohrrichtung der Lafette (n) (15, 16), insbesondere über Fluidzylinder, schiebbar angeordnet ist/ sind.

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**E21D 21/00**

IPC 8 full level  
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**E21D 9/112** (2013.01 - EP US); **E21D 20/003** (2013.01 - EP US)

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• [X] DE 1807972 B2 19710909  
• [Y] DE 2657573 A1 19780622 - GEWERK EISENHUETTE WESTFALIA  
• [Y] DE 3108877 A1 19820107 - VOEST ALPINE AG [AT]

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