Title (en)

PROCESS AND DEVICE FOR SIMULTANEOUSLY DRILLING AND LINING A HOLE

Title (de)

VERFAHREN UND EINRICHTUNG ZUM GLEICHZEITIGEN BOHREN UND AUSKLEIDEN VON LÖCHERN

Title (fr)

PROCEDE ET DISPOSITIF POUR FORER ET REVETIR EN MEME TEMPS DES TROUS

Publication

EP 0948701 A1 19991013 (DE)

Application

EP 97911051 A 19971112

Priority

- AT 9700247 W 19971112
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- AT 106597 A 19970618

Abstract (en)

[origin: WO9821439A1] In a process for drilling, in particular rotary percussion or percussion drilling, and lining holes in the ground or rocks, a hole (13) is percussion and/or rotation drilled by a cutter (1, 2, 3) mounted on boring rods (9) and a lining is formed by a jacket tube (5). During drilling, at least one jacket tube (5, 5') coupled to the cutter (1, 2) is drawn in the axial direction by the cutter (1, 2, 3) into the bore hole (13) and once drilling is finished, the cutter (3) is at least partially removed from the jacket tube (5, 5') together with the boring rods (9). In a device for drilling, in particular percussion or rotary percussion drilling, and lining holes in the ground or rocks, a cutter (1, 2, 3) mounted on boring rods (9) drills a bore hole by percussion and/or rotary drilling. The cutter (1, 2, 3) is divided in the radial direction. At least one jacket tube (5, 5') which surrounds the boring rods (9) is located at the end of the cutter (3) away from the drilling surface, around the outer circumference of the cutter (3), and is form-fittingly joined to the cutter (1) by at least one coupling element (6) so as to be drawn in the longitudinal direction of the bore hole (13).

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Citation (search report)

See references of WO 9821439A1

Cited by

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WO 9821439 A1 19980522; AT E217681 T1 20020615; AU 4856297 A 19980603; AU 726332 B2 20001102; CA 2271655 A1 19980522; CA 2271655 C 20060418; CN 1079880 C 20020227; CN 1237222 A 19991201; CZ 162399 A3 20000614; CZ 296814 B6 20060614; DE 59707305 D1 20020620; EP 0948701 A1 19991013; EP 0948701 B1 20020515; ES 2176709 T3 20021201; HK 1023611 A1 20000915; HR P970600 A2 19990831; HR P970600 B1 20020630; ID 21554 A 19990624; JP 2001503486 A 20010313; JP 3813177 B2 20060823; KR 100338308 B1 20020527; KR 20000053240 A 20000825; PL 185256 B1 20030430; PL 333244 A1 19991122; SK 283483 B6 20030805; SK 59399 A3 20000313; TR 199900983 T2 20000721

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