

Title (en)  
PNEUMATIC SUBMERSIBLE BORING TOOL

Title (de)  
TAUCHFÄHIGES PNEUMATISCHES-BOHRWERKZEUG

Title (fr)  
OUTIL DE FORAGE PNEUMATIQUE ET SUBMERSIBLE

Publication  
**EP 1076754 A1 20010221 (EN)**

Application  
**EP 99917743 A 19990504**

Priority  
• CZ 9900011 W 19990504  
• CZ 136198 A 19980504

Abstract (en)  
[origin: WO9957411A1] A pneumatic submersible boring tool which is comprised of a front cover (4) with a working tool and with its arrestment, a rear input body (8) with a built in water valve and a working cylinder (1), wherein a striking piston (2) is guided that is provided with axial and side filling and exhaust ducts, whereby, said piston extends into a cavity (14) of said input body (8) by its rear extended part (21) with a filling recess (27) on its surface, which consists in that the front working compartment (17) of the working cylinder (1) is interconnected by a filling groove (16), provided on the surface of said striking piston (2), by a side filling duct (18) connected with it that passes through the wall of said striking piston (2), and by an axial filling duct (19) arranged in the rear extended part (21) of said striking piston (2), connected on said side filling duct (18), with a cavity (14) of said input body (8) whereby a closing pin (15) is built in axially in said cavity (14), and whereby the front face of said pin (15) is placed within the axial longitudinal section that is delimited by the front and the rear dead centres of said rear face (20) of said rear extended part (21) of said striking piston (2) and the external diameter of said closing pin (15) is smaller than the internal diameter of said axial filling duct (19). Pneumatic tool preferably consists of an axial exhaust duct (24) provided in the front part of said striking piston (2), wherein mouths said side exhaust duct (23) that passes through the wall of said striking piston (2) and is a continuation of said exhaust groove (22) formed on the surface of said striking piston (2) and also said side release duct (34) that passes through the wall of said striking piston (2) and is a continuation of the filling groove (16) provided on the surface of said striking piston (2) and interconnected with said bottom working compartment (17) of said working cylinder (1), whereby in said axial exhaust duct (24) an exhaust inertial slide valve (32) of pipe-like shape is placed so that it can slide.

IPC 1-7  
**E21B 4/14**

IPC 8 full level  
**E21B 7/12** (2006.01); **E21B 4/14** (2006.01)

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**WO 9957411 A1 19991111**; AT E232264 T1 20030215; AU 3593999 A 19991123; CZ 136198 A3 19991117; DE 69905245 D1 20030313; DE 69905245 T2 20040122; EP 1076754 A1 20010221; EP 1076754 B1 20030205

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