

Title (en)

METHOD FOR PNEUMATICALLY PICKING UP SOIL FOR USE IN SUCTION DEVICES AND SUCTION TUBE FOR THIS PURPOSE AND USE OF SAID SUCTION TUBE

Title (de)

VERFAHREN ZUM PNEUMATISCHEN AUFNEHMEN VON ERDREICH FÜR SAUGVORRICHTUNGEN UND ABSAUGROHR HIERZU SOWIE VERWENDUNG EINES DERARTIGEN ABSAUGROHRES

Title (fr)

PROCEDE DE RECEPTION PNEUMATIQUE DE TERRE DU SOUS-SOL POUR DISPOSITIFS D'ASPIRATION, TUBE D'ASPIRATION CORRESPONDANT, ET UTILISATION D'UN TEL TUBE D'ASPIRATION

Publication

**EP 1618258 B1 20070912 (DE)**

Application

**EP 04721120 A 20040317**

Priority

- DE 2004000545 W 20040317
- DE 10315335 A 20030403
- DE 10318720 A 20030425
- DE 10320238 A 20030507

Abstract (en)

[origin: WO2004088049A1] The invention relates to a method for pneumatically picking up soil for suction dredges, using a suction tube (3) having a crown (11) disposed at the lower end and an air supply device (10) for supplying pressurized air to the crown (11), thereby producing a pressurized air flow which loosens the soil in the area of the crown (11). The pressurized air flow below the crown (11) is blown into the soil in parallel to the cross-sectional plane of the crown (11), thereby detaching a soil core which has approximately the same size as the internal width of the crown (11) or smaller and which is sucked off through the suction tube (3). The invention also relates to a device for carrying out the inventive method which comprises at least one pointed tube (1) which projects beyond the crown (11) downward in the direction parallel to the center axis (30) of the suction tube (3). Said pointed tube is adapted for blowing a pressurized air flow into the soil below the crown (11) in parallel to a cross-sectional plane of the same for detaching a soil core and sucking the same off through the suction tube (3).

IPC 8 full level

**E02F 3/92** (2006.01); **E21B 7/18** (2006.01); **E21B 21/16** (2006.01); **E21C 25/60** (2006.01)

CPC (source: EP)

**E02F 3/9262** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004088049 A1 20041014**; AT E373146 T1 20070915; DE 20308281 U1 20030918; DE 20308282 U1 20031009;  
DE 502004004954 D1 20071025; EP 1618258 A1 20060125; EP 1618258 B1 20070912

DOCDB simple family (application)

**DE 2004000545 W 20040317**; AT 04721120 T 20040317; DE 20308281 U 20030525; DE 20308282 U 20030525; DE 502004004954 T 20040317;  
EP 04721120 A 20040317