

Title (en)

PROCESS FOR PLACING A CONCRETE PILE IN THE GROUND AND A SCREW DRILL AND CASING TO BE USED IN THE PROCESS

Publication

EP 0228138 A3 19871028 (EN)

Application

EP 86202332 A 19861218

Priority

BE 1011410 A 19851231

Abstract (en)

[origin: EP0228138A2] A concrete pile is placed in the ground through a casing with a screw disposed on the bottom end thereof being screwed while rotating into the ground and on reaching the desired depth being brought up, while during this movement upwards concrete mixture is placed in the casing, said mixture being conveyed into the hole formed through a passage at the bottom end of the casing which is closed during the screwing in. In order to avoid a high resistance during the screwing of the casing into the ground and to prevent earth from being pressed downwards while the casing is being pulled out of the drilled hole, the screwing of the casing into the ground takes place by a screw fin with openings between the windings, with the ground directly above the screw fin being compacted by a displacer with a closed spiral part having the same screw direction as the fin and a closed spiral part above it having the opposite screw direction. The casing is rotated in the original screw direction during the pulling up thereof.

IPC 1-7

E02D 5/56; **E02D 7/22**

IPC 8 full level

E02D 5/36 (2006.01); **E02D 5/56** (2006.01); **E02D 7/22** (2006.01); **E21B 7/00** (2006.01); **E21B 7/26** (2006.01); **E21B 10/44** (2006.01)

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Citation (search report)

- [Y] FR 2513304 A1 19830325 - DN INZH STR INST [SU]
- [Y] US 3391544 A 19680709 - DACZKO DONALD S
- [A] FR 2437468 A1 19800425 - LABRUE JEAN MARIE
- [A] GB 981445 A 19650127 - JOHN JOSEPH DOUGHERTY
- [A] DE 576831 C 19330518 - WILHELM STRAUSS

Cited by

EP0757155A1; CN102392611A; BE1007558A5; US5722498A; EP2133507A1; CN112695744A; CN113404437A; EP1536070A1; FR2858988A1; DE4228580C1; DE10344353A1; DE10344353B4; NL1018702C2; BE1010781A3; CN114233178A; EP0311363A3; CN104329020A; RU2685599C1; DE4220976C1; EP0575922A3; EP1041240A3; RU2509842C2; WO03012211A1; WO9512050A1; EP0989241A1; US8322458B2; EP2395154A1; US8511941B2; EP1726718A1; US7429148B2; EP2246479A1; US8500370B2; JP2009299459A; US9255376B2; WO2021144773A1; BE1027995A1

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