

Search history

Search 1: (CPC = E02D5/32) AND (PD<20150123) (Results 102)
Search 2: 1 AND (FT = (side OR transversal) NEAR (hole OR channel OR aperture)) (Results 3)
Search 3: 1 AND (FT = inject* NEAR (fluid OR air OR gas OR water)) (Results 9)

Title: Concrete Piling.

Abstract: 10,196. Bignell, E. April 30. Piles piles, driving. -Concrete piles of the type sunk by fluid pressure are provided with longitudinal apertures 6 which may be lined with pipes 7 and connect with side apertures 15. Tubes 11 housed within the apertures 6 are connected to nozzles 9 projecting through a bearing-plate 2. The nozzles may be reversely threaded interiorly and exteriorly so that, after the pile has been sunk, the tubes. 11 may be unscrewed from them, or, by rotating the tubes 11 in the reverse direction, both tube and nozzle are withdrawn together. Air or water under pressure is supplied through pipes 13 and 14, and by supplying water to one or more pipes the sinking of the pile may be adjusted for verticality. Adjacent piles may be connected by interlocking-means 3, 4 and a cap may be screwed upon the top after the pile is sunk.

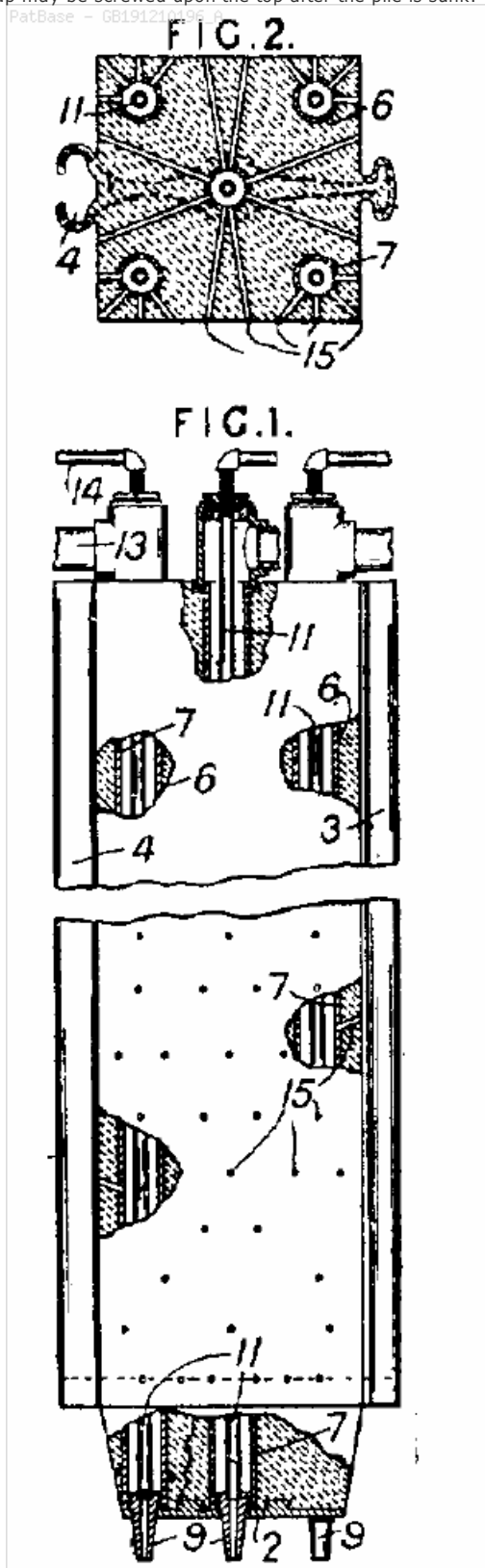
Classifications:

International (IPC 8-9): E02D5/32 (Advanced/Invention);

E02D5/24 (Core/Invention)

CPC: E02D5/32

European: E02D5/32



Family:

Publication number	Publication date	Application number	Application date
GB191210196 A	19120725		00000000

Priority:

19120430

Probable Assignee:

BIGNELL EDWARD

Assignee(s): (std):

BIGNELL EDWARD

Assignee(s):

EDWARD BIGNELL

Inventor(s): (std):

BIGNELL EDWARD

Inventor(s):

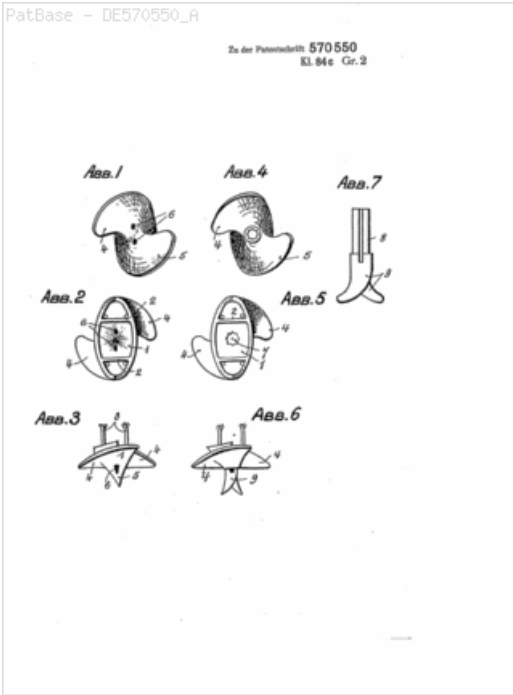
EDWARD BIGNELL

Title: METALLSCHUH FUER SCHRAUBENPFAEHLE AUS BEWEHRTEM BETON METAL SHOE FOR SCHRAUBENPFAEHLE of reinforced concrete (Machine translation)

Abstract: Source: DE570550A [DE] (Claim 1) 1. PATENTANSPRUECHE: i. Metallschuh fuer Schraubenpfaehle aus bewehrtem Beton mit einer Wassereinspritz- vorrichtung, dadurch gekennzeichnet, dass der Schuh aus einem Hohlkegel (i) mit zwei am oberen Teil befindlichen Schrauben fluegeln (q.) besteht und der Kegel im unteren Teile (5) mit Loechern (7) fuer das Einspritzen von Wasser unmittelbar in die Bohrstelle versehen ist.

Machine translation: (claim 1) 1 Claims: i metal shoe for Schraubenpfaehle of reinforced concrete with a **water injection** device, characterized in that the shoe wings made of a hollow cone (i) with two at the upper part located screws (q), and the cone in the lower part (5) with holes (7) for the **injection** of **water** provided directly to the drill site.

Classifications:
International (ipc 8-9): E02D5/32 E02D5/56 E02D5/72 (Advanced/Invention);
E02D5/00 E02D5/22 E02D5/24 (Core/Invention)
International (ipc 1-7): E02D5/32 E02D5/56 E02D5/72
CPC: E02D5/32 E02D5/56 E02D5/72
European: E02D5/32 E02D5/56 E02D5/72



Family:

Publication number	Publication date	Application number	Application date
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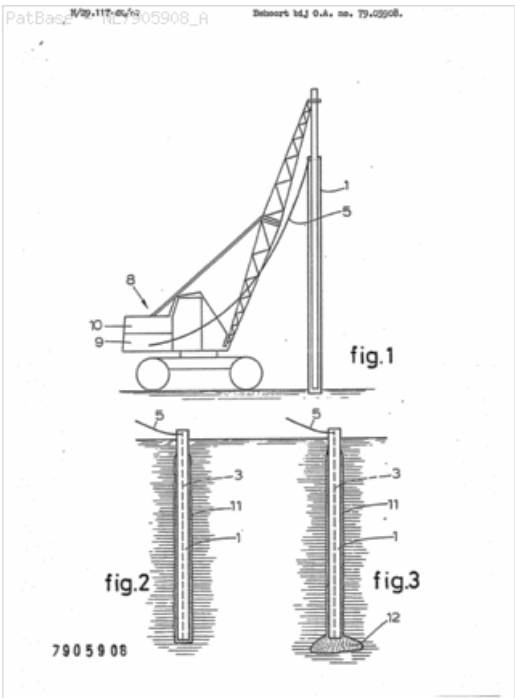
Priority:
19271209 DE1928G074968 19281129

Probable Assignee: GUSTAVE GRIMAUD
Assignee(s): (std) GUSTAVE GRIMAUD

Title: DRIVING METHOD FOR CONCRETE PILE INTO SOIL - BY INJECTING LIQUID VIA DUCT IN PILE TO BOTTOM ORIFICES FOLLOWED BY GROUT TO FORM BROAD FOOT

Abstract: The method is used for driving a concrete pile (1) into the soil. The pile is provided with a longitudinal duct (3) leading to one or more orifices (6) at its lower end (2). A liquid under high pressure is supplied (via 4) to the duct to produce downward jets which loosen the soil at the lower end (2) so that the pile sinks down under its own weight. When it has reached the required depth, cement grout is injected under pressure via the duct to form a broader foot at the end (2). Grout may also be used as the liquid during the pile driving operation.

Classifications:
International (IPC 8-9): E02D5/32 E02D5/44 E02D5/62 (Advanced/Invention);
E02D5/22 E02D5/24 E02D5/34 (Core/Invention)
International (IPC 1-7): E02D5/32 E02D5/62
CPC: E02D5/32 E02D5/44 E02D5/62
European: E02D5/32 E02D5/44 E02D5/62



Family:

Publication number	Publication date	Application number	Application date
NL7905908 A	19810203	NL19790005908	19790731

Priority:

NL19790005908 19790731

Probable Assignee: WAAL HOLDING DE BV

Assignee(s): (std): WAAL HOLDING B V DE ; WAAL HOLDING DE BV

Assignee(s): DE WAAL HOLDING B V TE AMSTERDAM ; DE WAAL HOLDING TE AMSTERDAM BV

Title: Method and apparatus for constructing building elements in the soil like piles, injection anchorages, cut-off walls or similar.

Abstract: 1. A method for constructing building elements (1) in the soil (5) such as piles, injection anchorages, cut-off walls or the like, comprising the steps of feeding liquid material under high pressure through at least one outlet nozzle (7) from the surface (4) of the soil into an opening (2) in the soil filled with hardened building material (3) and driving said liquid material against the surrounding wall (8) of the opening in the soil, characterized in that said liquid material is introduced by impulse shocks and said building material (3) acts as insulating mass for the liquid material supplied through said outlet nozzle (7) due to the inertia of its mass.

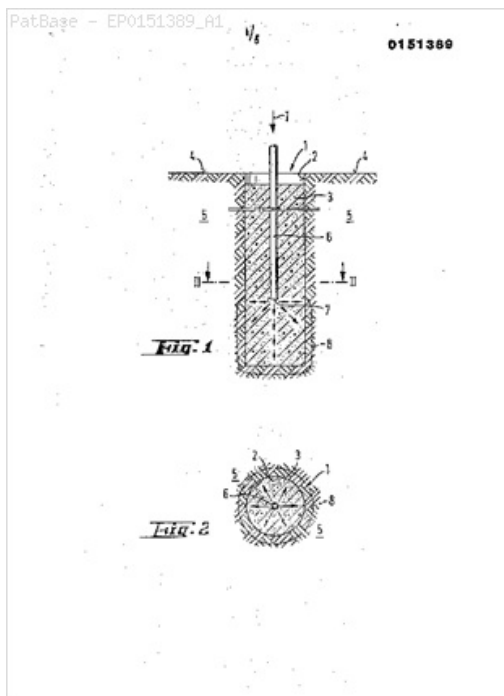
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International (IPC 1-7): E02D17/13 E02D3/12 E02D5/18 E02D5/42 E02D5/44 E02D5/46 E02D5/54 E02D5/62 E02D5/76

CPC: E02D5/18 E02D5/42 E02D5/44 E02D5/46 E02D5/54 E02D5/62 E02D5/76 E02D5/32

European: E02D5/18 E02D5/32 E02D5/42 E02D5/44 E02D5/46 E02D5/54 E02D5/62 E02D5/76



Family:

Publication number	Publication date	Application number	Application date
AT113328 E	19941115	AT19850111793T	19850108
AT54970 E	19900815	AT19850100126T	19850108
DE3400741 A1	19850718	DE19843400741	19840111
DE3400741 C2	19890622	DE19843400741	19840111
DE3410830 A1	19851003	DE19843410830	19840323
DE3410830 C2	19890524	DE19843410830	19840323
EP0151389 A1	19850814	EP19850100126	19850108
EP0151389 B1	19900725	EP19850100126	19850108
EP0346941 A2	19891220	EP19890111793	19850108
EP0346941 A3	19900207	EP19890111793	19850108
EP0346941 B1	19941026	EP19890111793	19850108

Priority:

DE19843400741 19840111 DE19843410830 19840323 EP19850100126 19850108

Probable Assignee: STUMP BOHR GMBH

Assignee(s): (std): STUMP BOHR GMBH

Assignee(s): STUMP BOHR GMBH 8045 ISMANING DE

Inventor(s): (std): REICHERT ERNST DIPL ING

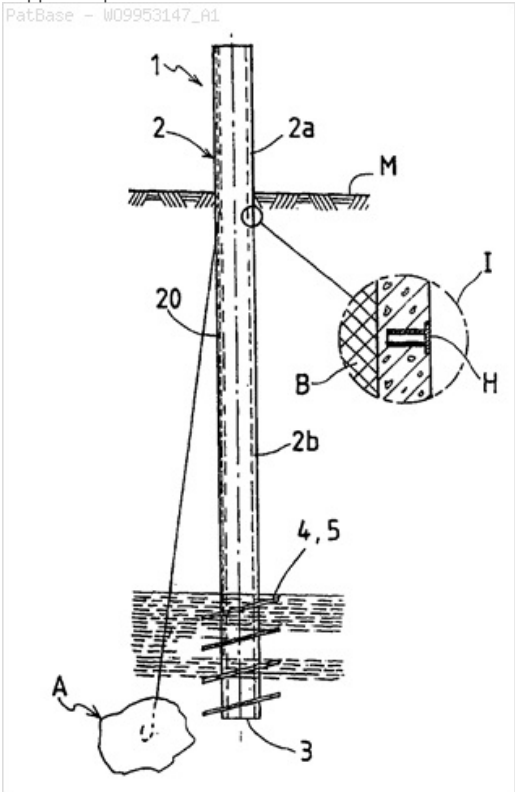
Inventor(s): REICHERT ERNST DIPL ING 8011 POERING DE

Designated states: AT BE CH FR IT LI NL

Title: CONCRETE PILE AND METHOD FOR POSITIONING IT IN THE GROUND

Abstract: Concrete pile (1) for supporting structures a certain distance above ground level (M), such as viaducts and the like. The pile is characterized in that it is entirely prefabricated and comprises a hollow cylindrical shaft (2), which contains an upper pier section (2a) and a foundation section (2b). The foundation section has an open bottom end (3) and is in its area which adjoins the said open end provided with an external screw thread (4, 5), for screwing said pile in the ground. The shaft of said pile containing a number of ducts (20), which are distributed over the circumference, which ducts open out on the outside of the shaft in the area of the external screw thread. The invention also relates to a method for positioning said pile in the ground, said method being characterized in that while the pile is being screwed in, a liquid medium is injected on its outside via the ducts (20) and the position of the pile while it is being screwed in is controlled by varying locally along the external circumference of the pile, the volume and/or pressure of the supplied liquid medium.

Classifications:
International (IPC 8-9): E02D5/32 E02D5/56 E02D7/26 E02D9/00 (Advanced/Invention); E02D5/22 E02D5/24 E02D7/00 E02D9/00 (Core/Invention)
International (IPC 1-7): E02D5/32 E02D5/50 E02D5/56 E02D5/72 E02D7/22 E02D7/24 E02D7/26 E02D7/28 E02D9/00
CPC: E02D5/32 E02D5/56 E02D7/26 E02D9/005
European: E02D5/32 E02D5/56 E02D7/26 E02D9/00B



Family:

Publication number	Publication date	Application number	Application date
AT242825 E	20030615	AT19990914802T	19990408
AU199933463 A1	19991101	AU19990033463	19990408
DE69908768 D1	20030717	DE19996008768	19990408
DE69908768 T2	20040519	DE19996008768T	19990408
EP1071854 A1	20010131	EP19990914802	19990408
EP1071854 B1	20030611	EP19990914802	19990408
NL1008856 C1	19991012	NL19981008856	19980409
WO9953147 A1	19991021	WO1999NL00209	19990408

Priority:

NL19981008856 19980409 WO1999NL00209 19990408

Probable Assignee: LAMBERTUS ROELOF TOORENMAN

Assignee(s): (std): LAMBERTUS ROELOF TOORENMAN ; TOORENMAN LAMBERTUS ROELOF

Inventor(s): (std): TOORENMAN LAMBERTUS ROELOF

Inventor(s): LAMBERTUS ROELOF TOORENMAN

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

Title: CONCRETE POST, ESPECIALLY FOR SUPPORTING CONSTRUCTIONS IN SOFT SOIL, CONTAINS CHANNEL FOR **INJECTING WATER** INTO TIP REGION WHEN POST IS BEING SUNK

Abstract: The post (B) comprises a steel-reinforced concrete body (G) with a pointed tip (S) and a channel (K) extending inside the post parallel to the post length axis. The channel entrance (E) is in the top end of the post and its exit (A) is in the tip region.

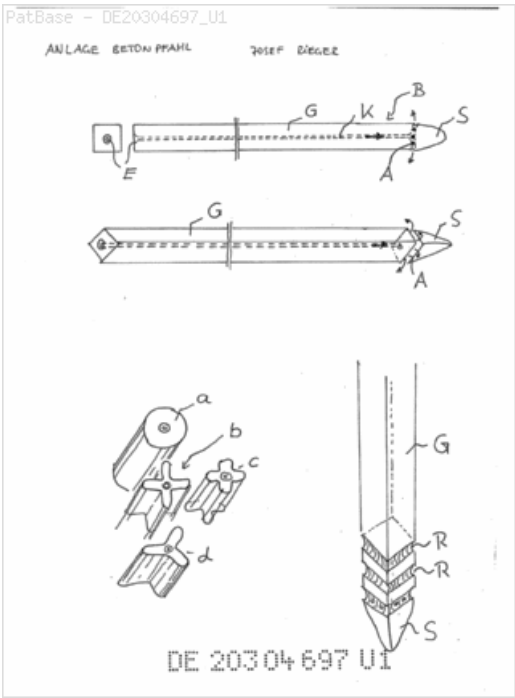
Classifications:

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International (ipc 1-7): E02D5/30 E02D5/32

CPC: E02D5/30 E02D5/32 E02D2200/1614 E02D2200/1635 E02D2200/1657

European: E02D5/30 E02D5/32 P02D200/16A10 P02D200/16B10 P02D200/16C10



Family:

Publication number	Publication date	Application number	Application date
DE20304697 U1	20030605	DE20032004697U	20030324

Priority:

DE20032004697U 20030324

Probable Assignee:

RIEGER JOSEF

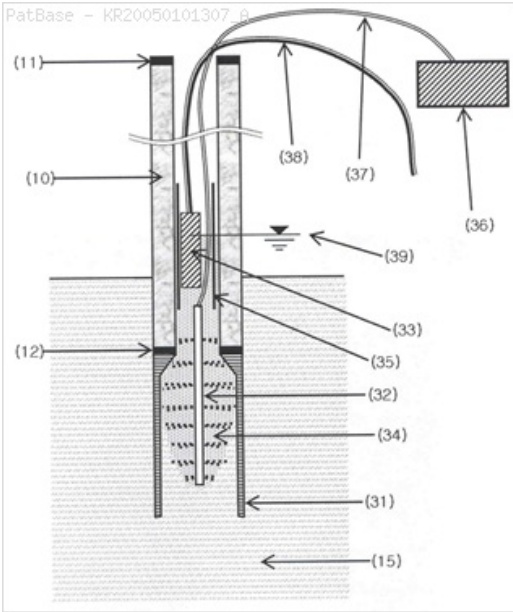
Assignee(s): (std):

RIEGER JOSEF

Title: INSTALLING METHOD FOR PRECAST CONCRETE PILE

Abstract: Source: KR20050101307A **Machine translation:** The present invention relates to how to install the piles to the ground, when installing the conventional concrete stakes into the ground and to solve the problem of excessive penetration resistance in the case of particularly sensitive land half volume to push up the soil is already installed around the pile fell to solve the problem. In the present invention, concrete piles or slightly larger outer diameter equal to the outer diameter of the front end with the operating inside the shoe and the tip shroud using high pressure **water injection** device heaving (heaving of penetration resistance and the ground discharge tube that is causing the elevated by crushing and pulverizing using a slurry feed pump is discharged to the outside together with the dirt and water. Bypiles, tissue penetration resistance, raised switch tip

Classifications:
International (IPC 8-9): E02D5/72 E02D7/24 E02D7/26 (Advanced/Invention); E02D5/72 E02D7/24 E02D7/26 (Advanced/Non-invention); E02D5/00 E02D7/00 (Core/Invention)
International (IPC 1-7): E02D5/72 E02D7/24 E02D7/26
CPC: E02D7/26 E02D5/32 E02D5/72 E02D7/06 E02D7/24 E02D7/28 E02D2250/00 E02D2600/00



Family:

Publication number	Publication date	Application number	Application date
KR20050101307 A	20051021	KR20050091855	20050930

Priority:
KR20050091855 20050930

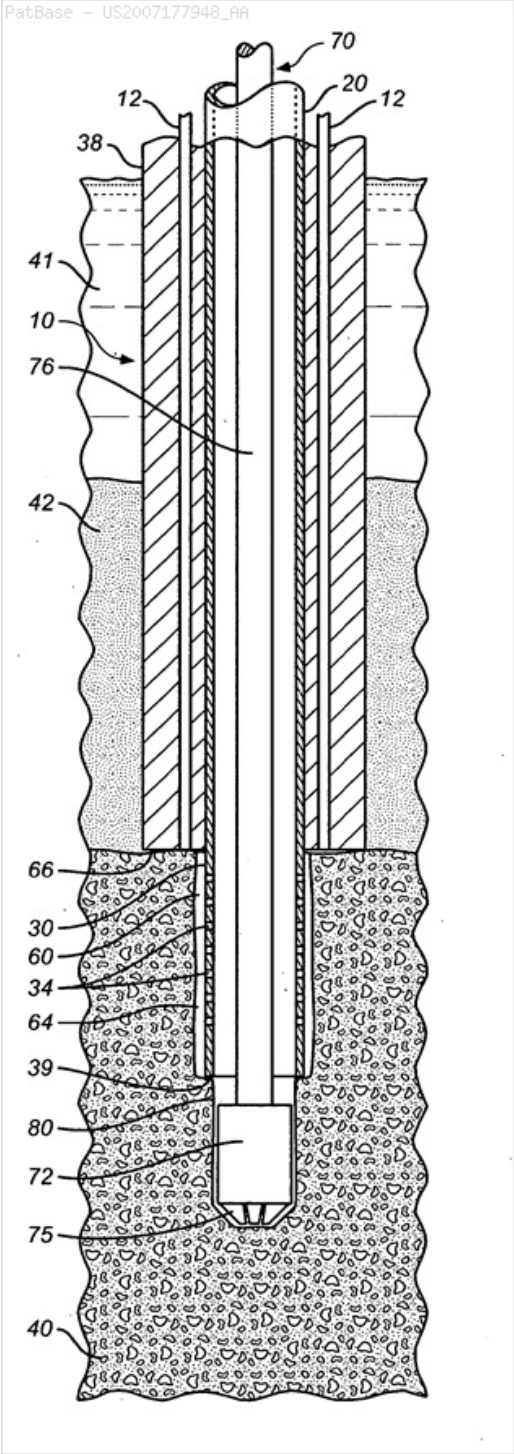
Probable Assignee: JEONG SOON YONG
Assignee(s): (std): JEONG SOON YONG
Inventor(s): (std): JEONG SOON YONG

Title: PRE-CAST/PRE-STRESSED CONCRETE AND STEEL PILE AND METHOD FOR INSTALLATION

Abstract: A method for installing a pre-cast/pre-stressed concrete and steel pile used in the construction of pile foundations and the resulting installed pile that has its distal end anchored to bedrock is disclosed. After the pile is located on bedrock, a first hole is drilled into bedrock that is of sufficient depth to accommodate a lower portion of the steel pipe that extends below the concrete pile and contains a plurality of orifices. A second hole is drilled into bedrock that is below and concentric to the first hole and has a diameter than that is usually less than that of the first hole. The second hole forms an anchoring socket to accommodate an anchoring anchor. Grout is injected into the steel pile and anchoring socket until the grout fills the voids in the interior of the steel pipe. Grout also seeps through the orifices in the lower end of said steel pipe and fills the second hole, and an annular space between the outer circumference of the steel pipe and the walls of the first hole.

Classifications:

International (IPC 8-9): E02D13/00 E02D5/30 E02D5/50 (Advanced/Invention); E02D13/00 E02D5/22 E02D5/24 (Core/Invention) **CPC:** E02D5/32 E02D5/48 E02D5/50 E02D7/24 E02D7/26 **European:** E02D5/32 E02D5/48 E02D5/50 E02D7/24 E02D7/26 **US:** 405/228 405/233 405/240 405/249 405/257



Family:

Publication number	Publication date	Application number	Application date
US2007177948 AA	20070802	US20060345802	20060202
US7390144 BB	20080624	US20060345802	20060202

Priority:

US20060345802 20060202

Probable Assignee: NOVA GROUP INC

Assignee(s): (std): NOVA GROUP INC

Assignee(s): BANK OF AMERICA NA ADMINISTRATIVE AGENT AS

Inventor(s): (std):	FEDRICK RONALD M
Inventor(s):	FEDRICK RONALD
Agent(s):	NIXON PEABODY LLP

Title: APPARATUS AND METHODS FOR THE PLACEMENT OF PIPE PILING

Abstract: Apparatus and methods for the installation of pipe pilings into the ground for use as structural building foundations, geothermal piles, or both, are disclosed. In addition to specialized fittings for pipe pile assemblies, the inventions include specialized drive mechanisms used in conjunction with rotary or vibratory motors. Methods of installing pipe pilings are further improved with the disclosure of methods of adding grout or similar materials during or after installation of the piles.

Classifications:

International (IPC 8-9): E02D11/00 E02D15/04 E02D23/00 E02D27/12 E02D5/20 E02D5/22 E02D5/28 E02D5/30 E02D5/32 E02D5/34 E02D5/46 E02D5/50 E02D5/52 E02D5/54 E02D5/56 E02D5/62 E02D5/66 E02D7/00 E02D7/02 E02D7/06 E02D7/18 E02D7/22 E02D7/26 E21B33/13 F16L23/00 (Advanced/Invention); E02F3/32 (Advanced/Non-invention)

CPC: F16L23/00 E02D5/34 E02D5/50 E02D5/665 E02D5/20 E02D5/32 E02D5/526 E02D7/06 E02D11/00 E02D5/285 E02D7/18 E02D7/26 E02D5/56 E02D5/62 E02D7/22 E02D5/54 E21B33/13 E02D5/22 E02D7/02 E02D2200/165 E02D2200/1671 E02F3/32 E02D7/00 E02D2300/0023
US: 1/1 285/39 405/231 405/232 405/233 405/241 405/249 405/251 405/252.1 405/253



Family:

Publication number	Publication date	Application number	Application date
CA2882337 AA	20150217	CA20132882337	20130614
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CA2914469 AA	20151203	CA20132914469	20130614
CA2914469 C	20180814	CA20132914469	20130614
CR20150636 A	20160628	CR20150000636	20151204
US2013272798 AA	20131017	US20120594839	20120826
US2013272799 AA	20131017	US20130917183	20130613
US2014056652 AA	20140227	US20130917132	20130613
US2014105689 AA	20140417	US20130137838	20131220
US2015345094 AA	20151203	US20150820474	20150806
US2015345095 AA	20151203	US20150820478	20150806
US2015345097 AA	20151203	US20150820483	20150806
US2017191238 AA	20170706	US20170462793	20170317
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US9611610 BB	20170404	US20150820474	20150806
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WO13188758 A2	20131219	WO2013US45876	20130614
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WO14035529 A1	20140306	WO2013US45866	20130614

Priority:

US20110528116P	20110826	US20120660292P	20120615	US20120528116P	20120826
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WO2013US45876	20130614	US20130137838	20131220	US20150820474	20150806
US20150820478	20150806	US20150820483	20150806	US20170462793	20170317

Probable Assignee: AMERICAN PILEDRIVING EQUIPMENT INC

Assignee(s): (std): AMERICAN PILEDRIVING EQUIPMENT INC ; PAUL SUVER ; SUVER PAUL W

Inventor(s): (std): CORS GERALD A ; KLEKOTKA JOSEPH M ; PAUL SUVER ; SUVER PAUL W

Agent(s): CASSAN MACLEAN; CASSAN MACLEAN IP AGENCY INC; OSLER HOSKIN AND HARCOURT LLP; MADSON IP PC; MADSON CRAIG J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW