

PatBase - Search results 21 June 2017

Search query (2): [SP]: system for and method of stabilizing rail track structures using a load transfer apparatus a system for and method of stabilizing rail track structures using a load transfer apparatus is disclosed. the load transfer apparatus includes a vertical load transfer element and a top load transfer element, wherein the top load transfer element is used to transfer applied locomotive and rail car loads to the vertical load transfer element. in one embodiment, the top load transfer element includes helical flights. in another embodiment, the top load transfer element includes a flared top. in yet another embodiment, the top load transfer element includes a load transfer cap. in a further embodiment, the top load transfer element includes two or more support legs each with a top support attached thereto. the railroad stabilization system can comprise any one type or any combinations of types of the aforementioned load transfer apparatuses.

Results: 6

Search history

Search PN=(WO2015034979) (Results 1)

1:

Search [SP]: system for and method of stabilizing rail track structures using a load transfer apparatus a system for and method of stabilizing rail track structures using a load transfer apparatus is disclosed. the load transfer apparatus includes a vertical load transfer element and a top load transfer element, wherein the top load transfer element is used to transfer applied locomotive and rail car loads to the vertical load transfer element. in one embodiment, the top load transfer element includes helical flights. in another embodiment, the top load transfer element includes a flared top. in yet another embodiment, the top load transfer element includes a load transfer cap. in a further embodiment, the top load transfer element includes two or more support legs each with a top support attached thereto. the railroad stabilization system can comprise any one type or any combinations of types of the aforementioned load transfer apparatuses. (Results 6)

Title: Support system for a railroad track

Abstract: Source: US4494694A A support system for a railroad track is described specifically adapted for the improvement of railroad subgrade performance. A plurality of vertically disposed piles are positioned below the ties and the rails of the track so that loads imposed on the cross ties will be distributed into the subgrade by the piles. The piles are preferably comprised of cementitious material. Each of the piles is comprised of a cylindrical stem portion having a funnel-shaped head portion at the upper end thereof. In one form of the invention, the cross ties rest upon the upper end of the head portion of the piles. In another form of the invention, a ballast material is positioned between the cross ties and the upper ends of the piles.

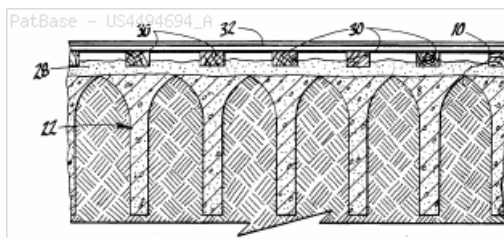
Classifications:

International (IPC 1-7): E01B1/00

CPC: E01B1/001 E01B2/006 E01B2204/08 E02D3/08

European: E01B2/00C E02D3/08 P01B1/00B P01B204/08

US: 238/119 238/2 405/233 405/266



Family:

Publication number	Publication date	Application number	Application date
US4494694 A	19850122	US19820425181	19820928

Priority:

US19820425181 19820928

Probable Assignee: UNIV IOWA STATE RES FOUND INC

Assignee(s): (std): UNIV IOWA STATE RES FOUND INC

Assignee(s): IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC ; STATE UNIV

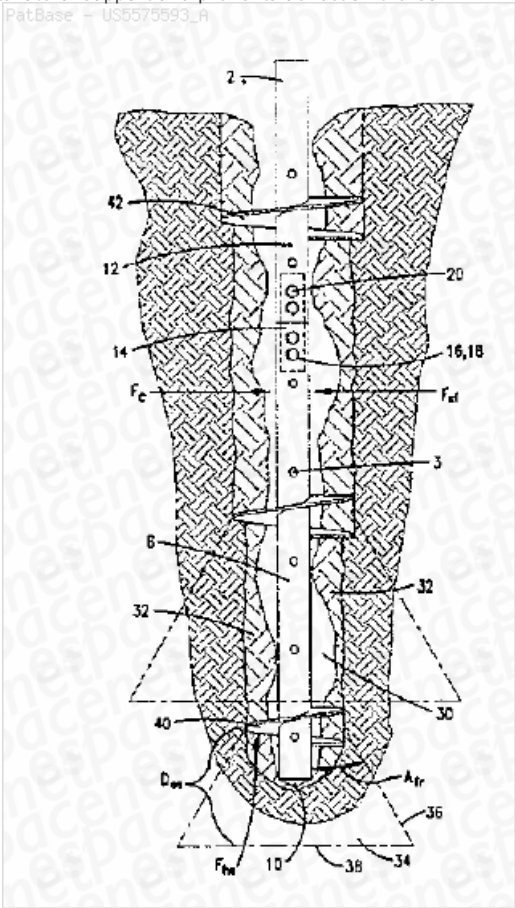
Inventor(s): (std): HANDY RICHARD L ; LAMB ROBERT O ; PITT JOHN M

Title: Method and apparatus for installing a helical pier with pressurized grouting

Abstract: Source: US5575593A A method and apparatus used to increase the stiffness characteristic of soil to improve its ability to support a structures and to provide a tie-back anchoring force. The apparatus includes an anchor having helixes thereon is rotated into the ground. The helical anchor is hollow and includes multiple perforated holes along its length and about its perimeter. Once, the anchor is drilled into the ground, pressurized grout is injected therein. The grout is forced through the helical anchor and out through the perforated holes. The grout fills any voids along the sides of the anchor and stiffens the surrounding soil. Once the grout hardens, it may be used in a tie-back application or to support new and old construction or the like. The grout surrounding the anchor increases its lateral support and prevents deflection thereof.

Classifications:

International (IPC 8-9): E02D5/30 E02D5/36 E02D5/80 (Advanced/Invention); E02D5/24 E02D5/34 E02D5/80 (Core/Invention)
International (IPC 1-7): F02D5/44
CPC: E02D5/30 E02D5/36 E02D5/801
European: E02D5/30 E02D5/36 E02D5/80B
US: 405/232 405/233 405/237 405/244



Family:

Publication number	Publication date	Application number	Application date
US5575593 A	19961119	US19940273210	19940711

Priority:

US19940273210 19940711

Probable Assignee:

HUBBELL INC

Assignee(s): (std):

ATLAS SYSTEMS INC

Assignee(s):

HUBBELL INC ; NEWCO ATLAS INC

Inventor(s): (std):

RAAF DAVID B

Title: Method and apparatus for forming piles in place

Abstract: Source: US2001028827A A method for making piles apparatus for practicing the method of the invention are disclosed. The invention may be used to support the foundation of a structure, such as a building. The method draws one or more soil displacing members on a shaft down through a body of soil by turning a screw at the lower end of the shaft. The soil displacing members force soil out of a cylindrical region around the shaft. The cylindrical region is filled with grout to encapsulate and strengthen the shaft. The grout may be fed by gravity from a bath of grout around the shaft. The methods of the invention may be used to make stepped piers at much lower cost than existing methods. The invention provides methods for coating the screw portion of a screw pier with grout to protect the screw from the action of corrosive soils and to reinforce helical screws.

Classifications:

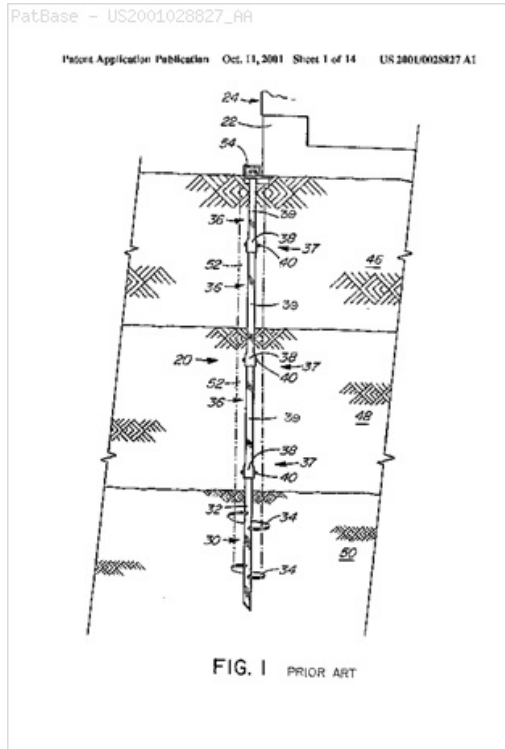
International (IPC 8-9): E02D5/36 E02D5/46 E02D5/56 E02D7/00 E21B10/44 E21B7/26 (Advanced/Invention); E02D5/34 E21B10/00 E21B7/00 (Core/Invention)

International (IPC 1-7): E02D5/00 E02D5/30 E02D5/34 E02D5/36 E02D5/38 E02D5/56 E02D5/74 E02D7/00 E02D7/22 E02D7/24 E21B10/64

CPC: E02D5/36 E02D5/46 E21B7/26 E21B10/44

European: E02D5/36 E02D5/46 E21B10/44 E21B7/26

US: 175/262 405/233 405/233P 405/237 405/239 405/241 405/244 405/248 405/249 405/251 405/252.1 405/252.100S 52/169.13



Family:

Publication number	Publication date	Application number	Application date
AR014232 AA	20010207	AR1998P106767	19981230
AT199755 E	20010315	AT19960941562T	19961220
AU199710910 A1	19970728	AU19970010910	19961220
AU724933 B2	20001005	AU19970010910	19961220
BRPI9612290 A	19991228	BR1996PI12290	19961220
CA2241150 AA	19980622	CA19962241150	19961220
CA2241150 C	20021029	CA19962241150	19961220
DE69612115 D1	20010419	DE19966012115	19961220
DE69612115 T2	20010802	DE19966012115T	19961220
DK0870092 T3	20010611	DK19960941562T	19961220
EP0870092 A1	19981014	EP19960941562	19961220
EP0870092 B1	20010314	EP19960941562	19961220
ES2157472 T3	20010816	ES19960941562T	19961220
NZ323869 A	20000128	NZ19960323869	19961220
US2001028827 AA	20011011	US20010877956	20010608
US2002150430 AA	20021017	US20020177171	20020620
US5707180 A	19980113	US19950577967	19951226
US6264402 BA	20010724	US19970000722	19971230
US6435776 BB	20020820	US20010877956	20010608
US6652195 BB	20031125	US20020177171	20020620
WO9724493 A1	19970710	WO1996CA00868	19961220

Priority:

US19950577967 19951226 US19970000722 19971230 US20010877956 20010608
US20020177171 20020620 WO1996CA00868 19961220

Probable Assignee: VICKARS DEVELOPMENTS CO LTD

Assignee(s): (std): TOEBOSCH GARY ; VICKARS DEV CO LTD ; VICKARS DEVELOPMENTS CO LTD ; VICKARS JEREMIAH CHARLES TILNE ; VICKARS ROBERT ALFRED ; VICKARS DEVELOPMENTS COMPANY L ; VICKARS JEREMIAH CHARLES TILNEY ; VICKARS DEVELOPMENTS COMPANY LTD

Assignee(s): VICKARS DEVELOPMENTS CO LTD BURNABY ; VICKARS DEVELOPMENT CO LTD ; VICKARS DEVELOPMENTS CO ; VICKARS DEVELOPMENTS CO L

Inventor(s): (std): GARY TOEBOSCH ; JEREMIAH CHARLES TILNEY VICKARS ; NANAIMO STREET ; ROBERT ALFRED VICKARS ; TOEBOSCH GARY MATHEUS ; VICKARS JEREMIAH CHARLES TILNEY ; VICKARS ROBERT ALFRED ; VICKARS JEREMIAH CHARLES TILNE ; VICKARS CHARLES ; VICKARS ALFRED ; TOEBOSCH GARY

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CN CU CZ DE DK EE ES FI FR GB GE GR
HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT
RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

Title: System and method for positioning a pile cap underneath an existing elevated bridge assembly

Abstract: Source: US2003217420A A system and method for inserting pre-cast concrete pile caps under wooden railroad bridges without removing essential load bearing rails, cross-ties, and stringers is disclosed. The system and method minimizes the time that the track is closed to normal rail traffic. The system and method uses recycled oil well drill pipes that are cast into pile caps so that female-threaded ends are flushed with an upper surface of the pile caps. Lifting rods have male threaded ends that are used with a multi-point lifting device that allows the pile cap to be slipped under the existing bridge in a number of small incremental steps utilizing the spaces between wooden bridge stringers.

Classifications:

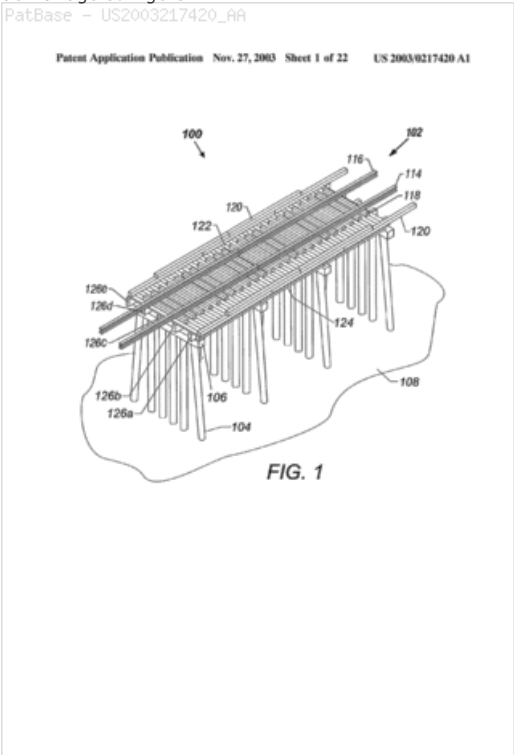
International (IPC 8-9): E01D21/00 E01D22/00 (Advanced/Invention)

International (IPC 1-7): E01D21/00

CPC: E01D22/00

European: E01D22/00

US: 14/75 14/75S 14/77.1 14/77.100P



Family:

Publication number	Publication date	Application number	Application date
US2003217420 AA	20031127	US20020155608	20020524
US2005262651 AA	20051201	US20050196939	20050804
US6701564 BB	20040309	US20020155608	20020524
US7013520 BA	20060321	US20040764947	20040126
US7363671 BB	20080429	US20050196939	20050804

Priority:

US20020155608 20020524 US20040764947 20040126 US20050196939 20050804

Probable Assignee:

SNEAD EDWIN DESTEIGUER

Assignee(s): (std):

SNEAD EDWIN D ; SNEAD EDWIN DESTEIGUER

Inventor(s): (std):

SNEAD EDWIN D ; SNEAD EDWIN DESTEIGUER

Inventor(s):

SNEAD EDWIN

Agent(s):

HOWREY LLP

Title: EXTENSIBLE SHELLS AND RELATED METHODS FOR CONSTRUCTING A SUPPORT PIER

Abstract: Source: US2011064526A Extensible shells and related methods for constructing a support pier are disclosed. A shell can define an interior for holding granular construction material and define an opening for receiving the granular construction material into the interior. The shell can be flexible such that the shell expands when granular construction material is compacted in the interior of the shell. A method may include positioning the shell in the ground and filling at least a portion of the interior of the shell with the granular construction material. The granular construction material may be compacted in the interior of the shell to form a support pier.

Classifications:

International (IPC 8-9): E02D23/00 E02D27/16 E02D27/18

E02D27/20 E02D3/08 E02D5/60 E02D7/00 E02D7/28

E02D7/30 (Advanced/Invention)

CPC: E02D7/28 E02D27/18 E02D27/20 E02D5/60 E02D27/16

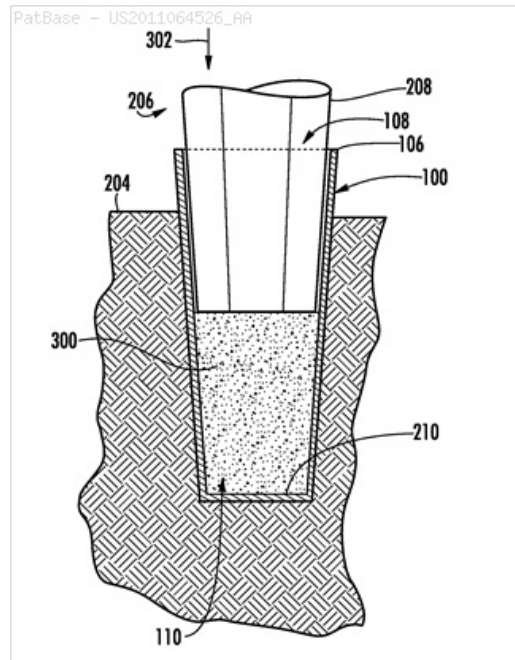
E02D2200/1685 E02D2200/1692 E02D2300/0006 E02D2300/0079

E02D2250/0007 E02D2200/165 E02D7/02 E02D3/08 E02D7/30

E02D23/00

European: E02D3/08

US: 1/1 405/232 405/245 405/245P 405/249 405/271



Family:

Publication number	Publication date	Application number	Application date
BR112013005497 A2	20160503	BR20131105497	20110913
CA2809638 AA	20130226	CA20112809638	20110913
CL2013000652 A1	20131108	CL20130000652	20130308
CO6660455 A2	20130430	CO20130093981	20130411
EP2616591 A2	20130724	EP20110825771	20110913
EP2616591 A4	20170301	EP20110825771	20110913
US2011064526 AA	20110317	US20100880804	20100913
US2013279992 AA	20131024	US20110822011	20110913
US2015330051 AA	20151119	US20150809579	20150727
US2017159257 AA	20170608	US20170430807	20170213
US8221033 BB	20120717	US20100880804	20100913
US9091036 BB	20150728	US20110822011	20110913
US9567723 BB	20170214	US20150809579	20150727
WO12037089 A2	20120322	WO2011US51349	20110913
WO12037089 A3	20120614	WO2011US51349	20110913
WO17019682 A1	20170202	WO2016US44038	20160726

Priority:

US20090241878P 20090912 US20100880804 20100913 US20110822011 20110913
 US20150809579 20150727 US20130822011 20130620 US20170430807 20170213
 WO2011US51349 20110913

Probable Assignee: GEOPIER FOUND CO INC

Assignee(s): (std): GEOPIER FOUNDATION COMPANY INC ; GEOPIER FOUNDATION CO INC ; WHITE DAVID J ; GEOPIER FOUND CO INC

Assignee(s): TCO FUNDING CORP ; TENSAR LLC CORP ; TENSAR POLYTECHNOLOGIES INC ; TENSAR INT LLC ; UBS STAMFORD BRANCH AG ; GEOTECHNICAL REINFORCEMENT CO INC ; NORTH AMERICAN GREEN INC ; TENSAR CORP ; TENSAR HOLDINGS LLC ; TENSAR INT CORP ; AMERICAN CAPITAL LTD ; CREDIT SUISSE CAYMAN ISLANDS BRANCH AG ; GENERAL ELECTRIC CAPITAL ADMINISTRATIVE AGENT AND ; GENERAL ELECTRIC CAPITAL ADMINISTRATIVE AGENT AND COLLATERAL AGENT AS CORP

Inventor(s): (std): WHITE DAVID J

Inventor(s): DAVID J WHITE

Agent(s): MCFADDEN FINCHAM INC ; OSLER HOSKIN AND HARCOURT LLP ; ESTUDIO CAREY LTDA ; HARRISON GODDARD FOOTE LLP ; WARD AND SMITH PA ; NEXSEN PRUET PLLC ; E ERIC ; MILLS E ERIC

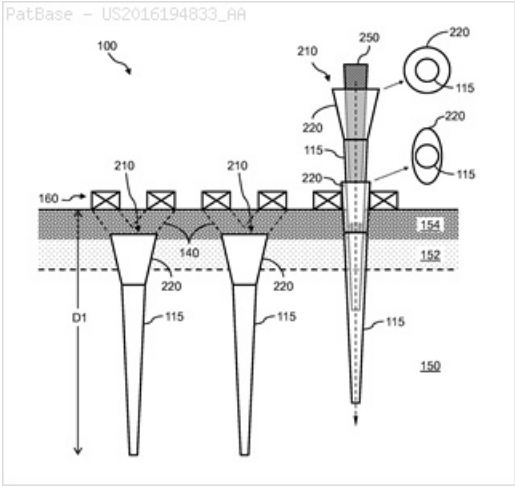
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA 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

Title: SYSTEM FOR AND METHOD OF STABILIZING RAIL TRACK STRUCTURES USING A LOAD TRANSFER APPARATUS

Abstract: Source: US2016194833A A system for and method of stabilizing rail track structures using a load transfer apparatus is disclosed. The load transfer apparatus includes a vertical load transfer element and a top load transfer element, wherein the top load transfer element is used to transfer applied locomotive and rail car loads to the vertical load transfer element. In one embodiment, the top load transfer element includes helical flights. In another embodiment, the top load transfer element includes a flared top. In yet another embodiment, the top load transfer element includes a load transfer cap. In a further embodiment, the top load transfer element includes two or more support legs each with a top support attached thereto. The railroad stabilization system can comprise any one type or any combinations of types of the aforementioned load transfer apparatuses.

Classifications:

International (IPC 8-9): E01B1/00 E01B2/00 E01B9/02 E02D3/00 E02D3/08 E02D5/22 E02D5/34 E02D5/48 E02D5/56 E02D7/02 (Advanced/Invention)
CPC: E01B1/001 E02D5/34 E02D5/56 E02D5/223 E02D7/02 E02D5/48 E01B2/006
US: 238/2 405/231 405/232 405/252.1 405/255 405/256



Family:

Publication number	Publication date	Application number	Application date
CA2922365 AA	20160224	CA20142922365	20140904
CO16055810 A2	20160909	CO20160055810	20160303
EP3049571 A2	20160803	EP20140842610	20140904
US2016194833 AA	20160707	US20140916737	20140904
WO15034979 A2	20150312	WO2014US53985	20140904
WO15034979 A3	20150625	WO2014US53985	20140904

Priority:

US20130874050P 20130905 US20140916737 20140904 WO2014US53985 20140904

Probable Assignee: GEOPIER FOUNDATION CO INC

Assignee(s): (std): GEOPIER FOUNDATION CO INC

Assignee(s): WHITE DAVID J

Inventor(s): (std): WHITE DAVID J

Inventor(s): DAVID J WHITE

Agent(s): OSLER HOSKIN AND HARCOURT LLP; JAIME EDUARDO DELGADO VILLEGAS; HGF LTD; MILLS E ERIC

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 IR IS IT JP KE KG KM KN KP KR KZ LA LC LI 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 SA 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