

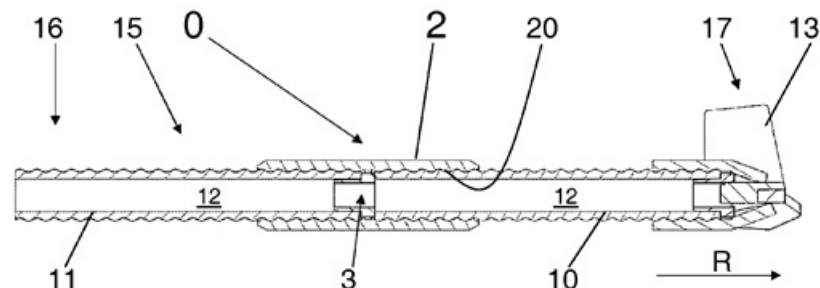
Search history

Search 1: FT=(ANCHORING~ AND TIE~ ROD~ AND CEMENT~) (Results 1446)
Search 2: FT=(ANCHORING~ AND TIE~ ROD~ AND CEMENT~ dig and eart) (Results 0)
Search 3: FT=(ANCHORING~ AND TIE~ ROD~ AND CEMENT~ EART) (Results 0)
Search 4: FT=(ANCHORING~ AND TIE~ ROD~ AND CEMENT~ EARTH) (Results 0)
Search 5: FT=(ANCHORING~ AND TIE~ ROD~ AND CEMENT~) (Results 1446)

Title: SELF-DRILLING **ANCHOR** WITH DRILL **ANCHOR** SEAL BOULON D'ANCRAGE AUTO-FOREUR DOTE D'UN

Abstract: Source: EP2354448A3 [DE] Es wird ein Selbstbohranker (0) mit einer Ankerstange, umfassend eine Mehrzahl von Ankerstangenelementen (10, 11), die ein Injektionskanal (12) vollstaendig quert und welche mittels einer Verlaengerungsmuffe (2) verlaengerbar sind, offenbart. Von der Verlaengerungsmuffe (2) vollstaendig umschlossen, wird eine Bohrankerdichtung (3) einen Schulterabschnitt und mindestens einen Halsabschnitt aufweisend lagefixiert, zwischen den benachbarten Ankerstangenelementen (10, 11) verwendet, wodurch der Injektionskanal (12) ueber die Stossfuge zwischen den Ankerstangenelementen (10, 11) gedichtet fortgesetzt und unterbrechungsfrei gehalten ist.

FIG. 3



Classifications:

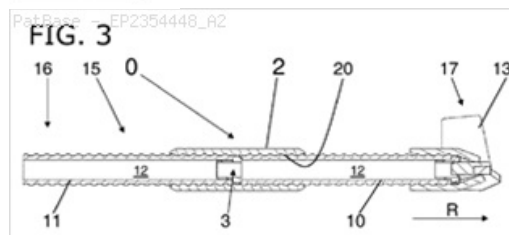
International (IPC 8-9): E21B17/04 E21D20/00

E21D21/00 (Advanced/Invention);

E02D5/80 (Advanced/Non-invention)

CPC: E21D21/0053 E21D21/0046 E21D20/00 E02D5/80 E21B17/04

European: E21D21/00M6 P21D21/00M8



Family:

Publication number	Publication date	Application number	Application date
CH702595 A2	20110729	CH20100000102	20100128
CH702595 B1	20180914	CH20100000102	20100128
EP2354448 A2	20110810	EP20110152558	20110128
EP2354448 A3	20180103	EP20110152558	20110128

Priority:

CH20100000102 20100128

Probable Assignee: KUECHLER TECHNIK AG

Assignee(s): (std): KUECHLER TECHNIK AG

Inventor(s): (std): JOERG KUECHLER ; ANTON GRECKO ; GRECKO ANTON ; KUECHLER JOERG

Agent(s): SCHNEIDER FELDMANN AG PATENT UND MARKENANWAELTE; SCHNEIDER FELDMANN PATENT U MARKENANWAELTE AG

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Legal status (INPADOC)

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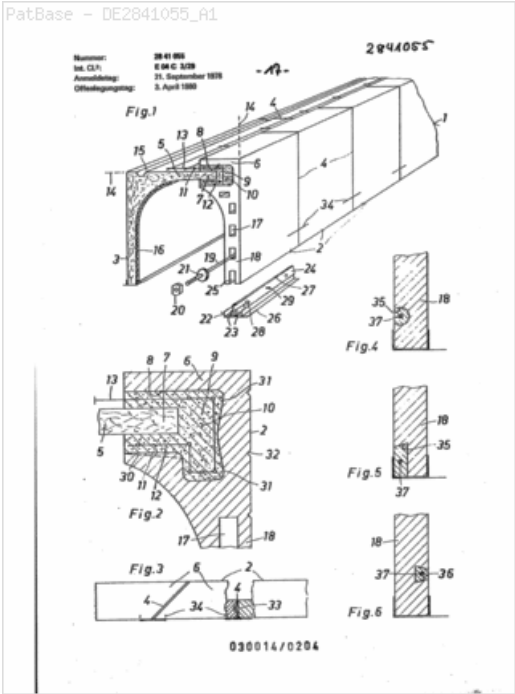
Patent	Date recorded	Event group	Code	Event	Details
CH702595 A2	20110729	LSPB	+	published / reissued	
CH702595 B1	20180914	LSGT	+	granted / extensions (spc, cpc, pte)	
CH702595 B1	20300128	PEXP		Calculated Patent Term Expiry	
EP2354448 A2	20110810	LSPB	+	published / reissued	
EP2354448 A3	20181226	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20180704

Title: INVERTED U=PROFILE ROLLER SHUTTER CASE - IS UNIT ASSEMBLED WITH SECTIONS ENGAGING FACING GROOVES, AND FULL LENGTH SUPPORT ELEMENT

Abstract: The inverted U-shaped profile is assembled from angled shaped pieces of any material, with interfacing top sections, set in a row and joined together to made up the required length of roller shutter case, which has end closing covers; they are reinforced along their entire length. Sections (5) of the pieces (3) on one side engage matching groove-type recesses (8) in the sections (6) of those (2) on the outer side of the U profile. In the connection area of all sections there is a support element (10) which extends across the entire length of the case (1). The entire unit can be of lightweight, but can withstand rough treatment, even when very long. Production is simple, and a high degree of sound and heat insulation can be provided.

Classifications:

International (IPC 8-9): E04C3/22 E04C3/29 E06B9/17 (Advanced/Invention);
E04C3/20 E04C3/29 E06B9/17 (Core/Invention)
International (IPC 1-7): E04C3/22 E04C3/29 E06B9/17
CPC: E04C3/22 E04C3/29 E06B9/17015
European: E04C3/22 E04C3/29 E06B9/17B2



Family:

Publication number	Publication date	Application number	Application date
DE2841055 A1	19800403	DE19782841055	19780921

Priority:

DE19782841055 19780921

Probable Assignee:

FUNK ROLLADEN GMBH

Assignee(s): (std):

FUNK ROLLADEN GMBH

Assignee(s):

ROLLADEN FUNK GMBH

Inventor(s): (std):

FUNK OTTO

Legal status (INPADOC)

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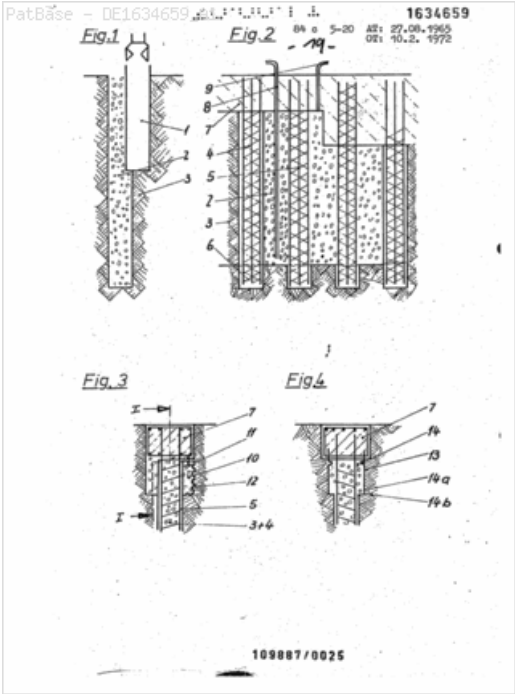
Patent	Date recorded	Event group	Code	Event	Details
DE2841055 A1	19800403	LSPB	+	published / reissued	
DE2841055 A1	19840913	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	

Title: VERFAHREN ZUR HERSTELLUNG EINER ZUSAMMENHAENGENDEN BOHRPFAHLWAND METHOD FOR PRODUCING A contiguous pile wall (Machine translation)

Abstract: Source: DE1634659A1 [DE] (Claim 1) EMI0010.0001 Pateatanaprueehe 1. Verfahren zur Herstellung von Pfahl- und Dichtungswaenden dadurch gekennzeichnet, dass zunaechst Bohrloecher in den _ Baugrund abgeteuft werden und diese anschliessend mit einem Steingeruest ausgefuehlt werden.

Machine translation: (Claim 1) EMI0010.0001 td Pateatanaprueehe 1 Process for the production of pile and Dichtungswaenden wherein are first drilled holes in the ground _ and these are then filled with a Steingeruest.

Classifications:
International (IPC 8-9): E02D5/18 E02D5/68 (Advanced/Invention); E02D5/00 E02D5/18 (Core/Invention)
International (IPC 1-7): E02D5/18 E02D5/68
CPC: E02D5/18 E02D5/68
European: E02D5/18 E02D5/68



Title: METHOD AND APPARATUS FOR GENERATING SELF ROTATING FLUID JET

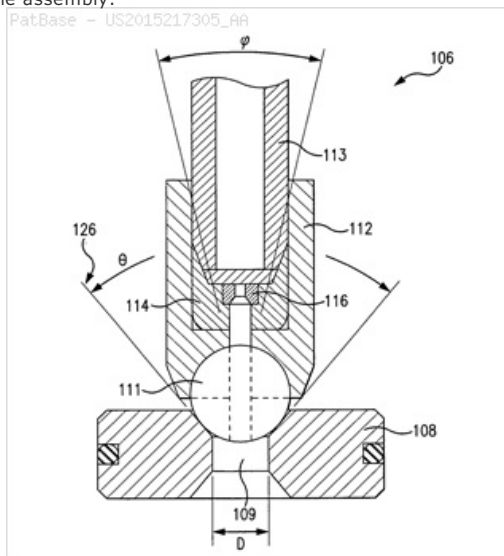
Abstract: A nozzle assembly for generating fluid jets, such as self-spinning fluid jets. A nozzle body includes a cylindrical nozzle cavity, an inlet, an outlet, and a tubular nozzle rotor assembly positioned with respect to the nozzle cavity. The nozzle rotor assembly can have a ball end and a tubular end and a central fluid passage routed through the nozzle rotor assembly. A fluid swirl enhancer forms communication with the inlet. A replaceable nozzle seat forms communication with the ball end of the nozzle rotor assembly and with the outlet. The ball end of the nozzle rotor assembly pivots, oscillates and rotates against the nozzle seat when pressurized fluid flows through the nozzle assembly.

Classifications:

International (IPC 8-9): B05B1/14 B05B1/34 B05B3/04 B05B3/06 B08B3/02 B08B9/043 B08B9/049 B24C1/04 B24C3/12 B24C5/04 B24C7/00 B26F3/00 F16L27/02 (Advanced/Invention); B05B13/06 (Advanced/Non-invention)

CPC: B24C3/12 B24C7/0023 F16L27/023 B05B1/14 B05B3/0463 B05B3/06 B05B13/0636 B08B3/02 B08B9/0433 B08B9/0495 B24C1/045 B24C5/04 B26F3/004

US: 239/240 239/310 239/318 285/261 451/40



Family:

Publication number	Publication date	Application number	Application date
US2015217305 AA	20150806	US20140171360	20140203
US9587776 BB	20170307	US20140171360	20140203

Priority:

US20140171360 20140203

Probable Assignee: YIE GENE G

Assignee(s): (std): YIE GENE G

Inventor(s): (std): YIE GENE G

Agent(s): PAULEY ERICKSON AND KOTTIS

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2015217305 AA	20150806	LSPB	+	published / reissued	
US2015217305 AA	20170215	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9587776 BB	20170307	LSGT	+	granted / extensions (spc, cpc, pte)	
US9587776 BB	20151109	LSSES	NFA1	Non Final Action Mailed	
US9587776 BB	20170215	LSGT	PAT1	Patented Case	
US9587776 BB	20340620	PEXP		Calculated Patent Term Expiry (PTA 137 days)	

Title: Reinforcement member for the reinforcement of concrete structures

Abstract: A reinforcement member including a reelable steel tape intended to be incorporated into concrete. The faces of the steel tape each include substantially rectilinear ribs arranged in at least one longitudinal row, these being substantially parallel to each other and inclined in relation to the longitudinal direction of the tape. The ribs of one of the faces of the tape are symmetrical with the ribs of the other of the faces of the tape in relation to the mid-plane of the tape, parallel to the faces of this tape.

Classifications:

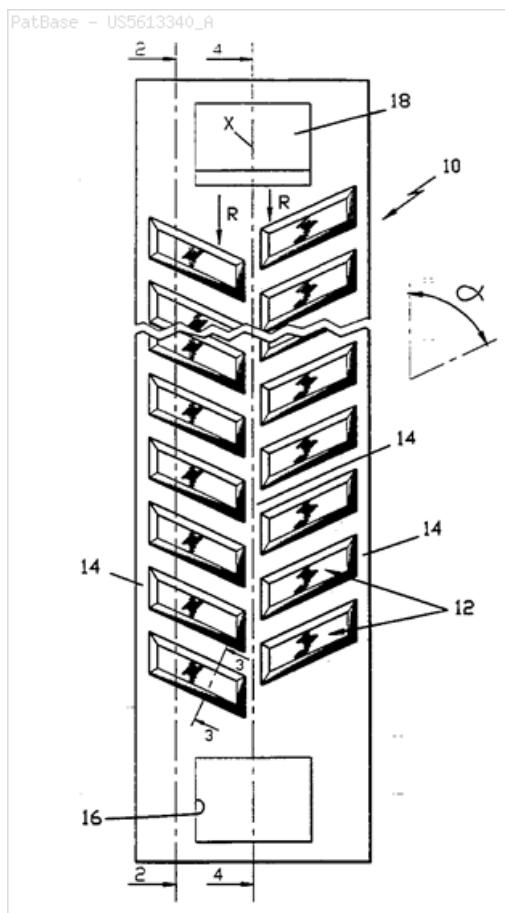
International (IPC 8-9): B21D22/02 B21D22/08 B21D31/00
E01C11/16 E01F8/00 E04C5/03 E04C5/04 (Advanced/Invention);
B21D31/00 E04C5/00 (Advanced/Non-invention)

International (IPC 1-7): B21D22/02 B21D22/08 B21D31/00
B21H8/00 E01C11/16 E04C3/30 E04C5/00 E04C5/004 E04C5/03
E04C5/04 E04C5/08

CPC: E01F8/0023 E04C5/03

European: E01F8/00A15 E04C5/03

US: 52/851 52/855 72/195 72/198



Family:

Publication number	Publication date	Application number	Application date
AT157420 E	19970915	AT19940400821T	19940414
AU199459495 A1	19941027	AU19940059495	19940415
AU676885 B2	19970327	AU19940059495	19940415
CA2121656 AA	19941021	CA19942121656	19940419
DE69405144 D1	19971002	DE19946005144	19940414
EP0621380 A1	19941026	EP19940400821	19940414
EP0621380 B1	19970827	EP19940400821	19940414
FI101731 B	19980814	FI19940001807	19940419
FI941807 A	19941021	FI19940001807	19940419
FI941807 A0	19940419	FI19940001807	19940419
FR2704255 A1	19941028	FR19930004647	19930420
FR2704255 B1	19950713	FR19930004647	19930420
JP2882749 B2	19990412	JP19940082034	19940420
JP7090984 A2	19950404	JP19940082034	19940420
KR19940024185 A	19941118	KR19940008253	19940419
NO312305 B1	20020422	NO19940001399	19940418
NO941399 A	19941021	NO19940001399	19940418
NO941399 A0	19940418	NO19940001399	19940418
NO941399 L	19941021	NO19940001399	19940418
US5613340 A	19970325	US19940229679	19940419
US5809819 A	19980922	US19960756476	19961126
ZA9402673 A	19951019	ZA19940002673	19940419

Priority:

FR19930004647 19930420 CA19942121656 19940419 US19940229679 19940419
US19960756476 19961126

Probable Assignee: SOLLAC

Assignee(s): (std): LORRAINE LAMINAGE

Assignee(s): SOLLAC IMMEUBLE ELYSEES LA DEFENSE ; SOLLAC ; SORATSUKU ; SOLLAC PUTEAUX FR ; BOLLAERT GEOFFROY ; GILLET VINCENT ; GUERIN GEORGES ; LE BON ALAIN

Inventor(s): (std): ALAIN LE BON ; BOLLAERT GEOFFROY ; BON ALAIN LE ; DE BON ALAIN ; GEOFFROY BOLLAERT ; GEORGES GUERIN ; GILLET VINCENT ; GUERIN GEORGES ; GUERIN GEORGES J M ; VINCENT GILLET ;

Inventor(s): RU BON ARAN ; JIRETSUTO BUINSENTO ; GURIN JIYORUJIYU ; BARAATO JIEFUROI ; LE BON ALAIN
 LE BON ALAIN F 78100 SAINT GERMAIN EN LAYE FR ; GURIN JORUJU ; JIRETSUTO UINSENTO ; GUERIN
 GEORGES F 78170 LA CELLE ST CLOUD FR ; GILLET VINCENT WASHINGTON D C 20007 US ; BOLLAERT
 GEOFFROY F 75016 PARIS FR ; BARAATO JEFUROI

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; ROBIC

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT157420 E	19970915	LSGT	+	granted / extensions (spc, cpc, pte)	
AT157420 E	19980215	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT157420 E	20140414	PEXP		Calculated Patent Term Expiry	
AU199459495 A1	19941027	LSPB	+	published / reissued	
AU676885 B2	19970327	LSGT	+	granted / extensions (spc, cpc, pte)	
AU676885 B2	20140415	PEXP		Calculated Patent Term Expiry	
CA2121656 AA	19941021	LSPB	+	published / reissued	
CA2121656 AA	20001107	LSSES	+EEER	EXAMINATION REQUEST	
CA2121656 AA	20050419	LSLE	-FZDE	DEAD	
DE69405144 D1	19980312	LSWD	-8332	NO LEGAL EFFECT FOR DE	
EP0621380 A1	19941026	LSPB	+	published / reissued	
EP0621380 A1	19941109	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19940909
EP0621380 A1	19961002	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19960816
EP0621380 B1	19970827	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19970827
EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19970827
EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : THE PATENT HAS BEEN ANNULLED BY A DECISION OF A NATIONAL AUTHORITY LAPSED DATE : 19970827
EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19970827
EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19970827
EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE

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EP0621380 B1	19970827	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19970827
EP0621380 B1	19970831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP0621380 B1	19971127	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : PT LAPSED DATE : 19971127
EP0621380 B1	19971127	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19971127
EP0621380 B1	19971128	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19971128
EP0621380 B1	19980202	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP0621380 B1	19980225	LSWD	-GBV	GB: EP PATENT (UK) TREATED AS ALWAYS HAVING BEEN VOID IN ACCORDANCE WITH GB SECTION 77(7)/1977	REF COUNTRY CODE : EP EFFECTIVE DATE : 19970827
EP0621380 B1	19980430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980430
EP0621380 B1	19980430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980430
EP0621380 B1	19980605	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19980605
EP0621380 B1	19980701	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FD4D REF DOCUMENT NUMBER : 76040 COUNTRY OF REF DOCUMENT : IE
EP0621380 B1	19980819	LSGT	+26N	NO OPPOSITION FILED	
EP0621380 B1	19981215	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0621380 B1	20030324	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 20030324 YEAR OF FEE PAYMENT : 10
EP0621380 B1	20030415	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR

				[ANNOUNCED FROM NATIONAL OFFICE TO EPO]	PAYMENT DATE : 20030415 YEAR OF FEE PAYMENT : 10
EP0621380 B1	20030429	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20030429 YEAR OF FEE PAYMENT : 10
EP0621380 B1	20040414	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040414
EP0621380 B1	20040430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040430
EP0621380 B1	20041031	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *SOLLAC EFFECTIVE DATE : 20040430
EP0621380 B1	20041231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20041231
EP0621380 B1	20050204	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0621380 B1	20140414	PEXP		Calculated Patent Term Expiry	
FI101731 B	19980814	LSPB	+	published / reissued	
FI101731 B	20041031	LSLE	-MA	PATENT EXPIRED	
FI101731 B	20140419	PEXP		Calculated Patent Term Expiry	
FI941807 A	19941021	LSPB	+	published / reissued	
FR2704255 A1	19941028	LSPB	+	published / reissued	
FR2704255 B1	19950713	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2704255 B1	20000128	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2704255 B1	20130420	PEXP		Calculated Patent Term Expiry	
JP2882749 B2	19990412	LSGT	+	granted / extensions (spc, cpc, pte)	
JP2882749 B2	20040205	LSLE	-LAPS	CANCELLATION BECAUSE OF NO PAYMENT OF ANNUAL FEES	
JP2882749 B2	20140420	PEXP		Calculated Patent Term Expiry	
JP7090984 A2	19950404	LSPB	+	published / reissued	
KR19940024185 A	19941118	LSPB	+	published / reissued	
NO312305 B1	20020422	LSGT	+	granted / extensions (spc, cpc, pte)	
NO312305 B1	20041227	LSLE	-MM1K	LAPSED BY NOT PAYING THE ANNUAL FEES	
NO312305 B1	20140418	PEXP		Calculated Patent Term Expiry	
NO941399 A	19941021	LSPB	+	published / reissued	
US5613340 A	19970325	LSGT	+	granted / extensions (spc, cpc, pte)	
US5613340 A	19940616	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SOLLAC, FRANCE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BOLLAERT, GEOFFROY; GILLET, VINCENT; GUERIN, GEORGES J.M.; AND OTHERS; REEL/FRAME:007030/0129 EFFECTIVE DATE : 19940502

US5613340 A	20000922	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5613340 A	20050325	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5613340 A	20050427	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5613340 A	20050427	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5613340 A	20050524	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20050325
US5613340 A	20140419	PEXP		Calculated Patent Term Expiry	
US5809819 A	19980922	LSGT	+	granted / extensions (spc, cpc, pte)	
US5809819 A	20020227	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5809819 A	20060922	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5809819 A	20061026	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5809819 A	20061026	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5809819 A	20061121	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060922
US5809819 A	20161126	PEXP		Calculated Patent Term Expiry	
ZA9402673 A	19951019	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9402673 A	20140418	PEXP		Calculated Patent Term Expiry	

Title: To simplify the assembly and to improve their effect, in particular with regard to their use as a noise-protection wall,...

Abstract: To simplify the assembly and to improve their effect, in particular with regard to their use as a noise-protection wall, panel-shaped upright wall elements (1) are held together in the longitudinal direction by a clamping member (2) or clamping member pair (2, 2) extending in their upper part, and held with their lower edge in a base (4) forming part of the ground (3).

Classifications:

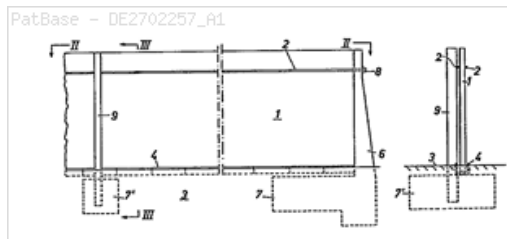
International (IPC 8-9): E01F8/00 (Advanced/Invention);

E01F8/00 (Core/Invention)

International (IPC 1-7): E01F7/00 E04B1/82 E04H17/14 G10K11/00

CPC: E01F8/0017 E01F8/0023

European: E01F8/00A10 E01F8/00A15



Family:

Publication number	Publication date	Application number	Application date
AT352772 B	19791010	AT19760000409	19760122
AT40976 A	19790315	AT19760000409	19760122
BE850689 A	19770516	BE19770174327	19770124
CH616188 A	19800314	CH19770000827	19770124
DE2702257 A1	19770804	DE19772702257	19770120
NL7700715 A	19770726	NL19770000715	19770124

Priority:

AT19760000409 19760122

Probable Assignee: ETERNIT WERKE HATSCHKE L

Assignee(s): (std): EBENSEER BETONWERKE G M B H ; EBENSEER BETONWERKE GESELLSCHAFT ; ETERNIT WERKE HATSCHKE L ; EBENSEER BETONWERKE GMBH WIEN ; EBENSEER BETONWERKE GMBH

Assignee(s): HATSCHKE LUDWIG ETERNIT WERKE ; FIRMA ETERNIT WERKE LUDWIG HATSCHKE TE VOECKLABRUCK EN EBENSEER BETONWERKE GESELLSCHAFT MBH TE WENEN OOSTENRIJK ; ETERNIT WERKE LUDWIG HATSCHKE ; ETERNIT WERKE LUDWIG HATSCHKE VOECKLABRUCK ; EBENSEER BETONWERKE GESELLSCHAFT M B H ; EBENSEER BETONWERKE GESELLSCHAFT MBH

Inventor(s): (std): KAMPELMUEHLER ANTON DIPL ING ; MACULAN ALEXANDER DIPL ING

Inventor(s): DIPL ING ALEXANDER MACULAN ; DIPL ING ANTON KAMPELMUEHLER

Legal status (INPADOC)

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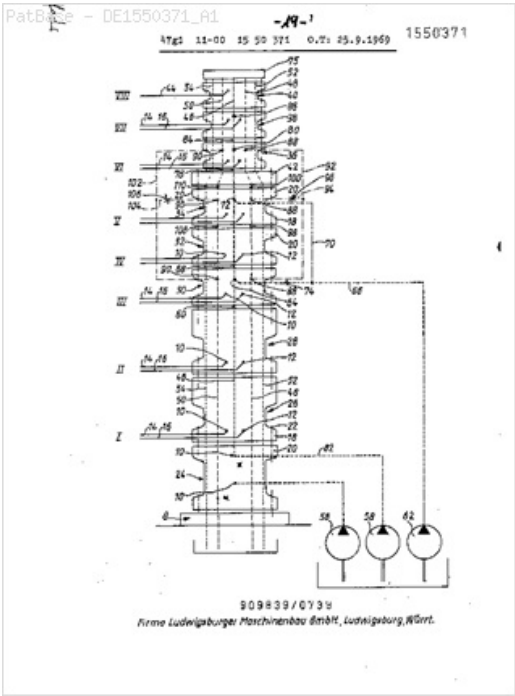
Patent	Date recorded	Event group	Code	Event	Details
AT352772 B	19791010	LSGT	+	granted / extensions (spc, cpc, pte)	
AT352772 B	19821215	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT352772 B	19890715	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT352772 B	19930415	LSAS	EEFA	CHANGE OF THE COMPANY NAME	
AT352772 B	20001115	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT352772 B	19960122	PEXP		Calculated Patent Term Expiry	
AT40976 A	19790315	LSPB	+	published / reissued	
BE850689 A	19770516	LSPB	+	published / reissued	
CH616188 A	19800314	LSGT	+	granted / extensions (spc, cpc, pte)	
CH616188 A	19820930	LSLE	-PL	PATENT CEASED	
CH616188 A	19970124	PEXP		Calculated Patent Term Expiry	
DE2702257 A1	19770804	LSPB	+	published / reissued	
DE2702257 A1	19830303	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
NL7700715 A	19770726	LSPB	+	published / reissued	
NL7700715 A	19820901	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	

Title: STEUEREINRICHTUNG ZUM STEuern DRUCKMEDIUMBETAETIGTER GERAETE,INSBESONDERE HYDRAULISCH GESTEUERTER ARBEITSAGGREGATE VON WERKZEUGMASCHINEN CONTROL DEVICE FOR CONTROLLING DRUCKMEDIUMBETAETIGTER DEVICE, ESPECIALLY HYDRAULIC CONTROLLED WORK EQUIPMENT MACHINE TOOL (Machine translation)

Abstract: Source: DE1550371A1 [DE] (Claim 1) 1. Steuereinrichtung zum Steuern druckmediumbetae,tigter Geraete, ins besondere Arbeitsaggregate von Werkzeugmasohinen, mit mindestens einer angetriebenen liruckme,diumqupille, die mit einer Vielzahl von an den Geraeten angeschlossenen Steuerventilen.-oder Steuer schiebern in Verbindung steht, die ihrerseits an im wesentlichen quaderfoermigen, zu den Geraeten fuehrende Anschlusse einen durchbohrten Boden aufweisende, randoffene Ausnehmungen dienen.

Machine translation: (claim 1) 1 Control means for controlling pressure medium betae,tigter devices, in particular the work units of Werkzeugmasohinen, with at least one driven liruckme,diumqupille, the gate valves with a variety of connected to the Appliances Steuerventilen. or control in communication, the quaderfoermigen turn at substantially to the Appliances-conductors having a perforated bottom to serve, open-edge cutouts.

Classifications:
International (IPC 8-9): F16K11/00 (Advanced/Invention);
F16K11/00 (Core/Invention)
International (IPC 1-7): F16K11/00
CPC: F16K11/00
European: F16K11/00



Family:

Publication number	Publication date	Application number	Application date
DE1550371 A1	19690925	DE19661550371	19660427
DE1550371 B2	19720615	DE19661550371	19660427

Priority:

DE1966L053443 19660427

Probable Assignee: LUDWIGSBURGER MASCHB GMBH

Assignee(s): (std): LUDWIGSBURGER MASCH BAU ; LUDWIGSBURGER MASCHB GMBH

Assignee(s): LUDWIGSBURGER MASCHINENBAU GMBH

Inventor(s): (std): WERNER ROESCH HANS

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE1550371 A1	19690925	LSPB	+	published / reissued	
DE1550371 B2	19720615	LSPB	+	published / reissued	

Title: Yarn-supplying mechanism

Abstract: 1. A yarn supplying mechanism comprising the combination of a clamping device through which the yarn passes, means for operating said clamping device to alternately grip and release said yarn, a first loop-forming device acting on the yarn in advance of said clamping device, means for actuating said first loop-forming device to draw yarn from a supply and form a first loop therein in advance of said clamping device as it grips the yarn and to move and remain out of engagement with said loop while the clamping device releases the yarn, a second loop-forming device acting on the yarn in the rear of said clamping device, and means for actuating said second loop-forming device to draw yarn from said first loop through said clamping device as it releases the yarn, to form a second loop in the rear of said clamping device and to move and remain out of engagement with said second loop during most of the cycle.

Classifications:

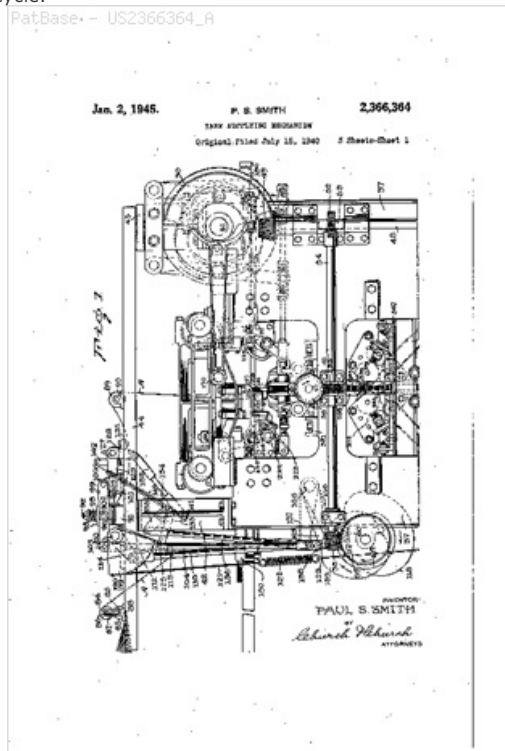
International (IPC 8-9): D04H11/04 (Advanced/Invention);
D04H11/00 (Core/Invention)

International (IPC 1-7): D04H11/04 D06N7/00

CPC: D04H11/04

European: D04H11/04

US: 156/435 156/470 156/474 226/106 226/114 28/143 28/159
425/396



Family:

Publication number	Publication date	Application number	Application date
US2302722 A	19421124	US19400345448	19400715
US2312129 A	19430223	US19420439438	19420417
US2352131 A	19440620	US19420439440	19420417
US2366364 A	19450102	US19420439439	19420417

Priority:

US19400345448 19400715 US19420439438 19420417 US19420439440 19420417
US19420439439 19420417

Probable Assignee: ELLEN BERTHA ALLEN

Assignee(s): (std): DWIGHT PORTER ALLEN ; ELLEN BERTHA ALLEN

Inventor(s): (std): SMITH PAUL S

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2302722 A	19421124	LSGT	+	granted / extensions (spc, cpc, pte)	
US2312129 A	19430223	LSGT	+	granted / extensions (spc, cpc, pte)	
US2352131 A	19440620	LSGT	+	granted / extensions (spc, cpc, pte)	
US2366364 A	19450102	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Composite cable for prestressed concrete constructions, preferably for cable-stayed bridges

Abstract: In order to reduce the outlay for the installation of such a cable on a building site, it is proposed according to the invention to manufacture the individual components of the cable beforehand at the manufacturer's and to deliver them to the building site in containers. To this end, the jacket tube of the cable is composed of individual steel tube sections (1) which have at their ends external threads (G) and are screwed to one another with threaded sleeves (2). The **anchorings** of the cable are designed as one-piece steel bodies in the form of trumpet-shaped enlargements (4), on which an **anchor** plate (5) is supported. The individual strands are **anchored** in the **anchor** plate. For the cable, bundles consisting of threaded rods are preferably used, which are wound up together to form a bunch (13). The threaded rods (14) are straightened by insertion into the jacket tube sections (1).

Classifications:

International (IPC 8-9): E01D19/14 E01D19/16

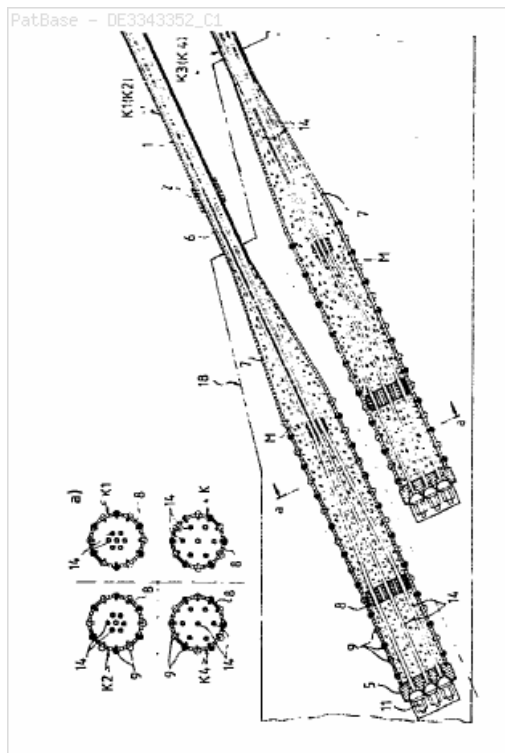
E04C5/08 (Advanced/Invention);

E01D19/00 E04C5/00 (Core/Invention)

International (IPC 1-7): D07B1/06 E01D11/00 E04C5/08

CPC: E01D19/14 E01D19/16 E01D2101/28 E04C5/08

European: E01D19/14 E01D19/16 E04C5/08 P01D101/28



Family:

Publication number	Publication date	Application number	Application date
DE3343352 C1	19850605	DE19833343352	19831130

Priority:

DE19833343352 19831130

Probable Assignee: FINSTERWALDER ULRICH

Assignee(s): (std): AICHER MAX ; FINSTERWALDER ULRICH ; HEINEN RICHARD DR

Assignee(s): HEINEN RICHARD DR 8000 MUENCHEN DE ; FINSTERWALDER ULRICH DR ING E H DR ING 8000 MUENCHEN DE ; AICHER MAX 8228 FREILASSING DE

Inventor(s): (std): FINSTERWALDER ULRICH DR ING E ; HEINEN RICHARD DR ; FINSTERWALDER ULRICH DR ING ; AICHER MAX

Inventor(s): AICHER MAX 8228 FREILASSING DE ; FINSTERWALDER ULRICH DR ING E H DR ING ; FINSTERWALDER ULRICH DR ING E H DR ING 8000 MUENCH ; HEINEN RICHARD DR 8000 MUENCHEN DE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE3343352 C1	19850605	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3343352 C1	19850605	LSPB	+8100	PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
DE3343352 C1	19850605	LSGT	+D1	GRANT (NO UNEXAMINED APPLICATION PUBLISHED) PATENT LAW 81	
DE3343352 C1	19851128	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3343352 C1	19900118	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : DYCKERHOFF & WIDMANN AG, 8000 MUENCHEN, DE AICHER,

DE3343352 C1	19930603	LSAS	8327	CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER	PARTYTYPE : OWNER OWNER : DYCKERHOFF & WIDMANN AG, 8000 MUENCHEN, DE AICHER,
DE3343352 C1	19951109	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	

Title: CONCRETE PUMP WITH BUTTRESSED DISTRIBUTION PIPE

Abstract: A pump assembly has a hopper adapted to hold a wet concrete mass and having a front wall formed with a front port centered on a front axis perpendicular to the front wall at the front port and a rear wall formed with two rear ports centered on respective rear axes perpendicular to the rear wall at the rear ports and generally parallel to the front axis. Respective piston pumps secured to the rear wall outside the hopper over the rear ports are operable to draw portions of the mass out of the hopper and expel them back into the hopper through the respective rear ports. An outlet conduit is connected to the front wall outside the hopper over the front port and a distributor pipe in the hopper has a front end fitted and aligned with the front port and a rear end engageable over and alignable with either of the rear ports. A buttress formation fixed on front end of the distributor pipe defines outside the hopper a buttress plane parallel to the front and rear planes. An abutment lying on the buttress plane engages the buttress formation. A drive oscillates the distributor pipe about the front axis between one position with the rear end aligned with and engaged over one of the rear ports and with the other rear port opening into the hopper and another position with the rear end aligned with and engaged over the other rear port and with the one rear port opening into the hopper. The buttress formation and abutment remain in contact with each other but move relative to each other parallel to the planes as the pipe moves between the positions. Tie rods **anchored** in the abutment and in the rear wall prevent forward movement of the pipe and thereby press the rear end against the rear wall.

Classifications:

International (IPC 8-9): B65G53/56 E04G21/04 F04B15/02

F04B7/00 (Advanced/Invention);

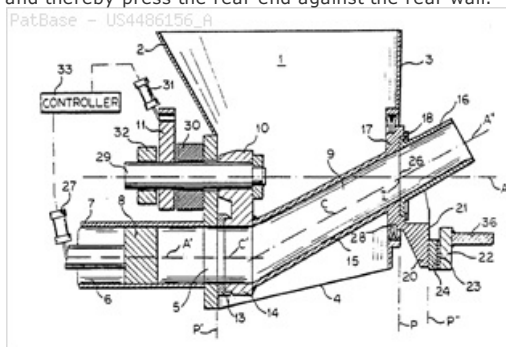
B65G53/34 E04G21/04 F04B15/00 F04B7/00 (Core/Invention)

International (IPC 1-7): B65G53/56 E04G21/04 F04B15/02

CPC: Y10S417/90 F04B7/0096 F04B7/0034 F04B15/023

European: F04B15/02B F04B7/00C8 F04B7/00T2D

US: 417/517 417/519 417/532 417/900



Family:

Publication number	Publication date	Application number	Application date
AR226655 A1	19820730	AR19820289376	19820512
BR8203344 A	19840117	BR19820003344	19820608
DE3122825 A1	19830105	DE19813122825	19810609
DE3122825 C2	19841108	DE19813122825	19810609
DE3242600 A1	19840524	DE19823242600	19821118
FR2507254 A1	19821210	FR19820008647	19820518
GB2101228 A1	19830112	GB19820014781	19820520
GB2101228 B2	19850123	GB19820014781	19820520
IT1147991 A	19861126	IT19820048471	19820520
IT8248471 A0	19820520	IT19820048471	19820520
JP57210176 A2	19821223	JP19820097906	19820609
SU1326191 A3	19870723	SU19823451508	19820608
US4486156 A	19841204	US19820427180	19820929
YU124982 A	19850430	YU19820001249	19820609

Priority:

DE19813122825 19810609 US19820386259 19820608 DE19823242600 19821118

Probable Assignee: SCHEELE MASCHF W

Assignee(s): (std): SCHEELE WALTER MASCHF GMBH AND C ; MASHINENFUABURIKU UARUTAA SH ; WALTER SCHEELE GMBH AND CO MA KG ; SCHEELE MASCHF W ; W SCHEELE GMBH MASCHF ; WALTER SCHEELE GMBH AND CO KG ; UARUTAA SHIEERE MASCHF KG ; UARUTAA SHIEERE KG MASCHF

Assignee(s): MASHINENFABRIK VALTER SHEELE GMBKH OH KO ; MASHINENFABRIK VALTER SHEELE GMBKH OH KO Kx OPMA ; MASCHINENFABRIK WALTER SCHEELE GMBH AND CO KG ; MASCHINENFABRIK WALTER SCHEELE GMBH AND CO KG 4750 UNNA MASSEN DE ; SCHEELE MASCHF WALTER ; SCHEELE WALTER MASCHF GMBH AND CO KG ; MASHINENFABRIK VALTER SHEELE GMBKH OH KO KX OPM ; MASHINENFUABURIKU UARUTAA SHIEERE KG ; MASCHF W SCHEELE GMBH ; MASCHF WALTER SCHEELE GMBH ; MASCHF WALTER SCHEELE GMBH AND CO 4750 UNNA MASSEN DE KG ; MASCHF WALTER SCHEELE GMBH AND CO A CORP OF GERMANY KG ; MASCHF WALTER SCHEELE GMBH AND CO KG ; MASCHF WALTER SCHEELE GMBH AND CO KG ; MASCHINENFABRIK W SCHEELE GMBH ; MASCHINENFABRIK WALTER SCHEELE GMBH AND CO KG

Inventor(s): (std): GEUE FRANZ HUBERT ; GRIESBACH ROLF ING GRAD ; TJOA LIONG SENG ; HERUBERTO FUEGERU ; RORUFU GURIISUBATSUHA ; FURANTSUUFUUBERUTO GEUE ; GEUB FRANZ HUBERT ; GRISBAKH ROLF ; GOJE FRANTS KHUBERT ; FEGER KHERBERT ; GEUE F H ; GRIESBACH R ; FEGER H ; GUEU FRANZ HUBERT ; GRIESBACH ROLF ; FEGER HERBERT

Inventor(s): FRANTS KHUBERT GOJE DE ; ROLF GRISBAKH DE ; KHERBERT FEGER DE ; SENG DIPL RER POL TECH TJOA LIONG ; ROLF GRIESBACH ; HERBERT FEGER ; FRANZ HUBERT GUEU ; FRANZ HUBERT GEUE ; GRIESBACH ROLF ING GRAD 4600 DORTMUND DE ; FEGER HERBERT 7505 ETTLINGEN DE ; GEUE FRANZ HUBERT 5768 SUNDERN DE ; GRIESBACH ROLF ING ; GEUE FH ; HERBERT FEGER FRANZ HUBERT GEUE ET ROLF GRIESBACH

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AR226655 A1	19820730	LSGT	+	granted / extensions (spc, cpc, pte)	

AR226655 A1	20020512	PEXP		Calculated Patent Term Expiry	
BR8203344 A	19840117	LSPB	+	published / reissued	
DE3122825 A1	19830105	LSPB	+	published / reissued	
DE3122825 A1	19830105	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3122825 C2	19841108	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3122825 C2	19841108	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3122825 C2	19850509	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3242600 A1	19840524	LSPB	+	published / reissued	
DE3242600 A1	19880609	LSRV	-8131	REJECTION	
FR2507254 A1	19821210	LSPB	+	published / reissued	
FR2507254 A1	19880325	LSLE	-ST	NOTIFICATION OF LAPSE	
GB2101228 A1	19830112	LSPB	+	published / reissued	
GB2101228 B2	19850123	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2101228 B2	19880113	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	
GB2101228 B2	20020520	PEXP		Calculated Patent Term Expiry	
IT1147991 A	19861126	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1147991 A	20020520	PEXP		Calculated Patent Term Expiry	
JP57210176 A2	19821223	LSPB	+	published / reissued	
SU1326191 A3	19870723	LSGT	+	granted / extensions (spc, cpc, pte)	
US4486156 A	19841204	LSGT	+	granted / extensions (spc, cpc, pte)	
US4486156 A	19820929	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MASCHINENFABRIK WALTER SCHEELE GMBH & CO. KG., NOR OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:FEGER, HERBERT; GRIESBACH, ROLF; GEUE, FRANZ-HUBERT; REEL/FRAME:004051/0323 EFFECTIVE DATE : 19820630
US4486156 A	19841005	LSGT	PAT1	Patented Case	
US4486156 A	19881204	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT CONFIRMED	
US4486156 A	19890221	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19881204
US4486156 A	19921206	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4486156 A	19930216	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19921208
US4486156 A	20180123	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4486156 A	20180123	LSLE	-STCH	INFORMATION ON STATUS: PATENT	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES

DISCONTINUATION UNDER 37 CFR 1.362				
YU124982 A	19850430	LSPB	+	published / reissued

Title: MULTIPLE SYNTHETIC DEFORMED BARS AND RETAINING WALLS

Abstract: Connection devices to improve utilization of synthetic deformed bars to transfer tensile loads. Attachment devices for connection of thin wall face panels to mechanically stabilized earth walls with minimal tensile loads. Horizontally disposed synthetically deformed bars or other tensionable members utilized to combine precast retaining wall elements.

Classifications:

International (IPC 8-9): E02D17/00 E02D17/20 E02D29/00 E02D29/02 E02D3/02 E02D5/00 E02D5/74 E02D5/76 E02D5/80 E04C5/07 E04C5/16 E04H12/20 E21D20/00

E21D21/00 (Advanced/Invention);
E02D17/20 E02D5/74 E02D5/80 E04C5/07 E04H12/00

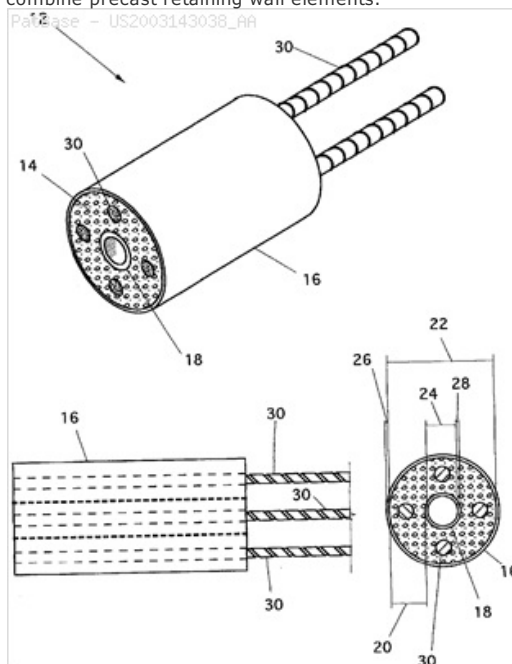
E21D20/00 (Core/Invention);
E04B (Subclass/Invention)

International (IPC 1-7): E02D17/00 E02D29/00 E02D29/02 E02D3/02 E02D5/00 E02D5/74 E04B E04H12/20 E21D20/00 E21D20/02 E21D21/00

CPC: E02D5/808 E02D5/76 E02D17/207 E04C5/07 E04C5/085 E04C5/127 E02D5/80 E02D29/02 E04C5/162

European: E02D17/20D E02D5/76 E02D5/80 E02D5/80F E04C5/07 E04C5/08A E04C5/12D

US: 1/1 405/244 405/244S 405/259.1 405/259.100P 405/284 405/284P 405/287 52/153 52/153S

**Family:**

Publication number	Publication date	Application number	Application date
AU2001241675 AA	20010903	AU20010241675	20010222
AU200141675 A1	20010903	AU20010041675	20010222
AU200141675 A5	20010903	AU20010041675	20010222
AU2003210538 AA	20030724	AU20030210538	20030114
AU2003210538 AH	20030724	AU20030210538	20030114
US2003143038 AA	20030731	US20030342758	20030114
US2003185634 AA	20031002	US20020047080	20020114
US2005008438 AA	20050113	US20040758601	20040114
US2016333544 AA	20161117	US20060330758	20060111
WO0163057 A2	20010830	WO2001US05733	20010222
WO0163057 A3	20020307	WO2001US05733	20010222
WO03058003 A2	20030717	WO2003US01310	20030114
WO03058003 A3	20040930	WO2003US01310	20030114

Priority:

US20000184049P	20000222	US20010261486P	20010113	WO2001US05733	20010222
US20020047080	20020114	US20030342758	20030114	WO2003US01310	20030114
US20040758601	20040114	US20060330758	20060111		

Probable Assignee: JOHN W BABCOCK JOHN W

Assignee(s): (std): BABCOCK JOHN W ; JOHN W BABCOCK JOHN W

Assignee(s): BABCOCK JOHN WALTER ; JOHN W BABCOCK

Inventor(s): (std): JOHN W BABCOCK ; BABCOCK JOHN W ; BABCOCK JOHN WALTER

Inventor(s): BABCOCK JOHN

Agent(s): JOHN W BABCOCK

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2001241675 AA	20010903	LSPB	+	published / reissued	
AU200141675 A1	20010903	LSPB	+	published / reissued	
AU2003210538 AA	20030724	LSPB	+	published / reissued	
AU2003210538 AA	20040930	LSLE	-MK6	APPLICATION LAPSED SECTION 142(2) (F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	
US2003143038 AA	20030731	LSPB	+	published / reissued	

US2003143038 AA	20041123	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003185634 AA	20031002	LSPB	+	published / reissued	
US2003185634 AA	20040427	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2005008438 AA	20050113	LSPB	+	published / reissued	
US2005008438 AA	20060612	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2016333544 AA	20161117	LSPB	+	published / reissued	
US2016333544 AA	20170411	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO0163057 A2	20010830	LSPB	+	published / reissued	
WO0163057 A3	20030206	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO0163057 A3	20030402	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO0163057 A3	20041126	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO03058003 A2	20030717	LSPB	+	published / reissued	
WO03058003 A3	20050316	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO03058003 A3	20060609	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : JP
WO03058003 A3	20060609	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	TEXT : JP

Title: TURMARTIGES STATIONSGEBAEUDE FUER ELEKTRISCHE STARKSTROMVERSORGUNGSANLAGEN

Abstract: Source: AT381751B [DE] [Source: Claim 1] 1.

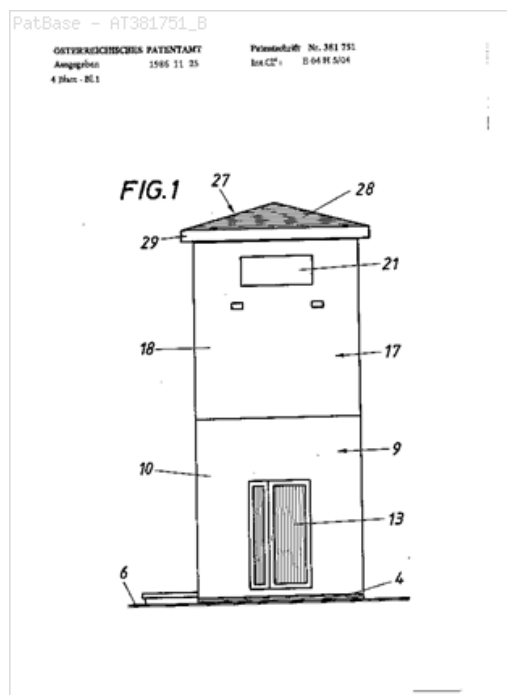
Classifications:

International (IPC 8-9): E04H5/04 (Advanced/Invention)

International (IPC 1-7): E04H5/04

CPC: E04H5/04

European: E04H5/04



Family:

Publication number	Publication date	Application number	Application date
AT381751 A	19861125	AT19840003970D	19841214
AT381751 B	19861125	AT19840003970	19841214
AT397084 A	19860415	AT19840003970	19841214

Priority:

AT19840003970 19841214

Probable Assignee: MAYREDER KRAUS AND CO ING

Assignee(s): (std): MAYREDER KRAUS AND CO ING

Assignee(s): INGENIEURE MAYREDER KRAUS AND CO BAUGESSELLSCHAFT M B H

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT381751 A	19861125	LSPB	+	published / reissued	
AT381751 B	19861125	LSGT	+	granted / extensions (spc, cpc, pte)	
AT381751 B	19950115	LSAS	EFA	CHANGE IN THE COMPANY NAME	
AT381751 B	19950515	LSAS	EIH	CHANGE IN THE PERSON OF PATENT OWNER	
AT381751 B	19970115	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT381751 B	20071115	LSLE	-ELA	EXPIRED DUE TO LAPSE OF TIME	
AT381751 B	20041214	PEXP		Calculated Patent Term Expiry	
AT397084 A	19860415	LSPB	+	published / reissued	

Title: PROCEDE POUR RELIER UN BLOC DE FEUILLES LIBRES PRESENTANT CHACUNE UNE RANGEE DE TROUS, ET MACHINE POUR LA MISE EN OEUVRE DUDIT PROCEDE. METHOD FOR CONNECTING BLOCK SHEETS FREE SHOWING EACH ROW ONE HOLE, AND MACHINE FOR IMPLEMENTING THE METHOD. (Machine translation)

Abstract: Source: CH267696A [FR] (Claim 1) 1. Machine selon la revendication II, ca racterisee en ce que les organes (27, 29) de mise en position des feuilles comportent des parties en forme de crochets (29) courbes sensiblement au meme degre que le pas du relieur en helice.

Machine translation: (Claim 1) 1. Machine according to claim II, ca acterized in that the bodies (27, 29) for positioning sheets have portions shaped hooks (29) curves substantially the same degree as the pitch of the helical binder.

Classifications:

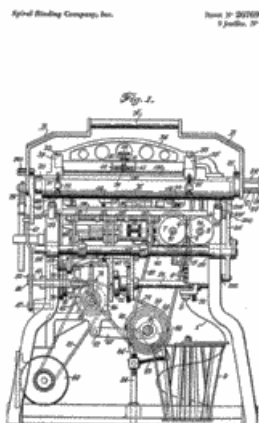
International (IPC 8-9): B42B5/12 (Advanced/Invention); B42B5/00 (Core/Invention)

International (IPC 1-7): B42B5/12

CPC: B42B5/123

European: B42B5/12B

PatBase - CH267696_A



Family:

Publication number	Publication date	Application number	Application date
CH267696 A	19500415		19470807

Priority:

19410604

Probable Assignee: SPIRAL BINDING

Assignee(s): (std): SPIRAL BINDING

Assignee(s): SPIRAL BINDING CO INC ; SPIRAL BINDING COMPANY INC

Inventor(s): (std): COMPANY INC SPIRAL BINDING ; INC SPIRAL BINDING CO

Inventor(s): INC SPIRAL BINDING COMPANY

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH267696 A	19500415	LSGT	+	granted / extensions (spc, cpc, pte)	
CH267696 A	19670807	PEXP		Calculated Patent Term Expiry	

Title: Modular elements building structure.

Abstract: A single storied or multistoried building structure is disclosed which is based on a concrete foundation slab and is provided with perimetrical and interior walls made of prefabricated reinforced concrete panels (5) at the top sides of which metal channel profiles (19) are embedded into the pannel concrete and which are fastened to one another by means of bolts (22) which connect respective upward extensions of metal plates (21) which are fitted into said metal channels (19) to engage a pair of projections extending from the channel sides; said panels (5) being **anchored** to the foundation slab by means of vertical tie rods (11) hooked at their lower end onto inverted T structural shapes (4) fastened on the foundation slab and connected at their upper ends by means of a nut (18) to said metal plates by which the panels are connected to one another. Such tie rods (11) extend along vertical ducts (12) which are defined, between two panels approached to one another, by channellike metal profiles (9) which are embedded into the vertical edges of each panel (5). In the case of a multistoried building a floor is interposed between two successive stories which floor comprises a corrugated metal sheet (30) with trapezoidal cross-section of the corrugations the edge of the sheet being laid to rest on top of the walls of the room to be covered by the floor; which sheet (30) functions as a form casting the concrete mortar and cooperates therewith as a reinforcement.

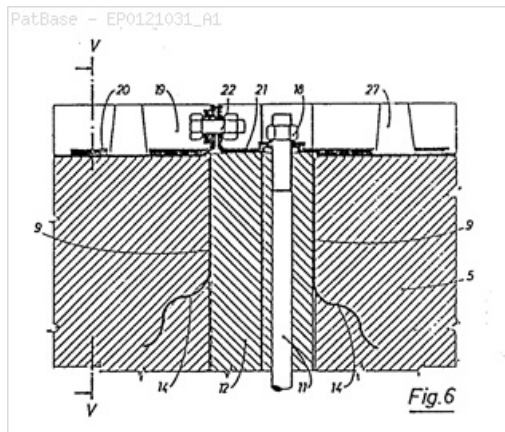
Classifications:

International (ipc 8-9): E04B1/04 E04B1/06 (Advanced/Invention); E04B1/02 (Core/Invention)

International (ipc 1-7): E04B1/00 E04B1/04 E04B1/06 E04B2/00 E04B5/00 E04H1/0 E04H1/00 E04H1/00

CPC: E04B1/04 E04B1/06

European: E04B1/04 E04B1/06



Family:

Publication number	Publication date	Application number	Application date
AT24563 E	19870115	AT19830830260T	19831207
DE3368709 D1	19870205	DE19833368709	19831207
EG17312 A	19901030	EG19840000082	19840204
EP0121031 A1	19841010	EP19830830260	19831207
EP0121031 B1	19861230	EP19830830260	19831207
ES529618 A0	19850101	ES19840529618	19840203
ES8502508 A1	19850101	ES19840529618	19840203
IN162303 A	19880430	IN1984CA00200	19840324
IT1170346 A	19870603	IT19830047988	19830324
IT8347988 A0	19830324	IT19830047988	19830324
PT78300 A	19840401	PT19840078300	19840322
PT78300 B	19860521	PT19840078300	19840322

Priority:

IT19830047988 19830324 EP19830830260 19831207

Probable Assignee: GRANIERI LUIGI

Assignee(s): (std): GRANIERI LUIGI

Assignee(s): LUIGI GRANIERI

Inventor(s): (std): GRANIERI LUIGI ; LUIGI GRANIERI

Designated states: AT BE CH DE FR GB LI LU NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT24563 E	19870115	LSGT	+	granted / extensions (spc, cpc, pte)	
AT24563 E	19870515	LSPB	+UEP	PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION	
AT24563 E	19920915	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT24563 E	20031207	PEXP		Calculated Patent Term Expiry	
DE3368709 D1	19880128	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3368709 D1	19921210	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EG17312 A	19901030	LSGT	+	granted / extensions (spc, cpc, pte)	
EG17312 A	20040204	PEXP		Calculated Patent Term Expiry	

EP0121031 A1	19841010	LSPB	+	published / reissued	
EP0121031 A1	19850710	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850404
EP0121031 B1	19861230	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0121031 B1	19871216	LSGT	+26N	NO OPPOSITION FILED	
EP0121031 B1	19871231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19871231
EP0121031 B1	19901121	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19901121 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901126	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19901126 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901203	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19901203 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901206	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 19901206 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901211	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19901211 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901214	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 19901214 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901220	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19901220 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901228	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19901228 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19901231	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19901231 YEAR OF FEE PAYMENT : 8
EP0121031 B1	19910328	LSFE	+EPTA	LU: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0121031 B1	19911207	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19911207
EP0121031 B1	19911207	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19911207

EP0121031 B1	19911208	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19911208
EP0121031 B1	19911231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19911231
EP0121031 B1	19911231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19911231
EP0121031 B1	19911231	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19911231
EP0121031 B1	19920630	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : GRANIERI LUIGI EFFECTIVE DATE : 19911231
EP0121031 B1	19920701	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19920701
EP0121031 B1	19920805	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP
EP0121031 B1	19920817	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0121031 B1	19920831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19920831
EP0121031 B1	19920831	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0121031 B1	19920901	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19920901
EP0121031 B1	19921030	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0121031 B1	19950131	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 83830260.2 EFFECTIVE DATE : 19920704
ES8502508 A1	19850101	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8502508 A1	20050101	PEXP		Calculated Patent Term Expiry	
IN162303 A	19880430	LSPB	+	published / reissued	
IT1170346 A	19870603	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1170346 A	19991027	LSFE	TA	FEE PAYMENT DATE (SITUATION AS OF EVENT DATE), DATA COLLECTED SINCE 19931001	EFFECTIVE DATE : 19950329
IT1170346 A	20030324	PEXP		Calculated Patent Term Expiry	
PT78300 A	19840401	LSPB	+	published / reissued	
PT78300 B	19860521	LSGT	+	granted / extensions (spc, cpc, pte)	
PT78300 B	20000531	LSLE	-MM3A	ANNULMENT OR LAPSE	TEXT : LAPSE DUE TO NON-PAYMENT OF FEES EFFECTIVE DATE : 19921122
PT78300 B	20040322	PEXP		Calculated Patent Term Expiry	

Title: Improvements in or relating to abrading machines and tools suitable for use therein

Abstract: 9823. [Class 60] A machine for abrading sheet material particularly leather soles for footwear comprises a cylindrical abrading roll and rotary feed means arranged to press the work against the roll and to feed it in a path having a component parallel to the roll axis. The machine column carries a plate 14 fitted with integral flanges 16, and serving to support a roll carrying frame including vertical plates 30, 32 arranged at an angle of 5 degrees to the direction of movement of work pieces through the machine. The frame, which is vertically adjustable, carries a distorting roll shaft 50 driven by worm gearing 52 and belt 418. The shaft 50 carries a pair of concave rolls each consisting of a metal core 72 and an outer rubber cushion layer 74. The lower rolls co-act with complementary convex upper rolls 78, 80 which are of hollow metal construction and are mounted on ball bearings 82, 84. The upper rolls are mounted in a lever frame 90 pivoted on a fixed shaft 96, the rolls being urged downwardly by a spring 108 to a position determined by an adjusting screw 104. Two work pieces may be fed to the distorting rolls over a table which is fitted with a partition. On leaving the rolls the work pieces pass on to a second table 116 co-acting with an upper guide plate 118 and serving to direct work pieces to a feed roll 124 carrying a number of toothed wheels 126 separated by spacers and driven by gearing from the shaft 50. The feed roll feeds the work pieces to a buffing roll 140 mounted on a shaft 142 and driven at high speed by a pulley 156. Beneath the buffing roll are a series of 16 feed belts 214 each passing over idler pulleys 194 carried by a shaft mounted between side plates 184, 186, secured to parallel arms swingable about a rearward supporting shaft. The forward ends of the arms are normally urged upwardly by springs the movement being limited by a stop when no work is passing under the buffing roll. The idlers run on anti-friction material 193, Fig. 8, carried by discs 192 engaging part-spherical bosses 191 on the shaft 190. The pulleys are returned by wedge-shaped end-plates 195 whose faces are parallel to the plates 30, 32. The discs 192 and bearing rings are clamped into a rigid assembly. Below the idler pulley assembly the belts run on a multiple grooved pulley 210 driven by worm gearing. An adjustable guide plate 232 engages the upper surface of the work and co-acts with a work table 238 having side pieces 240 to direct the work to the buffing roll. After passing tangentially beneath the buffing roll the work is bent round the latter for further buffing action. For this purpose the work-pieces are fed side by side over a pair of inclined yielding-mounted deflector plates 284, 286 arranged at about 30 degrees to the horizontal and extending jointly over the full width of the buffing roll. The work-pieces then pass to a further feed roll comprising spaced toothed wheels 306. An auxiliary short feed roll 314, Fig. 9 is provided on account of the inclination of the deflector plates to the feed roll axes. Guide plates are provided to press the work down on to the feed rolls 314, 306. The work-pieces then pass to a brush 276 on a shaft 274 parallel to the shaft 50 and driven by a pulley 282. While the work is cleaned by the brush it is supported on a fourth table. After passing the brush the work-pieces engage a feed roll 350 against which they are pressed by guide plates 356. The feed rolls 306, 350 and 314 are all driven from a belt 361 passing round a pulley 362 on the shaft 352 which is connected by spur gearing to the other feed rolls. Finally the work-pieces drop into a box at the back of the machine. The machine is driven from a mainshaft 380. A pulley 386 on this shaft is connected by a belt 388 to the buffing roll. Another pulley 396 on the mainshaft drives the brush pulley 282 through a crossed belt 398. Another pulley 400 drives the feed belts through a belt 402 and pulley 228. The distorting rolls are driven from a pulley 408 on the mainshaft which is connected by a belt to a lay shaft 414 connected by a belt 418 to the pulley 62. The lay shaft is adjustable to maintain the belt tension. A dust-collecting hood 436 is arranged to remove dust from the buffing roll 140. In operation the work-pieces such as soles are fed manually in a direction perpendicular to the shaft 50 so that they have a component movement lengthwise of the buffing roll. The distorting rolls impart a transverse curvature and in some cases a lengthwise curvature also to the work. The upper work-piece surfaces are subsequently flattened by the plate 232 and local variations in the thickness are accommodated by the resilience of the feed belts. If the work-pieces have skived edges the transverse curvature previously imparted tends to compensate for the smaller pressure exerted by the feed belts through the thinner marginal portions. The continued contact of the work with the buffing roll caused by the deflector plates causes the buffing to be continued under reduced pressure thus further improving the finish. The buffing roll, Fig. 14, includes a pair of flanged hubs 452, 458, carrying rim parts separated by the rim portion 468 of a short hub member 464. The members are clamped together by end plates 470, 472 connected by tie-rods. The peripheral surface of the roll is covered by a pair of arcuate sheets 482, 484 of sponge rubber carrying an outer **cemented** flannel layer 486 and an inner fabric re-inforcing sheet 487. The edges of the fabric sheet are carried to welting strips accommodated in bores 488 in the body adjacent a slot 478. At a diametrically opposed slot 480 the re-inforcing sheet is extended beyond the sponge rubber and is secured to canvas belting strips to form two tabs located between corrugated rolls 494 which may be rotated and then secured by set screws. The roll is covered by sand-paper 500 or like material the edges of which extend into the slot 478 between corrugated rolls 502, which may be turned to tension the sand-paper. In a modification, the feed belts are replaced by a rubber covered roll and the deflector plates are replaced by a presser member comprising plates adjustably secured together.

Classifications:

International (IPC 8-9): A43D37/00 A43D95/08 (Advanced/Invention);

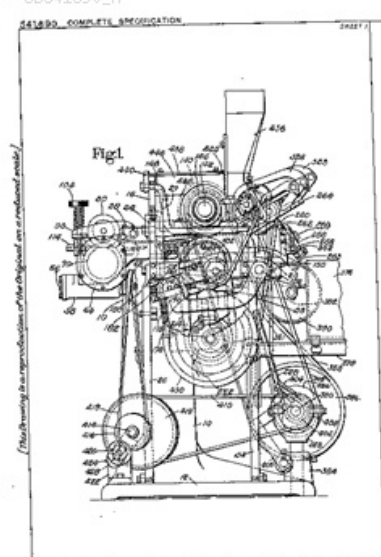
A43D37/00 A43D95/00 (Core/Invention)

International (IPC 1-7): B24B29/00

CPC: A43D37/00 A43D95/08

European: A43D37/00 A43D95/08

PatBase - GB541690A



Family:

Publication number	Publication date	Application number	Application date
GB541690 A	19411208	GB19400009823	19400605

Priority:

GB19400009823 19400605

Probable Assignee:

Assignee(s): (std):

UNITED SHOE MACHINERY CORP
UNITED SHOE MACHINERY CORP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
GB541690 A	19411208	LSGT	+	granted / extensions (spc, cpc, pte)	
GB541690 A	19600605	PEXP		Calculated Patent Term Expiry	

Title: SYSTEM AND METHOD OF FOAMED CEMENTITIOUS CONSTRUCTION

Abstract: A building system and method. A construction method and system is disclosed. The system includes panel members composed of foamed **cement** containing perlite as the only material aggregate. Each lightweight **cement** body is encased around its perimeter edges by a rigid frame preferably fabricated from steel C-channel or beams. Once cured, a plurality of such panels vertically disposed, arranged upon building footings, and inter-connected to serve as structure walls. The use of a special foamed cementitious mix containing expanded perlite provides lightweight panels of reliable strength and durability yet excellent thermal and sound insulation. The frames of abutting panels may be joined by welding. Reinforced concrete footings according to this disclosure are provided with a special channel running longitudinally there-along. An exposed **anchor** bar runs along the inside of the longitudinal channel. The wall panels have reinforcing conduits extending top to bottom in the panel frame. Tie rods situated in the conduit interiors extend beyond the conduit ends. The upper end of each tie rod is adjustably engaged with the end of the corresponding conduit, while the tie rod lower end is connected to the **anchor** rod on the footing. With the tie rod attached to the footing's **anchor** rod, the controlled tightening of the engagement of the tie rod and conduit upper ends pulls the tie rod into tension to secure the panel to the footing.

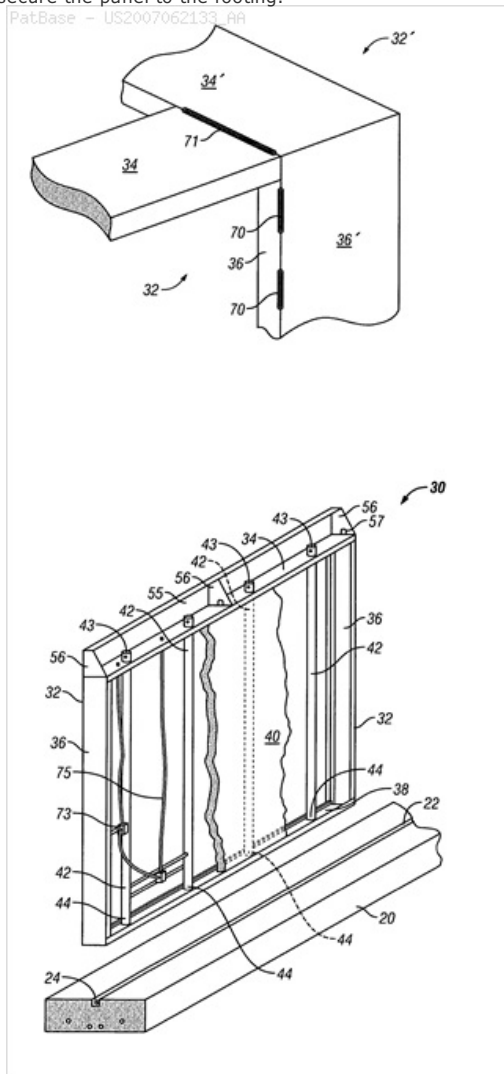
Classifications:

International (IPC 8-9): E02D27/00 (Advanced/Invention);
E02D27/00 (Core/Invention)

CPC: E04B1/04 E04B2001/3583

European: E04B1/04 P04B1/35T

US: 52/223.7 52/293.3 52/295

**Family:**

Publication number	Publication date	Application number	Application date
US2007062133 AA	20070322	US20060522618	20060918

Priority:

US20050718409P 20050916	US20060522618 20060918
Probable Assignee:	BRANYAN JEFFREY M
Assignee(s): (std):	BRANYAN JEFFREY M
Inventor(s): (std):	BRANYAN JEFFREY M
Inventor(s):	BRANYAN JEFFREY
Agent(s):	LAW OFFICE OF ROD D BAKER

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US2007062133 AA	20070322	LSPB	+	published / reissued	
US2007062133 AA	20090302	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: THIOLS AND/OR THIOL ESTERS AND METAL SALTS AS HARDENER SYSTEM IN RESIN COMPOSITIONS FOR, AMONG OTHER THINGS, THE FASTENING TECHNOLOGY

Abstract: The invention relates to at least one hardener system, containing at least one thiol and/or thiol ester and at least one metal salt as a radical chain initiator system, for a synthetic resin composition, said hardener system further comprising radically polymerizable compounds, preferably suitable or adapted for use in the chemical fastening technology; said invention further relates to a synthetic resin composition comprising such a hardener system, the use of the hardener system or the synthetic resin composition, and to further objects of invention associated therewith, such as processes, methods and uses.

Classifications:

International (IPC 8-9): C08F4/00 C08K5/09 C08K5/098 C08K5/36 C08K5/37 C08K5/38 C08L33/04 C08L33/08 C08L33/10 C08L75/16 (Advanced/Invention)

CPC: C08K5/098 C08K5/37 C08K5/38

Family:

Publication number	Publication date	Application number	Application date
DE102013114061 A1	20150618	DE201310114061	20131216
WO15090523 A1	20150625	WO2014EP03245	20141204

Priority:

DE201310114061 20131216

Probable Assignee: FISCHERWERKE GMBH AND CO KG

Assignee(s): (std): FISCHERWERKE GMBH AND CO KG

Inventor(s): (std): GRUEN JUERGEN ; WEINELT CHRISTIAN ; VOGEL MARTIN ; SCHLENK CHRISTIAN

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 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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE102013114061 A1	20150618	LSPB	+	published / reissued	
WO15090523 A1	20150625	LSPB	+	published / reissued	
WO15090523 A1	20170111	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 14814763 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

Title: FOLDED CARDBOARD CONCRETE FORM SYSTEM

Abstract: A form system for assembling a structural frame includes a base sheet of cardboard, the base sheet having a plurality of folding sections for corrugating the base sheet into a first shape, at least one additional sheet of cardboard, the additional sheet having a plurality of folding sections for corrugating the additional sheet into a second shape, wherein at least part of the second shape corresponds to at least part of the first shape such that when the additional sheet is positioned adjacent to the base sheet, the base sheet and the additional sheet form a V-shaped cavity therebetween, and a concrete fill cast within the at least one V-shaped cavity.

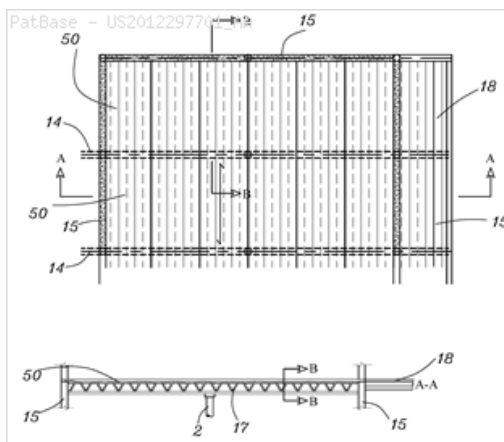
Classifications:

International (IPC 8-9): E04B1/16 E04G21/26 (Advanced/Invention)

CPC: E04G9/021 E04G9/083 E04G11/40 E04B1/164 E04B1/168

E04B5/326 E04B5/261

US: 52/127.3 52/340



Family:

Publication number	Publication date	Application number	Application date
US2012297701 AA	20121129	US20120482515	20120529

Priority:

US20110490812P 20110527 US20120482515 20120529

Probable Assignee:

OAKLEY GERARD

Assignee(s): (std):

OAKLEY GERARD

Inventor(s): (std):

OAKLEY GERARD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2012297701 AA	20121129	LSPB	+	published / reissued	
US2012297701 AA	20150504	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: Device for pressing a two-component adhesive into a pipe in order to produce a non-prestressed **anchor**.

Abstract: The device consists of a nozzle connection (20) and an element (26) which is inserted between the start (11a) of a rock **anchor** designed as a pipe (11) and a sealing surface (24) of the nozzle connection (20). The nozzle connection (20) comprises two concentrically arranged pipes (22, 23) for the separate feed of the two components (B,K) of a two-component adhesive. The element (26) consists of a plastically deformable material and has a cylindrical collar surrounding the start (11a) of the pipe and a flange (27). The outer wall (22) of the nozzle connection (20) ends in an edge (25) as an intersection line between a conical surface and a cylindrical surface. A static mixer (13) is inserted at the start (11a) of the pipe. A two-component adhesive can be pressed at a pressure of 120 bar into the pipe (11) by this device in order to fill the pipe and the intermediate space between the outer surface of the pipe and the wall of a drill hole for the purpose of producing a non-prestressed **anchor** for consolidating rock. The non-prestressed **anchor** can consequently be set by machine.

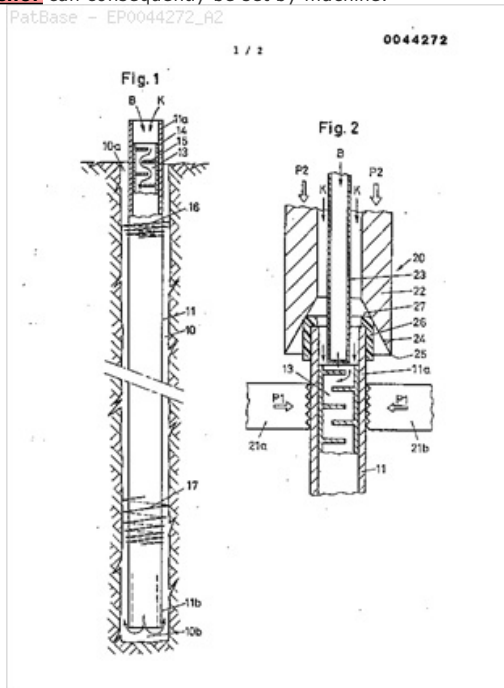
Classifications:

International (IPC 8-9): E21D20/02 E21D21/00 (Advanced/Invention)

International (IPC 1-7): E02D E21D20/02

CPC: E21D20/02 E21D21/0093

European: E21D20/02 E21D21/00S



Family:

Publication number	Publication date	Application number	Application date
EP0044272 A2	19820120	EP19810810222	19810605
EP0044272 A3	19820428	EP19810810222	19810605
FI811657 A	19820112	FI19810001657	19810529
FI811657 L	19820112	FI19810001657	19810529

Priority:

CH19800005355 19800711

Probable Assignee: SIG SCHWEIZ INDUSTRIEGES

Assignee(s): (std): SIG SCHWEIZ INDUSTRIEGES

Assignee(s): SIG SCHWEIZERISCHE INDUSTRIE GES ; SIG SCHWEIZERISCHE INDUSTRIE GESELLSCHAFT

Inventor(s): (std): STRAUB GUENTER ; STRAUB GUNTER

Designated states: AT CH DE FR LI SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP0044272 A2	19820120	LSPB	+	published / reissued	
EP0044272 A2	19820414	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19820204
EP0044272 A3	19850102	LSRV	-18R	APPLICATION REFUSED	EFFECTIVE DATE : 19840728
FI811657 A	19820112	LSPB	+	published / reissued	
FI811657 A	20040831	LSLE	-FD	APPLICATION LAPSED	PARTYTYPE : OWNER OWNER : SIG SCHWEIZERISCHE

Title: HOLDING ELEMENT WHICH CAN BE ADHESIVELY BONDED IN A BORE HOLE

Abstract: The invention relates to a device for the durable fastening of objects, such as, for example, tie rods, test equipment or other devices in bore holes, in particular at any points inside bore holes, by adhesively bonding a holding element which can be coupled to an object and/or device. So that adhesive bonding can be carried out cost-effectively at any point of the bore hole length, the invention provides for the tubular holding element, which is tailored to the respective cross-section of the bore hole, can be closed at the ends and is designed for accommodating adhesive material, to be surrounded by a close-fitting but expandable casing, in which arrangement the casing is fastened at the ends so as to be sealed off from the holding element, and the section of the holding element surrounded by the casing is provided with openings on the side facing the mouth of the bore hole, and the casing is provided with openings on the side turned to the bore hole bottom.

Classifications:

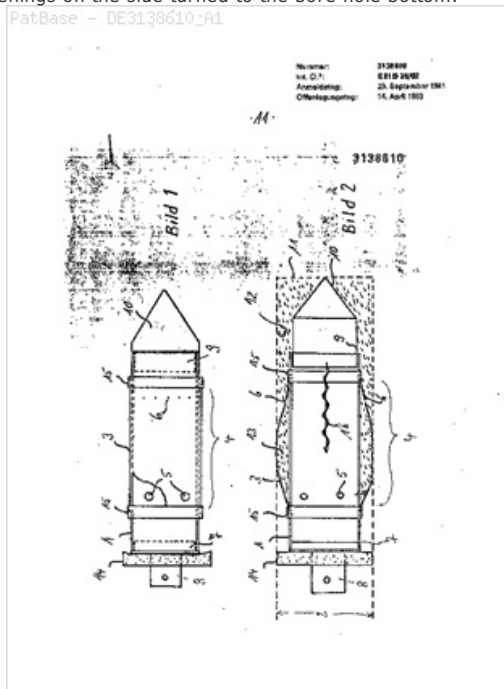
International (IPC 8-9): E21D20/02 E21D21/00 (Advanced/Invention); E21D20/00 E21D21/00 (Core/Invention)

International (IPC 1-7): E21D20/02

CPC: E21D21/0026 E21D20/02 E21D21/0073

European: E21D20/02 E21D21/00M P21D21/00M14

PatBase - DE3138610:A1



Family:

Publication number	Publication date	Application number	Application date
DE3138610 A1	19830414	DE19813138610	19810929
DE3138610 C2	19841018	DE19813138610	19810929

Priority:

DE19813138610 19810929

Probable Assignee: BERGWERKSVERBAND GMBH

Assignee(s): (std): BERGWERKSVERBAND GMBH

Assignee(s): BERGWERKSVERBAND GMBH 4300 ESSEN DE

Inventor(s): (std): KLEIN HANS DIETER ING GRAD

Inventor(s): KLEIN HANS DIETER INGGRAD ; KLEIN HANS DIETER ING GRAD 4320 HATTINGEN DE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE3138610 A1	19830414	LSPB	+	published / reissued	
DE3138610 A1	19830414	LSSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3138610 C2	19841018	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3138610 C2	19841018	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3138610 C2	19850418	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	

Title: Tie block, tie block sleeper unit, method and mould for producing a tie block or a block sleeper unit, railway track superstructure, and method for correcting the height of a ballastless railway track

Abstract: The sleeper block has a block body (2) and a base (3), which is formed from elastic esp. closed-pore material (5). The sides (4) extending from the base are at least partially formed from similar closed-pore material, constructed in a ring, which is connected to the base by esp. contact pressure. The materials of sole and sides have different elastic characteristics and/or strength. The sleeper block and/or a block unit, are fitted into a concrete track bed, which also has a connection support. For height correction of the superstructure, the block is lifted out of the track bed and re-positioned. The free space between sleeper block and track bed is filled esp. with concrete, and a layer of compensation material, esp. concrete, is applied, when the desired height is reached.

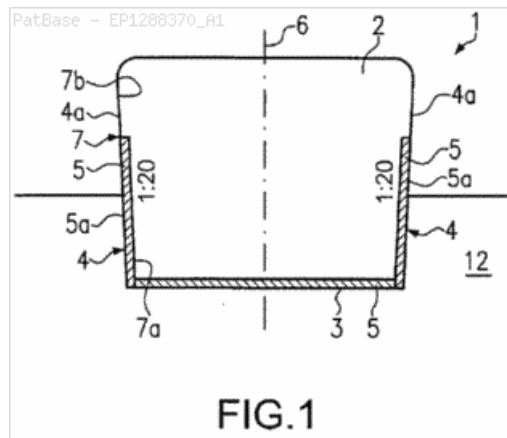
Classifications:

International (IPC 8-9): B28B19/00 B28B7/00 E01B1/00 E01B3/42 (Advanced/Invention)

International (IPC 1-7): B28B7/00 E01B1/00 E01B3/42

CPC: B28B7/0044 B28B19/0046 E01B1/005 E01B3/42 E01B3/46 E01B2204/01

European: B28B19/00G B28B7/00B3D E01B1/00C2 E01B3/42 E01B3/46 P01B204/01



Family:

Publication number	Publication date	Application number	Application date
EP1288370 A1	20030305	EP20010120522	20010828

Priority:

EP20010120522 20010828

Probable Assignee: RHOMBERG BAU GMBH

Assignee(s): (std): RHOMBERG BAU GMBH

Designated states: AT CH DE LI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP1288370 A1	20030305	LSPB	+	published / reissued	
EP1288370 A1	20031105	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20030904
EP1288370 A1	20031126	LSFE	+AKX	DESIGNATION FEES PAID	COUNTRY OF REF DOCUMENT : AT COUNTRY OF REF DOCUMENT : CH COUNTRY OF REF DOCUMENT : DE COUNTRY OF REF DOCUMENT : LI
EP1288370 A1	20040128	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20031216
EP1288370 A1	20040616	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : RTE TECHNOLOGIE GMBH
EP1288370 A1	20041020	LSWD	-18W	APPLICATION WITHDRAWN	EFFECTIVE DATE : 20040826

Title: COIL BAR **ANCHOR**

Abstract: A coil bar **anchor** for embedding into concrete structures has a threaded segment utilizing a coil thread and an **anchor** segment, the entire coil bar **anchor** being formed out of a single piece of material.

Classifications:

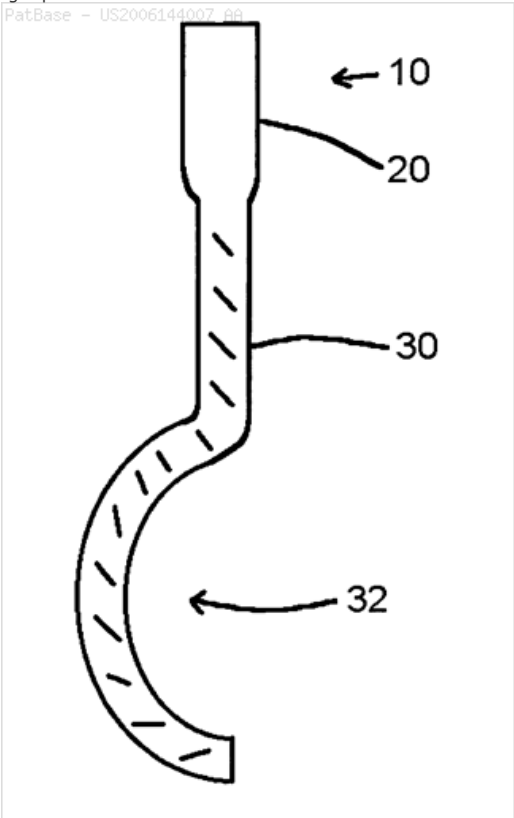
International (IPC 8-9): E04B1/38 (Advanced/Invention);

E04B1/38 (Core/Invention)

CPC: E04B1/4121

European: E04B1/41D1

US: 52/698



Family:

Publication number	Publication date	Application number	Application date
US2006144007 AA	20060706	US20050030543	20050106

Priority:

US20050030543 20050106

Probable Assignee:

AZARIN MICHAEL

Assignee(s): (std):

AZARIN MICHAEL

Inventor(s): (std):

AZARIN MICHAEL

Agent(s):

LAURENCE P COLTON

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2006144007 AA	20060706	LSPB	+	published / reissued	
US2006144007 AA	20090217	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: Excavating machine

Abstract: A machine for excavating underground galleries, comprising a frame displaceable within a gallery, an arm pivotally connected to said frame, means for adjusting the orientation of said arm in a plurality of directions, said arm having a rotary tool carrier provided with cutting tools distributed over the periphery thereof located to operate in a plane perpendicular to the direction of the arm, the machine having means enabling the pivotal connection between the arm and the frame to occupy two distinct alternative positions, in each of which positions the means supporting said pivotal connection can be immobilized.

Classifications:

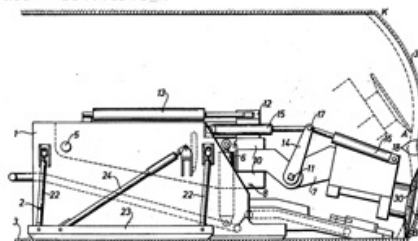
International (IPC 8-9): E21D9/02 E21D9/10 (Advanced/Invention); E21D9/10 (Core/Invention)

International (IPC 1-7): E01G3/00 E01G3/04 E02D E21C1/10 E21C27/06 E21C27/22 E21D11/40 E21D3/00 E21D9/00 E21D9/10
CPC: E21D9/106 E21D9/102

European: E21D9/10B2B E21D9/10D

US: 299/31 299/57 299/75

PatBase - US4005905_A



Family:

Publication number	Publication date	Application number	Application date
AU197472211 A1	19760212	AU19740072211	19740812
CA1008888 A1	19770419	CA19740207279	19740819
CH592238 A	19771014	CH19740011494	19740822
CS202539 B2	19810130	CS19740005811	19740821
DE2439764 A1	19750306	DE19742439764	19740820
FR2245823 A1	19750425	FR19740028767	19740821
FR2245823 B1	19830401	FR19740028767	19740821
GB1475737 A	19770601	GB19740036474	19740819
IT1019941 A	19771130	IT19740026310	19740814
JP50054128 A2	19750513	JP19740096013	19740821
LU68289 A	19750521	LU19730068289	19730822
SE411373 B	19791217	SE19740010698	19740822
SE411373 C	19800410	SE19740010698	19740822
SE7410698 A	19750224	SE19740010698D	19740822
US4005905 A	19770201	US19740499578	19740821

Priority:

LU19730023305 19730822 LU19730068289 19730822

Probable Assignee: LINDEN ALIMAK AB

Assignee(s): (std): LINDEN ALIMAK AB

Assignee(s): LINDEN ALIMAK AB SE ; LINDEN ALIMAK AB SKELLEFTEA SCHWEDEN ; LINDEN SLIMAK AB ; LINDEN ALIMAK AB SW ; DUBOIS MICHEL

Inventor(s): (std): DUBOIS M ; DUBOIS MICHEL

Inventor(s): MICHEL DUBOIS ; M DUBOIS ; DUBOIS MICHEL ITTRE BELGIEN ; DUBOIS MICHEL BE

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Patent	Date recorded	Event group	Code	Event	Details
AU197472211 A1	19760212	LSPB	+	published / reissued	
CH592238 A	19771014	LSGT	+	granted / extensions (spc, cpc, pte)	
CH592238 A	19840430	LSLE	-PL	PATENT CEASED	
CH592238 A	19940822	PEXP		Calculated Patent Term Expiry	
CS202539 B2	19810130	LSGT	+	granted / extensions (spc, cpc, pte)	
CS202539 B2	19890821	PEXP		Calculated Patent Term Expiry	
DE2439764 A1	19750306	LSPB	+	published / reissued	
DE2439764 A1	19811001	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE2439764 A1	19830804	LSRV	-8131	REJECTION	
FR2245823 A1	19750425	LSPB	+	published / reissued	
FR2245823 B1	19830401	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2245823 B1	19840622	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2245823 B1	19940821	PEXP		Calculated Patent Term Expiry	
GB1475737 A	19770601	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1475737 A	19771012	LSGT	+PS	PATENT SEALED	
GB1475737 A	19840418	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT	

OF RENEWAL FEE				
GB1475737 A	19940819	PEXP		Calculated Patent Term Expiry
IT1019941 A	19771130	LSGT	+	granted / extensions (spc, cpc, pte)
IT1019941 A	19940814	PEXP		Calculated Patent Term Expiry
JP50054128 A2	19750513	LSPB	+	published / reissued
LU68289 A	19750521	LSGT	+	granted / extensions (spc, cpc, pte)
LU68289 A	19930823	PEXP		Calculated Patent Term Expiry
SE411373 B	19791217	LSPB	+	published / reissued
SE411373 C	19800410	LSGT	+	granted / extensions (spc, cpc, pte)
SE411373 C	19940822	PEXP		Calculated Patent Term Expiry
SE7410698 A	19750224	LSPB	+	published / reissued
US4005905 A	19770201	LSGT	+	granted / extensions (spc, cpc, pte)

Title: Volta sospesa in materiale refrattario e/o refrattario isolante Volta sospesa in materiale refrattario e/o refrattario isolante Time suspended in refractory and/or insulating refractory (Machine translation)

Abstract: Source: CH391170A [IT] [Source: Claim 1] 1. Volta sospesa in materiale refrattario secondo la rivendicazione, caratterizzata da ciò che i mattoni so presentano due profili laterali differenti coniugantisi; un foro passante mediano quale sede della detta asta; e all'occorrenza, una sede ribassata attorno a detto foro per il tratto inferiore del tirante; e una fascia trasversale abbassata per costituire sede della guarni- 85 zione di tenuta delle due testate di ciascun blocco. **Machine translation:** [Source: Claim 1] 1. Time suspended in refractory material according to claim, characterised by what the bricks I know have two different side profiles coniugantisi; a through hole halfback as the seat of that auction, and if necessary, a lowered seat around said the lower hole of the tie rod; and a transverse range lowered to be headquarters of the rubber seal of the two tested 85 ing per block.

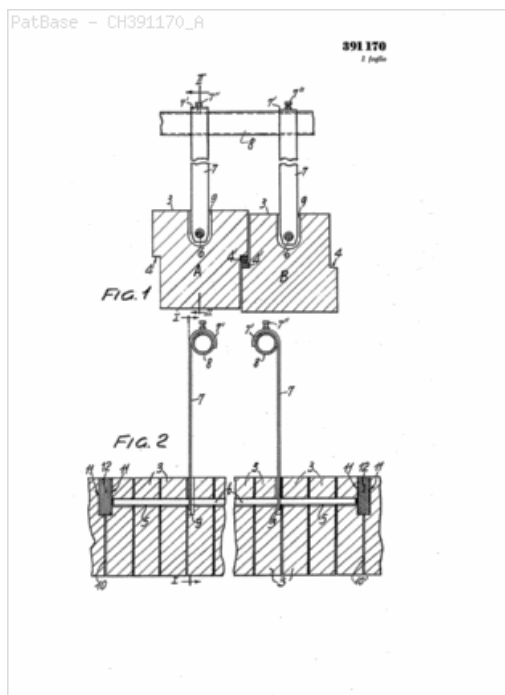
Classifications:

International (IPC 8-9): F23M5/06 (Advanced/Invention)

International (IPC 1-7): F23M5/04

CPC: F23M5/06

European: F23M5/06



Family:

Publication number	Publication date	Application number	Application date
CH391170 A	19650430	CH19630003172	19630309

Priority:

IT19620015398 19620801

Probable Assignee: JOHNS MANVILLE ITALIANA S P A

Assignee(s): (std): JOHNS MANVILLE ITALIANA S P A

Inventor(s): (std): EGONE ROCCO

Inventor(s): ROCCO EGONE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH391170 A	19650430	LSGT	+	granted / extensions (spc, cpc, pte)	
CH391170 A	19830309	PEXP		Calculated Patent Term Expiry	

Title: Lifting device for loading and unloading unit loads.

Abstract: The invention relates to a lifting device for loading and unloading loads through the door opening of an aircraft. - The device is advantageously linked removably to the structure of the said aircraft, in proximity to the said opening (4) and comprises: . a slideway (10) capable of being fixed to the said structure by removable linking means (11); . a ramp (12) mounted within the said slideway and capable of resting inclined on the ground via support elements (14); . a support platform (15) linked to the said ramp so as to be able to slide, and receiving the said loads; and. means (16) for driving the said platform with respect to the ramp.

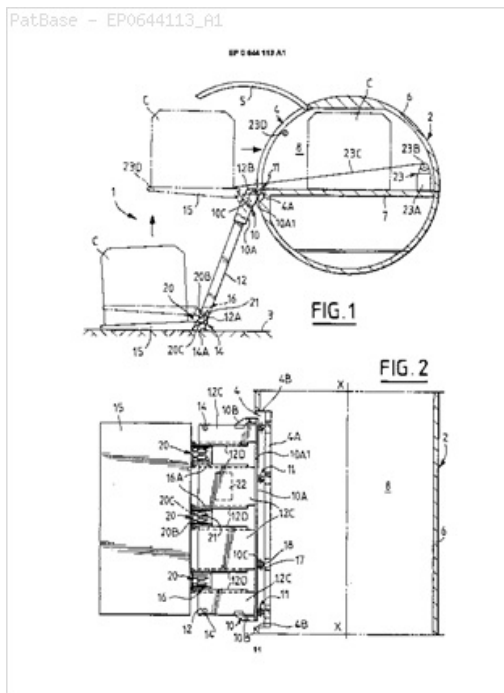
Classifications:

International (IPC 8-9): B64C1/22 B64D9/00 (Advanced/Invention); B64C1/00 B64D9/00 (Core/Invention)

International (IPC 1-7): B64C1/22 B64D9/00 B64F1/32

CPC: B64C1/22 B64D9/00

European: B64C1/22 B64D9/00



Family:

Publication number	Publication date	Application number	Application date
DE69406233 D1	19971120	DE19946006233	19940902
DE69406233 T2	19980219	DE19946006233T	19940902
EP0644113 A1	19950322	EP19940401950	19940902
EP0644113 B1	19971015	EP19940401950	19940902
ES2109634 T3	19980116	ES19940401950T	19940902
FR2710313 A1	19950331	FR19930011159	19930920
FR2710313 B1	19951124	FR19930011159	19930920

Priority:

FR19930011159 19930920

Probable Assignee: AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE

Assignee(s): (std): AEROSPATIALE

Assignee(s): AEROSPATIALE SOC NAT INDUSTRIELLE ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE PARIS ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE PARIS FR ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE SOCIET ; AEROSPATIALE STE NATIONALE INDLE ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE SOCIETE ANONYME DITE

Inventor(s): (std): MICHEL L HERITIER ; MICHEL FARRE ; JEAN LOUIS CAMBON ; L HERITIER MICHEL ; FARRE MICHEL ; CAMBON JEAN LOUIS

Inventor(s): MICHEL L HERMITIER ; L HERITIER MICHEL F 31770 COLOMIERS FR ; FARRE MICHEL F 31790 LEGUEVIN FR ; CAMBON JEAN LOUIS F 31270 CUGNAUX FR

Agent(s): CABINET BLOCH AND BONNETAT

Designated states: BE DE ES GB IT NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE69406233 D1	19981112	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE69406233 T2	19980219	LSGT	+	granted / extensions (spc, cpc, pte)	
DE69406233 T2	20140902	PEXP		Calculated Patent Term Expiry	
EP0644113 A1	19950322	LSPB	+	published / reissued	
EP0644113 A1	19950614	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19950418

EP0644113 A1	19960207	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19951222
EP0644113 A1	19970122	LSAS	RAP1	RIGHTS OF AN APPLICATION TRANSFERRED	PARTYTYPE : OWNER OWNER : AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE
EP0644113 B1	19971015	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0644113 B1	19980116	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2109634 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) :
EP0644113 B1	19981007	LSGT	+26N	NO OPPOSITION FILED	
EP0644113 B1	20091030	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20090922 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20090922 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20090915 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20091130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20090915 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20100129	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20090922 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20100430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20090926 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20100531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 20091023 YEAR OF FEE PAYMENT : 16
EP0644113 B1	20110331	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : *AEROSPATIALE SOC. NATIONALE INDUSTRIELLE EFFECTIVE DATE : 20100930
EP0644113 B1	20110413	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : NL REF LEGAL EVENT CODE : V1 EFFECTIVE DATE : 20110401
EP0644113 B1	20110503	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : SE REF LEGAL EVENT CODE

					: EUG
EP0644113 B1	20110525	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20100902
EP0644113 B1	20110531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100902
EP0644113 B1	20110721	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 69406233 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20110401
EP0644113 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100930
EP0644113 B1	20110729	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110401
EP0644113 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100902
EP0644113 B1	20110831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20110401
EP0644113 B1	20111019	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FD2A EFFECTIVE DATE : 20111019
EP0644113 B1	20111130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100903
EP0644113 B1	20120928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20100903
EP0644113 B1	20140902	PEXP	Calculated Patent Term Expiry		
ES2109634 T3	19980116	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2109634 T3	19980116	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 644113 COUNTRY OF REF DOCUMENT : ES

ES2109634 T3	20140902	PEXP		Calculated Patent Term Expiry
FR2710313 A1	19950331	LSPB	+	published / reissued
FR2710313 B1	19951124	LSGT	+	granted / extensions (spc, cpc, pte)
FR2710313 B1	20020104	LSAS	CD	CHANGE OF NAME OR COMPANY NAME
FR2710313 B1	20020104	LSAS	TP	TRANSMISSION OF PROPERTY
FR2710313 B1	20110624	LSLE	-ST	NOTIFICATION OF LAPSE
				EFFECTIVE DATE : 20110531
FR2710313 B1	20130920	PEXP		Calculated Patent Term Expiry

Title: CORROSION-PROTECTED **ANCHORING** RODS FOR **ANCHORING** STRUCTURAL PARTS IN THE EARTH, AS WELL AS METHOD OF PRODUCING **ANCHORINGS** WITH CORROSION-PROTECTED **ANCHOR** RODS

Abstract: A corrosion-protected **anchoring** rod for the **anchoring** of structural parts in the earth is adapted to be placed in a bore hole formed in the earth, with the rod consisting of a force transmission section adjacent the opening of the bore hole, and a force introduction section adjacent the end of the **anchoring** rod disposed furthest in the hole. The force transmission section of the rod is covered with a smooth, corrosion-preventing covering, while the force introduction section is also covered with a corrosion-preventing covering having a corrugated profile in order to increase the frictional resistance between the **anchoring** rod and the surrounding soil. The corrosion-prevented coverings of the **anchoring** rod are suitably joined to completely enclose the **anchoring** rod, and a bonding composition is provided in the space between the corrugated covering and the tension member.

Classifications:

International (IPC 8-9): E02D5/74 E02D5/76

E02D5/80 (Advanced/Invention);

E02D5/74 E02D5/80 (Core/Invention)

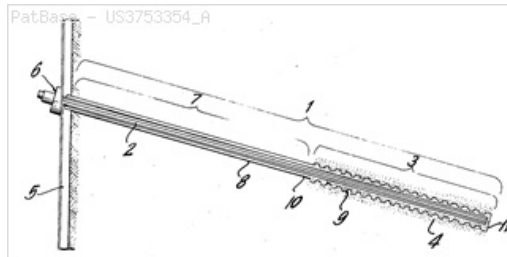
International (IPC 1-7): E02D17/04 E02D31/00 E02D5/00 E02D5/74

E02D5/76 E02D5/80

CPC: E02D5/76 E02D5/808

European: E02D5/76 E02D5/80F

US: 405/259.5 52/738.1 52/834 57/72



Family:

Publication number	Publication date	Application number	Application date
AT334606 B	19760125	AT19720009216	19721030
AT921672 A	19760515	AT19720009216	19721030
BE762718 A	19710716	BE19710762718	19710209
CH521487 A	19720415	CH19710001543	19710203
DE2101236 A1	19720817	DE19712101236	19710112
FR2122094 A5	19720825	FR19710003954	19710205
GB1344354 A	19740123	GB19710025739	19710419
JP55014207 B4	19800415	JP19710025346	19710421
NL7101560 A	19720714	NL19710001560	19710205
US3753354 A	19730821	US19710129715	19710331

Priority:

DE19712101236 19710112 AT19710000808 19710201 AT19720009216 19721030

Probable Assignee: BAUER KARLHEINZ

Assignee(s): (std): BAUER KARLHEINZ ; BAUER K

Assignee(s): BAUER K DT ; BAUER KARLHEINZ DR ING ; BAUER KARLHEINZ WITTELSBACHERSTR 5 ; BAUER KARLHEINZ WITTELSBACHERSTR 5 8898 SCHROBENHAUSEN OBB ALLEMAGNE

Inventor(s): (std): DR BAUER KARLHEINZ ING ; BAUER K ; BAUER KARLHEINZ DR ING

Inventor(s): ING BAUER KARLHEINZ DR ; BAUER K DT

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT334606 B	19760125	LSGT	+	granted / extensions (spc, cpc, pte)	
AT334606 B	19751215	LSRV	-A1V	REFUSAL	
AT334606 B	19921030	PEXP		Calculated Patent Term Expiry	
AT921672 A	19760515	LSPB	+	published / reissued	
AT921672 A	19870215	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
BE762718 A	19710716	LSPB	+	published / reissued	
CH521487 A	19720415	LSGT	+	granted / extensions (spc, cpc, pte)	
CH521487 A	19861031	LSLE	-PL	PATENT CEASED	
CH521487 A	19910203	PEXP		Calculated Patent Term Expiry	
DE2101236 A1	19720817	LSPB	+	published / reissued	
FR2122094 A5	19720825	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2122094 A5	19861226	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2122094 A5	19910205	PEXP		Calculated Patent Term Expiry	
GB1344354 A	19740123	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1344354 A	19740605	LSGT	+PS	PATENT SEALED	
GB1344354 A	19750611	LSRV	433D	APPLICATION MADE FOR REVOCATION (SECT. 33/1949)	
GB1344354 A	19750828	LSRV	433G	CASE DECIDED BY THE COMPTROLLER ** APPLICATION REFUSED (SECT. 33/1949)	

GB1344354 A	19861217	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE
GB1344354 A	19910419	PEXP		Calculated Patent Term Expiry
JP55014207 B4	19800415	LSPB	+	published / reissued
NL7101560 A	19720714	LSPB	+	published / reissued
US3753354 A	19730821	LSGT	+	granted / extensions (spc, cpc, pte)

Title: TIE RODS

Abstract: 1328100 Water barriers for **anchor** bars or tie rods DOXFORD and SUNDERLAND Ltd 8 Dec 1970 [23 Dec 1969] 62618/69 Headings E1S and E1W An **anchor** bar or tie rod 1 has at least one resilient water 'barrier 4 making an interference fit around the rod. To effect the seal the barrier may be of a self-relapsing material which binds round the rod or may be of a polyolefin material and formed with a collar 7 which has internal annular sealing ribs (not shown). Radially extending reinforcing ribs 6 may be provided. The tie bar may have at least one threaded end 8 to take a she bolt or may have a welded threaded socket to take a hexagonal headed bolt. The tie rod may be used to hold temporary shuttering.

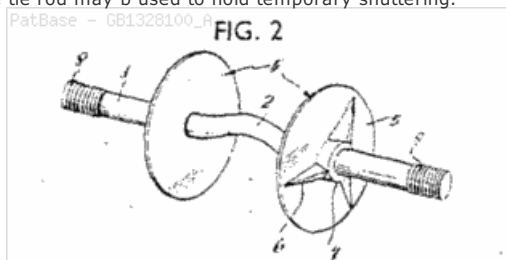
Classifications:

International (IPC 8-9): E04G17/065 (Advanced/Invention);
E04G17/06 (Core/Invention)

International (IPC 1-7): E04G17/06 E04G17/08

CPC: E04G17/0658

European: E04G17/065D4 E04G17/06B3C



Family:

Publication number	Publication date	Application number	Application date
GB1328100 A	19730830	GB19690062618	19691223

Priority:

GB19690062618 19691223

Probable Assignee: DOXFORD SUNDERLAND LTD

Assignee(s): (std): DOXFORD SUNDERLAND LTD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
GB1328100 A	19730830	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1328100 A	19740213	LSGT	+PS	PATENT SEALED	
GB1328100 A	19750702	LSLE	-PLNP	PATENT LAPSED THROUGH NONPAYMENT OF RENEWAL FEES	
GB1328100 A	19891223	PEXP		Calculated Patent Term Expiry	

Title: CONNECTOR MEMBER FOR WOOD CONSTRUCTION WORK

Abstract: For power transmission between a wooden beam and another building component, for example another wooden beam, a blind bore and a vent bore opening into the bottom of the bore are formed in the wooden beam. An insert body is pushed into the blind bore. This body comprises two spaced end plates whose outer cross-section corresponds to the cross-section of the blind bore, and at least one, preferably four, power-transmitting bars whose ends are welded to the opposing sides of the end plates. Bar dowels are then driven in from the side of the wooden beam so as to penetrate spaces between adjacent power-transmitting bars. Epoxy resin is then pressed into the blind bore from the outside until the entire blind bore and preferably also part of the vent bore are filled in with resin. When the resin has hardened, the resin body and the steel parts form a composite body. Connecting members may be attached to the outer end part.

Classifications:

International (IPC 8-9): E04B1/26 (Advanced/Invention)

International (IPC 1-7): E04B1/26 E04B1/38 E04B1/40 E04B1/48 E04C3/29 F16B12/10 F16B13/00

CPC: Y10T403/471 Y10T403/472 Y10T403/55 Y10T403/587

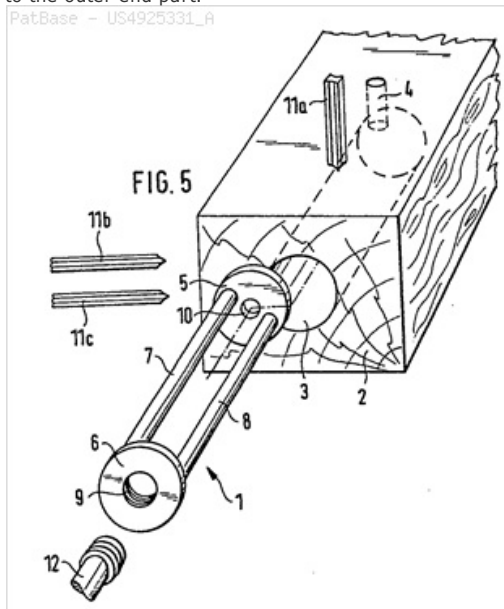
Y10T403/7079 E04B1/486 E04B1/2604 E04B2001/264

E04B2001/2692

European: E04B1/26B E04B1/48D P04B1/26B12 P04B1/26B41

US: 403/266 403/267 403/292 403/319 403/378 52/125.4 52/125.5

52/585 52/707



Family:

Publication number	Publication date	Application number	Application date
AT66036 E	19910815	AT19870113854T	19870922
CA1294110 A1	19920114	CA19870548679	19871006
DE3634039 A1	19880414	DE19863634039	19861006
DE3634039 C2	19880714	DE19863634039	19861006
DE3771986 D1	19910912	DE19873771986	19870922
DK164291 B	19920601	DK19870005216	19871005
DK164291 C	19921019	DK19870005216	19871005
DK521687 A	19880407	DK19870005216	19871005
DK521687 A0	19871005	DK19870005216	19871005
EP0263350 A2	19880413	EP19870113854	19870922
EP0263350 A3	19881102	EP19870113854	19870922
EP0263350 B1	19910807	EP19870113854	19870922
US4925331 A	19900515	US19870103288	19871001

Priority:

DE19863634039 19861006 DE19873771986 19870922 EP19870113854 19870922
CA19870548679 19871006

Probable Assignee:

BERTSCHE PETER

Assignee(s): (std):

BERTSCHE PETER

Assignee(s):

BERTSCHE PETER 8371 PRACKENBACH DE

Inventor(s): (std):

PETER BERTSCHE ; BERTSCHE PETER

Inventor(s):

BERTSCHE PETER 8371 PRACKENBACH DE

Agent(s):

RICHES MCKENZIE AND HERBERT LLP

Designated states:

AT BE CH DE FR GB LI LU NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT66036 E	19910815	LSGT	+	granted / extensions (spc, cpc, pte)	
AT66036 E	19921215	LSLE	-REN	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT66036 E	20070922	PEXP		Calculated Patent Term Expiry	
CA1294110 A1	19920114	LSGT	+	granted / extensions (spc, cpc, pte)	
CA1294110 A1	20090114	LSLE	-MKEX	EXPIRY	

CA1294110 A1	20090114	PEXP		Calculated Patent Term Expiry	
DE3634039 A1	19880414	LSPB	+	published / reissued	
DE3634039 A1	19880414	LSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3634039 C2	19880714	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3634039 C2	19880714	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3634039 C2	19881215	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE3634039 C2	19890921	LSRE	+8368	OPPOSITION REFUSED DUE TO INADMISSIBILITY	
DE3634039 C2	20001005	LSLI	8320	WILLINGNESS TO GRANT LICENCES DECLARED (PARAGRAPH 23)	
DE3771986 D1	19920903	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DK164291 B	19920601	LSPB	+	published / reissued	
DK164291 C	19921019	LSGT	+	granted / extensions (spc, cpc, pte)	
DK164291 C	20050606	LSLE	-BPB	PATENT LAPSED	TEXT : DK
DK164291 C	20071005	PEXP		Calculated Patent Term Expiry	
DK521687 A	19880407	LSPB	+	published / reissued	
EP0263350 A2	19880413	LSPB	+	published / reissued	
EP0263350 A3	19890705	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19890427
EP0263350 A3	19900228	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19900110
EP0263350 B1	19910807	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0263350 B1	19910807	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19910807
EP0263350 B1	19910807	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19910807
EP0263350 B1	19910807	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19910807
EP0263350 B1	19910922	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19910922
EP0263350 B1	19910930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH LAPSED DATE : 19910930
EP0263350 B1	19910930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19910930
EP0263350 B1	19910930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19910930
EP0263350 B1	19920116	LSLE	-NLV1	NL: LAPSED OR ANNULLED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT	REF COUNTRY CODE : EP
EP0263350 B1	19920529	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
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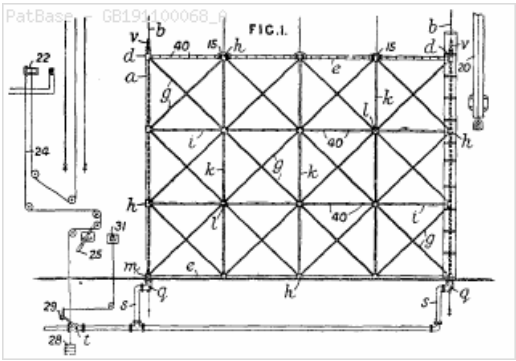
EP0263350 B1	20030829	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20030829 YEAR OF FEE PAYMENT : 17
EP0263350 B1	20040922	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20040922
EP0263350 B1	20050511	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20040922
EP0263350 B1	20050920	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20050920 YEAR OF FEE PAYMENT : 19
EP0263350 B1	20061128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20061128 YEAR OF FEE PAYMENT : 20
EP0263350 B1	20070629	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20070531
EP0263350 B1	20080430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20061002
EP0263350 B1	20070922	PEXP		Calculated Patent Term Expiry	
US4925331 A	19900515	LSGT	+	granted / extensions (spc, cpc, pte)	
US4925331 A	19900314	LSGT	PAT1	Patented Case	
US4925331 A	19900314	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4925331 A	19931006	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4925331 A	19971016	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4925331 A	20010713	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4925331 A	20071001	PEXP		Calculated Patent Term Expiry	

Title: IMPROVEMENTS RELATING TO FIRE-RESISTING SCREENS, CURTAINS AND THE LIKE.

Abstract: 68. Wilkins and Brother, F., and Hutchinson, R. H. Jan. 2. [Cognate Application, 3143/11.] Fire-proof curtains.- Consists of a fire-resisting screen or curtain formed of tubular members a, e, i, k connected together by sockets d, h, l, m, and tied or braced by diagonal ties g to form a rigid framework, adapted to be covered with sheet metal, asbestos, etc.; the end tubular members a serve as guides working over fixed vertical cables or columns b, and water is admitted to the tubing in case of fire, and escapes through discharge nozzles 40. The sockets m at the bottom corners of the frame are provided with downwardly - projecting tubular attachments, which, when the curtain is lowered, fit into flexible sleeves in hollow elbow brackets q connected to water-supply piping s, a water-tight connexion being formed by the flexible sleeve. In order to prevent excessive leakage of water from the sockets d at the upper corners of the curtain, tubular glands v, ball-jointed therein, work over the guide-cables b, and are provided with internal baffling-rings. The sheet-metal or asbestos covering is secured to the framework by means of clamps, which may be combined with the hangers 15 by which the curtain is suspended. The end tubular members a are provided with liners to run over the guide-cables b. The nozzles 40 may be formed of hollow plugs, screwed into the tubes, and provided with discharge slots. The curtain is counterbalanced, is lowered under the control of an air-cushioning device 20, and is raised by means of a winch 22 provided with a friction brake, which is released by means of a cable 24 and a handle 25 to allow the curtain to fall. The handle 25 also controls a cock t, which, in the event of a fire, is released from a retaining-catch 29 controlled from a handle in a box 31, and is opened by a weight 28 when the curtain is dropped, thereby admitting water to the curtain frame. In a modified arrangement for controlling the admission of water, two cocks are provided, one adapted to be opened by the descent of the curtain, and the other by means of a handle in an emergency box.

Classifications:

International (IPC 8-9): E06B5/16 (Advanced/Invention);
E06B5/10 (Core/Invention)
CPC: E06B5/16
European: E06B5/16



Family:

Publication number	Publication date	Application number	Application date
GB191100068 A	19111012		00000000

Priority:

19110102

Probable Assignee: FRED WILKINS AND BROTHER LTD

Assignee(s): (std): FRED WILKINS AND BROTHER LTD ; ROBERT HALLER HUTCHINSON

Assignee(s): FRED WILKINS AND BROTHER LIMITED

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
GB191100068 A	19111012	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: SAFETY SKI BINDING

Abstract: This safety ski binding for protecting the skier's leg in case of abnormal lateral torsion and forward and backward fall comprises essentially a hollow case pivoted to the ski and enclosing spring controlling the pivotal movements of the case as well as hooks carried by this case and cooperating with studs projecting laterally from the ski boot. The protection is ensured in case of combined torsion and toe-lift and heel-lift movements. Quick-release and quick-fitting are also provided, together with adjustment of the hardness of the release mechanism.

Classifications:

International (IPC 8-9): A63C9/08 A63C9/081 A63C9/084

A63C9/085 A63C9/086 (Advanced/Invention);

A63C9/08 (Advanced/Non-invention);

A63C9/08 (Core/Invention)

International (IPC 1-7): A63C9/081

CPC: A63C9/081 A63C9/0841 A63C9/0842 A63C9/08535

A63C9/08542 A63C9/086 A63C9/0805 A63C9/0846 A63C9/08514

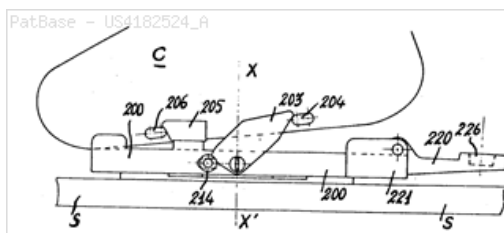
A63C9/08564 A63C9/08578 A63C2201/06

European: A63C9/081 A63C9/084A A63C9/084A1 A63C9/084H

A63C9/085A1 A63C9/085B A63C9/085B1 A63C9/085C1

A63C9/085C3 A63C9/086 K63C201/06 K63C9/08C

US: 280/618 280/624



Family:

Publication number	Publication date	Application number	Application date
AT375555 B	19840827	AT19780006207	19780825
AT620778 A	19810915	AT19780006207	19780825
CH629107 A	19820415	CH19780008811	19780818
DE2836481 A1	19790301	DE19782836481	19780821
DE2836481 C2	19820923	DE19782836481	19780821
FR2400923 A1	19790323	FR19770026029	19770826
FR2400923 B1	19830415	FR19770026029	19770826
FR2419087 A2	19791005	FR19780006942	19780310
FR2419087 B2	19830527	FR19780006942	19780310
FR2428448 A2	19800111	FR19780018056	19780616
FR2428448 B2	19830527	FR19780018056	19780616
FR2451757 A2	19801017	FR19800008725	19800418
FR2451757 B2	19830527	FR19800008725	19800418
IT1118250 A	19860224	IT19780027044	19780825
IT7827044 A0	19780825	IT19780027044	19780825
JP54044947 A2	19790409	JP19780103755	19780825
US4182524 A	19800108	US19780933634	19780814

Priority:

FR19770026029 19770826

FR19780006942 19780310

FR19780018056 19780616

FR19800008725 19800418

Probable Assignee: BEYL JEAN

Assignee(s): (std): BEYL JEAN JOSEPH ALFRED ; JIIN JIYOSU FU ARUFURETSUDO BEI ; LOOK SA

Assignee(s): LOOK S A ; SOCIETE LOOK 58004 NEVERS NIEVRE FR ; STE LOOK ; LOOK ; LOOK 58004 NEVERS NIEVRE FR SOC ; BEYL JEAN

Inventor(s): (std): BEYL JEAN JOSEPH ALFRED ; JIIN JIYOSU FU ARUFURETSUDO BEI ; BEYL JEAN A J

Inventor(s): ALFRED BEYL JEAN JOSEPH ; BEYL JEAN JOSEPH ALFRED NEVERS NIEVRE FR ; JEAN JOSEPH ALFRED BEYL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT375555 B	19840827	LSGT	+	granted / extensions (spc, cpc, pte)	
AT375555 B	19950615	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT375555 B	19980825	PEXP		Calculated Patent Term Expiry	
AT620778 A	19810915	LSPB	+	published / reissued	
CH629107 A	19820415	LSGT	+	granted / extensions (spc, cpc, pte)	
CH629107 A	19950428	LSLE	-PL	PATENT CEASED	
CH629107 A	19980818	PEXP		Calculated Patent Term Expiry	
DE2836481 A1	19790301	LSPB	+	published / reissued	
DE2836481 A1	19790719	LSSES	+OD	REQUEST FOR EXAMINATION	
DE2836481 A1	19800327	LSAS	OGA	NEW PERSON/NAME/ADDRESS OF THE APPLICANT	
DE2836481 C2	19820923	LSGT	+	granted / extensions (spc, cpc, pte)	
DE2836481 C2	19820923	LSGT	+D2	GRANT AFTER EXAMINATION	
DE2836481 C2	19830310	LSOP	-8363	OPPOSITION AGAINST THE PATENT	
DE2836481 C2	19840412	LSGT	+8365	FULLY VALID AFTER OPPOSITION	

PROCEEDINGS				
DE2836481 C2	19950810	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
FR2400923 A1	19790323	LSPB	+	published / reissued
FR2400923 A1	19790504	LSAS	TP	TRANSMISSION OF PROPERTY
FR2400923 B1	19830415	LSGT	+	granted / extensions (spc, cpc, pte)
FR2400923 B1	19950630	LSLE	-ST	NOTIFICATION OF LAPSE
FR2400923 B1	19970826	PEXP		Calculated Patent Term Expiry
FR2419087 A2	19791109	LSAS	TP	TRANSMISSION OF PROPERTY
FR2428448 A2	19800229	LSAS	TP	TRANSMISSION OF PROPERTY
IT1118250 A	19860224	LSGT	+	granted / extensions (spc, cpc, pte)
IT1118250 A	19980825	PEXP		Calculated Patent Term Expiry
JP54044947 A2	19790409	LSPB	+	published / reissued
US4182524 A	19800108	LSGT	+	granted / extensions (spc, cpc, pte)
US4182524 A	19980814	PEXP		Calculated Patent Term Expiry

Title: PRESSURE ACCUMULATOR FOR GASES AND LIQUIDS

Abstract: Source: DE517917A [DE] (Claim 1) 1. PATEN TANSPRÜCHIRs: i. Aus zwei ineinander angeordneten Behältern bestehender Druckspeicher fuer Gase oder Flüssigkeiten, dadurch gekenn zeichnet, dass der innere, fuer die Aufnahme des unter Druck zu setzenden: 1. ledituns bestimmte, aus Metall bestehende Behälter nur gas- bzw. fluessigkeitsdicht zu sein braucht, waehrend der aeußere, den Druck aufnehmende Behälter aus geeignetem Bau- stoff, wie z. B. Metall, Zement, Zement beton o. dgl., besteht, in sich verankert oder armiert und der Hohlraum zwischen bei den Behältern mit einer zaehfluessigen Dichtungssubstanz als Druckuebertragungs- mittel gefuehlt ist. Behälter nach Anspruch i, dadurch gekennzeichnet, dass von der aeußeren Wan dung (a) des in die Erde eingebauten Be haelters einzelne Teile derselben, wie z. B. die Stirnwaende, durch pyramidenfoermige Widerstandskoerper (la) mit grosser Basis flaeche (i) gestuetzt werden, waehrend die Seitenwandungen durch Anker gegenseitig verankert sein koennen. 3. Behälter nach Anspruch i, dadurch gekennzeichnet, dass bei -zylindrischer Ouerschnittsform- desselben die Stirn waende durch Stabanker, die zylindrische Mantelwand des aeußeren Behaelterteiles da gegen durch herumgelegte Ringanker oder eine Drahtwicklung gegen die innere Druckwirkung gestuetzt wird. **Machine translation:** (Claim 1) 1. PATEN TANSPRÜCHIRs: i. From two into one another arranged containers of existing accumulators for gases or liquids, thus gekenn it draws that the inside, for those admission under pressure to setting: 1. ledituns of certain containers only gas and/or liquid consisting of metal to be needs, while the outside, the pressure taking up container out be suitable-builds material, like e.g. Metal, **cement, cement** concrete o. , is filled embodied in itself or reinforced and the cavity between with the containers exists such with a viscous you tungssubstanz as pressure transmission means. Container according to requirement i, by the fact characterized that of the outside Wan dung (A) into the earth of inserted haelters individual parts of the same, how the front walls are e.g. supported, by pyramid-shaped resistance bodies (la) with large basis surface (i), while the side walls can be embodied by **anchors** mutually. 3. Container according to requirement i, by the fact characterized that - cylindrical Ouerschnittsform of the same the forehead would wind by staff **anchor**, which is supported there cylindrical coat wall of the outside container part approximately by put peripheral tie beams or a Drahtwicklung against the internal pressure effect.

Classifications:

International (IPC 8-9): B01J3/04 E02D31/04 E02D31/06 F17C1/02 (Advanced/Invention);

B01J3/04 E02D31/00 F17C1/00 (Core/Invention)

International (IPC 1-7): B01J3/04 B21D51/04 B30B15/16 E02D31/04 E02D31/06 E04H7/18 F02M21/02 F17C1/00 F17C1/02

CPC: B01J3/04 E02D31/04 E02D31/06 F17C1/02 F17C2201/0119

F17C2201/0157 F17C2201/052 F17C2203/0362 F17C2203/0631

F17C2203/0636 F17C2203/0678 F17C2223/0123 F17C2223/035

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European: B01J3/04 E02D31/04 E02D31/06 F17C1/02

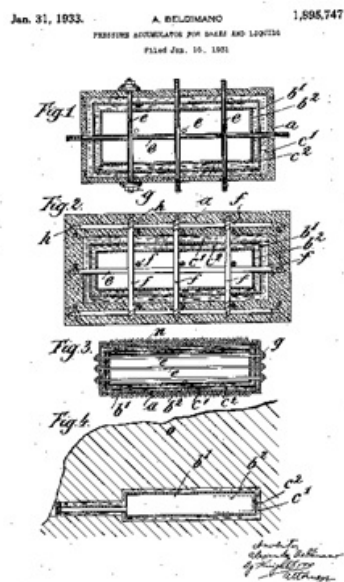
R17C201/01A3 R17C201/01G2 R17C201/05A R17C203/03B

R17C203/06A7B2 R17C203/06B1 R17C203/06B4 R17C223/01A3

R17C223/03C R17C270/01C6A R17C270/01C6B R17C270/01C7A

US: 220/653 405/55 52/169.6 52/192 52/267 52/291 52/381

PatBase - US1895747_A

**Family:**

Publication number	Publication date	Application number	Application date
CH148472 A	19310731		19300519
DE517917 A	19310209	DE1928B138125D	19280627
DE543209 A	19320203		00000000
US1895747 A	19330131	US19310509209	19310116

Priority:

DE1928B138125 19280627 19300519 US19310509209 19310116

Probable Assignee: SYNDICAT GAZSOUSPRESSION

Assignee(s): (std): ALEXANDER BELDIMANO ; SYNDICAT GAZSOUSPRESSION

Inventor(s): (std): SYNDICAT GAZSOUSPRESSION ; ALEXANDER BELDIMANO

Inventor(s): GAZSOUSPRESSION SYNDICAT ; BELDIMANO ALEXANDER

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH148472 A	19310731	LSGT	+	granted / extensions (spc, cpc, pte)	
CH148472 A	19500519	PEXP		Calculated Patent Term Expiry	
DE517917 A	19310209	LSGT	+	granted / extensions (spc, cpc, pte)	
DE543209 A	19320203	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Lightweight concrete dock

Abstract: A lightweight concrete floating dock comprised of a plurality of main walkway floats and finger floats comprised of a lightweight but relatively strong concrete shell, a stout inner metal flange and a buoyant foam core. A grid of continuous steel reinforcing is embedded throughout the concrete shell. Utilities are enclosed in conduits within the shell or can be placed in an accessible alternative utility trench. Floats are connected using a hook and eye or swivel type of connection. Docks are positioned using metal cages extending out from opposite sides of floats supporting winch stands with cables attached to **anchors** along the harbor floor. A stout inner metal frame fitted against the inner side walls of the concrete shell is directly connected to metal elements used for connecting floats, mooring boats and positioning docks, such that all substantial external forces imparted to the dock are endured by the inner metal frame leaving the concrete shell crack and maintenance free.

Classifications:

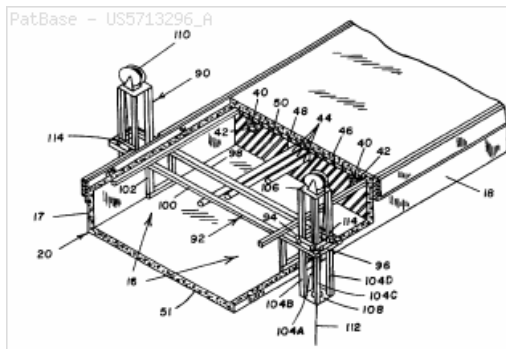
International (IPC 8-9): B63B35/36 B63B5/14 (Advanced/Invention); B63B35/34 B63B5/00 (Core/Invention)

International (IPC 1-7): B63B35/44

CPC: B63B5/14 B63B35/36 B63B2231/62

European: B63B35/36 B63B5/14 L63B231/62

US: 114/263 114/266



Family:

Publication number	Publication date	Application number	Application date
US5713296 A	19980203	US19960695654	19960812

Priority:

US19960695654 19960812

Probable Assignee:

GERVASI PAUL R

Assignee(s):

GERVASI PAUL R ; LAMKIN EDWARD B

Inventor(s): (std):

GERVASI PAUL R ; LAMKIN EDWARD B

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5713296 A	19980203	LSGT	+	granted / extensions (spc, cpc, pte)	
US5713296 A	20011119	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5713296 A	20060203	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5713296 A	20060308	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5713296 A	20060308	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5713296 A	20060404	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060203
US5713296 A	20160812	PEXP		Calculated Patent Term Expiry	

Title: A METHOD OF WATER-PROOFING UNDERGROUND CONCRETE STRUCTURE

Abstract: A system and method of waterproofing a concrete structure is described. The system may comprise one or more components enabling the waterproofing of the concrete structure. The one or more components may comprise a flexible synthetic polymer membrane placed on a concrete structure. The flexible synthetic polymer membrane may have a T-shaped longitudinal profiles at regular intervals at an interlocking side of the said flexible synthetic polymer membrane. The one or more components may further comprise a crystalline admixture added into the concrete structure. The one or more components may further comprise an elastomeric liquid water base polyurethane or, hybrid polyurethane polyurea or methyl methacrylate, applied over unconfined areas of the concrete structure to form a seamless waterproof membrane over the said unconfined areas of the concrete structure. The one or more components may further comprise an epoxy resin grout, a polymer modified non-shrink cementitious mortar and hydrophilic swell able water stops for enabling ancillary waterproofing treatments.

Classifications:**International (IPC 8-9):** E02D29/00 E02D29/045 (Advanced/Invention)**Family:**

Publication number	Publication date	Application number	Application date
IN201621011910 A	20171006	IN201621011910	20160404

Priority:

IN201621011910 20160404

Probable Assignee: NINA WATERPROOFING SYSTEMS PVT LTD**Assignee(s):** NINA WATERPROOFING SYSTEMS PVT LTD**Inventor(s):** MEHUL KIRIT PARIKH**Legal status (INPADOC)**[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
IN201621011910 A	20171006	LSPB	+	published / reissued	

Title: ANIMATED MECHANICAL STEER HAVING SPRING BIASED HEAD

Abstract: An animated mechanically operated steer which simulates the appearance and natural movements of a live animal used for practicing the art of cattle roping from horseback and to train a horse to follow the moving steer at the proper speed and distance for roping or lassoing purposes. An arm rotatably secured to a pedestal is also secured to the steer and drives the steer. The back legs of the steer move in an arcuate path to simulate a live animal. The head is pivotally secured to the frame and comprises a pair of horns mounted thereon. A pair of springs are mounted on the frame to opposite sides of the head to hold the head in a vertical position. Thereby, when the head is lassoed by a rope, it moves in an arcuate manner to dislodge the rope in a live steer simulated manner.

Classifications:

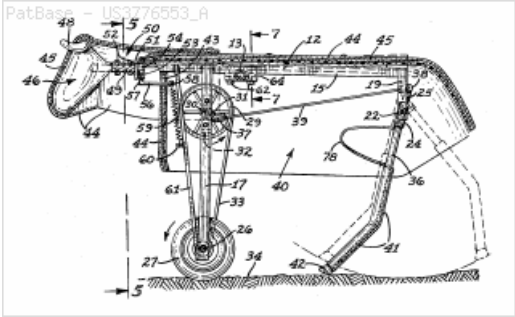
International (IPC 8-9): A63G1/28 (Advanced/Invention);
A63G1/00 (Core/Invention)

International (IPC 1-7): A63B71/02

CPC: A63G1/10 A63G19/20

European: A63G1/10 A63G1/28 A63G19/20

US: 273/339 273/367 273/368 434/433 446/367



Family:

Publication number	Publication date	Application number	Application date
US3776553 A	19731204	US19720319485	19721229

Priority:

US19720319485 19721229

Probable Assignee:

KELTON R

Assignee(s): (std):

KELTON R

Assignee(s):

KELTON R US

Inventor(s): (std):

KELTON R

Inventor(s):

KELTON R US

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3776553 A	19731204	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: DEVICE FOR DETERMINING TENSILE AND/OR COMPRESSIVE STRESSES, AND METHOD FOR PUTTING SAID DEVICE IN PLACE

Abstract: Device for determining tensile and/or compressive stresses along a bore hole 13 in a natural and/or artificial substrate 27, for example rock, concrete, soil, tipped materials or the like, having a pipe 14, especially a metallic pipe, which is supported in/on the substrate in a force-transmitting manner, in particular a pipe which is arranged in a force-transmitting manner in the bore hole 13, the pipe 14 being supported in/on the substrate by means of a supporting device, for example a thread 21 on the pipe and a nut 25, a wedge or the like, and measuring pick-ups 29 being provided in the interior 19 of the pipe 14, each being connected, indirectly or directly, preferably over the entire area, to the pipe in the region of their two ends, at least at two points which, in particular, are located in the longitudinal direction of the pipe 14.

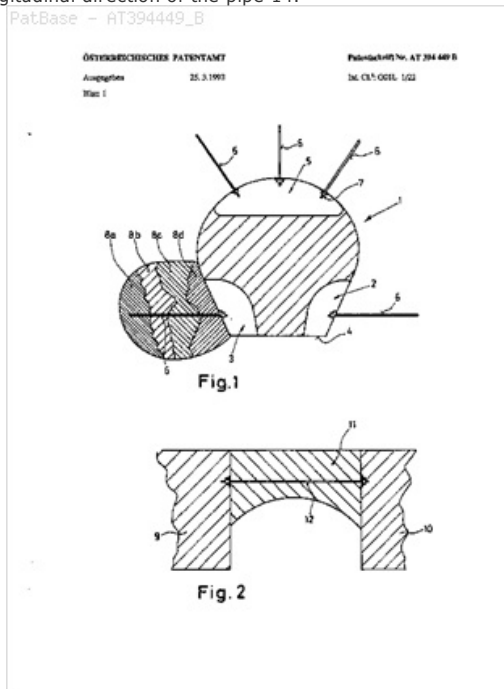
Classifications:

International (IPC 8-9): G01L5/00 (Advanced/Invention);
G01L5/00 (Core/Invention)

International (IPC 1-7): G01L1/22

CPC: G01L5/0004

European: G01L5/00B



Family:

Publication number	Publication date	Application number	Application date
AT258488 A	19910915	AT19880002584	19881019
AT394449 B	19920325	AT19880002584	19881019

Priority:

AT19880002584 19881019

Probable Assignee: PORR ALLG BAUGES

Assignee(s): (std): PORR ALLG BAUGES

Assignee(s): ALLGEMEINE BAUGESELLSCHAFT A PORR AKTIENGESELLSCHAFT

Inventor(s): (std): ANGELI RUDOLF DIPL ING ; SALZMANN HEINRICH ING

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT258488 A	19910915	LSPB	+	published / reissued	
AT394449 B	19920325	LSGT	+	granted / extensions (spc, cpc, pte)	
AT394449 B	19950615	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT394449 B	20081019	PEXP		Calculated Patent Term Expiry	

Title: Method and apparatus for blowing cores etc. using a plunger-cleaned blow box suitable for quick-set sand

Abstract: In foundry core-blowing, a blow box snugly fits a plunger which moves through it during the blowing step. In effect, the plunger pushes all of the fluidized sand mix out of the blow box and into the core box. This solves problems which have long impeded the use of quick setting sand mixes in blowing of cores and the like. With more conventional sand mixes better and more uniform packing of the sand in the mold is believed to be achieved. Two measuring feeders are provided supplying two different sand mixes which are non curing when separate but fast setting when mixed. They are mixed in a rapid mixer, dumped into a charging tube which quickly dumps the mix into a blow box. The plunger moves through the charging tube and then through the blow box, cleaning both and aiding in the blowing of all of the sand mix into the mold or the blow tube leading to it. The tip of the blow tube has an internal lip which breaks off any residue or plug retained within this tube.

Classifications:

International (IPC 8-9): B22C15/24 B22C5/16 B22C9/02

B29C33/38 (Advanced/Invention);

B22C9/02 B29C33/38 (Advanced/Non-invention);

B22C15/00 (Core/Invention)

International (IPC 1-7): B22C15/22 B22C15/24 B22C15/28

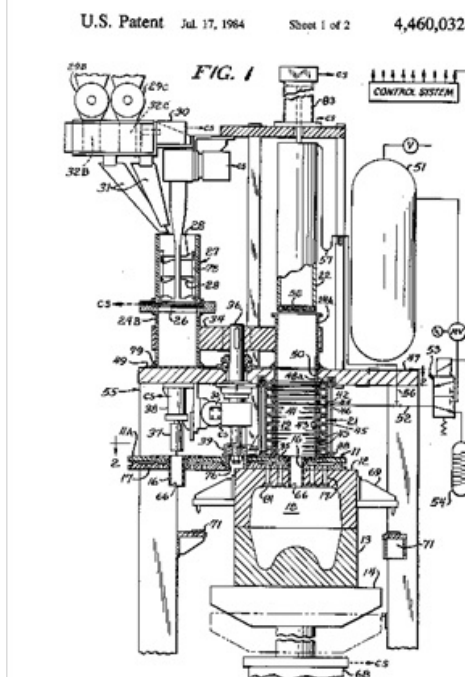
B22C5/16 B22C9/02 B29C33/38

CPC: B22C15/245 B22C5/12 B22C15/24

European: B22C15/24 B22C15/24A B22C5/12

US: 164/158 164/195 164/20 164/200 164/201 164/202

PatBase - US4460032_A



Family:

Publication number	Publication date	Application number	Application date
AU198310555 A1	19830804	AU19830010555	19830118
AU198539587 A1	19851017	AU19850039587	19850306
AU551722 B2	19860508	AU19830010555	19830118
AU568925 B2	19880114	AU19850039587	19850306
CA1208875 A1	19860805	CA19830419612	19830117
CA1232425 A1	19880209	CA19850474284	19850214
DE3374847 D1	19880121	DE19833374847	19830118
EP0084841 A2	19830803	EP19830100381	19830118
EP0084841 A3	19841017	EP19830100381	19830118
EP0084841 B1	19871209	EP19830100381	19830118
EP0158082 A2	19851016	EP19850102083	19850226
EP0158082 A3	19880127	EP19850102083	19850226
ES519204 A0	19840601	ES19830519204	19830122
ES519204 A2	19840613	ES19830519204	19830122
ES542139 A0	19860416	ES19850542139	19850411
ES542139 A2	19860425	ES19850542139	19850411
ES8404778 A1	19840601	ES19830519204	19830122
ES8605700 A1	19860416	ES19850542139	19850411
JP1642115 C3	19920228	JP19830010463	19830125
JP3003532 B4	19910118	JP19830010463	19830125
JP58145334 A2	19830830	JP19830010463	19830125
JP60231552 A2	19851118	JP19850079146	19850412
US4460032 A	19840717	US19820342071	19820125
US4570694 A	19860218	US19840599728	19840412
US4643240 A	19870217	US19850783144	19851030

Priority:

US19820342071 19820125 CA19830419612 19830117 US19840599728 19840412
 CA19850474284 19850214 US19850783144 19851030

Probable Assignee: BEARDSLEY AND PIPER LLC

Assignee(s): (std): PETTIBONE CORP ; LUND ROBERT S

Assignee(s): PETEIBOON CORP ; SECURITY PACIFIC BUSINESS CREDIT INC ; SIMPSON ACQUISITIONS LLC ;
 PETTIBONE A DE CORP CORP ; BEARDSLEY AND PIPER LLC ; FIRST NATIONAL BANK OF CHICAGO ;
 HARRIS NA ; HEICO HOLDING INC ; HEISLEY HOLDING INC

Inventor(s): (std): ROBERT S LUND ; ROBAATO ESU RANDO ; ROBAATO ESU RUNDO ; LUND ROBERT S

Agent(s): GRIFFITH HACK; MACRAE AND CO
Designated states: DE FR GB IT SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU198310555 A1	19830804	LSPB	+	published / reissued	
AU198539587 A1	19851017	LSPB	+	published / reissued	
AU551722 B2	19860508	LSGT	+	granted / extensions (spc, cpc, pte)	
AU551722 B2	20030118	PEXP		Calculated Patent Term Expiry	
AU568925 B2	19880114	LSGT	+	granted / extensions (spc, cpc, pte)	
AU568925 B2	20050306	PEXP		Calculated Patent Term Expiry	
DE3374847 D1	19881229	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3374847 D1	19930114	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0084841 A2	19830803	LSPB	+	published / reissued	
EP0084841 A3	19850410	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19850129
EP0084841 A3	19860611	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19860414
EP0084841 B1	19871209	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0084841 B1	19881123	LSGT	+26N	NO OPPOSITION FILED	
EP0084841 B1	19910118	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19910118 YEAR OF FEE PAYMENT : 9
EP0084841 B1	19910122	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 19910122 YEAR OF FEE PAYMENT : 9
EP0084841 B1	19910128	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19910128 YEAR OF FEE PAYMENT : 9
EP0084841 B1	19910131	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0084841 B1	19910318	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19910318 YEAR OF FEE PAYMENT : 9
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EP0084841 B1	19920119	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19920119
EP0084841 B1	19920916	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : PCNP
EP0084841 B1	19920930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19920930
EP0084841 B1	19921001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19921001

NATIONAL OFFICE TO EPO]					
EP0084841 B1	19921127	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0084841 B1	19950131	LSLE	-EUG	SE: EUROPEAN PATENT HAS LAPSED	REF COUNTRY CODE : EP TEXT : 83100381.9 EFFECTIVE DATE : 19920806
EP0158082 A2	19851016	LSPB	+	published / reissued	
EP0158082 A3	19880629	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19880426
EP0158082 A3	19890419	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19890303
EP0158082 A3	19910925	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19910325
ES8404778 A1	19840601	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8404778 A1	19960601	LSLE	-MM4A	PATENT LAPSED	EFFECTIVE DATE : 19960401
ES8404778 A1	20040601	PEXP		Calculated Patent Term Expiry	
ES8605700 A1	19860416	LSGT	+	granted / extensions (spc, cpc, pte)	
ES8605700 A1	20060416	PEXP		Calculated Patent Term Expiry	
JP1642115 C3	19920228	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1642115 C3	20030125	PEXP		Calculated Patent Term Expiry	
JP3003532 B4	19910118	LSPB	+	published / reissued	
JP58145334 A2	19830830	LSPB	+	published / reissued	
JP60231552 A2	19851118	LSPB	+	published / reissued	
US4460032 A	19840717	LSGT	+	granted / extensions (spc, cpc, pte)	
US4460032 A	19820125	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PETTIBONE CORPORATION, A CORP. OF DE OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:LUND, ROBERT S.; REEL/FRAME:003984/0267 EFFECTIVE DATE : 19820106
US4460032 A	19840517	LSGT	PAT1	Patented Case	
US4460032 A	19840517	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4460032 A	19850513	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FIRST NATIONAL BANK OF CHICAGO THE OLDPARTY : SECURITY INTEREST; ASSIGNOR:PETTIBONE CORPORATION A DE CORP; REEL/FRAME:004403/0708 EFFECTIVE DATE : 19850411
US4460032 A	19880114	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4460032 A	19900604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SECURITY PACIFIC BUSINESS CREDIT INC. OLDPARTY : SECURITY INTEREST; ASSIGNOR:PETTIBONE CORPORATION, A CORP. OF DE.; REEL/FRAME:005432/0185 EFFECTIVE DATE : 19881229
US4460032 A	19900604	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PETTIBONE CORPORATION, A CORP. OF DE, DELAWARE OLDPARTY : RELEASED BY SECURED PARTY; ASSIGNOR:FIRST NATIONAL BANK OF CHICAGO; REEL/FRAME:005441/0776 EFFECTIVE DATE : 19890525
US4460032 A	19920717	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US4460032 A	19950915	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PETTIBONE CORPORATION, ILLINOIS OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:SECURITY PACIFIC BUSINESS CREDIT, INC.; REEL/FRAME:007648/0300 EFFECTIVE DATE : 19950913
US4460032 A	19960408	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4460032 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SIMPSON ACQUISITIONS, L.L.C., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HEICO HOLDING, INC.; REEL/FRAME:008920/0994 EFFECTIVE DATE : 19980123
US4460032 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEARDSLEY & PIPER, L.L.C., ILLINOIS OLDPARTY : CHANGE OF NAME; ASSIGNOR:SIMPSON ACQUISITIONS, L.L.C.; REEL/FRAME:008933/0004 EFFECTIVE DATE : 19980126
US4460032 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HEISLEY HOLDING, INC., ILLINOIS OLDPARTY : CHANGE OF NAME; ASSIGNOR:PETTIBONE CORPORATION; REEL/FRAME:008933/0009 EFFECTIVE DATE : 19970401
US4460032 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HEICO HOLDING, INC., ILLINOIS OLDPARTY : CHANGE OF NAME; ASSIGNOR:HEISLEY HOLDING, INC.; REEL/FRAME:008933/0359 EFFECTIVE DATE : 19970625
US4570694 A	19860218	LSGT	+	granted / extensions (spc, cpc, pte)	
US4570694 A	19840421	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PETTIBONE CORPORATION A DE CORP OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LUND, ROBERT S.; REEL/FRAME:004248/0664 EFFECTIVE DATE : 19840406
US4570694 A	19851218	LSGT	PAT1	Patented Case	
US4570694 A	19851218	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4570694 A	19880412	LSRE	CC	CERTIFICATE OF CORRECTION	
US4570694 A	19890821	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4570694 A	19930818	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4570694 A	19970818	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4643240 A	19870217	LSGT	+	granted / extensions (spc, cpc, pte)	
US4643240 A	19861213	LSGT	PAT1	Patented Case	
US4643240 A	19861213	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4643240 A	19870825	LSRE	CC	CERTIFICATE OF CORRECTION	
US4643240 A	19900815	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4643240 A	19940817	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

US4643240 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SIMPSON ACQUISITIONS, L.L.C., ILLINOIS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HEICO HOLDING, INC.; REEL/FRAME:008920/0994 EFFECTIVE DATE : 19980123
US4643240 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BEARDSLEY & PIPER, L.L.C., ILLINOIS OLDPARTY : CHANGE OF NAME; ASSIGNOR:SIMPSON ACQUISITIONS, L.L.C.; REEL/FRAME:008933/0004 EFFECTIVE DATE : 19980126
US4643240 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HEISLEY HOLDING, INC., ILLINOIS OLDPARTY : CHANGE OF NAME; ASSIGNOR:PETTIBONE CORPORATION; REEL/FRAME:008933/0009 EFFECTIVE DATE : 19970401
US4643240 A	19980209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HEICO HOLDING, INC., ILLINOIS OLDPARTY : CHANGE OF NAME; ASSIGNOR:HEISLEY HOLDING, INC.; REEL/FRAME:008933/0359 EFFECTIVE DATE : 19970625
US4643240 A	19981119	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US4643240 A	20080207	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HARRIS N.A., ILLINOIS OLDPARTY : SECURITY AGREEMENT; ASSIGNOR:SIMPSON TECHNOLOGIES CORPORATION; REEL/FRAME:020478/0413 EFFECTIVE DATE : 20080201

Title: EQUIPMENT FOR BIAXIAL FRACTURE TESTING

Abstract: The testing equipment for determining mechanical fracture characteristics on cuboid or cylindrical sample bodies under biaxial stress comprises a force transmission device with integrated rolling-contact bearing and a wedge or truncated wedge which interacts with this device in order to introduce the bending tensile force without any friction, into the sample body in a direction which is perpendicular to the course of the crack or the plane of the crack (x direction).; The compressive force perpendicular to the bending tensile force in the x- direction, acting in a direction parallel to the crack plane and perpendicular to the crack front (z direction) is introduced into the sample body via the plate-like force transmission devices with integrated rolling- contact bearings by compression units which are fixed to two loading frames which act so that they are mechanically independent of each other. With the compressive force in the z direction perpendicular to the bending tensile force in the x direction a biaxial orthogonal stress state in the sample body is formed.

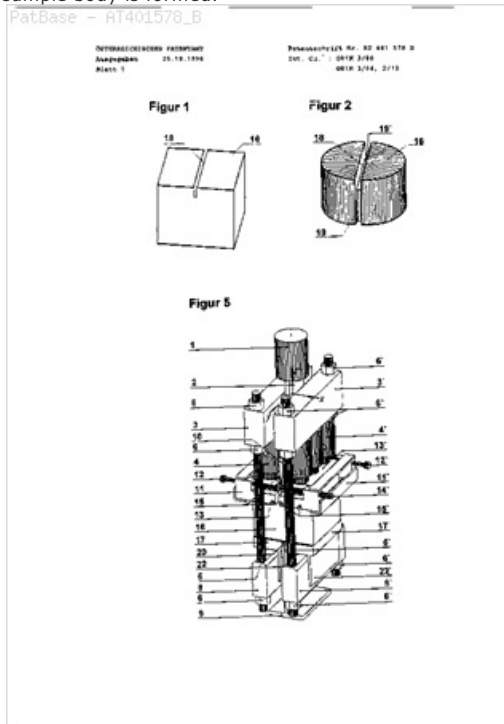
Classifications:

International (IPC 8-9): G01N3/02 (Advanced/Non-invention);
G01N3/00 (Core/Non-invention)

International (IPC 1-7): G01N3/04 G01N3/08 G01N3/10

CPC: G01N2203/0254

European: S01N203/02G2

**Family:**

Publication number	Publication date	Application number	Application date
AT152594 A	19960215	AT19940001525	19940803
AT401578 B	19961025	AT19940001525	19940803

Priority:

AT19940001525 19940803

Probable Assignee: ELSER MICHAEL DIPL ING

Assignee(s): (std): ELSER MICHAEL DIPL ING ; TSCHEGG ELMAR DR

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT152594 A	19960215	LSPB	+	published / reissued	
AT401578 B	19961025	LSGT	+	granted / extensions (spc, cpc, pte)	
AT401578 B	19971115	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT401578 B	19971115	LSLE	-RER	CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES	
AT401578 B	20140803	PEXP		Calculated Patent Term Expiry	

Title: Method of manufacturing a foundation.

Abstract: Expanding material is placed in the ground, as a result of which both the ground and the expanding concrete are placed under compression.

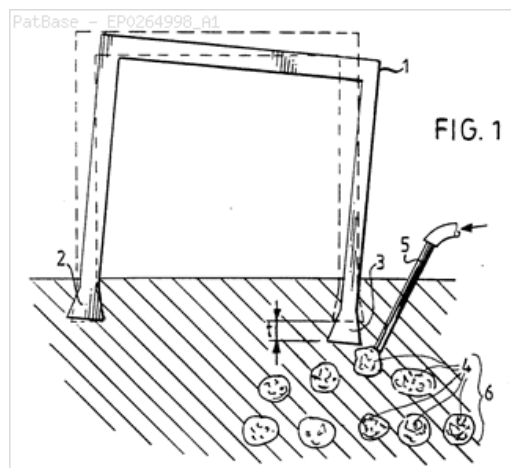
Classifications:

International (IPC 8-9): C04B22/00 E02D3/12 E02D31/12
E02D35/00 E02D37/00 E02D5/44 E02D5/50 E02D5/62
E02D5/76 (Advanced/Invention);
C04B22/00 E02D3/00 E02D31/00 E02D35/00 E02D37/00 E02D5/22
E02D5/34 E02D5/74 (Core/Invention)

International (IPC 1-7): E02D27/28 E02D35/00 E02D37/00

CPC: C04B22/008 E01C23/10 E02D3/12 E02D5/44 E02D5/50
E02D5/62 E02D5/76 E02D31/12 E02D35/00 E02D37/00

European: C04B22/00L E01C23/10 E02D3/12 E02D31/12
E02D35/00 E02D37/00 E02D5/44 E02D5/50 E02D5/62 E02D5/76



Family:

Publication number	Publication date	Application number	Application date
AT56774 E	19901015	AT19870201910T	19871006
DE3765078 D1	19901025	DE19873765078	19871006
EP0264998 A1	19880427	EP19870201910	19871006
EP0264998 B1	19900919	EP19870201910	19871006
NL8602512 A	19880502	NL19860002512	19861006
NL8700512 A	19880502	NL19870000512	19870303

Priority:

NL19860002512 19861006 NL19870000512 19870303 EP19870201910 19871006
EP19870201910 19871006

Probable Assignee: BALLAST NEDAM GROEP NV

Assignee(s): (std): BALLAST NEDAM GROEP NV

Assignee(s): BALLAST NEDAM GROEP TE AMSTERDAM NV ; BALLAST NEDAM GROEP N V ; BALLAST NEDAM GROEP N V AMSTELVEEN NL ; BALLAST NEDAM GROEP N V TE AMSTERDAM

Inventor(s): (std): VAN BIJSTERVELD JACOBUS JOHANN

Inventor(s): VAN BIJSTERVELD JACOBUS JOHANNES NL 2631 HZ NOOTDO ; VAN BIJSTERVELD JACOBUS JOHANNES NL 2631 HZ... ; VAN BIJSTERVELD JACOBUS JOHANNES

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT56774 E	19901015	LSGT	+	granted / extensions (spc, cpc, pte)	
AT56774 E	20071006	PEXP		Calculated Patent Term Expiry	
DE3765078 D1	19911017	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3765078 D1	19951005	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0264998 A1	19880427	LSPB	+	published / reissued	
EP0264998 A1	19880803	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19880602
EP0264998 A1	19890607	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19890419
EP0264998 B1	19900919	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0264998 B1	19900919	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT LAPSED DATE : 19900919
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				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	
EP0264998 B1	19900919	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI LAPSED DATE : 19900919
EP0264998 B1	19900919	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE LAPSED DATE : 19900919
EP0264998 B1	19900919	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19900919
EP0264998 B1	19900919	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19900919
EP0264998 B1	19901031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19901031
EP0264998 B1	19901228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP0264998 B1	19901230	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 19901230
EP0264998 B1	19910911	LSGT	+26N	NO OPPOSITION FILED	
EP0264998 B1	19931011	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19931011 YEAR OF FEE PAYMENT : 7
EP0264998 B1	19931020	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19931020 YEAR OF FEE PAYMENT : 7
EP0264998 B1	19931027	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19931027 YEAR OF FEE PAYMENT : 7
EP0264998 B1	19931029	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19931029 YEAR OF FEE PAYMENT : 7
EP0264998 B1	19931031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 19931031 YEAR OF FEE PAYMENT : 7
EP0264998 B1	19941006	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19941006
EP0264998 B1	19941031	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19941031

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	
EP0264998 B1	19950430	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : BALLAST NEDAM GROEP N.V. EFFECTIVE DATE : 19941031
EP0264998 B1	19950501	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19950501
EP0264998 B1	19950531	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19941006
EP0264998 B1	19950616	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON- PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0264998 B1	19950630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19950630
EP0264998 B1	19950701	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19950701
EP0264998 B1	19950825	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
EP0264998 B1	20071006	PEXP		Calculated Patent Term Expiry	
NL8602512 A	19880502	LSPB	+	published / reissued	
NL8602512 A	19910603	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	
NL8700512 A	19880502	LSPB	+	published / reissued	
NL8700512 A	19880502	LSES	+A1B	A SEARCH REPORT HAS BEEN DRAWN UP	
NL8700512 A	19921102	LSLE	-BV	THE PATENT APPLICATION HAS LAPSED	

Title: Method of producing a concrete floor secured against uplift

Abstract: The invention relates to a method of producing a concrete floor secured against uplift, in which the concrete floor is produced by overlapping high-pressure injection columns before completion of the trench excavation. The length of the high-pressure injection columns corresponds to the statically required thickness of the concrete floor, the floor being secured against uplift by tension elements and/or compression elements. Here, the tension elements and/or the compression elements can be placed before the construction of the high-pressure injection floor or after the construction of the high-pressure injection floor or in one operation together with the high-pressure injection floor, in which arrangement tension piles and/or tension rods and/or grouted **anchors** can be placed as tension elements. The uplift forces can be transmitted via an arch to the trench closure.

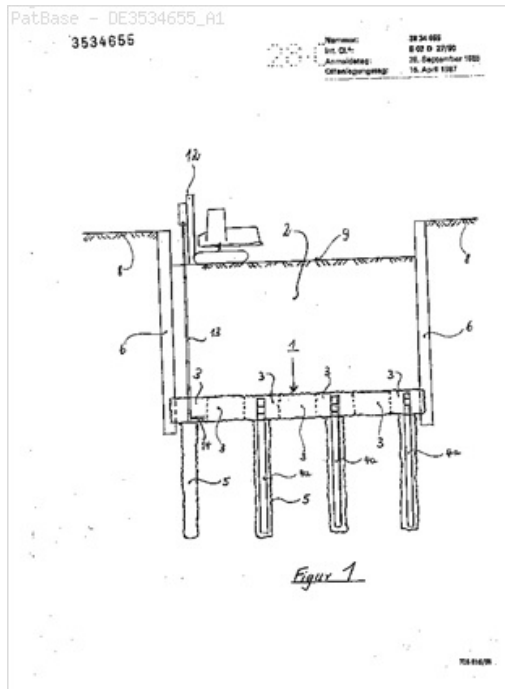
Classifications:

International (IPC 8-9): E02D27/50 E02D31/12 (Advanced/Invention); E02D27/32 E02D31/00 (Core/Invention)

International (IPC 1-7): E02D27/50 E02D31/12

CPC: E02D27/50 E02D31/12

European: E02D27/50 E02D31/12



Family:

Publication number	Publication date	Application number	Application date
DE3534655 A1	19870416	DE19853534655	19850928
DE3534655 C2	19900510	DE19853534655	19850928

Priority:

DE19853534655 19850928

Probable Assignee: BILFINGER BERGER BAU

Assignee(s): (std): BILFINGER BERGER BAU

Assignee(s): BILFINGER AND BERGER BAUAKTIENGESELLSCHAFT ; BILFINGER AND BERGER BAUAKTIENGESELLSCHAFT 6800 ; BILFINGER AND BERGER BAUAKTIENGESELLSCHAFT 6800 MANNHEIM DE

Inventor(s): (std): MAYER GERHARD DR ING

Inventor(s): MAYER GERHARD DR ING 6909 WALLDORF DE

Legal status (INPADOC)

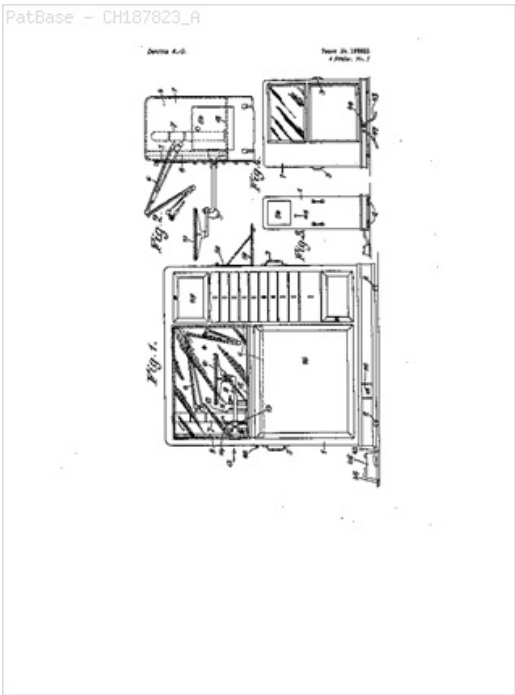
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Patent	Date recorded	Event group	Code	Event	Details
DE3534655 A1	19870416	LSPB	+	published / reissued	
DE3534655 A1	19870416	LSSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE3534655 C2	19900510	LSGT	+	granted / extensions (spc, cpc, pte)	
DE3534655 C2	19900510	LSGT	+D2	GRANT AFTER EXAMINATION	
DE3534655 C2	19901108	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3534655 C2	19910905	LSLI	8320	WILLINGNESS TO GRANT LICENCES DECLARED (PARAGRAPH 23)	
DE3534655 C2	19980917	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	

Title: SCHRANK FUER ZAHNAERZTLICHE ZWECKE. CABINET FOR PURPOSES ZAHNAERZTLICHE. (Machine translation)

Abstract: Source: CH187823A [DE] 1. Schrank nach Patentanspruch, dadurch gekennzeichnet, dass er zwecks Erreichung der Fahrbarken mit Fahrrollen versehen ist. **Machine translation:** . 1 Cabinet according to claim, characterized in that it is provided with castors To achieve the driving boats.

Classifications:
International (IPC 8-9): A61G15/14 (Advanced/Invention);
A61G15/00 (Core/Invention)
International (IPC 1-7): A61C1/00
CPC: A61G15/14
European: A61G15/14



Family:

Publication number	Publication date	Application number	Application date
CH187823 A	19361130		00000000

Priority:

19360205

Probable Assignee:

DENTICA A G

Assignee(s): (std):

DENTICA A G

Inventor(s): (std):

DENTICA A G

Inventor(s):

A G DENTICA

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH187823 A	19361130	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: EARTH SUPPORTING STRUCTURES

Abstract: ABSTRACT OF THE DISCLOSURE

An earth supporting structure is formed from a plural-ity of prefabricated re-inforced elements, each element comprising a prefabricated re-inforced concrete panel with a prefabricated re-inforced concrete tie rod for support- ing the panel in an erect position, the tie rod being artic-ulated to the panel through exposed common re-inforcing elements so that the structural element as a whole will take up relatively little space in Storage and handling and will be easy to erect. A method of erecting the structural element includes supporting the panel in a substan-tially upright position utilizing the tie rod as a prop. With the element in such propped position final adjustment and the laying of a concrete base over the free end of the tie rod may be carried out and the exposed common re-inforcing elements covered with concrete.

Classifications:

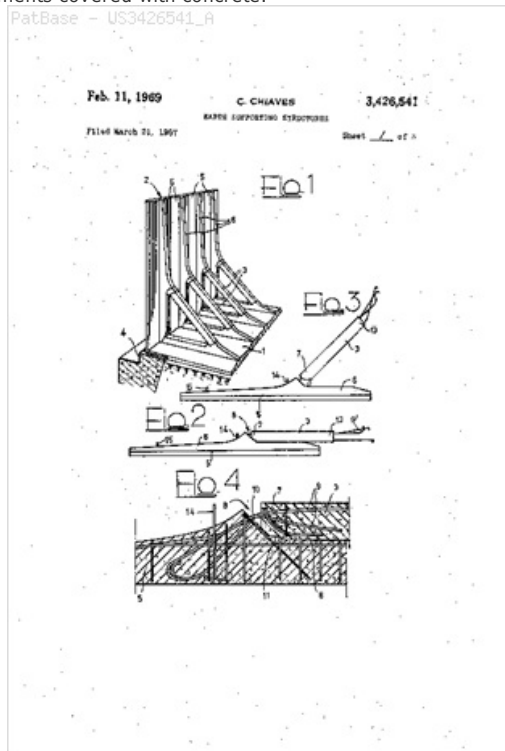
International (IPC 8-9): E02D29/02 (Advanced/Invention)

International (IPC 1-7): E02D29/02 E02D5/20 E04B1/344 E04C1/10

CPC: E02D29/0266

European: E02D29/02F1

US: 405/287 52/169.1



Family:

Publication number	Publication date	Application number	Application date
AT277309 B	19691229	AT19670002982	19670329
CH459901 A	19680715	CH19670004234	19670323
DE1634302 A1	19700702	DE19671634302	19670323
DE1634302 B2	19730927	DE19671634302	19670323
DE1634302 C3	19740425	DE19671634302	19670323
ES338531 A1	19680501	ES19670338531	19670328
FR1515760 A	19680301	FR19670100774	19670330
GB1176878 A	19700107	GB19670014666	19670330
US3426541 A	19690211	US19670624929	19670321

Priority:

IT19660007371 19660330 IT19660737166 19660330 AT19670002982 19670329

Probable Assignee: CHIAVES

Assignee(s): (std): CHIAVES ; CHIAVES CARLO ; CHIAVES CARLO ING

Assignee(s): CARLO CHIAVES ; CHIAVES CARLO TURIN ITALIEN ; ING CARLO CHIAVES

Inventor(s): (std): CARLO CHIAVES ; CHIAVES CARLO ; CHIAVES CARLO ING

Inventor(s): CHIAVES CARLO TURIN ITALIEN ; ING CARLO CHIAVES

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT277309 B	19691229	LSGT	+	granted / extensions (spc, cpc, pte)	
AT277309 B	19830115	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT277309 B	19870329	PEXP		Calculated Patent Term Expiry	
CH459901 A	19680715	LSGT	+	granted / extensions (spc, cpc, pte)	
CH459901 A	19870323	PEXP		Calculated Patent Term Expiry	
DE1634302 A1	19700702	LSPB	+	published / reissued	
DE1634302 B2	19730927	LSPB	+	published / reissued	

DE1634302 C3	19740425	LSGT	+	granted / extensions (spc, cpc, pte)
DE1634302 C3	19740425	LSGT	+C3	GRANT AFTER TWO PUBLICATION STEPS (3RD PUBLICATION)
DE1634302 C3	19830505	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
ES338531 A1	19680501	LSGT	+	granted / extensions (spc, cpc, pte)
FR1515760 A	19680301	LSGT	+	granted / extensions (spc, cpc, pte)
FR1515760 A	19870330	PEXP		Calculated Patent Term Expiry
GB1176878 A	19700107	LSGT	+	granted / extensions (spc, cpc, pte)
GB1176878 A	19700520	LSGT	+PS	PATENT SEALED
GB1176878 A	19821027	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE
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US3426541 A	19690211	LSGT	+	granted / extensions (spc, cpc, pte)

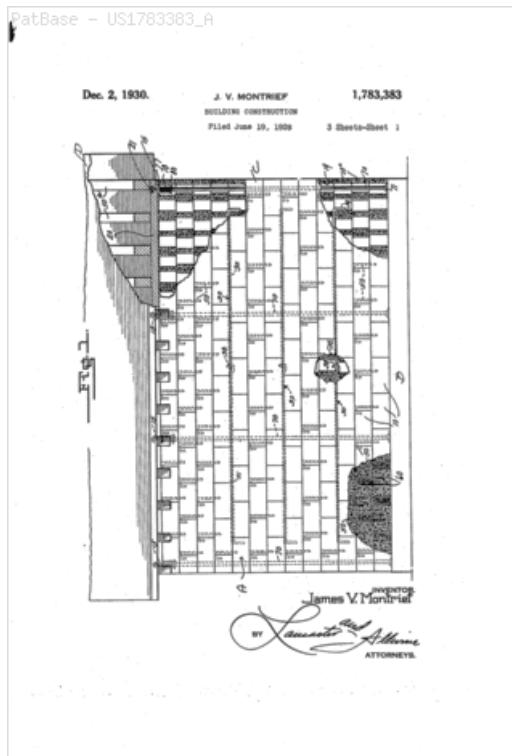
Title: BUILDING CONSTRUCTION

Abstract: I claim : 1. In e wall construction the combination ot a foundation, superposed rows of loosely disposed blocks niountcll on the foundation io define said wall, the blocks at the ends of the Wall having vertically aligning passageways i7horetlii'oiegl from the foundation upwardly. eye bolts secured in the foiilclation facing lip\ve1'dly in each of said vertical passngeways at the ends ol' the wall, nieinbers detncliaibly connected with said eye bolts and extending upwardly through the vertical inlssagemtys provided by the superposed positioning of said blocks at the ends of the mill. means to clump the upper ends of said nieinbers against the top blocks at the top of the well wliereby to exert a clamping pressure nt the ends of the wall thiroughiout the superposed blocks froni the ssfoundation upwardly to hold the ends of the Wall in si, stable relation, and horizontal connecting :md reinforcing means extending longitudinally of the well connected at its ends to these blocks at the ends of the well which are held in position by the vertically clamped meinbers. 2. In si. wall construction the coibination ot 11 foundation, za top beam, superposed rows of blocks between the foundation and top berlin, said blocks lioving; vertical passagewziys therethrough, tension elements extending through said passegeways and connected nthier opposite ends to the foundation and top bemn whereby to clamp the blocks together in at stable relation, and horizontal _lt;-onnection members extending horizontally thirough the well and connected at their ends to the blocks at the opposite ends of the well. In in building construction the combination ol' it plurality of superposed building blocks defining at wall, certain of seid building blocks at the ends of the wall lmvng vertical openings therein, and zz tie rod construction 'tor horizontally tying and reiniorciing the blocks in the well comprising at pair ot relatively movable sections having the remote ends thereof provided with downiurned encliors projecting into the openings of tie end blocks of the well, said rod sections at their udjacent ends having menus to clamp the szune in e definitely adjusted relation. 4. In building construction an elongated i'o1in_lt;stion, un elungfitefl well on the foundetien including ai plurality oi' superposed building blocks having vertical aligning openings therethrough at the ends of the wall and at locations interinedisto the ends of the wall, e longitudinally extending beam capping the top of the wall, and tie rods under tension connected at their lower ends to the foundation and extending upwardly through the aligning openings at the ends of the wall and at locations inte1'n1edia.te the ends ofthe well and being connected at their upper ends to the top beam at the ends thereof and at iiteruediaie locations thereon. 5. In a building construction an _l.G'T1gC1lSGCI f0Li]1(lé!,f101`1, en elongated wall on the foundation including a plurality of superposed building blocks having vertical aligning openings thierethrough nt the ends of the wall and at locations interinedinte the ends of the well, ai. longitudinally extending beam capping the top of the wall, tie rods under tension connected at their lower ends to the Foundationii and extending upwardly through the aligning openings at the ends of the wall and ut locations interinedinte the ends of ilue well and being connected at their upper ends to the top beuin at the ends thereof and at interinediate locations thereon, and tie rods liorizontally embedded between the blocks of the Wall :it a plurality of spaced locations between the foundations and top beam, each of said liorizontul tie rods including 21. pair of sections having Ein adjustable connection ant the adjacent ends thereof, with the remote ends of said sections **anchored** to those blocks at the ends oi' the wall through which the vertical tie rods extend. 6. In 21 wall structure the combination of an plurality of uninortared blocks laid in superposed row relation upon each other, spaced horizontal tie rods longitudinally tensioned and gripping the blocks at the ends oil the wall to horizontally clamp the respective rows of blocks in a. beam relation, and vertical tie rods under tension and clamping the umnortared blocks in 21, beam relation together at spaced vertical locations along the length of the Wziil. 7. In st wall structure the combination of fi- plurality of uninortared bonded blocks placed in loose relation in superposed rows, horizontal tension tie rod constructions ut spaced relation along the height of the wall longitudinally elznnping the blocks in the rows in 11 beam-like relation, the blocks of the superposed rows at the ends of the Wall having voids therein providing vertical passagcways, and tie rods clamping the blocks togetlier at the ends of the wall loosely eXtending thirough said passegeivays and having inezins associatcd therewith :it the lower and upper ends thereof io udjiistebly compress the blocks together in fi non-obstructing function relation with _respect to the horizontal tie rod constructions. ` 8. In at building construction a, plurality of horizontally superposed horizontal rows of niortared connected blocks, horizontal tie rod means connecting the blocks of certain of the rows of blocks together, vertical tie rod means connecting the blocks together, and tie members individually connecting the G 1,783,363 zuljzmeznt blmaks of otlmr 0 l' the ro\\s of blocks tngotlxcr 2lg2III']_f rclnive II1(IVE1`1ICIII mvay from ealcrll other. 9. In fi wall C(711Sfl`1ICt10ll the c01nbuiatio11 of 21 plurality of SII DG1` ]JOS'I'(l rows 0'F blocks, \c1'fical flu rml menus clamping the 'blocks togetllul' in a vcrficam1 Wall-like fClk\}\IO\], and ulmms l' (ZSIIIé1\II§7 acting in take u top lonsl ull tho blocks mmdcx' circumstances Wlmcre au m\_gt;\e1'm1c1 f1f1\` C£II.CIIS to fl'E,C,L\$flII'B the l,»lr1_t;:"lie. lf). in II wall G171"1St1'1IC1»1011 the C0\11)11211\I)\ of u f0um1z1Um1, ax plumltity ol' Sl' lJ]Cl' l1(S(¥(l blorks in wall-like rclul ion (III the fUll1)(lf1t10117 zu top lU!_IS12))1)(1'111gl)Q£\III on the luloeks, vcruicnl C121IUJ)11§_§ 111621115 C01111BC17111Q: the fou1\dzL~ tion with the Imaam to czlzuup the blocks in a (TOll' 1111'C\$F1' tfl \\\=a\I-like rclatimx, and means acting IIQ1\\` QQ11 the fouml;LtE_t;_gt;u :md Lille load sup- 1JU1'11]1§_I beam for 1'_lt;:Iie'ing; tho blocks of the load on the beam under circulnstzuxces wha; Q Ilw blocks tlu'ez1L_t;en to fx'aclu1'e incident fo an ovevloafl, II. In n wall co11st1'ucti_t;_gt;n the comlauiution ol' fi foundation, il plurality of Superp0_gt;=e_t;ll,m1ucl{si11 xvsmll-like 1'cl:11,1onon fha founQIntinn, n top load Suppo1'tiug beam ou the lzloclw, vertical clznnping 111951115 connecting the 'foulxiluilem with the beam to clamp the blocks in u compressed wall-lllie relation, mul resilient menus under COIII}__)1` QSSI0H between the lEI)IIHLI21'I'({}11 and the load supporiugf lyczuu um'111:11ly ucting to force the same counter to the nlcnus which tends to ve1'tic:1lly con1p1'es.~5 said blocks. 12. In n wall COIS1,]§11C1',1011 of the class rie» scribbsrw1 ZL f0III(1ET1011 llaving au eye bak my clworcd therein with an nyc extending up- \vm':lly in exposed 1` (éIH\Q1011 011 [wp of the f0` L11\ULLII011, 11 plurality of sulrerposcnl blocks lzzwilmg aligning 'lms;sz\ge¥(fays II1131'B1)111'Ollgl' l with the eye of the eye bolt clisposcd in the bottom part; of said pzxssagcwuys, :L top m_m» hex: for the l)101f1'{}:17 and :tn ::_lt;ljus'bu,l;lc cluuxp mr] l1éIVIIISJ§ 11 lower hooked end awlnpten1 to be slippc11 into the eye by insertion of tlc same flo\\1\1\;xrrlly III!` 011Q11 the aligning passagewuys of the lnluku when they are usrxcnu bledss mid ro\_t;11:1viug moans on the cucl thereof for engaging :mid top membm' for J]III'{}'lllg the roll under tension LU clamp L1xc blocks lJ\_'l\\`('?'11 the iop l11L11111)Q1' and the fouuflation. 13. In an wall CO1\SI71`\\`IC1II011 of the class mlnswilnuf1 a foum1llun having an eye bolt illl_t;_cl1m~_lt;I therein with am eye extending up\vu1'cl~ ly in exposed relation on top of the f_t;:»uuc1a~ lion, a, plurality of superposed blocks lmvng: aligning passa;§eK\zxsy tlworetllrouglm with the eye of the eye bolt disposed in the bottom part ol' said p:1SS:\ge\\ays, :1 In); uleulbex' for the blocks, mul an acljusiabie clamp rofl having :x lower lloolrcd end adapted to be slipped into the eye by insertion of the

Classifications:**International (IPC 8-9):** E04B1/06 (Advanced/Invention);

E04B1/02 (Core/Invention)

International (IPC 1-7): E04B1/02 E04B2/16**CPC:** E04B1/06**European:** E04B1/06**US:** 52/223.7 52/293.2 52/300 52/92.1

**Family:**

Publication number	Publication date	Application number	Application date
US1783383 A	19301202	US19280286556	19280619

Priority:

US19280286556 19280619

Probable Assignee:

MONTRIEF JAMES V

Assignee(s): (std):

MONTRIEF JAMES V

Inventor(s): (std):

MONTRIEF JAMES V

Legal status (INPADOC)[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US1783383 A	19301202	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: LOW PRESSURE DROP REFORMING REACTOR

Abstract: A syngas reforming reactor has a shell-and-tube configuration wherein the shell-side fluid flow path through the tube bundle has a longitudinal configuration. The reactor can include a shell-side inlet fluid distributor plate below the lower end of the tube bundle, and a flow sleeve in an enlarged-diameter discharge annulus at an upper end adjacent the tube sheet to prevent short-circuiting of the shell-side fluid into the shell-side fluid outlet. The tube bundle can include a plurality of ring baffles and lattice baffles. The longitudinal flow configuration can provide a lower shell-side pressure drop and lower cost compared to a conventional cross-flow reforming exchanger

Classifications:

International (IPC 8-9): B01J10/00 B01J12/00 B01J19/00 B01J8/00 C10L3/00 (Advanced/Invention);

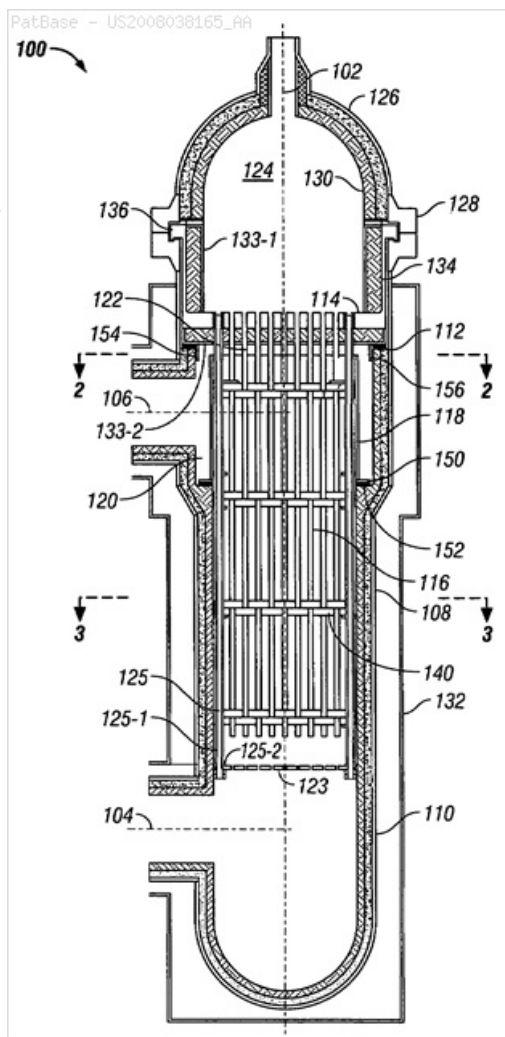
B01J10/00 B01J19/00 B01J8/00 C10L3/00 (Core/Invention)

International (IPC 1-7): C10L3/00

CPC: F28F2275/205 B01J8/065 B01J2208/00221 B01J2208/00495 F28D7/16 F28F9/005 F28F9/0131 F28F9/0135 F28F19/02

European: B01J8/06F F28D7/16 F28F19/02 F28F9/00C F28F9/013B F28F9/013F L01J208/00C2D4F2 L01J208/00C2P4

US: 165/104.34 165/160 165/161 165/162 165/172 165/173 165/174 165/175 165/176 165/177 165/178 165/179 422/196 422/197 422/197P 422/198 422/200 422/201 422/202 422/203 422/204 422/213 422/600 422/600P 422/608 422/608P 422/625 422/641 422/642 422/644 422/645 422/646 422/647 422/650 422/652 422/653 48/127.1 48/127.9 48/61 48/95

**Family:**

Publication number	Publication date	Application number	Application date
CN101501167 A	20090805	CN200780029590	20070718
CN101501167 B	20120912	CN200780029590	20070718
DE602007026027 D1	20121206	DE200760026027T	20070718
EP2049626 A1	20090422	EP20070796921	20070718
EP2049626 A4	20111005	EP20070796921	20070718
EP2049626 B1	20121010	EP20070796921	20070718
IN00320KN2009 A	20090508	IN2009KN00320	20090122
IN280284 B	20170217	IN2009KN00320	20090122
PE05102008 A1	20080719	PE20070001054	20070808
RU2009108287 A	20100920	RU20090108287	20070718
RU2436839 C2	20111220	RU20090108287	20070718
SA2492 B1	20101005	SA20070280427	20070805
US2008038165 AA	20080214	US20060501099	20060808
US2010074812 AA	20100325	US20090614983	20091109
US7635456 BB	20091222	US20060501099	20060808
US8168131 BB	20120501	US20090614983	20091109
WO08020950 A1	20080221	WO2007US16264	20070718

Priority:

US20060501099 20060808 EP20070796921 20070718 WO2007US16264 20070718
US20090614983 20091109

Probable Assignee: KELLOGG BROWN AND ROOT LLC

Assignee(s): (std): BURLINGAME ROBERT STEVENS ; CIZMAR LLOYD EDWARD ; HACKEMESSER LARRY GENE ; KELLOGG BRAUN EHND RUT EHLEHLSI ; KELLOGG BROWN AND ROOT LLC ; KELLOG BROWN AND ROOT LLC ; AGUILAR LAURA BETH

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Inventor(s): BURLINGAME ROBERT STEVENS HOUSTON ; AGUILAR LAURA BETH HOUSTON ; HACKMESSER LARRY GENE HOUSTON ; CIZMAR LLOYD EDWARD MISSOURI CITY ; CIZMAR LLOYD ; BURLINGAME ROBERT ; HACKMESSER LARRY ; AGUILAR LAURA

Agent(s): PATENTANWAELTE WEICKMANN AND WEICKMANN; WEISS WOLFGANG ET AL; WEISS WOLFGANG; KELLOGG BROWN AND ROOT LLC, ATTN: CHRISTIAN HEAUSLER; KELLOGG BROWN AND ROOT LLC ATTN CHRISTIAN HEAUSLER; KELLOGG BROWN AND ROOT LLC,ATTN: CHRISTIAN HEAUSLER; KBR IP LEGAL DEPT; HEAUSLER CHRISTIAN N

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI 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 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN101501167 A	20090805	LSPB	+	published / reissued	
CN101501167 A	20090805	LSPB	+C06	PUBLICATION	
CN101501167 B	20120912	LSGT	+	granted / extensions (spc, cpc, pte)	
CN101501167 B	20120912	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN101501167 B	20270718	PEXP		Calculated Patent Term Expiry	
EP2049626 A1	20090422	LSPB	+	published / reissued	
EP2049626 A1	20090422	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090130
EP2049626 A1	20161031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20160726 YEAR OF FEE PAYMENT : 10
EP2049626 A4	20111005	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20110906
EP2049626 B1	20121010	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2049626 B1	20121010	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2049626 B1	20121015	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
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EP2049626 B1	20130430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20121010
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EP2049626 B1	20130830	LSLE	-PG25	LAPSED IN A CONTRACTING STATE	COUNTRY OF REF DOCUMENT : IT NOTIFICATIONNOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT

				[ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121010
EP2049626 B1	20130918	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20130711
EP2049626 B1	20131031	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602007026027 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130711
EP2049626 B1	20140228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121010
EP2049626 B1	20140228	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : PL
EP2049626 B1	20140326	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20130718
EP2049626 B1	20140423	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2049626 B1	20140425	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20140331
EP2049626 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130731
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EP2049626 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130731
EP2049626 B1	20140430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20140201
EP2049626 B1	20140508	LSDW	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R119 REF DOCUMENT NUMBER : 602007026027 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140201
EP2049626 B1	20140522	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R074 REF DOCUMENT NUMBER : 602007026027 COUNTRY OF REF DOCUMENT : DE
EP2049626 B1	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130731
EP2049626 B1	20140626	LSRE	REG	REFERENCE TO A	REF COUNTRY CODE : DE

				NATIONAL CODE	REF LEGAL EVENT CODE : R074 REF DOCUMENT NUMBER : 602007026027 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20140522
EP2049626 B1	20140731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130718
EP2049626 B1	20140829	LSRE	+PGRI	PATENT REINSTATED IN CONTRACTING STATE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE REINSTATED DATE : 20140519
EP2049626 B1	20150630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : TR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121010
EP2049626 B1	20150630	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121010
EP2049626 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20130718
EP2049626 B1	20150731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20070718
EP2049626 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170727 YEAR OF FEE PAYMENT : 11
EP2049626 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180727 YEAR OF FEE PAYMENT : 12
EP2049626 B1	20270718	PEXP		Calculated Patent Term Expiry	
IN00320KN2009 A	20090508	LSPB	+	published / reissued	
IN280284 B	20170217	LSGT	+	granted / extensions (spc, cpc, pte)	
IN280284 B	20290122	PEXP		Calculated Patent Term Expiry	
PE05102008 A1	20080719	LSPB	+	published / reissued	
PE05102008 A1	20111130	LSRV	-FC	REFUSAL	
RU2009108287 A	20100920	LSPB	+	published / reissued	
RU2436839 C2	20111220	LSGT	+	granted / extensions (spc, cpc, pte)	
RU2436839 C2	20270718	PEXP		Calculated Patent Term Expiry	

SA2492 B1	20101005	LSGT	+	granted / extensions (spc, cpc, pte)	
US2008038165 AA	20080214	LSPB	+	published / reissued	
US2008038165 AA	20091202	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US2010074812 AA	20100325	LSPB	+	published / reissued	
US2010074812 AA	20120411	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US7635456 BB	20091222	LSGT	+	granted / extensions (spc, cpc, pte)	
US7635456 BB	20060808	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KELLOGG BROWN & ROOT LLC, TEXAS OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:BURLINGAME, ROBERT STEVENS; CIZMAR, LLOYD EDWARD; HACKEMESSER, LARRY GENE; AND OTHERS; REEL/FRAME:018168/0119 EFFECTIVE DATE : 20060803
US7635456 BB	20091202	LSGT	PAT1	Patented Case	
US7635456 BB	20130318	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US7635456 BB	20170622	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US7635456 BB	20180425	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, NO OLDPARTY : SECURITY INTEREST; ASSIGNOR:KELLOGG BROWN & ROOT LLC; REEL/FRAME:046022/0413 EFFECTIVE DATE : 20180425
US7635456 BB	20280610	PEXP		Calculated Patent Term Expiry (PTA 672 days)	
US8168131 BB	20120501	LSGT	+	granted / extensions (spc, cpc, pte)	
US8168131 BB	20120411	LSGT	PAT1	Patented Case	
US8168131 BB	20151102	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8168131 BB	20180425	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, NO OLDPARTY : SECURITY INTEREST; ASSIGNOR:KELLOGG BROWN & ROOT LLC; REEL/FRAME:046022/0413 EFFECTIVE DATE : 20180425
US8168131 BB	20291109	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
WO08020950 A1	20080221	LSPB	+	published / reissued	
WO08020950 A1	20070718	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780029590.9 COUNTRY OF REF DOCUMENT : CN
WO08020950 A1	20090122	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 320/KOLNP/2009 COUNTRY OF REF DOCUMENT : IN
WO08020950 A1	20090130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007796921 COUNTRY OF REF DOCUMENT : EP
WO08020950 A1	20090210	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08020950 A1	20090310	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2009108287 COUNTRY OF REF DOCUMENT : RU KIND CODE OF REF DOCUMENT :

A
DESIGNATED STATE(S) :

Title: BRIDGE WITH PIERS BEARING SUCCESSIVE BRIDGE-DECK ELEMENTS.

Abstract: Bridge composed of piers (1) made from masonry, particularly made from concrete, carrying, via their horizontal upper surface, successive bridge-deck elements (10A, 10B). Horizontal metal plates (17), which interact with vertical stabilisation tie rods (22) which are **anchored** or fastened on the top of the pier, are provided in the lower surface of these bridge-deck elements. The stabilisation tie rods are preferably arranged between the axis (AA) of the pier and bearing plates (7, 8, 9) interposed between the end of the bridge-deck element and the top of the pier.

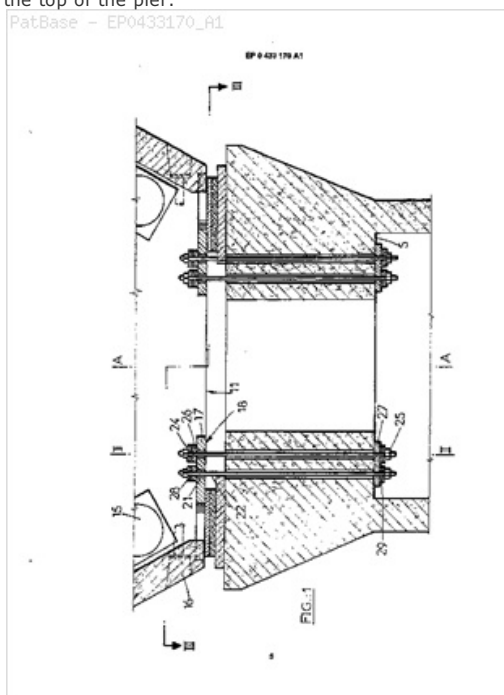
Classifications:

International (IPC 8-9): E01D19/02 E01D19/04 (Advanced/Invention);
E01D19/02 E01D19/04 (Core/Invention)

International (IPC 1-7): E01D19/02 E01D19/04 E01D19/06

CPC: E01D19/02 E01D19/04

European: E01D19/02 E01D19/04



Family:

Publication number	Publication date	Application number	Application date
EP0433170 A1	19910619	EP19900403548	19901212
FR2656016 A1	19910621	FR19890016625	19891215
FR2656016 B1	19920306	FR19890016625	19891215

Priority:

FR19890016625 19891215

Probable Assignee: MULLER INTERNATIONAL JEAN

Assignee(s): (std): MULLER INT JEAN ; MULLER INTERNATIONAL JEAN ; MULLER J INT

Assignee(s): JEAN MULLER INTERNATIONAL

Inventor(s): (std): DANIEL DUTOIT ; DUTOIT DANIEL

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP0433170 A1	19910619	LSPB	+	published / reissued	
EP0433170 A1	19920102	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19911106
EP0433170 A1	19930630	LSSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19930517
EP0433170 A1	19940323	LSRV	-18R	APPLICATION REFUSED	EFFECTIVE DATE : 19931107
FR2656016 A1	19910621	LSPB	+	published / reissued	
FR2656016 B1	19920306	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2656016 B1	19951027	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2656016 B1	20091215	PEXP		Calculated Patent Term Expiry	

Title: Concrete formwork and method for forming a draft tube

Abstract: A formwork for a draft tube which includes ganged precast forms, each precast form corresponding to a curved segment of the draft tube. The precast forms are molded with continuous side plates extending thereabout and **anchored** in the precast concrete form and projecting beyond the surface opposite to the contact surface to provide a flange. A fastening means for attaching adjacent forms with a space therebetween to allow for stripping. A method includes determining the outline of the inner surface of the draft tube and dividing it into segments and preparing molds to make precast forms corresponding to each segment. The precast forms are assembled and shored to provide the draft tube ganged formwork, and concrete is poured about the draft tube formwork and is cured. The precast forms are stripped from the set concrete structure and reused in another draft tube formwork.

Classifications:

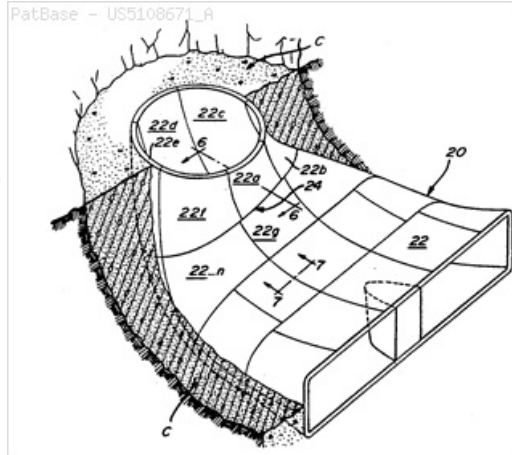
International (IPC 8-9): B28B23/00 B28B7/34 B28B7/36 E04G11/04 E04G13/00 E04G15/00 E04G9/02 (Advanced/Invention); B28B23/00 B28B7/34 B28B7/36 E04G13/00 E04G15/00 E04G9/02 (Core/Invention)

International (IPC 1-7): B28B1/16 B28B7/36 E04B1/16 E04G11/04

CPC: B28B7/346 B28B7/36 B28B23/00 E04G9/02 E04G13/00 E04G15/00

European: B28B23/00 B28B7/34D B28B7/36 E04G13/00 E04G15/00 E04G9/02

US: 249/10 249/11 249/114.1 249/115 249/134 249/135 249/177 249/184 249/189 264/130 264/131 264/133 264/225 264/227 264/261 264/263 264/273 264/274 264/277 264/279 264/279.1 264/297.1 264/31 264/313 264/316 264/318 264/32 264/33 264/334 264/337 264/338 264/35 264/40.1 264/401 405/135 405/149 405/152 425/182 425/59 52/584 52/601



Family:

Publication number	Publication date	Application number	Application date
CA2053749 AA	19930208	CA19912053749	19911018
CA2053749 C	19940726	CA19912053749	19911018
US5108671 A	19920428	US19910741335	19910807

Priority:

US19910741335 19910807 CA19912053749 19911018 CA19912053749 19911018

Probable Assignee: KIEWIT CONST GROUP INC

Assignee(s): (std): KIEWIT CONST GROUP INC ; KIEWIT CONSTRUCTION GROUP INC

Assignee(s): CHAPDELAINE LOUIS

Inventor(s): (std): CHAPDELAINE LOUIS

Agent(s): OGILVY RENAULT LLP SENCRL SRL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA2053749 AA	19930208	LSPB	+	published / reissued	
CA2053749 AA	19911018	LSSES	+EEER	EXAMINATION REQUEST	
CA2053749 C	19940726	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2053749 C	20061018	LSLE	-MKLA	LAPSED	
CA2053749 C	20111018	PEXP		Calculated Patent Term Expiry	
US5108671 A	19920428	LSGT	+	granted / extensions (spc, cpc, pte)	
US5108671 A	19910807	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KIEWIT CONSTRUCTION GROUP INC., NEBRASKA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:CHAPDELAINE, LOUIS; REEL/FRAME:005798/0566 EFFECTIVE DATE : 19910709
US5108671 A	19920415	LSGT	PAT1	Patented Case	
US5108671 A	19950802	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5108671 A	20000430	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5108671 A	20000711	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000428

US5108671 A	20180127	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5108671 A	20180127	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5108671 A	20110807	PEXP		Calculated Patent Term Expiry	

Title: MAGNETIC CHUCKS

Abstract: (Claim 1) 1. In a magnetic chuck of the permanent magnet type, comprising (a) a casing base structure having a recess therein defined by an inside bottom wall and inside sidewalls, (b) a work supporting faceplate mounted on said base structure and covering the recess therein with said faceplate including an assembly of laterally-spaced pole pieces of paramagnetic material, said faceplate having an inner face arranged substantially in a lateral plane, (c) a magnetic pack of the permanent magnet type reciprocally mounted for lateral movement in said recess free of any contact with any opposed portions of said bottom and side walls defining the latter, with said pack including an assembly of laterally-spaced permanent magnets cooperatively arranged with respect to said faceplate pole pieces in a lateral work holding position of said pack with said pack having a face disposed in a substantially lateral plane opposed to said inner face of said faceplate for lateral reciprocation relative to the latter, and (d) means to reciprocate said pack laterally between the work holding position and another position of work release relative to said faceplate pole pieces; the improvement comprising (e) means guiding free reciprocation of said pack in the base structure recess which eliminates any frictional sliding contact between any portions of and fixedly mounted on the inside bottom and side walls of the base structure recess and opposed portions of said pack, and (f) slide promoting means interposed between said faceplate and pack opposed faces spacing them a minimum distance apart comprising thin, tough, long wearing diamagnetic plastic sheeting of low friction and high lubricity, while magnetic attraction between said faceplate and pack maintain the opposed faces of said faceplate and pack urged toward each other on opposite sides of said plastic sheeting.

Classifications:

International (IPC 8-9): B23Q3/154 (Advanced/Invention);

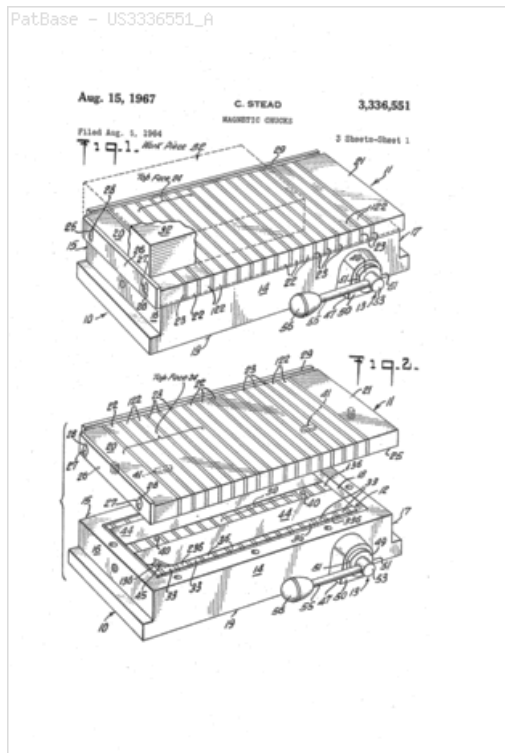
B23Q3/15 (Core/Invention)

International (IPC 1-7): B23Q3/15 H01F7/04

CPC: B23Q3/1546

European: B23Q3/154C

US: 269/8 335/295



Family:

Publication number	Publication date	Application number	Application date
US3336551 A	19670815	US19640387604	19640805

Priority:

US19640387604 19640805

Probable Assignee: TAFT PEIRCE MFG CO

Assignee(s): (std): TAFT PEIRCE MFG CO ; TAFT PEIRCE MFG COMPANY

Assignee(s): THE TAFT PEIRCE MANUFACTURING COMPANY

Inventor(s): (std): CLIFFORD STEAD

Inventor(s): STEAD CLIFFORD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3336551 A	19670815	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Apparatus for the fabrication of containers made from plastic material

Abstract: 939,840. Moulding containers. LABORATOIRES VIFOR S.A. Feb. 26, 1962 [May 18, 1961], No. 7477/62. Class 87(2). A sealed liquid filled container is formed by injection of the liquid into a preformed slug to expand it against the walls of a mould. Horizontal turntable 1 carrying a circumferential series of electrically heated initial moulds 2 and finishing moulds 3 is indexed between a lower synthetic resin injection device, Fig. 16 (not shown) and an upper liquid injection device. Table 1 is lowered to engage the nozzle of the synthetic resin injection device against initial mould 2 which is closed by head portion 174 through which needle 192 of the liquid injection device is introduced into the cavity 24 to be surrounded by the injected synthetic resin. The table 1 is raised to disengage from the synthetic resin injection device and the liquid injection device is raised retaining the preformed slug within head 174. Table 1 is indexed and to enable the preformed slug to be deposited within a finishing mould 3. Obturator 204 of the liquid injection device is raised to permit the injection of precompressed liquid, Fig. 9 (not shown). After withdrawal of needle 192 and head 174 the container within mould 3 is indexed to an intermediate position to set whilst injection of a fresh preformed slug takes place into an initial mould 2. Upon the subsequent indexing of table 1, a sealing device, Fig. 12 (not shown) is lowered to melt the top of the container which is then sealed by a descending punch. Alternatively, Fig. 15 (not shown) the sealing device may utilise direct contact of an electrically heated sapphire head. The filled and sealed container is then ejected upon indexing the table 1. Refrigerated water cooling is provided at the base of the electrically heated synthetic resin injection device, within container clamps, Fig. 14 (not shown) and to the chamber 254 and punch 262 of the sealing device. The table 1 is indexed and locked and the synthetic resin injection device and container sealing device actuated by hydraulically operated members, Figs. 7 and 4 (not shown) and the table 1 and the telescopic fluid injection assembly are vertically actuated from a hydraulic piston assembly concentric with the axis of rotation of the table 1.

Classifications:

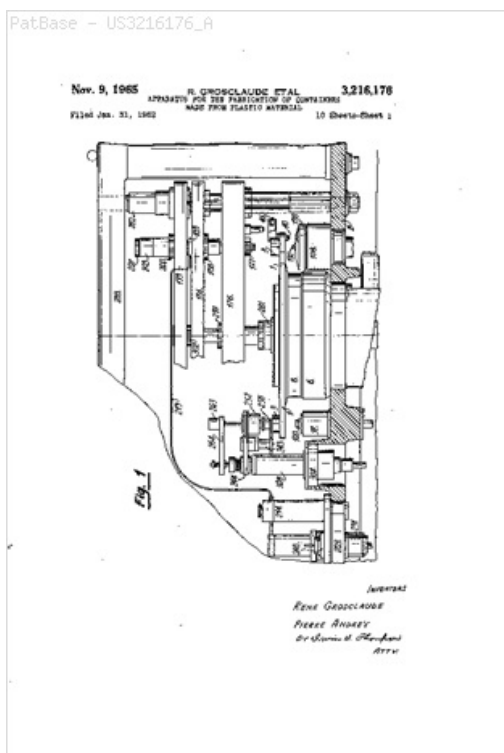
International (IPC 8-9): B29C45/03 B65B3/02 (Advanced/Invention); B29C45/03 B65B3/00 (Core/Invention)

International (IPC 1-7): A61L3/00 B29C17/02 B29C17/07 B29C24/00 B65B3/02

CPC: B29C45/03 B65B3/022

European: B29C45/03 B65B3/02B

US: 425/107 425/144 425/185 425/324.1 53/140 53/561



Family:

Publication number	Publication date	Application number	Application date
CH370004 A	19630615	CH19610005800	19610518
GB939840 A	19631016	GB19620007477	19620226
US3216176 A	19651109	US19620170108	19620131

Priority:

CH19610005800 19610518

Probable Assignee:

VIFOR SA

Assignee(s): (std):

VIFOR SA

Assignee(s):

LABORATOIRES VIFOR S A

Inventor(s): (std):

PIERRE ANDREY ; RENE GROSCLAUDE

Inventor(s):

ANDREY PIERRE ; GROSCLAUDE RENE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH370004 A	19630615	LSGT	+	granted / extensions (spc, cpc, pte)	
CH370004 A	19810518	PEXP		Calculated Patent Term Expiry	
GB939840 A	19631016	LSGT	+	granted / extensions (spc, cpc, pte)	
GB939840 A	19820226	PEXP		Calculated Patent Term Expiry	
US3216176 A	19651109	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: REFINEMENTS TO THE CONSTRUCTION SYSTEMS FOR STRUCTURES IN REINFORCED CONCRETE OR SOME OTHER MATERIAL BY MEANS OF HIGH-PRECISION INTEGRAL MODULAR FORMS

Abstract: A foundation framework for structures in a reinforced setting material includes a foundation raft with a form having a plurality of modular panels and angular reinforcements for joining at least two faces of at least one right-angle dihedral formed by faces of the modular panels. A layout and positioning template is disposed on top of the form of the foundation raft for correctly dimensioning, positioning, and fitting walls, installations and reinforcements in the foundation raft. Adjustment legs for centering the layout and positioning template are provided, as well as self-centering clamps and a stabilizer having security pins and an anchorage mechanism for securing the form to a support surface.

Classifications:

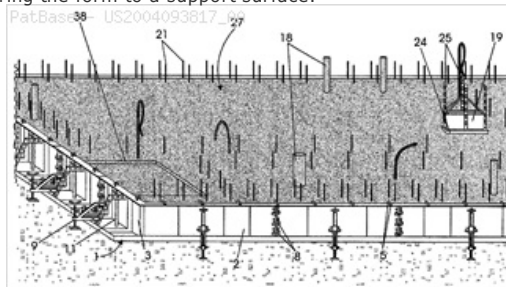
International (IPC 8-9): E02D27/01 E04B1/16 E04B1/18 E04G1/36 E04G11/02 E04G11/06 E04G11/08 E04G11/10 E04G11/20 E04G11/28 E04G11/38 E04G11/48 E04G13/00 E04G13/02 E04G13/04 E04G13/06 E04G15/00 E04G15/02 E04G15/06 E04G17/00 E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/00 E04G21/00 E04G21/02 E04G21/12 E04G25/00 E04G27/00 E04G9/02 E04G9/08 (Advanced/Invention); E02D27/01 E04B1/16 E04B1/18 E04G1/36 E04G11/00 E04G13/00 E04G15/00 E04G17/00 E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/00 E04G21/00 E04G21/02 E04G21/12 E04G25/00 E04G27/00 E04G9/02 E04G9/08 (Core/Invention)

International (IPC 1-7): B28B7/22 E02D1/00 E04B1/00 E04F10/00 E04G1/00 E04G11/02 E04G21/00

CPC: E04G19/00 E02D27/01 E04B1/16 E04G1/36 E04G11/02 E04G11/087 E04G11/10 E04G11/20 E04G11/38 E04G11/48 E04G13/00 E04G13/02 E04G13/04 E04G13/06 E04G15/02 E04G15/06 E04G17/001 E04G17/002 E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/003 E04G19/006 E04G21/025 E04G21/122 E04G27/00 E04G15/00 E04G17/00 E04G25/00 E02D27/013 E02D27/016 E04G13/062 E04G13/066

European: E02D27/01 E04B1/16A E04G1/36 E04G11/02 E04G11/08D E04G11/10 E04G11/20 E04G11/38 E04G11/48 E04G13/00 E04G13/02 E04G13/04 E04G13/06 E04G15/00 E04G15/02 E04G15/06 E04G17/00 E04G17/00B E04G17/00D E04G17/04 E04G17/06 E04G17/14 E04G17/16 E04G19/00A E04G19/00B E04G21/02B E04G21/12C E04G25/00 E04G27/00

US: 249/13 52/294 52/414



Family:

Publication number	Publication date	Application number	Application date
DE10353277 A1	20090507	DE20031053277	20031114
ES2281212 AA	20070916	ES20020002648	20021118
ES2281212 BA	20080816	ES20020002648	20021118
FR2850415 A1	20040730	FR20030005952	20030519
FR2850415 B1	20070406	FR20030005952	20030519
GB200310568 A0	20030611	GB20030010568	20030508
GB2395221 A1	20040519	GB20030010568	20030508
GB2395221 B2	20060104	GB20030010568	20030508
US2004093817 AA	20040520	US20030697203	20031030
US2006260238 AA	20061123	US20060495544	20060731

Priority:

ES20020000264 20021118 ES20020002648 20021118 US20030697203 20031030
US20060495544 20060731

Probable Assignee: SISTEMAS INDUSTRIALIZADOS BARCONS SL

Assignee(s): (std): BARCONS SALVADOR P ; BARCONS SALVADOR PUJOL ; PUJOL BARCONS SALVADOR ; SIST S INDUSTRIALIZADOS BARCON

Assignee(s): SISTEMAS INDUSTRIALIZADOS BARCONS SL ; SISTEMAS INDUSTRIALIZADOS BARCONS S L POLIGONOINDU ; SISTEMAS INDUSTRIALIZADOS BARCONS S L ; SISTEMAS INDUSTRIALIZADOS BARCONS S L PUERTO DESANTA MARIA ; SISTEMAS INDUSTRIALIZADOS BARCONS S L POLIGONOINDUSTRIAL LAS SALINAS DE LEVANTE ; SALVADOR PUJOL BARCONS

Inventor(s): (std): BARCONS SALVADOR P ; BARCONS SALVADOR PUJOL ; PUJOL BARCONS SALVADOR

Inventor(s): SALVADOR PUJOL BARCONS

Agent(s): CABINET NETTER; CROWELL AND MORING LLP, INTELLECTUAL PROPERTY GROUP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE10353277 A1	20090507	LSPB	+	published / reissued	
DE10353277 A1	20100415	LSSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE10353277 A1	20120329	LSRV	-R002	REFUSAL DECISION IN EXAMINATION/REGISTRATION PROCEEDINGS	
DE10353277 A1	20120809	LSRV	-R003	REFUSAL DECISION NOW FINAL	EFFECTIVE DATE : 20120504
DE10353277 A1	20130919	LSDW	-R119	APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20130601
ES2281212 AA	20070916	LSPB	+	published / reissued	
ES2281212 AA	20060601	LSAS	+PC2A	TRANSFER OF PATENT	
ES2281212 AA	20070916	LSSES	+EC2A	SEARCH REPORT PUBLISHED	DATE OF REF DOCUMENT :

					20070916 KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :
ES2281212 BA	20080816	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2281212 BA	20080816	LSGT	+FG2A	DEFINITIVE PROTECTION	REF DOCUMENT NUMBER : 2281212B1 COUNTRY OF REF DOCUMENT : ES
ES2281212 BA	20221118	PEXP		Calculated Patent Term Expiry	
FR2850415 A1	20040730	LSPB	+	published / reissued	
FR2850415 A1	20061110	LSAS	TP	TRANSMISSION OF PROPERTY	
FR2850415 B1	20070406	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2850415 B1	20140307	LSLE	-ST	NOTIFICATION OF LAPSE	EFFECTIVE DATE : 20140131
FR2850415 B1	20230519	PEXP		Calculated Patent Term Expiry	
GB2395221 A1	20040519	LSPB	+	published / reissued	
GB2395221 B2	20060104	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2395221 B2	20140129	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20130508
GB2395221 B2	20230508	PEXP		Calculated Patent Term Expiry	
US2004093817 AA	20040520	LSPB	+	published / reissued	
US2004093817 AA	20061113	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2006260238 AA	20061123	LSPB	+	published / reissued	
US2006260238 AA	20060731	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SISTEMAS INDUSTRIALIZADOS BARCONS, S.L., SPAIN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:BARCONS, SALVADOR PUJOL; REEL/FRAME:018145/0068 EFFECTIVE DATE : 20060630
US2006260238 AA	20090217	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: METHOD OF CONSTRUCTING WALLS

Abstract: 1. The method of constructing a wall of the character described which comprises disposing a series of aligned, vertical supports, in spaced relation, **anchoring** said supports at their upper and lower ends, forming a plurality of slabs of plaster material, disposing said slabs, while in plastic state, at opposite sides of said series of vertical supports, subjecting said slabs to pressure to force their opposing surfaces and their contiguous edges into intimate contact and enclosing said vertical supports, securing said slabs in position, and then permitting said slabs to set and solidify into a unitary continuous wall structure.

Classifications:

International (IPC 8-9): E04B2/84 (Advanced/Invention);

E04B2/72 (Advanced/Non-invention);

E04B2/84 (Core/Invention);

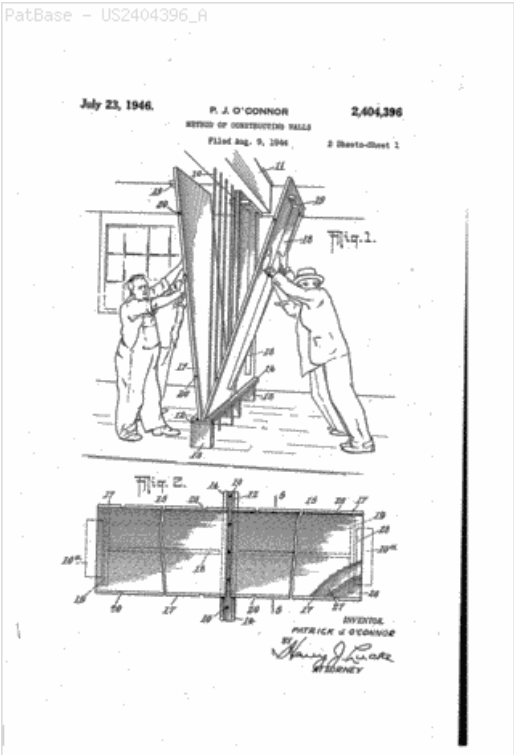
E04B2/72 (Core/Non-invention)

International (IPC 1-7): E04B2/74

CPC: E04B2/723 E04B2/842

European: E04B2/84P

US: 264/31 52/125.6 52/238.1



Family:

Publication number	Publication date	Application number	Application date
US2404396 A	19460723	US19440548671	19440809

Priority:

US19440548671 19440809

Probable Assignee:

O CONNOR PATRICK J

Assignee(s): (std):

O CONNOR PATRICK J

Inventor(s): (std):

O CONNOR PATRICK J

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2404396 A	19460723	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Electrically driven power steering apparatus

Abstract: An electrically driven power steering apparatus utilizes an electric motor as a drive source and produces an assisting torque which depends on the magnitude of a torque applied from steering mechanisms for assisting in the operation of a steering system. When an abnormality in the torque applied or a locking of the motor is detected, the energization of the motor is interrupted as is a system which transmits the assisting torque. In this manner, the application of a relative force to the steering system from the electric drive mechanism is blocked, thus positively preventing the vehicle from being steered against the intent of a driver as a result of influences of any abnormal operation of the electric drive mechanism upon the steering system. Whenever the energization of the motor and the assisting torque transmission system are interrupted, the force required for the steering operation will be equivalent to a manual steering. During a normal operation, an assisting torque which is controlled in accordance with a torque detected by the torque detector mechanism is applied, enabling a facilitated steering operation.

Classifications:

International (IPC 8-9): B62D5/04 B62D6/02

B62D6/10 (Advanced/Invention);

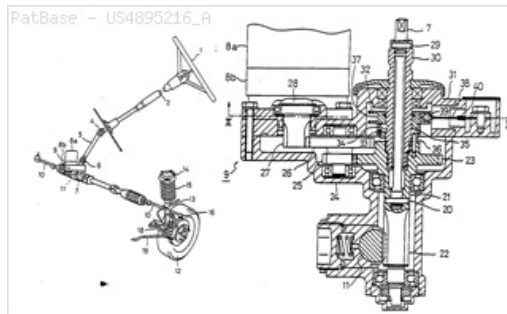
B62D5/04 B62D6/02 B62D6/08 (Core/Invention)

International (IPC 1-7): B62D5/04 B62D6/02

CPC: B62D5/0463 B62D5/0478 B62D6/10

European: B62D5/04 B62D5/04P2B B62D5/04P4B B62D6/10

US: 180/404 180/446 180/79.1 318/489 701/43 73/862.322



Family:

Publication number	Publication date	Application number	Application date
JP62258862 A2	19871111	JP19860103666	19860506
US4895216 A	19900123	US19880249236	19880923

Priority:

JP19860103666 19860506 US19870045999 19870504

Probable Assignee: AISIN GROUP

Assignee(s): (std): AISIN GROUP ; AISIN SEIKI

Assignee(s): AISIN SEIKI CO LTD ; AISIN SEIKI KABUSHIKIKAISHA

Inventor(s): (std): FUSHIMI TAKEHIKO ; SAKAKIBARA NAOJI ; FUSIMI TAKEHIKO

Legal status (INPADOC)

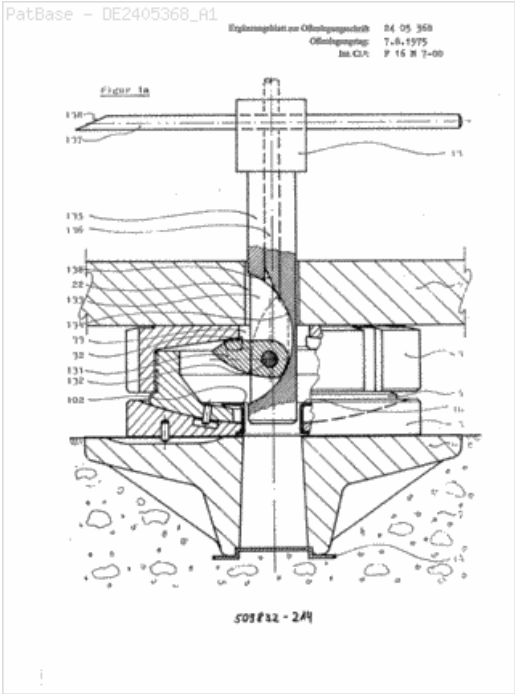
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Patent	Date recorded	Event group	Code	Event	Details
JP62258862 A2	19871111	LSPB	+	published / reissued	
US4895216 A	19900123	LSGT	+	granted / extensions (spc, cpc, pte)	
US4895216 A	19891031	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : AISIN SEIKI KABUSHIKIKAISHA, JAPAN OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNORS:FUSIMI, TAKEHIKO; SAKAKIBARA, NAOJI; REEL/FRAME:005173/0788 EFFECTIVE DATE : 19870423
US4895216 A	19891117	LSGT	PAT1	Patented Case	
US4895216 A	19940123	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4895216 A	19940405	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19940123
US4895216 A	20180129	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4895216 A	20180129	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US4895216 A	20080923	PEXP		Calculated Patent Term Expiry	

Title: MACHINE MOUNTING ON FOUNDATION - HAS TILTING DISC HELD BY SPRING CLAMP TO TILTING PORTION ALLOWING RADIAL MOVEMENT

Abstract: The mounting has a screw adjustment for height, also spherical supporting surfaces for angular compensation, while an **anchor** bolt passes through the middle to hold it in place. The mounting foot i divided into a tilting disc and a support plate for grouting into the floor, and the diameter of the screwed portion is at least twice its height. The disc and the tilting portion are held together by a spring clamp so that they can move radially and tangentially in relation to each other, but cannot be pulled apart in the axial direction, and between them is a safety device limiting the amount of radial and tangential movement. The disc also has a device preventing turning but allowing tangential movement, and a peripheral ring keeping the grout clear of the mounting.

Classifications:
International (IPC 8-9): F16M7/00 (Advanced/Invention);
F16M7/00 (Core/Invention)
International (IPC 1-7): F16M7/00
CPC: F16M7/00
European: F16M7/00



Family:

Publication number	Publication date	Application number	Application date
DE2405368 A1	19750807	DE19742405368	19740205

Priority:

DE19742405368 19740205

Probable Assignee: GEMEX GMBH AND CO KG
Assignee(s): (std): GEMEX GMBH AND CO KG
Inventor(s): (std): RAUE KLAUS

Legal status (INPADOC)

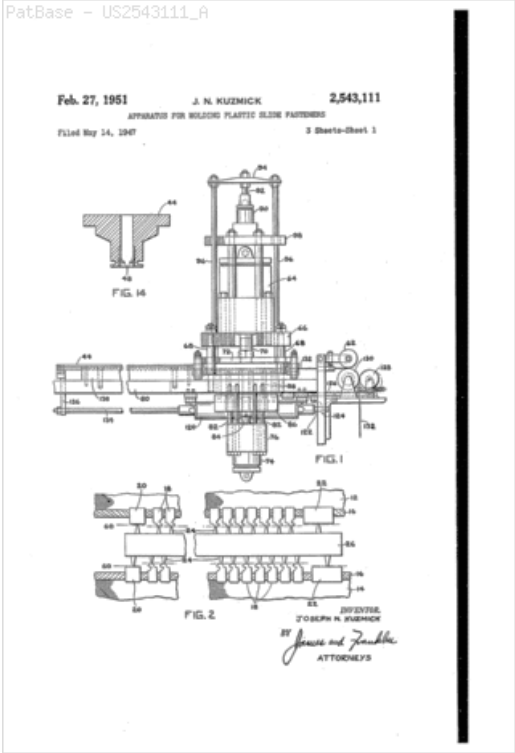
[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
DE2405368 A1	19750807	LSPB	+	published / reissued	
DE2405368 A1	19780601	LSLE	-OHJ	NON-PAYMENT OF THE ANNUAL FEE	

Title: APPARATUS FOR MOLDING PLASTIC SLIDE FASTENERS

Abstract: (Claim 1) 1. iApporatus f,:)- wo,ding a slide fastener s_ringer, said apperptus co-.ipr-isin.- mold haiv.-s seral,al,)Ie i,-! L' I-le - Diaiie of the slide fastener tape, each rniotd liaif hav;_-. ,Ig a row of moid cavities for the des"red fasteiie_, eler_ie_-its, a transfer chamber in sai.d m-,_d, -_ald bein, a long thili para'lel-si.ded chlM'),)n-r e.-_itendin.- collaterally of the rov_- _)-' cavi_ics, ,ov; of gates formed in said mold and cc-nnecti-Tig the end of ea(-,h cavity with said transf,-i: s,,iid chamber and gates opeiiin- into the -_nartiig plane of the mold, said transfer chamber '),)ein.- open at the top and bottom and re-_eiving tv.,,o opposite,y movable blades of ec_i-ial 'Lhickncss, one of said blades acting as a transfer blade, and the other of said blades actirl said transfer ehamber in a direction transverse of the length of the blades and.chamber, in order to compress molding material inthe chamber and to thereby extrude the same through the gates into the cavities.

Classifications:
International (ipc 8-9): B29C45/14 (Advanced/Invention);
B29C45/14 (Core/Invention)
International (ipc 1-7): B29D5/00
CPC: B29C45/14573
European: 31C26A B29C45/14H2B
US: 264/252 264/257 425/121 425/545 470/112



Family:

Publication number	Publication date	Application number	Application date
US2543111 A	19510227	US19470747970	19470514

Priority:

US19470747970 19470514

Probable Assignee: CONMAR PROD CORP
Assignee(s): (std): CONMAR PROD CORP
Assignee(s): CONMAR PRODUCTS CORP
Inventor(s): (std): KUZMICK JOSEPH N

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2543111 A	19510227	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Wood panel earth shelter construction

Abstract: An arch structure for an earth sheltered building includes a plurality of curved wood panel sections arranged in tandem and in a plurality of adjacent rows. The sections are joined adhesively and define an arch resting on a foundation of footings. Each of the panel sections includes side members joined to end members and ribs extending between the side members and between the end members. Joined to the members are top and bottom skins which enclose the panel and in conjunction with the ribs define a plurality of compartments. Insulation material is disposed within the compartments. At least one of the skins is offset on the side members to define male and female portions which are joined with panel sections in adjacent rows. The panels are fabricated from wood. After assembling into the arch form, the panels are covered with an exterior sheathing which is pressure treated and waterproofed. End walls are attached to the arch section, and the structure is covered with earth.

Classifications:

International (IPC 8-9): E04B1/10 (Advanced/Invention);
E04B1/02 (Core/Invention)

CPC: E04B1/10

European: E04B1/10

US: 52/169.1 52/169.6 52/745 52/745.08 52/745.13 52/86



Family:

Publication number	Publication date	Application number	Application date
US4590721 A	19860527	US19820450465	19821216

Priority:

US19820450465 19821216

Probable Assignee: BERG JEREMY R

Assignee(s): (std): BERG JEREMY R ; LOVELESS JOHN G ; SENKOW WALTER

Inventor(s): (std): BERG JEREMY R ; LOVELESS JOHN G ; SENKOW WALTER

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US4590721 A	19860527	LSGT	+	granted / extensions (spc, cpc, pte)	
US4590721 A	19860326	LSGT	PAT1	Patented Case	
US4590721 A	19891106	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4590721 A	19940529	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4590721 A	19940809	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19940529
US4590721 A	20180123	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4590721 A	20180123	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362

Title: Improvements in or relating to iron-cored inductors

Abstract: 1,145,616. Reactors. MASCHINENFABRIK OERLIKON. 19 May, 1967 [24 May, 1966], No. 23352/67. Heading H1T. In the iron core of, e.g. a choke coil having yokes 1, 3 comprising sheet iron stampings and a plurality of core legs 5 (only one shown), built up from stacks of sheet iron stampings 7, the stacks being separated by insulation 9, which may be of fibreglass synthetic resin plates, at least one yoke 1 comprises a plurality of yoke portions 19, 21, 23, interconnected in pairs and the yoke portions are resiliently compressed against the core legs. The interleaved stampings define air gaps 22, 24 (Fig. 5) and each of the yoke portions 19, 21, 23 is bounded by thicker outer stampings 25, 27, 29. A plate 31, 33 bridges the gap between interleaved portions 19, 21 and 21, 23 respectively and is clamped by bolts 39, nuts 45, spring washers 47 and insulation 43, 41. Each yoke portion is forced on to its associated core leg by rods 71 which carry nuts 77 and spring washers 85 which when screwed up compress bearers 60, 79 bearing on the yoke portions. The insulation 9 may be bonded with epoxy resin to the stacks of stampings. The choke may be a 3-phase device.

Classifications:

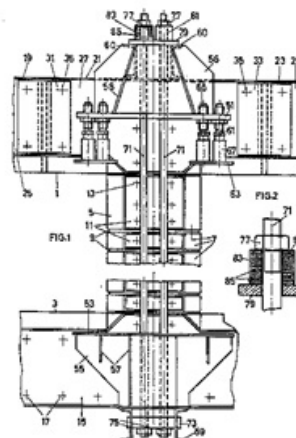
International (IPC 8-9): H01F27/26 H01F27/33 (Advanced/Invention);
H01F27/26 H01F27/33 (Core/Invention)

International (IPC 1-7): H01F27/26 H01F37/00

CPC: H01F27/263 H01F27/33

European: H01F27/26A H01F27/33

PatBase - GB1145616_A



Family:

Publication number	Publication date	Application number	Application date
AT270798 B	19690512	AT19670004828	19670523
CH461631 A	19680831	CH19660007494	19660524
ES340896 A1	19680616	ES19670340896	19670523
GB1145616 A	19690319	GB19670023352	19670519

Priority:

CH19660007494 19660524

Probable Assignee: OERLIKON MASCHF

Assignee(s): (std): OERLIKON MASCHF

Assignee(s): MASCHF OERLIKON ; MASCHINENFABRIK OERLIKON

Inventor(s): (std): PAUL KAESERMANN ; KASERMANN PAUL

Inventor(s): KAESERMANN PAUL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AT270798 B	19690512	LSGT	+	granted / extensions (spc, cpc, pte)	
AT270798 B	19870523	PEXP		Calculated Patent Term Expiry	
CH461631 A	19680831	LSGT	+	granted / extensions (spc, cpc, pte)	
CH461631 A	19860524	PEXP		Calculated Patent Term Expiry	
ES340896 A1	19680616	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1145616 A	19690319	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1145616 A	19870519	PEXP		Calculated Patent Term Expiry	

Title: atracador universal para fixaCco de unidades de bombeio mecAnico Moored fixaCco universal units of mechanical pumping (Machine translation)

Abstract: Source: BRPI0702372A [PT] ATRACADOR UNIVERSAL PARA FIXACCO DE UNIDADES DE BOMBEIO MECANICO A presente invencao se refere a um dispositivo de fixacao estrutural preferencialmente aplicado em unidades petroliferas de bombeio mecanico de qualquer modelo e capacidade, garantindo seguranca e robustez embora de instalacao rapida e eficaz, satisfazendo todas as exigencias requeridas por entidades certificadoras. E um dispositivo de fixacao polivalente que permite o alinhamento da unidade de bombeio mecanico ao poço produtor, com total liberdade de reposicionamento em relacao a base de ancoragem.

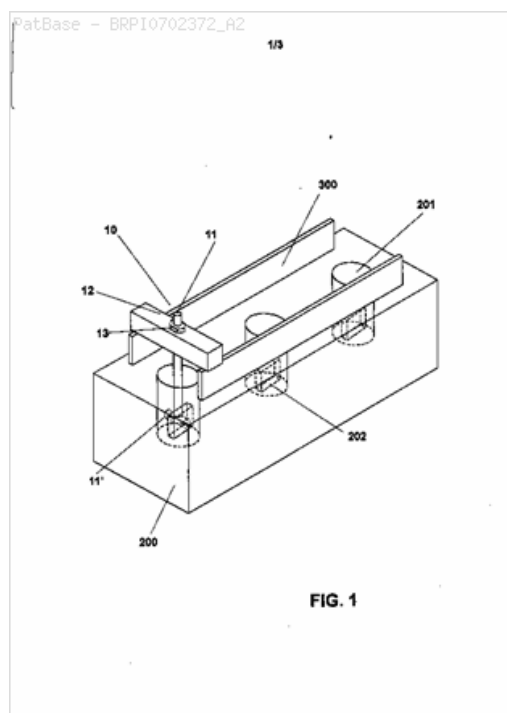
Machine translation: ATRAC UNIVERSAL UNIT FOR FIXACCO mechanical pumping This invention relates to a device often used for fixation structural units from oil bombejo any mechanical model and capacity, while ensuring safety and soundness of quick and effective, satisfying all the demands required by certification bodies. And a versatile fixture that allows the alignment of the mechanical pumping unit to the production well, with complete freedom in regards to reposition the dock.

Classifications:

International (IPC 8-9): E21B23/01 (Advanced/Invention);

E21B23/00 (Core/Invention)

International (IPC 1-7): E21B23/01



Family:

Publication number	Publication date	Application number	Application date
BRPI0702372 A2	20090120	BR2007PI02372	20070530
BRPI0702372 B1	20190604	BR2007PI02372	20070530

Priority:

BR2007PI02372 20070530

Probable Assignee: PETROLEO BRASILEIRO SA

Assignee(s): (std): PETROLEO BRASILEIRO PETROBRAS SA ; PETROLEO BRASILEIRO S A PETROBRAS ; PETROLEO BRASILEIRO SA

Inventor(s): (std): SALES RALPH GABRIEL HENRIQUES ; RALPH GABRIEL HENRIQUES SALES

Legal status (INPADOC)

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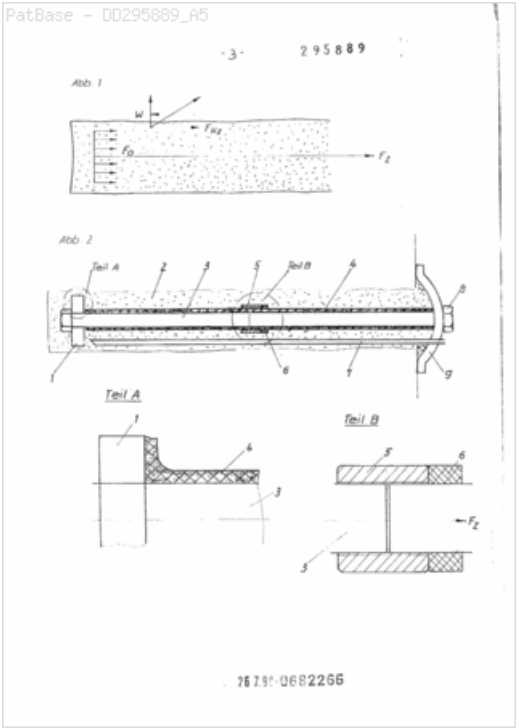
Patent	Date recorded	Event group	Code	Event	Details
BRPI0702372 A2	20090120	LSPB	B03A	PUBLICATION OF AN APPLICATION: PUBLICATION OF A PATENT APPLICATION OR OF A CERTIFICATE OF ADDITION OF INVENTION	
BRPI0702372 A2	20180821	LSES	B07A	TECHNICAL EXAMINATION (OPINION): PUBLICATION OF TECHNICAL EXAMINATION (OPINION)	
BRPI0702372 A2	20190326	LSGT	B09A	DECISION: INTENTION TO GRANT	
BRPI0702372 A2	20190604	LSGT	+B16A	PATENT OR CERTIFICATE OF	TEXT : PRAZO DE VALIDADE: 10 (DEZ) ANOS CONTADOS A PARTIR

			ADDITION OF INVENTION GRANTED	DE 04/06/2019, OBSERVADAS AS CONDICOES LEGAIS. (CO) 10 (DEZ) ANOS CONTADOS A PARTIR DE 04/06/2019, OBSERVADAS AS CONDICOES LEGAIS
BRPI0702372 B1	20270530	PEXP	Calculated Patent Term Expiry	

Abstract: Source: DD295889A [DE] [Source: Claim 1] 1. Anordnung zum Verankern und Spannen von Stabankern in einem vorgefertigten Bohrloch, dadurch gekennzeichnet, dass eine Grundplatte (1) kleineren Durchmessers als des Bohrloches in einer Vergussmasse (2) so angeordnet wird, dass die Kraftuebertragung ueber die tiefste Stelle des Ankerfusses erfolgen kann und die Stablaenge des Ankers (3) mit einer plastischen Schicht (4) gegen eine Verbindung mit der Vergussmasse (2) geschuetzt ist. **Machine translation:** [Source: claim 1] 1 arrangement for **anchoring** and tensioning rod bolts in a ready-made hole, characterised in that a base plate (1) smaller diameter than the borehole in a sealing compound is (2) so arranged that power over the deepest part of the **anchor** foot can be made and the length of the bolt (3) with a plastic layer (4) against a connection with the potting compound (2) is protected.

Classifications:

International (IPC 8-9): E02D5/80 (Advanced/Invention);
E02D5/80 (Core/Invention)
International (IPC 1-7): E02D5/80



Family:

Publication number	Publication date	Application number	Application date
DD295889 A5	19911114	DD19900343078	19900726

Priority:

DD19900343078 19900726

Probable Assignee: ERDOEL ERDGAS GEOTECHNOLOGIE G
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Inventor(s): (std): MOHRMANN RUEDIGER
Inventor(s): MOHRMANN RUEDIGER DE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DD295889 A5	19911114	LSGT	+	granted / extensions (spc, cpc, pte)	
DD295889 A5	19950302	LSLE	-ENJ	CEASED DUE TO NON-PAYMENT OF RENEWAL FEE	
DD295889 A5	20100726	PEXP		Calculated Patent Term Expiry	

Title: VERFAHREN UND VORRICHTUNG ZUM HERSTELLEN EINER SOHLENVERANKERUNG OD. DGL.

Abstract: Source: AT369863B [DE] [Source: Claim 1] 1. Verfahren zum Herstellen einer Sohlverankerung od. dgl., gekennzeichnet durch die Kombination der an sich bekannten Schritte: a) Einfuehren von Zugankern (22) in das Bohrloch (2), welche von einem mit mindestens einem Ventil (8) versehenen Schutzrohr (4, 4') umgeben sind, b) Einpressen einer Verankerungsmasse mindestens in die Haftstrecke (7), wobei die Verankerungsmasse ueber das Ventil (8) bzw. die Ventile im Schutzrohr in den Ringraum zwischen Schutzrohr und Bohrlochwand eindringt und diesen Ringraum ueber die ganze Laenge der Haftstrecke (7) ausfuellt, c) Einbringung einer, die Zuganker (22) umgebende Vergussmasse im oberen Bereich des Schutzrohres (Spannstrecke 12), und d) Anbringung einer Abdichtung, beispielsweise in Form eines ringfoermigen, aufblasbaren Ballons (14) am Ende der Haftstrecke (7). **Machine translation:** [Source: claim 1] 1 procedure to establish a sole anchor or etc., characterized by the combination of the known steps: a) introduce by tie rods (22) into the hole (2) by a protective tube with at least one valve (8) (4, 4') are surrounded, b) penetrates presses a Verankerungsmasse at least in the prison stretch (7), where the regulation ankerungsmasse of the valve (8) or the valves in the conduit in the annular space between protective tube and borehole wall and this ring space over the entire length of the stick line (7) fills, c) input one, the tie rod (22) surrounding sealing compound in the upper part of the protection tube (clamping track 12), and d) affixing a seal, for example, in the form of a ring-shaped, inflatable balloons (14) at the end of the stick line (7).

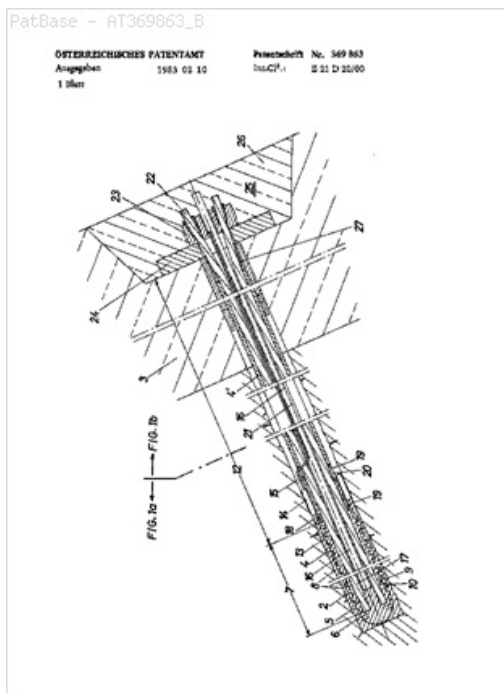
Classifications:

International (IPC 8-9): E21D20/02 E21D21/00 (Advanced/Invention); E21D20/00 E21D21/00 (Core/Invention)

International (IPC 1-7): E21D20/00

CPC: E21D21/006 E21D20/02 E21D21/0026 E21D21/0093

European: E21D20/02 E21D21/00M E21D21/00S P21D21/00M10



Family:

Publication number	Publication date	Application number	Application date
AT369863 B	19830210	AT19790006975	19791029
AT697579 A	19820615	AT19790006975	19791029

Priority:

AT19790006975 19791029

Probable Assignee: VORSPANN TECHNIK GMBH

Assignee(s): (std): VORSPANN TECHNIK GMBH

Assignee(s): VORSPANN TECHNIK GES MBH ; VORSPANN TECHNIK GESELLSCHAFT M B H

Legal status (INPADOC)

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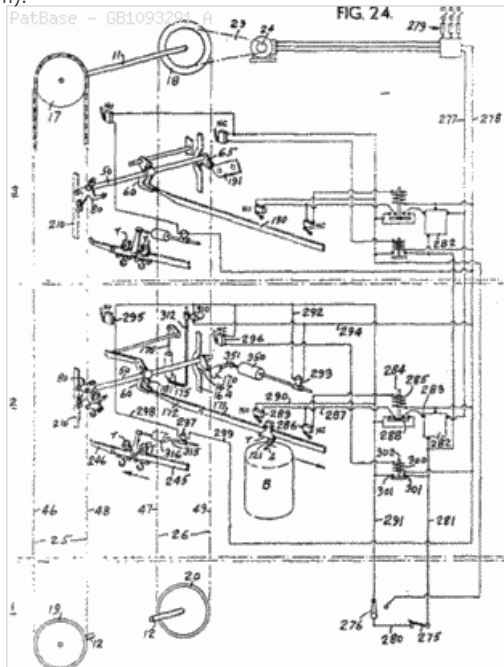
Patent	Date recorded	Event group	Code	Event	Details
AT369863 B	19830210	LSGT	+	granted / extensions (spc, cpc, pte)	
AT369863 B	19870315	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT369863 B	19991029	PEXP		Calculated Patent Term Expiry	
AT697579 A	19820615	LSPB	+	published / reissued	

Title: CONVEYOR SYSTEM AND MEANS

Abstract: 1,093,291. Endless conveyers. GRAY DEVELOPMENT CO. Jan. 17, 1966 No. 2143/66. Heading B8A. [Also in Division B7] General Arrangement.-Laundry Bags B are conveyed by trollies T from a source of soiled linen (not shown) on a basement level 1 to an upper level 2 or 3 for washing, ironing, etc., by travelling on a rail (130) (Fig 2, not shown) from which each trolley T is transferred to a hook 60 carried by endless chains 25, 26. The trolley T is discharged on to a conveyer rail 171 on the level 2 if a cam 170 is placed in an operative position by electro-pneumatic mechanism selectively operated by a switch 276. If the switch 276 is set in an alternative position a fixed cam 191 results in delivery of the trolley to a conveyer rail 190 on the level 3. The rail 171 circulates in a closed circuit 171, (245) (Fig. 27, not shown) via a reception station (not shown) at which the bag B is detached, and the empty trolley T is delivered back to a hook 80 on the chains 25, 26. The trolley T is then conveyed to a selected level and discharged to an associated conveyer-rail circuit (similar to the circuit 171 (245)), thereby to receive a fresh bag B for delivering to a selected level 1-3 via a hook 60 on the endless chains 25, 26. Take-up of loaded trollies at level 1. A trolley T arriving with a bag B on a rail (130) at the level 1 is permitted to pass pawls (143), (142) (Fig. 3, not shown) of an escapement mechanism following the satisfactory transfer of a preceding load on to a respective hook 60. A spring-loaded trip lever (156) connected to the pawls (142), (143), is adapted to be engaged by a roller (71) carried by one arm (67) Figs. 18-21, (not shown) of a bell crank (65) rigid with the hook 60. The latter is pivotally mounted on a respective one of a number of carrier rods 50 carried by the endless chains 25, 26. A roller (70) carried by the other arm of the bell crank (65) is guided by a linear cam (163) to tilt the hook 60 at the correct moment to receive the trolley T when it has been allowed to pass the escapement pawls (142), (143). The bag B is permitted to clear the rail (130) in its upward movement by a displaceable rail section (133) which is lifted by the bag and falls back afterwards by gravity. The section (133) carries a pawl (141) which prevents backward movement of a trolley T in the transfer position. The hook 60 is moved, during its upward movement to a normal carrying position by action on the roller (70) of a straight section 164 of the cam 163, and a further section 167 of the latter at the level 2 causes the hook 60 to be moved into a trolley discharging attitude. Discharge of loaded trolley at level 2. Discharge on to the rail 171 if selected by operation of the switch 276 may be boosted by a lever (184) (Fig. 10, not shown) engaging the trolley. The lever (184) may be moved from an inoperative position (Fig. 2, not shown) to an operative position (Fig. 10, not shown) by energisation of a cylinder (175). The boosting movement of the lever (184) is derived from the engagement of a roller (183) carried by the lever (184), by a surface on the upwardly moving hook assembly 60. In passing along rail 171 the trolley T operates micro-switch 289 thereby activating a time switch 282. Operation of a second microswitch 286 by the trolley T stops the action of the time switch and the trolley T passes to its reception station. Should an accumulation of trollies build up the micro-switch 286 will not be operated before the time switch time elapses. This will result in the opening by the time switch of a main supply lead 281 thus releasing hold relays 302 and 279 to stop operation of the conveyer drive motor 279. Discharge of loaded trollies at level 3. Any trollies present on hooks arriving at level 3 will be discharged by the action of the fixed cam 191 acting on the roller (71) of the respective hook 60. The discharge is boosted by the action of a lever (197) (Fig. 5, not shown). Discharge of unloaded trollies T at level 1. Each carrier rod 50 carries in addition to a hook assembly 60 (Fig. 12, not shown) at the middle of the rod 50, a hook assembly 80 for unloaded trollies, at the end of the rod 50, adjacent the chain 25. There is an associated discharge rail track (225) (Fig. 7, not shown) and delivery rail tracks (245) and (222) for the transfer of the unloaded trollies at the respective levels 1, 2 and 3. As each hook (80) approaches the track (225) it is turned into a discharge attitude by the action of a linear cam section (213). Discharge is boosted by the action of an arm (236). Take-up of unloaded trollies at levels 2 and 3. Feed of the trollies is controlled by pawls (252); (252a). which may be set by closure of a micro-switch (295) in the circuit of a solenoid valve (297), by the passage of a preceding hook 80. Alternatively the pawls (252), (252a), may be set by the engagement of a lever (260) (Fig. 25 not shown) by a roller (95) carried at the extremity of the hook 80. Conveyor Framework.-The rollers of each chain 25, 26 are guided by guides (27), (28); (29), (30); (31), (32); and (33), (34). (Figs. 2 and 7, not shown). These guides are carried by cross members (35), (36), carried by hollow rectangular cross-section frame members 6, 7. (Figs. 1, 14, not shown).

Classifications:**International (IPC 8-9):** B65G17/20 B65G17/48 (Advanced/Invention);

B65G17/20 B65G17/30 (Core/Invention)

International (IPC 1-7): B65G47/61**CPC:** B65G17/485 B65G17/20 B65G2201/02 B65G2201/0288**European:** B65G17/00 B65G17/20 B65G17/48B L65G201/02 L65G201/02S L65G812/02F2D1D2**Family:**

Publication number	Publication date	Application number	Application date
GB1093291 A	19671129	GB19660002143	19660117

Priority:

GB19660002143 19660117

Probable Assignee: GRAY DEV CO**Assignee(s):** (std): GRAY DEV CO ; GRAY DEV COMPANY**Assignee(s):** GRAY DEVELOPMENT CO ; GRAY DEVELOPMENT COMPANY**Inventor(s):** (std): GRAY CORNELIUS

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Patent	Date recorded	Event group	Code	Event	Details
GB1093291 A	19671129	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1093291 A	19860117	PEXP		Calculated Patent Term Expiry	

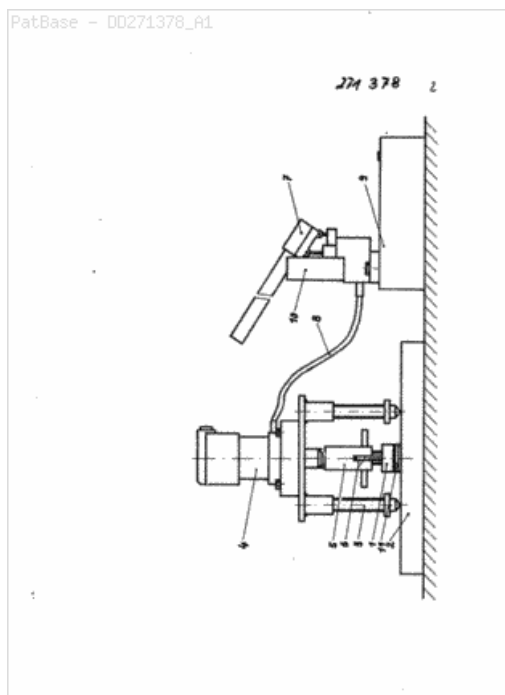
Title: PRUEFGERAET ZUR BESTIMMUNG DER HAFTFESTIGKEIT VON KLEINFORMATIGEN KERAMISCHEN ERZEUGNISSEN AUF FESTEN TRAEGERWERKSTOFFEN TESTER FOR DETERMINING THE ADHESION OF SMALL CERAMIC PRODUCTS ON FIXED CARRIER MATERIALS (Machine translation)

Abstract: Source: DD271378A [DE] [Source: Claim 1] 1 Seite Zeichnung **Machine translation:** [Source: claim 1] 1 page of drawing

Classifications:

International (IPC 8-9): G01N19/04 (Advanced/Invention);
G01N19/00 (Core/Invention)

International (IPC 1-7): G01N19/04



Family:

Publication number	Publication date	Application number	Application date
DD271378 A1	19890830	DD19880314294	19880331

Priority:

DD19880314294 19880331

Probable Assignee: BAUAKADEMIE DDR

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Inventor(s): ZUCHOLD STEFFI DD ; KEUCHER JOACHIM DD ; BAEHR KARSTEN DD

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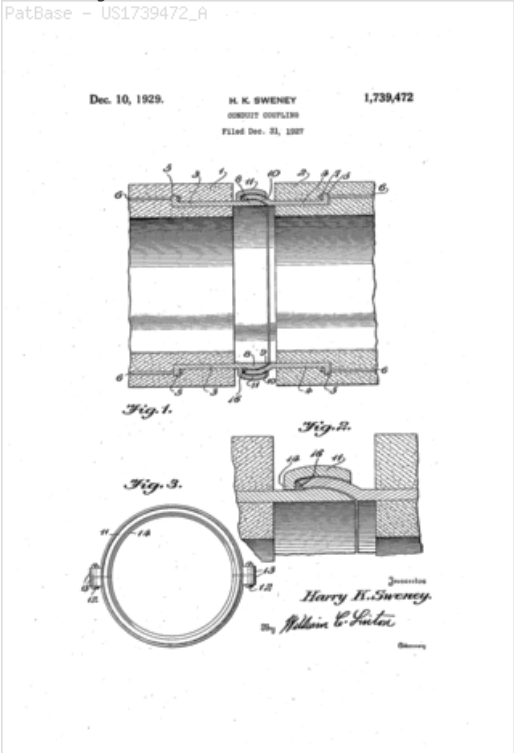
Patent	Date recorded	Event group	Code	Event	Details
DD271378 A1	19890830	LSPB	+	published / reissued	
DD271378 A1	20030102	LSLE	-ENJ	CEASED DUE TO NON-PAYMENT OF RENEWAL FEE	

Title: CONDUIT COUPLING

Abstract: 1. A conduitcoupling comprising a pair of cooperating collars, each carried by the adjacent ends of the conduit sections to be coupled, the end of one of said collars having its outer peripheral portion formed with a semi-spherical bearing surface, the end of the remaining collar being provided with an enlarged skirt having semi-spherical inner -and outer surfaces, the inner semi-spherical surface of said skirt being engaged over said semi-spherical bearing surface of the first mentioned collar, and a rigid clamping sleeve concentric with the outer semi-spherical surface of the skirt and engaged over the same, one edge of said sleeve terminating short of the skirt and the other edge of sai sleeve snugly engaging the outer peripheral portion of the first mentioned collar beyond the semi-spherical bearing surface thereof.

Classifications:

International (IPC 8-9): F16L27/04 (Advanced/Invention);
F16L27/02 (Core/Invention)
International (IPC 1-7): F16L21/00
CPC: F16L27/04
European: F16L27/04
US: 285/261 285/290.4 285/423



Family:

Publication number	Publication date	Application number	Application date
US1739472 A	19291210	US19270243961	19271231

Priority:

US19270243961 19271231

Probable Assignee: SWENEY HARRY K
Assignee(s): (std): SWENEY HARRY K
Inventor(s): (std): SWENEY HARRY K

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Patent	Date recorded	Event group	Code	Event	Details
US1739472 A	19291210	LSGT	+	granted / extensions (spc, cpc, pte)	