

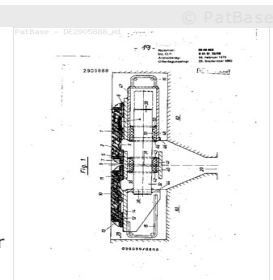
1) Family number: 1781815 (DE2905888A1)

VORRICHTUNG ZUM UEBERBRUECKEN VON DEHNUNGSFUGEN IN BAUWERKEN BRIDGE EXPANSION JOINT SPANNING STRIPS - HAVE EDGE T=SECTION MEMBERS LINKED TO PLATE ON SOCKETS WITH ROUNDED SUPPORTS

Abstract: Source: DE2905888A1 "Vorrichtung zum Ueberbruecken von Dehnungsfugen in Bau werken" Patentansprueche 1 Vorrichtung zum Ueberbruecken von Dehnungsfugen in Bau- werken, insbesondere Verkehrsbauwerken wie Bruecken aus einem aus elastischem Werkstoff bestehendem Fugenband mit durchgehender Fahrbahnflaeche und einviukanisierten, an den Laengskanten angeordneten T-Profilen, die ueber Verbindungselemente mit entsprechend in die Randbe reiche der Dehnungsfuge eingelassenen Befestigungs profilen zu verbinden sind, dadurchgekennzeichnet, dass die einander gegenueberliegenden T-Profile (5, 11) nebeneinander verlegter Fugenbaender (1, 10) mit einer in Laengsrichtung (19) der Dehnungsfuge (20) angeordneten Platte (30) verbunden sind, die sich auf in Fahrbahn laengsrichtung (29) verschieblich angeordneten huelsen foermigen Lagern (4b, 46) mit runden oder andersfoermigen Trageelementen (32-37) abstuetzt 2. An elastic joint strip has vulcanised edge T-profiles for connection to fixture profiles let into the gap edges, in provision for spanning expansion joints, eps. in bridges. Interfacing T-profiles of adjacent strips are connected to a plate sited lengthways in the joint. This is supported on socket-shaped bearings sliding lengthways, with rounded support-elements. Expansion joints of any width can be bridged at low level, and can bear heavy vehicles.

Probable Assignee: WSW STAHL AND WASSERBAU GMBH

Earliest Publication Date: 19800925



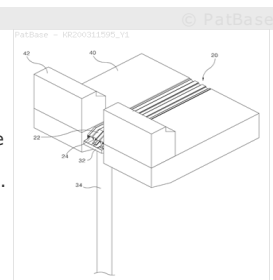
2) Family number: 47066987 (KR200311595Y)

EXPANSION JOINTS WITH A DRAIN GUTTER (MACHINE TRANSLATION)

Abstract: Source: KR200311595Y Is the subject innovation is installed in the gap between the spaced bridges and overpasses absorbs a smooth elastic action of the upper panel 40 and provide expansion joints to allow for drainage. The expansion joint is a side install the rails 22 and the rubber seal 24 of the lower side downwardly, and the curb section drain trough 32 and the induction pipe 34 is positioned between 42 of the expansion joint it is good to be drained through. Bridges, tops, curb section, drainage gutters, expansion joints, rail, pipeline induction

Probable Assignee: LTD KAY KNOW

Earliest Publication Date: 20030501



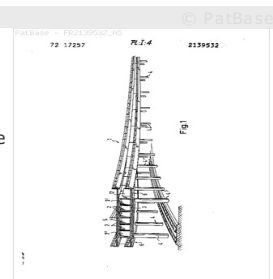
3) Family number: 567533 (FR2139532A)

ESTRUTURA DE CONSTRUCAO EM CONCRETO ARMADO REPOUSANDO SOBRE COLUNAS DE CONCRETO ARMADO

Abstract: Source: FR2139532A (Claim 1) 1.Structure en beton arme reposant sur des supports egalement en beton arme et destinee a supporter plusieurs plans superposes-et eventuellement cote a cote - de circulation et de desserte, de preference pour vehicules sur rails et sans rails, caracterisee en ce que la charpente-support d'un plan de circulation et/ou de desserte repose sur des supports (4) et est constituee par des tubes (2,2') disposes parallelement cote a cote et/ou les uns au-dessus des autres, qui sont dimensionnees et agences de maniere qu'ils forment dans leur espace interieur d'autres voies de circulation et/ou de desserte. (Claim 1) 1.Structure reinforced concrete resting on supports in reinforced concrete and also has support multiple bunk destiny-and possibly score Plans by side - traffic and service, preferably for rail vehicles without rails, CHARACTERIZED that the frame supporting a traffic plan and / or service rests on supports (4) and is constituted by tubes (2,2 ') willing parallel side by side and / or one above the others, which are dimensioned and arranged in such a manner that they form in their interior space of other roads and / or service.

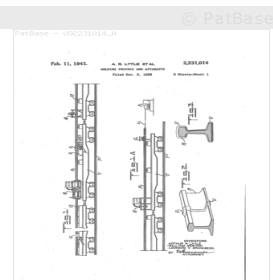
Probable Assignee: HUBMANN GEORG

Earliest Publication Date: 19721123



4) Family number: 19250944 (US2231014A)

WELDING PROCESS AND APPARATUS



Abstract: Source: GB532422A 532,422. Annealing steel. LINDE AIR PRODUCTS CO. Aug. 30, 1939, No. 24861. Convention date, Dec. 3, 1938. [Class 72]. [Also in Group XXII] Steel members such as rails, I or channel beams, pipes, rods and c. the members, after butt welding by high temperature gas flames, simultaneously applied to all portions of the members adjacent the abutting ends and reciprocated longitudinally across the ends to heat them to welding temperature, and by pressure continuously applied to upset the metal at all points round the joints, and removal of the upset metal from the sides and top of the head and the sides of the base by gas flames preferably while the work is still hot from the welding operation or after previous heating by a blowpipe, are annealed by heating to 900°C. Annealing is effected by a set of burners carried on a carriage 411, Fig. 17, reciprocated across the joint by a hand operated rack 419 and pinion 417 or hydraulically. The burners are similar to the welding burners 311, 313, 315, 317, Fig. 7, which are carried by a carriage 151, the burners 313, 315 being provided with series of staggered rows of parallel and divergent tips for heating the sides of the rails and the burners 311, 317 having two rows of staggered tips of larger size than the tips for burners 313, 315, for heating respectively the top of the head and the underside of the base, the nozzles all being water cooled. The burners 33, 315 are vertically adjustable in collars 191 in slides 195, 193 which may be independently adjusted by screws 211, 213 in slides 199, 197, which may be simultaneously adjusted by a right and left handed screw 201. The burners 311 and 317 are vertically adjustable in collars 164 by racks 165, 167 and pinions in shafts 173, 175. The burner 317 is further supported by a bar 189 connected to a rod 185 carrying a rack 183 operated by a pinion 181 in the shaft 173.

Probable Assignee: UNION CARBIDE and CARBON RES LAB

Earliest Publication Date: 19410113

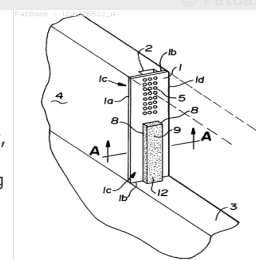
5) Family number: 29186870 (US6026622A)

PREDETERMINED CRACK-JOINT

Abstract: Source: US6026622A PCT No. PCT/EP95/02449 Sec. 371 Date Aug. 27, 1997 Sec. 102(e) Date Aug. 27, 1997 PCT Filed Jun. 23, 1995 PCT Pub. No. WO96/00822 PCT Pub. Date Jan. 11, 1996 Contraction joint rail for fitting in a wall (4) to be concreted and the use of such a rail which consists of a strip-like bar (1) with a device fitted to it forming an injection channel (2) extending over the length of the bar (1). The bar (1) may consist of a thin-walled plastic component, sheet zinc or the like. The device forming the injection channel (2) may be a foam strip (12) applied to the bar (1). The bar (1) may be fitted on both sides with a device forming an injection channel (2) and/or have perforations (5) permitting the penetration of a sealing material. The contraction joint rail of the invention is applied to an area of the wall (4) to be concreted and extends over the entire height of the wall (4), whereby after the wall (4) has been concreted, sealing material is sprayed into the injection channel (2) thus formed.

Probable Assignee: RASCOR SPEZIALBAU GMBH

Earliest Publication Date: 19960111



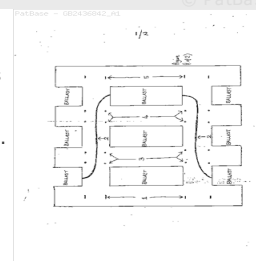
6) Family number: 33068010 (GB2436842A)

CONCRETE SLEEPER UNIT

Abstract: Source: GB2436842A The unit is formed with two concrete beams running lengthways and four concrete cross sleepers, strengthened throughout using steel reinforcement. The cribs between the sleepers will be filled with ballast for drainage and stability. The unit incorporates a plastic pipe within the concrete to house an S and T Bond (wire), preventing hazards from tripping and breakages by OTM and reducing the frequency of replacement of the S and T Bond. Being one heavy piece the unit will not move with a rail switchblade of an expansion joint and will have a longer lifespan than the existing support system.

Probable Assignee: DOCHERTY DANIEL

Earliest Publication Date: 20071010



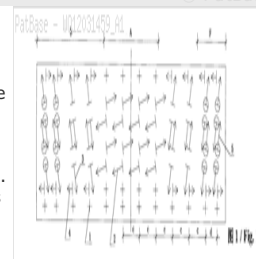
7) Family number: 48198998 (WO12031459A1)

LONG SEGMENT STRUCTURE OF OFFSHORE HIGH PILE WHARF

Abstract: Disclosed is a long segment structure of an offshore high pile wharf, and the length of a segment of the structure is no less than 120 m. In the long segment structure, batter piles located more than 25 m away from a zero line of temperature difference longitudinal displacement each are arranged in a small horizontal included angle, and batter piles located less than 25 m away from the zero line of temperature difference longitudinal displacement each are arranged in the longitudinal force direction. Pile foundations and pile tops of the long segment structure are hinged. In the long segment structure, the span of first cross-bents on two edges of a segment is less than that of inner cross-bents. Rails at a dilatation joint of the wharf are jointed by using several rail connection structures with a gap therebetween less than 20 mm.

Probable Assignee: CCCC THIRD HARBOR CONSULTANTS CO LTD

Earliest Publication Date: 20110119

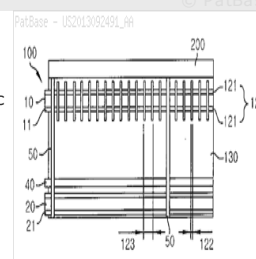


8) Family number: 48764364 (US2013092491A)

POWER SUPPLY APPARATUS FOR ON-LINE ELECTRIC VEHICLE, METHOD FOR FORMING SAME AND MAGNETIC FIELD CANCELATION APPARATUS

Abstract: Source: US2013092491A A power supply apparatus is for supplying power to an electric vehicle by a magnetic induction mechanism. The apparatus includes a power supply structure including a multiple number of power supply rail modules connected in a forward road direction, each power supply rail module including at least one power supply line passage elongated in the forward road direction, a power supply core of a lattice structure provided below the power supply line passage, and a concrete structure incorporating the power supply line passage and the power supply core; at least one power supply line accommodated in the power supply line passage in the forward road direction and surrounded by an insulating pipe; and at least one common line provided in the forward road direction and surrounded by an insulating pipe, for supplying power to the power supply apparatus.

Probable Assignee: KOREA ADVANCED INST OF SCIENCE AND TECHNOLOGY



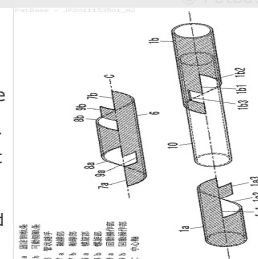
Earliest Publication Date: 20110421
9) Family number: 49600270 (JP2011153501A)

EXPANSION JOINT STRUCTURE OF STEEL PIPE RAIL

Abstract: Source: JP2011153501A PROBLEM TO BE SOLVED: To provide an expansion joint structure of a steel pipe rail that can absorb the elongation of total length while suppressing vibration during passing of vehicles and a reduction in the service life of vehicle wheels. SOLUTION: The expansion joint structure is adapted to connect the facing edges of a tubular fixed side rail 1a to a tubular movable side rail 1b expansibly through a tubular joint 6 turnable around the center axis C. One edge of the tubular joint 6 is formed of an axis part 7a, a spiral part 8a connecting both ends of the axis part 7a, and a turning operation part 9a provided at the axis part 7a. The other edge of the tubular joint 6 is formed of an axis part 7b, a spiral part 8b connecting both ends of the axis part 7b, and a turning operation part 9b provided at the axis part 7b. The respective edges of the fixed side rail 1a and movable side rail 1b are provided into a shape to be fitted to the respective edges of the tubular joint 6.

Probable Assignee: SENYO KOGYO KK

Earliest Publication Date: 20110811



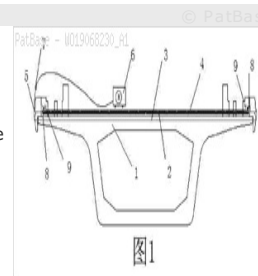
10) Family number: 73930772 (WO19068230A1)

POURING PROCESS FOR RAILWAY BRIDGE EXPANSION JOINT

Abstract: Disclosed is a pouring process for a railway bridge expansion joint. The pouring process comprises: providing an air bag (3), an inflation valve (5), an inflation pump (6), an air pressure meter (7), end gaskets (8) and stoppers (9), wherein the air bag (3) is provided with the inflation valve (5); the air pressure meter (7) is mounted at an air pipe of the inflation pump (6); the air bag (3) is covered with a plastic membrane; and the end gaskets (8) and the stoppers (9) are mounted at an upper portion of the air bag (3) and at two ends of a bridge joint. The present invention innovates a high-speed railway expansion joint construction process, and also has the function of improving the work efficiency of elastomer expansion joint construction.

Probable Assignee: ZHU ZIYI

Earliest Publication Date: 20190411



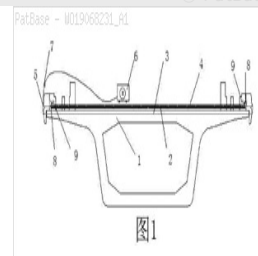
11) Family number: 73930773 (WO19068231A1)

CAST-IN-PLACE TOOLING FOR POLYURETHANE ELASTOMER EXPANSION JOINT OF RAILWAY BRIDGE

Abstract: Disclosed is cast-in-place tooling for a polyurethane elastomer expansion joint of a railway bridge, the tooling comprising: an air bag (3), an inflation valve (5), an inflation pump (6), an air pressure meter (7), end gaskets (8) and stoppers (9), wherein the air bag (3) is provided with the inflation valve (5); the air pressure meter (7) is mounted at a ventilation pipe of the inflation pump (6); the air bag (3) is covered with a layer of plastic film; and the end gaskets (8) and the stoppers (9) are mounted at an upper portion of the air bag (3) and at two ends of a bridge joint. The tooling innovates a construction process for high-speed railway expansion joints, and improves the working efficiency of elastomer expansion joint construction.

Probable Assignee: ZHU ZIYI

Earliest Publication Date: 20190411



12) Family number: 73997939 (CN208748515U)

TELESCOPING DEVICE OF PUBLIC ROAD BRIDGE ROOF BEAM GUARDRAIL

Abstract: Source: CN208748515U The utility model discloses a telescoping device of public road bridge roof beam guardrail, including the rail post, one side of rail post is provided with violently manages, the inboard of violentlymanaging is provided with the standpipe, the opposite side of rail post is provided with the expansion pipe, one side of flexible pipe is provided with small steel tube, one side of small steel tube is provided with the filling layer, small steel tube is provided with big steel pipe through the filling layer, the bottom of rail post is provided with the interior steel bloom of post, the bottom ofsteel bloom is provided with fixed steel sheet in the post, the bottom of fixed steel sheet is provided with the embedded bar, the inboard of embedded bar is provided with the expansion joint, the oneside at expansion joint is provided with the expansion joint reinforcing bar, one side of expansion joint reinforcing bar is provided with the angle steel, one side of angle steel is provided with the rubber tape, the top of rubber tape is provided with the waterproof layer. This kind of telescoping device of public road bridge roof beam guardrail utilizes its nimble flexible pipe and expansion joint, has realized reducing the purpose that the guardrail deformation pressure that brought the bottom was given to the concrete.

Probable Assignee: GUOCHENG GROUP CO LTD

Earliest Publication Date: 20190416

