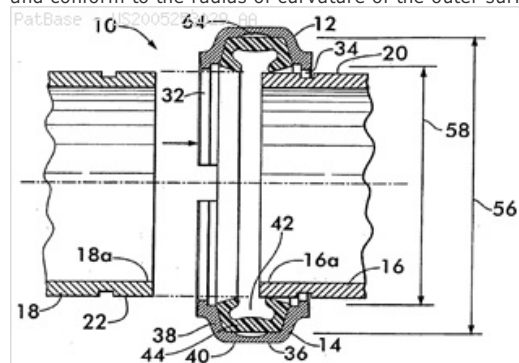


Diego Gonzalez

1) Family number: 32398909 (US2005253029A)
Title: DEFORMABLE MECHANICAL PIPE COUPLING

Abstract:

Source: US2005253029A A deformable mechanical pipe coupling is disclosed. The coupling is formed from an arcuate band that surrounds and defines a central space. The band has first and second ends in facing relation. arcuate surfaces that engage outer surfaces of the pipe elements extend lengthwise along the band. The arcuate surfaces have radii of curvature greater than the radii of curvature of the pipe element outer surfaces, allowing pipe elements to be inserted within the central space. The band has adjustably tightenable connection members mounted at each end. When the connection members are tightened, the ends are drawn toward one another, and the arcuate surfaces on the band deform and conform to the radius of curvature of the outer surfaces of the pipe elements.



International class (IPC 8-9): B21D39/00 B21D39/04 B23P11/00 B23P19/04 F16L F16L13/04 F16L15/00 F16L17/00 F16L17/02 F16L17/025 F16L17/04 F16L17/06 F16L19/00 F16L19/04 F16L21/00 F16L21/02 F16L21/04 F16L21/06 F16L23/00 F16L23/032 F16L23/04 F16L23/08 F16L23/16 F16L23/18 F16L25/08 F16L25/12 F16L25/14 F16L3/00 F16L33/04 F16L33/16 F16L35/00 F16L55/00 (Advanced/Invention); F16L17/00 F16L33/16 (Advanced/Non-invention); F16L17/00 F16L21/06 F16L23/00 (Core/Invention); F16L21/06 (Core/Non-invention); B21D F16L (Subclass/Invention)

International class (IPC 1-7): F16L17/00 F16L19/00 F16L21/04 F16L21/06 F16L23/00 F16L23/16 F16L3/00 F16L55/00

CPC: F16L17/04 F16L21/005 F16L21/065 F16L23/08 F16L23/18 F16L25/14 Y10T29/53987 F16L21/02

European class: F16L17/04 F16L21/02 F16L21/06 F16L21/06B F16L23/08 F16L23/18 F16L25/14

US class: 1/1 248/158 248/158P 277/608 277/608P 285/110 285/111 285/111P 285/112 285/112P 285/22 285/22P 285/330 285/337 285/337P 285/364 285/364P 285/365 285/367 285/367S 285/373 285/382 285/382P 285/406 285/411 285/419 285/420 29/282 29/521

Family:

Publication number	Pub. date	Application number	App. date
AU2005245821 AA	20051201	AU20050245821	20050510
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Priority: US20040571596 20040514; US20040571596P 20040514; US20050124781 20050509; AU20050245821 20050510; CA20052749222 20050510; EP20110184370 20050510; CA20052566697 20050510; EP20050746767 20050510; JP20070513253 20050510; JP20100194575 20050510; JP20070513253T 20050510; US20050125739 20050510; US20050125430 20050510; WO2005US16237 20050510; WO2005US16312 20050510; WO2005US16162 20050510; US20050126654 20050511; WO2005US16386 20050511; US20050127858 20050512; CN200580023212 20050513; US20050128728 20050513; WO2005US16835 20050513; US20060485921 20060713; IN2006CN04571 20061214; US20070867146 20071004; US20080174803 20080717; US20080174819 20080717; US20090416320 20090401; US20090423488 20090414; US20100868761 20100826; AU20100235944 20101021; AU20110200087 20110110; US20140277271 20140514; US20170662376 20170728;

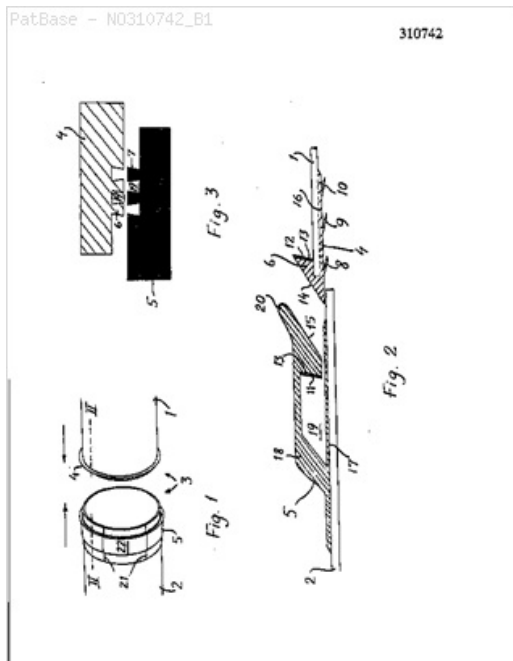
Cited documents: WO03029712 A1, WO03/029712, WO0159350 A1, WO0057093 A1, USD498826, USD372765, US8282136 BB, US8069547 BB, US7996981 BB, US7950701 BB, US7921536 BB, US7818869 BB, US7789434 BB, US7712796 BB, US7654587 BB, US7591055 BB, US7533910 BB, US7401819 BB, US7086131 BB, US6908123 BB, US6758500 BB, US6626466 BA, US6594869 BA, US6581977 BA, US6533333 BA, US6533333, US6499774 BA, US6367849 BA, US6367843 BA, US6328352 BA, US6312025 BA, US6302450 BA, US6302450, US6302450, US6231052 BA, US6227577 BA, US6206434 BA, US6170884 BA, US6170884 B1, US6170884, US6142536 A, US6076861 A, US6076861 A, US6070914 A, US6070911 A, US6030006 A, US5971001 A, US5911446 A, US5911446 A, US5845384 A, US5758907 A, US5758907, US5758906 A, US5758906 A, US5653481 A, US5647613 A, US5645303 A, US5540465 A, US5498042 A, US5468025 A, US5411162 A, US5312137 A, US5280970 A, US5280969 A, US5249829 A, US5248169 A, US5246257 A, US5240294 A, US5230540 A, US5230537 A, US5203594 A, US5203594 A, US5142536 A, US5094492 A, US5058931 A, US5058931 A, US5056833 A, US5056833 A, US5018548 A, US5018548, US4966395 A, US4966395, US4915418 A, US4913470 A, US4898407 A, US4896902 A, US4893843 A, US4893843 A, US4861075 A, US4861075 A, US4842306 A, US4834431 A, US4828300 A, US4779901 A, US4776362 A, US4739542 A, US4726611 A, US4722561 A, US4722561, US4702500 A, US4702499 A, US4643461 A, US4640530 A, US4639020 A, US4629217 A, US4611839 A, US4611839 A, US4601495 A, US4522434 A, US4522434 A, US4506418 A, US4471979 A, US4471979 A, US4417755 A, US4408788 A, US4403378 A, US4403378 A, US4391458 A, US4326737 A, US4311248 A, US4258941 A, US4258491 A, US4186947 A, US4111234 A, US3999785 A, US3997705 A, US3977705 A, US3977705 A, US3977105 A, US3966237 A, US3905623 A, US3877733 A, US3861723 A, US3851901 A, US3797078 A, US3794361 A, US3794361, US3695638 A, US3664691 A, US3658367 A, US3550638 A, US3464722 A, US3362730 A, US3362730 A, US3351352 A, US3291506 A, US3291506 A, US3268245 A, US3268245 A, US3251615 A, US3235293 A, US3213187 A, US3207538 A, US3181896 A, US3176723 A, US3134612 A, US3129920 A, US3107108 A, US3054629 A, US3054629 A, US3024046 A, US3024046 A, US3014259 A, US3003793 A, US29731 A, US2944839 A, US293734 A, US2883211 A, US2775806 A, US2769648 A, US2752173 A, US2752173 A, US2709094 A, US2688500 A, US2688170 A, US2675253 A, US2473102 A, US2473102 A, US2471182 A, US2459251 A, US2456048 A, US2449795 A, US2439979 A, US2439979 A, US2403606 A, US2377510 A, US2369710 A, US2178819 A, US2041132 A, US2028182 A, US2020156 A, US2020156 A, US2017167645 AA, US2015176728 AA, US2013257045 AA, US2013187379 AA, US2013187346 AA, US2013185919 AA, US2013125373 AA, US2012139236 AA, US2011154646 AA, US2011146048 AA, US2011062706 AA, US2011037250 AA, US2010320756 AA, US2010320756 AA, US2010218362 AA, US2010194109 AA, US2010148493 AA, US2009243291 AA, US2009172939 AA, US2009127846 AA, US2008290652 AA, US2008284161 AA, US2008129048 AA, US2008048444 AA, US2008018057 AA, US2008007061 AA, US2007176425 AA, US2007090646 AA, US2006284420 AA, US2005258641 AA, US2005253382 AA, US2005253381 AA, US2005253380 AA, US2005253029 AA, US2005242585 AA, US2005212296 AA, US2003178850 AA, US2003178850 AA, US2003062718 AA, US2002171244 AA, US1987235 A, US1930194 A, US1867891 A, US1851574 A, US1541601 A, US1093868 A, US04522434, TW483995, TW475045 B, TW475045, TW460667, TW404472, TW381649 B, TW381649, TW302427 B, TW142281, JP55143221, JP7028290 U1, JP7028290 U, JP7028290 U, JP5143221, JP51043221 A2, JP51043221, JP3018876 U, JP3018876 U, JP2002310351 A2, JP2002310351, JP2002241975 A2, JP2002241975 A2, JP2002147664 A2, JP2002147664, JP200009276, JP200009276 A2, JP200009276, JP1255783 A2, JP1255783, JP11241794 A2, JP11241794, JP11218274 A2, JP11218274, JP10132174 A2, JP10132174, JP0728290 U, GB822025 A, GB2367871 A1, GB2253452 A1, GB2253451 A1, GB2218768 A1, GB2211255 A1, GB2143294 A1, GB2051213 A1, GB1050914 A1, GB1050914 A, FR1084340 A, FR1084340 A, EP5746767, EP1769182 A2, EP1260751 A2, EP1180630 A2, EP05746767, EP0531833 A1, EP0498322 A1, EP0463424 A1, EP0427880 A1, EP0427880 A1, EP0412642 A1, EP0360946 A1, EP0306946 A2, EP0205896 A2, EP0178360 A1, EP0079457 A1, DE9103296 U1, DE9103296 U1, DE9103296 U, DE4427513 A1, DE4309330 A1, DE4309330 A1, DE3710852 C1, DE3038491 A1, DE19534437 A1, DE19532356 A1, DE1876798 U, DE1876798 U, DE1798281 U, DE1798281 U, DE1798281 A1, DE1798281 A1, DE1051585 B, DE10230845 A1, DE10230845 A1, DE10006029 A1, CN1084859 C, CA1179393 A1, BE519028 A, BE519028, **Assignee(s):** (std): VICTAULIC CO ; VICTAULIC CO OF AMERICA ; PORTER MICHAEL V ; PIGOTT MICHAEL S ; GIBB JOHN ; DOLE DOUGLAS R **Assignee(s):** VICTAULIC COMPANY ; VICTAULIC COMPANY OF AMERICA ; VITAULIC CO ; VICTAULIC COMPANYUS ; VICTAULIC CO EASTON **Inventor(s):** (std): DOLE DAUGLAS R ; GIBB JOHN DOLE DOUGLAS R PIGOT ; JOHN PIGOTT MICHAEL S DOLE DOU ; PORTER MICHAEL V ; JOHN GIBB ; GIBB JOHN ; DOLE DOUGLAS R ; PIGOTT MICHAEL S **Inventor(s):** DOLE DAUGLAS ; GIBB JOHN BEETON ; DOLE DOUGLAS R WHITEHOUSE STATION ; MICHAEL S PIGOTT ; PIGOTT MICHAEL ; PORTER MICHAEL ; DOLE DOUGLAS ; DOUGLAS R DOLE ; GIBB JOHN DOLE DOUGLAS R **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 LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SG SD SE SG SI SK SL SM SN SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

2) Family number: 14697563 (NO980798L)

Title: SKJOETEANORDNING FOR FLEKSIBLE DUKROERSEKSJONER SAMT FREMGANGSMATE TIL FREMSTILLING AV DENNE

Abstract:

Source: NO310742B 1. Skjøteanordning for sammenkobling av to fleksible dukrørseksjoner (1,2) til ventilasjonskanaler med stor diameter i form av lange rørgater omfattende minst to slike rørseksjoner (1,2), karakterisert ved at skjøteanordningen (3) omfatter to komplementært utformede ringer (4,5) fast for- bundet med hver sin rørseksjon (1,2), idet den ene ringen (4) er forsynt med elastisk forskyvbare og/eller deformerbare og perifer forløpende selvlåsende vulster eller fremspring (6.7) som er innrettet til å komme i selvlåsende inngrep med motsvarende fordypninger eller utsparinger på den motstående rørseksjon når rørseksjonene (1,2) presses sammen. 1 Splice assembly for connecting two flexible dukroerseksjoner (1.2) for ventilation ducts of large diameter in the form of long pipelines comprising at least two such pipe sections (1,2), wherein the coupling device (3) comprises two complementary shaped rings (4,5) firmly at-tached to each pipe section (1.2), wherein the one ring (4) is provided with elastic displaceable and / or deformable and circumferentially extending ridges or self-locking projection (6.7) which is adapted to come into self-locking engagement with corresponding recesses or cutouts on the opposite pipe section when the pipe sections (1,2) are pressed together.



International class (IPC 8-9): F16L37/084 F16L47/00 (Advanced/Invention);
F16L37/00 F16L47/00 (Core/Invention);
F16L (Subclass/Invention)

International class (IPC 1-7): F16L F16L37/084 F16L47/00

Family:

Publication number	Pub. date	Application number	App. date
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NO980798 A0	19980226	NO19980000798	19980226
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Priority: NO19980000798 19980226;

Assignee(s): (std): MASKIN ARGO AS ; MASKIN AS ARGO

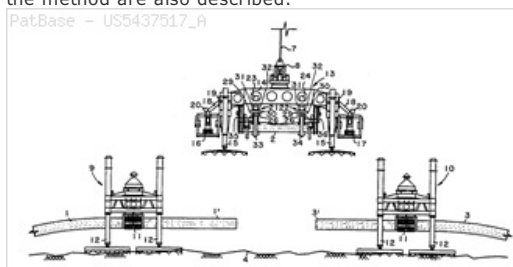
Inventor(s): (std): HAALAND SVEIN

3) Family number: 9972645 (US5437517A)

Title: Method for automatically repairing underwater pipelines, particularly suitable for great depths, and the relative apparatus

Abstract:

Source: US5437517A A method, using a crane-equipped depot ship, for automatically repairing an underwater pipeline even if installed at great depth, comprising substantially the following steps: cutting off the damaged pipe piece by a single working module which, lowered onto the sea bed by a crane and clamped about said pipeline, removably supports the cutting apparatus; removing the concrete from the facing ends of the cut pipeline by said single working module which removably supports the removal apparatus, this being provided with an expansion-centering head; installing connectors by a sonar head alignment apparatus removably supported by said working module; and installing the replacement pipe piece by said working module using a reference and guide apparatus clamped about said ends of the pipeline. Specific apparatus for implementing the method are also described.



International class (IPC 8-9): F16L1/26 F16L55/16 (Advanced/Invention);
F16L1/26 F16L55/16 (Core/Invention);
F16L (Subclass/Invention)

International class (IPC 1-7): F16L F16L1/16 F16L1/26

CPC: F16L1/26 F16L55/1608

European class: F16L1/26 F16L55/16F

US class: 405/169 405/173

Family:

Publication number	Pub. date	Application number	App. date
GB2276431 A1	19940928	GB19940005568	19940321
GB2276431 B2	19970205	GB19940005568	19940321
GB9405568 A0	19940504	GB19940005568	19940321
IT1272119 B	19970611	IT1993MI00535	19930322
ITMI930535 A0	19930322	IT1993MI00535	19930322
ITMI930535 A1	19940923	IT1993MI00535	19930322
NO941005 A	19940923	NO19940001005	19940321
NO941005 A0	19940321	NO19940001005	19940321
NO941005 L	19940923	NO19940001005	19940321
US5437517 A	19950801	US19940215198	19940318

Priority: IT1993MI00535 19930322;

Cited documents: US4832530 A, US4234268 A, US4203687 A, GB2082721 A1, GB2040012 A1, GB1554807 A,

Assignee(s): (std): SNAM PROGETTI

Assignee(s): SNAMPROGETTI S P A ; SNAMPROGETTI SPA

Inventor(s): (std): MONTESI MASSIMO ; CARRIOLI PAOLO
Inventor(s): MASSIMO MONTESI ; PAOLO CARRIOLI

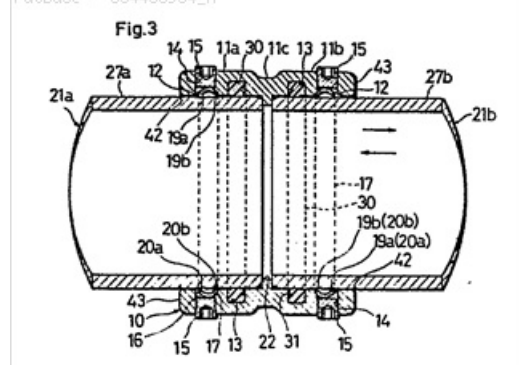
4) Family number: 16960836 (US4438954A)

Title: PIPE COUPLING

Abstract:

Source: US4438954A In a pipe coupling for connecting pipes as fluid conduits, a split clamping ring, which is of arcuated configuration in cross section, has a pair of spaced circular sharp edges directed toward the pipe for firm engagement therewith and is disposed in an annular groove formed internally of a body so as to be slightly displaceable relatively to the groove in an axial direction of the body when a certain axial force is applied to the pipe; a deformable sealing ring is disposed in another annular groove formed internally of the body; and a plurality of depressing members are provided for adjustably compressing the clamping ring diametrically.

PatBase - US4438954_H



International class (IPC 8-9): F16L17/035 F16L21/02 F16L21/08 F16L25/06 F16L41/12 (Advanced/Invention); F16L21/08 (Advanced/Non-invention);

F16L17/00 F16L21/08 F16L25/00 F16L41/08 (Core/Invention)

International class (IPC 1-7): F16L17/02 F16L17/03 F16L19/03 F16L21/02 F16L21/08 F16L41/08 F26B21/02

CPC: F16L17/035 F16L25/065 F16L41/12

European class: F16L17/035 F16L25/06B F16L41/12

US class: 285/104 285/111 285/197 285/321 285/369 285/383 285/404

Family:

Publication number	Pub. date	Application number	App. date
AU198178144 A1	19820930	AU19810078144	19811201
AU541120 B2	19841213	AU19810078144	19811201
BR8201099 A	19830111	BR19820001099	19820303
CA1177102 A1	19841030	CA19820394166	19820114
DE3170434 D1	19850613	DE19813170434	19811202
EP0061531 A1	19821006	EP19810110071	19811202
EP0061531 B1	19850508	EP19810110071	19811202
ES262281 U	19851216	ES19810262281U	19811214
ES262281 Y	19860716	ES19810262281U	19811214
JP57161391 A2	19821004	JP19810044619	19810326
KR840001610 Y1	19840830	KR19810005710U	19810814
PH18272 A	19850514	PH19820026983	19820312
US4438954 A	19840327	US19810325124	19811127

Priority: JP19810044619 19810326; CA19820394166 19820114;

Cited documents: US817300 A, US4304424 A, US3999785 A, US3941410 A, US3920270 A, US3420554 A, US3020054 A, US2921801 A, US2225208 A, US2177184 A, FR2430562 A1, DE2258950 A1, DE1475860 A1,

Assignee(s): (std): ISUZU FISHING REEL MFG ; ISUZU IND CO LTD ; ISUZU KOGYO KK

Assignee(s): ISUZU KOGYO KABUSHIKI KAISHA ; HATTORI TADASHI ; ISUZU KOGYO K K ; ISUZU IND CO

Inventor(s): (std): HATTORI TADASHI ; HATSUTORI TADASHI ; TADASHI HATTORI

Designated states: DE FR GB IT

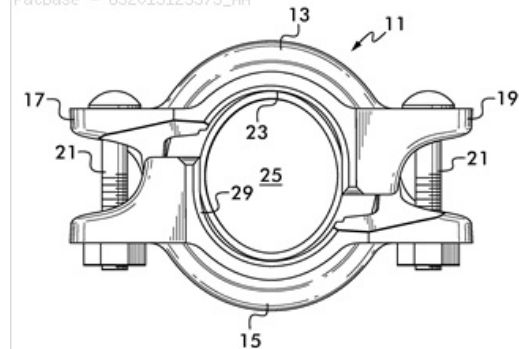
5) Family number: 53750716 (US2013125373A)

Title: COUPLING WITH PROJECTIONS HAVING ANGULARLY ORIENTED SURFACE PORTIONS

Abstract:

Source: US2013125373A A mechanical coupling for joining pipe elements has segments joined end to end, each segment having projections with surface portions oriented angularly with respect to other surface portions to serve as a guide for the insertion of pipe elements between the segments when arranged in spaced apart relation around a ring gasket. A method of assembling a pipe joint includes engaging the surfaces with ends of the pipe elements and rotating the segments relative to one another to permit insertion.

PatBase - US2013125373_AA



International class (IPC 8-9): B23P11/00 F16L F16L17/04 F16L21/00 F16L21/02 F16L21/06 F16L21/08 F16L23/08 F16L23/18 (Advanced/Invention); F16L (Subclass/Invention)

CPC: F16L21/065 F16L23/08 F16L17/04 F16L21/06 Y10T29/49872 Y10T29/49947 Y10T29/49963

US class: 1/1 285/349 285/374 285/375 29/525.01

Family:

Publication number	Pub. date	Application number	App. date
AU2012340939 AA	20140605	AU20120340939	20121109
AU2012340939 AA	20130530	AU20120340939	20121109
AU2012340939 BB	20170907	AU20120340939	20121109
BR112014012188 A2	20170530	BR20141112188	20121109
BR112014012188 B1	20200407	BR20141112188	20121109
CA2856371 AA	20140520	CA20122856371	20121109
CA2856371 C	20180501	CA20122856371	20121109
CN104204642 A	20141210	CN201280067457	20121109
CN104204642 B	20161019	CN201280067457	20121109
DE602012022629 D1	20161020	DE201260022629T	20121109
EP2783146 A1	20141001	EP20120851307	20121109
EP2783146 A4	20150610	EP20120851307	20121109
EP2783146 B1	20160907	EP20120851307	20121109
ES2604960 T3	20170310	ES20120851307T	20121109
HK1202609 A1	20151002	HK20150102848	20150320
HK1202609 A1	20170609	HK20150102848	20150320
HK1202609 A1	20151002	HK20150102848	20150320
HK1202609 B	20170609	HK20150102848	20150320
IL232614 A0	20140630	IL20140232614	20140514
IL232614 A1	20170831	IL20120232614	20121109
IN04543CN2014 A	20150918	IN2014CN04543	20140618
JP2015501909 T2	20150119	JP20140542360T	20121109
JP6132846 B2	20170524	JP20140542360T	20121109
KR101989887 B1	20190617	KR20147015491	20121109
KR20140103268 A	20140826	KR20147015491	20121109
MX2014006096 A1	20141017	MX20140006096	20121109
MX345784 B	20170214	MX20140006096	20121109
SG11201402498Q A1	20140926	SG20141102498	20121109
TR201617186 T4	20161221	TR20160017186T	20121109
TW201341698 A	20131016	TW20120143328	20121120
TWI588395 B	20170621	TW20120143328	20121120
US2013125373 AA	20130523	US20110300756	20111121
US2015052733 AA	20150226	US20140528706	20141030
US9528642 BB	20161227	US20140528706	20141030
WO13078021 A1	20130530	WO2012US64474	20121109

Priority: US20110300756 20111121; EP20120851307 20121109; WO2012US64474 20121109; US20140528706 20141030;

Cited documents: WO11102875 A1, WO10144298 A1, WO10144298 A1, WO10002695 A2, WO10002695 A2, WO09102698 A1, WO07145995 A2, WO0057093 A2, USD674061 S1, USD673248 S1, USD672849 S1, USD665056 S1, US7988207 BB, US7726703 BB, US7722087 BB, US7722087 BB, US7712796 BB, US7591055 BB, US7401819 BB, US7296451 BB, US7144047 BB, US7090259 BB, US7086131 BB, US7086131 BB, US6840782 BA, US6735841 BB, US6565129 BB, US6393885 BA, US6375228 BA, US6371684 BB, US6227577 BA, US6170884 BA, US6170884 B1, US6139069 A, US6105972 A, US6105972 A, US6076861 A, US6070914 A, US5951066 A, US5778715 A, US5603508 A, US5560656 A, US5505499 A, US5505499 A, US5450738 A, US5443581 A, US5291769 A, US5282654 A, US5249829 A, US5246256 A, US5190324 A, US5149143 A, US5058931 A, US5018768 A, US4915418 A, US4702500 A, US4643461 A, US4639020 A, US4639020 A, US4611839 A, US4611839 A, US4601495 A, US4522433 A, US4460201 A, US4432558 A, US4408788 A, US4391458 A, US4311248 A, US4289335 A, US4163571 A, US4114414 A, US3977705 A, US3851903 A, US3756629 A, US3695638 A, US3403931 A, US3365730 A, US3362730 A, US3351352 A, US3291506 A, US3283553 A, US3251615 A, US3201149 A, US3086797 A, US3054629 A, US3054629 A, US3024046 A, US3015502 A, US3006663 A, US2821415 A, US2486120 A, US2473102 A, US2473046 A, US2464416 A, US2428189 A, US2230287 A, US2028182 A, US2011210546 AA, US2011210546 AA, US2011062706 AA, US2010289257 AA, US2010289257 AA, US2010148493 AA, US2010148493 AA, US2009243289 AA, US2008303269 AA, US2008284161 AA, US2007090646 AA, US2006284420 AA, US2005258641 AA, US2005242585 AA, US2005212296 AA, US2005212296 AA, US2005212284 AA, US2005003449 AA, US2004036291 AA, US2003062718 AA, US2003062718 AA, US2001054820 AA, US1994361 A, US1331986 A, JP2013518231 T2, JP2013518231 T2, JP2012529610 T2, JP2012529610, JP2011043236 A2, JP2011043236, JP2011038638 A2, JP2011038638, JP2011017444 A2, JP2011017444 A2, JP2008019976 A2, JP2008019976, JP2007530886 T2, JP2007530886, JP2007278455 A2, GB2243659 A1, EP2282096 A1, CN1878978 A,

Assignee(s): (std): BANCROFT PHILIP W ; VICTAULIC CO OF AMERICA

Assignee(s): VICTAULIC CO4901 KESSLERSVILLE ROAD EASTON PA18040US ; VICTAULIC COMPANY ; VICTAULIC CO ; VICTAULIC CO EASTON

Inventor(s): (std): BANCROFT PHILIP ; BANCROFT PHILIP W ; PHILIP W BANCROFT

Inventor(s): BANCROFT PHILIP W BELVIDERE ; BANCROFT PHILIP WUS

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

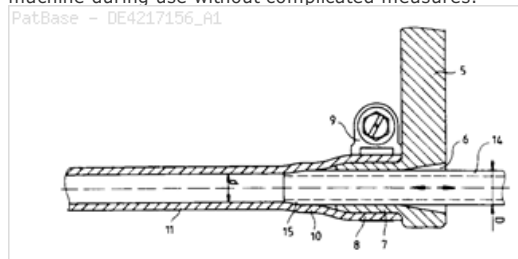
6) Family number: 10870596 (DE4217156A1)

Title: Quick-fit coupling for cylinder washing devices in printing machines - has fluid take-off pipe sliding into screwed pipe of fluid supply and sealed by elastic wall. Kupplung eines Fluidabnehmers an einen Fluidzufuehrer

Abstract:

Source: DE4217156A1 The screwed pipe of the fluid supply is designed as a rigid guide (7) in the first part pointing towards the fluid take off pipe and then forms a tubular guide (10) with elastic wall in a second adjoining part. The take off pipe (14) is part of a laterally displaceable cylinder washing device and the screwed pipe is mounted in the side wall of the printing machine. The tubular guide with elastic wall can be an elastic hose whose ID in this area is smaller than the OD of the pipe (14). USE/ADVANTAGE - The elastic wall ensures reliable sealing of coupling in printing machine during use without complicated measures.

PatBase - DE4217156A1



International class (IPC 8-9): F16L37/04 (Advanced/Invention);

F16L37/00 (Core/Invention)

International class (IPC 1-7): F16L37/02

CPC: F16L33/02

European class: F16L33/02

Family:

Publication number	Pub. date	Application number	App. date
DE4217156 A1	19931125	DE19924217156	19920523
DE4217156 C2	20010913	DE19924217156	19920523

Priority: DE19924217156 19920523; DE19924217156 19920523;

Cited documents: SU679768 T, DE3614542 A1, DE3612195 C1, DE3201259 C2,

Assignee(s): (std): HEIDELBERGER DRUCKMASCH AG

Assignee(s): HEIDELBERGER DRUCKMASCHINEN AG ; HEIDELBERGER DRUCKMASCHINEN AG 69115 HEIDELBERG DE

Inventor(s): (std): HEPPENSTIEL GERHARD ; KUSCH HANS JUERGEN
Inventor(s): KUSCH HANS JUERGEN 6903 NECKARGEMUEND DE ; HEPPENSTIEL GERHARD 6919 BAMMENTAL DE

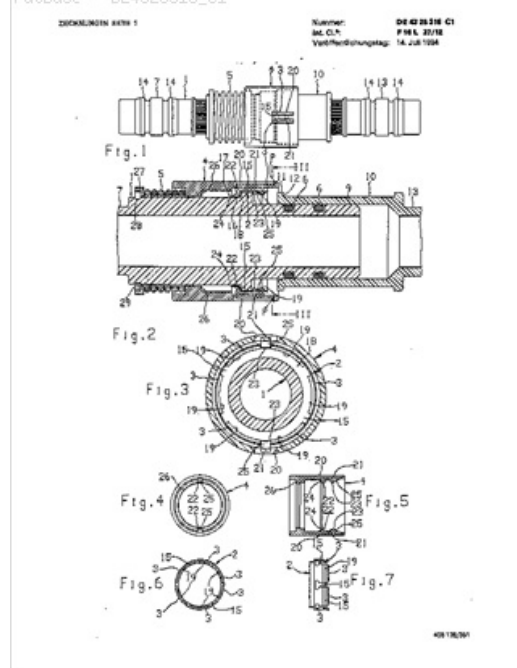
7) Family number: 11143625 (DE4328316C1)

Title: PLUG-IN-TYPE PIPE UNION STECKKUPPLUNG

Abstract:

Source: DE4328316C1 Locking arms (21) on the locking sleeve (4) engage with the coupling member in the free position. They are freed on fitting the member into the second pipe, whereupon the sleeve is thrust by the spring (5) into the locking position. The locking arms can be elastic and flexible, each having two radial protrusions (22,23) in succession in the direction of sleeve movement. Their flanks (24,25) furthest apart are chamfered, and a flange (18) on the member engages between them in the free sleeve position. A flange (11) on the second pipe rides over the chamfer (25) on fitting the member in the second pipe, thrusting the arms out of engagement.

PatBase - DE4328316_C1



International class (IPC 8-9): F16L37/098 (Advanced/Invention);
F16L37/00 (Core/Invention)

International class (IPC 1-7): F16L21/08 F16L37/084 F16L37/12

CPC: F16L37/0985

European class: F16L37/098D

Family:

Publication number	Pub. date	Application number	App. date
DE4328316 C1	19940714	DE19934328316	19930823
FR2709341 A1	19950303	FR19940010219	19940823
FR2709341 B1	19951110	FR19940010219	19940823

Priority: DE19934328316 19930823; DE20430028316 19930823;

Cited documents: US5048875 A, US3394954 A, US3390898 A, DE4240136 C1, DE4107603 C1, DE1947939 B2,

Assignee(s): (std): RASMUSSEN GMBH

Assignee(s): RASMUSSEN GMBH 63477 MAINTAL

Inventor(s): (std): CHRISTOPH STEINKAMP ; STEINKAMP CHRISTOPH

Inventor(s): STEINKAMP CHRISTOPH 63599 BIEBERGEMUEND

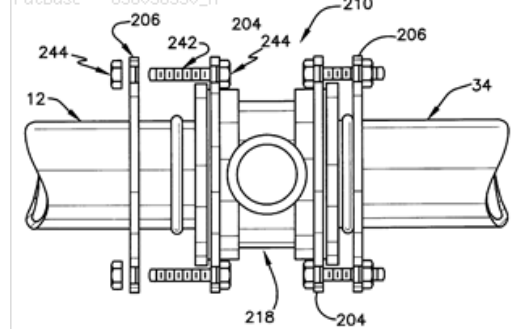
8) Family number: 15771942 (US6056330A)

Title: Axially clamping pipe coupler

Abstract:

Source: US6056330A A threadless coupler for connecting two large pipes in line and a third, relatively small pipe to form a Tee. The coupler has a clamp for engaging a male groove formed in each large pipe, the small pipe being connected by threading. The clamp comprises a collar surrounding the retained pipe. The clamp connects to the coupler by threaded fasteners. The coupler has two internal elastic seals which close over their respective large pipes. The clamp may be an annular collar which must be slipped over a pipe prior to forming the male groove, or two complementing sections which may be placed over the pipe after forming the groove. The coupler and pipes are all fabricated from non-malleable materials.

PatBase - US6056330_A



International class (IPC 8-9): F16L19/02 F16L23/02 F16L23/028 (Advanced/Invention);
F16L23/00 (Core/Invention)

International class (IPC 1-7): F16L23/02

CPC: F16L19/0206 F16L23/0286
European class: F16L19/02C F16L23/028D
US class: 285/133.21 285/337 285/368
Family:

Publication number	Pub. date	Application number	App. date
AU20000246416 AA	20011112	AU20000246416	20000502
AU2000046416 A1	20011112	AU20000046416	20000502
AU2000046416 A5	20011112	AU20000046416D	20000502
US6056330 A	20000502	US19970984045	19971203
WO184034 A1	20011108	WO2000US08747	20000502

Priority: US19930752793 19931120; US19970984045 19971203; WO2000US08747 20000502;

Cited documents: US580607 A, US5509699 A, US5046765 A, US4936609 A, US4397485 A, US3402945 A, US2868576 A, US1671789 A, GB411087 A, GB189318808 A, GB188318808 A, GB18808, FR1580069 A, CA814289 A, CA568801 A,

Assignee(s): (std): DRURY JAMES R ; COMPTON DOUGLAS C

Assignee(s): DOUGLAS C COMPTON ; JAMES R DRURY ; PHOENIX FIRE SYSTEMS INC ; PHOENIX FIRE SYSTEMS INC AN ALABAMA CORP

Inventor(s): (std): COMPTON DOUGLAS C ; DRURY JAMES R

Inventor(s): JAMES R DRURY ; DOUGLAS C COMPTON

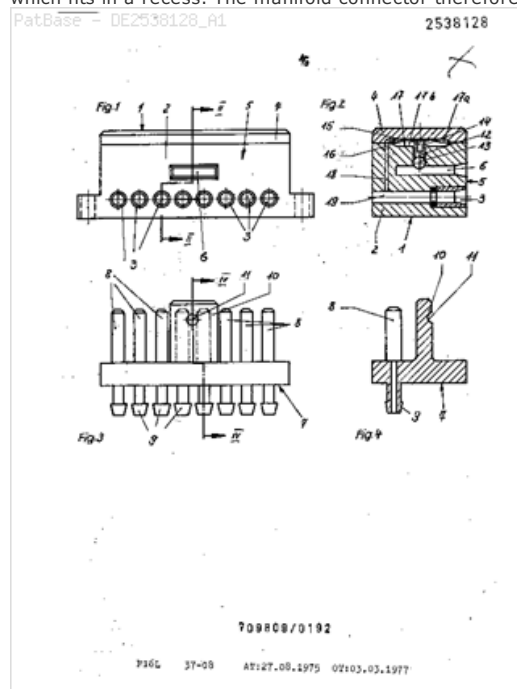
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9) Family number: 1617862 (DE2538128A1)

Title: STECKKUPPLUNG ZUM KUPPELN VON FLUIDLEITUNGEN PLUG IN MANIFOLD CONNECTOR FOR HYDRAULIC FLUID - HAS SPRING BIASED BALL LOCKED IN RECESS IN PLUG BY FLUID PRESSURE

Abstract:

Source: DE2538128A1 Ansprüche W Steckkupplung zum Kuppeln von Fluidleitungen, bestehend aus einem Kupplungsteil mit vorstehenden Fluidsteckanschlüssen und aus einem weiteren Kupplungsteil mit die Steckanschlüsse aufnehmenden Fluidbuchsenanschlüssen, dadurch gekennzeichnet, dass einem Kupplungs teil (1) wenigstens ein Verriegelungselement (13; 20) zugeordnet ist, das unter Fluideinwirkung mit dem anderen Kupplungsteil (7) in vorzugsweise formschlüssige Verbindung zu bringen ist 2. The manifold connector block (4) for pneumatic or hydraulic circuits has a row of pipe sockets (19) extended from the plug holes (3). A location slot (6) for the connector plug blade has a junction with another bore from which protrudes a spring-loaded steel ball (13). The steel ball can be pressurized from the fluid line through the cross drilling (18). After plugging in the fluid supply tube ends, the blade of the connector plug is locked in position by the pressurized steel ball (13) which fits in a recess. The manifold connector therefore remains locked for as long as the system is under pressure.



International class (IPC 8-9): F16L37/08 F16L39/02 (Advanced/Invention); F16L37/00 F16L39/00 (Core/Invention)

International class (IPC 1-7): F16L37/08

CPC: F16L37/08 F16L39/02

European class: F16L37/08 F16L39/02

Family:

Publication number	Pub. date	Application number	App. date
DE2538128 A1	19770303	DE19752538128	19750827
DE2538128 B2	19780420	DE19752538128	19750827

Priority: DE19752538128 19750827;

Assignee(s): (std): KUHNKE GMBH H KG ; KUHNKE GMBH KG H

Assignee(s): H KUHNKE GMBH KG ; H KUHNKE GMBH KG 2427 MALENTE ; HKUHNKE GMBH KG

Inventor(s): (std): KLOCKE HARALD

Inventor(s): KLOCKE HARALD 2427 MALENTE

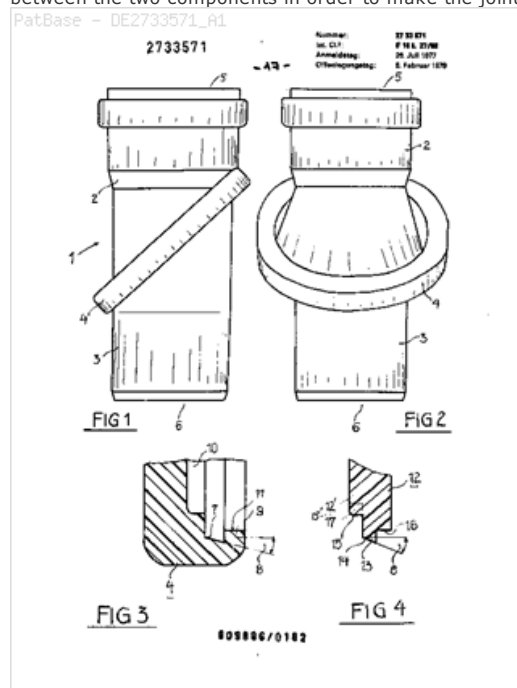
10) Family number: 1661040 (DE2733571A1)

Title: WINKELVERÄNDERBARES KNIESTUECK PIPE JOINT WITH SWIVEL ADJUSTMENT FOR ANGLE - HAS FLANGES MOUNTED AT 45 DEGREES FOR COAXIAL TO RIGHT ANGLE PIPE FIXTURE

Abstract:

Source: DE2733571A1 A I N K E L V E R D E R @ P @ S K N @ S S T @ C K P a t e n t a n s p r u e c h e 1 Winkelveraenderbares Kniestueck aus Kunststoff ode elastisch verformbarem Metall @um Verbinden von roh@en, bestehend aus zwei Rohrab schnitten, deren jeweils eines Ende einen schraegen, kraisingfoermigen Verbindungsflansch traegt, der mit dem anderen Vechindungsflansch unter Ausbildung einer im wersntlichen dichten

Rohrverbindung nach Art einer Gehrung um 360 drehbar verbunden ist, da d u r c h g e k e n n z e i c h n e t, dass im einen Verbindungsflansch (4) eine umlaufende Nut (7) ausgebildet ist, die an der gegen den zugehörigen anderen Verbindungsflansch (12) weisenden Seite von einem gegenaeher dem Nutgrund einspringenden Rand (8) begrenzt wird und der andere Verbindungsflansch (12) einen in die Nut (7) nach sreite und Durchmesser passenden Ringflansch (13) aufweist, der an seiner dem Verbindungsflansch (4) abgewendten Seite von einer zurueckgesetzten Ringflaeche (1) mit einen in Durchmesser der Innenumfangsflaeche des Randes (9) entsprechenden Aussenflaeche begrenzt ist, dass die Aussenflae- che (14) des Ringflansches (13) und/oder die Innenumfangsflaeche (11) des Randes (9) kegelig abgefast oder anderweitig absatzlos steigend hinterschnitten ist, und dass der Ringflansch (13) des Verbindungsflansches (12) unter Vermittlung der kegelligen oder steigend hinterschnittenen Umfangsflaeche bzw. Two pipes (2, 3) are joined by a flange coupling which is located at 45 deg. relative to the pipe axis. The two pipes are therefore adjustable between a coaxial orientation and a right angle, by allowing relative rotary movement between the two pipes. One coupling flange (4) is provided with an internal location groove which is limited by a tapered rim. The coupling on the second tube consists of an external radial flange (12) which locates in the internal groove. When the coupling flanges are assembled, an elastic seal ring (17) is located between the two components in order to make the joint leakproof.



International class (IPC 8-9): F16L27/08 F16L47/04 (Advanced/Invention);
F16L27/00 F16L47/00 (Core/Invention)

International class (IPC 1-7): F16L27/02 F16L41/00 F16L47/00

CPC: F16L27/0849 F16L47/04

European class: F16L27/08C F16L47/04

Family:

Publication number	Pub. date	Application number	App. date
DE2733571 A1	19790208	DE19772733571	19770726
DE2733571 C2	19810917	DE19772733571	19770726

Priority: DE19772733571 19770726; DE19772733571 19770726;

Cited documents: FR1249628 A, DE2306642 A1, CH41646 A, BE701680 A,

Assignee(s): (std): KESSEL BERNHARD

Assignee(s): KESSEL BERNHARD 8071 LENTING DE

Inventor(s): (std): KESSEL BERNHARD

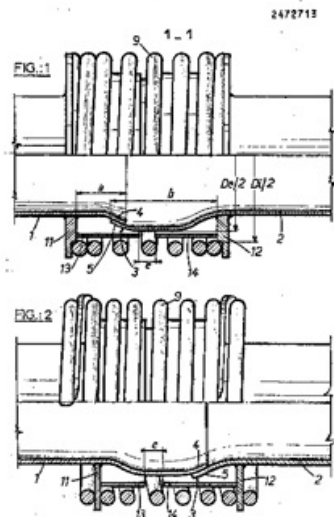
Inventor(s): KESSEL BERNHARD 8071 LENTING DE

11) Family number: 16840235 (FR2472713A)

Title: DISPOSITIF D'ACCOUPLEMENT PERFECTIONNE BALL-JOINT FOR COAXIAL LENGTHS AUTOMOBILE EXHAUST PIPE - USES PART SPHERICAL OVERLAPPED PIPE ENDS SECURED BY SURROUNDING COIL SPRING

Abstract:

Source: FR2472713A L'INVENTION CONCERNE DES PERFECTIONNEMENTS DU DISPOSITIF D'ACCOUPLEMENT A ROTULE SELON LE BREVET PRINCIPAL. L'EXTREMITE EVASEE 4 DE LA PIECE TUBULAIRE 1 EST ENGAGEE DANS L'EXTREMITE RESSERREE 5 DE LA PIECE TUBULAIRE 2; UN RESSORT A BOUDIN 9, COMPRISE ENTRE DEUX ARRETOIRS 11 ET 12, MAINTIENT EN CONTACT LES PARTIES 4 ET 5 DE LA ROTULE 3. L'INVENTION EST APPLICABLE PAR EXEMPLE A L'ACCOUPLEMENT DE DEUX PIECES D'UN CONDUIT D'ECHAPPEMENT POUR MOTEUR D'AUTOMOBILE, AFIN D'EVITER LA DESOLIDARISATION DES DEUX PARTIES DE LA ROTULE, ET D'AMORTIR LES CHOC ET VIBRATIONS QUE LE MOTEUR TRANSMET, PAR LA PIECE 1 A LA PIECE 2, SOLIDAIRE DU CHASSIS. The ball type joint connects two nominally coaxial lengths of automobile exhaust pipe (1,2). It permits a degree of rotation in any plane, and now uses coil spring (9) to secure the assembly. One length of pipe (1) may terminate in a relatively short flared lip (4) with a part spherical barrel, the lip fitting snugly inside a reciprocal end formation (5) of the other pipe (2). A spring (9) applies axial tension to the joint, and is mounted between two flanges (11,12) and outside a pair of heat-insulating sleeves (13,14). Alternatively, the flared lip may fit inside the complementary lip (5), the spring being fixed to the flanges to apply an axial compression to the joint.



International class (IPC 8-9): F01N13/08 F01N13/18 F16C11/06 F16L27/02 F16L27/04 F16L27/06 F16L37/12 F16L37/52 (Advanced/Invention); F01N13/08 F01N13/18 F16C11/06 F16L27/02 F16L37/00 (Core/Invention)

International class (IPC 1-7): F01N7/08 F16C11/12 F16L25/00 F16L27/02 F16L27/04

CPC: F16C11/06 F16L37/12 F16L37/52 F01N13/1811 F16L27/02 F16L27/04 F16L27/06

European class: F01N13/18B1 F16C11/06 F16L27/02 F16L27/04 F16L27/06 F16L37/12 F16L37/52

Family:

Publication number	Pub. date	Application number	App. date
DE8034256 U1	19810527	DE19800034256U	19801223
ES265092 U	19821201	ES19800265092U	19801223
ES265092 Y	19830601	ES19800265092U	19801223
FR2432671 A1	19800229	FR19780015751	19780526
FR2432671 B1	19830902	FR19780015751	19780526
FR2472713 A2	19810703	FR19790031932	19791228
FR2472713 B2	19831209	FR19790031932	19791228

Priority: FR19780015751 19780526; FR19790031932 19791228;

Cited documents: US4097071 A, US3173710 A, US3047315 A, US2242604 A, US1560735 A, GB1502934 A, DE634820 A, DE212431 A,

Assignee(s): (std): LUCHAIRE SA

Assignee(s): LUCHAIRE S A

Inventor(s): (std): LESCHER HENRI LOUIS

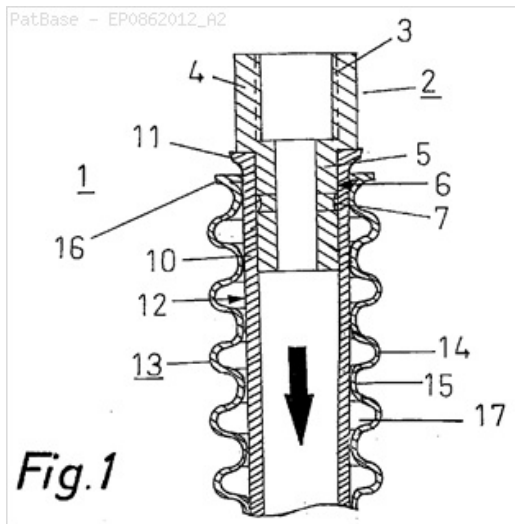
Inventor(s): HENRI LOUIS LESCHER

12) Family number: 16944805 (EP0862012A2)

Title: SOUND DAMPING DEVICE FOR REDUCING FLUID AND BODY NOISE GERAESCHDAEMPUNGSEINRICHTUNG FUER STROEMUNGS- UND KOERPERSCHALL DISPOSITIF D'AMORTISSEMENT ACOUSTIQUE POUR AMORTIR LE BRUIT D'UN FLUIDE ET D'UN CORPS

Abstract:

Source: EP0862012A2 The system comprises a wave pipe (10), a port section (20) made from a soft elastic material and a connecting socket section (30), with the inner contour (11) of the wave pipe corresponding to the outer contour (32). The outer diameter of the connecting socket section in the region of its elevations (33) may be larger than the inner diameter of the pressed wave pipe in the region of its recesses (14). Through the variation of the numerous grooves (34) in the outer contour of the connecting socket section and the number of pressed waves of the wave pipe, via the means (50) of a device to produce a noise dampening system, the rigidity of the wave pipe-connecting socket section connection may be adjustable. Bei einer Geraeuschdaempfungseinrichtung fuer Stroemungs- und Koerperschall von stroemenden Medien, insbesondere Fluessigkeiten, mit einem Wellrohr und einer Anschlussmuffe ist das Wellrohr oder ein Wellschlauch (13) tief eingezogen und ummantelt ein Durchstroemungsteil (10) aus einem weichen, elastischen Material, wobei eine hydraulische Trennung zwischen dem das Durchstroemungsteil durchstroemenden Medium und zwischen Wellrohr und Durchstroemungsteil vorgesehenen Schallabbaureaumen erfolgt. Bei einer Einrichtung zur Herstellung einer solchen Geraeuschdaempfungseinrichtung sind Pressbackenelemente (50) vorgesehen, die eine der Aussenkontur (12) des Wellschlauches entsprechende Kontur (52) aufweisen, wobei durch Aktivieren der Pressbackenelemente die Kontur des Wellschlauches ueber den Durchmesser so verpressbar ist, dass eine im wesentlichen gleichbleibende Kontur und ein verringerter Durchmesser entsteht.



International class (IPC 8-9): F01N1/22 F16L55/027 F16L55/033 G10K11/16 (Advanced/Invention); F01N1/16 F16L55/02 G10K11/00 (Core/Invention)

International class (IPC 1-7): E04B1/82 F16L55/027 F16L55/033 G10K11/16

CPC: F01N1/22 G10K11/16

European class: F01N1/22 G10K11/16

Family:

Publication number	Pub. date	Application number	App. date
AT224517 E	20021015	AT19980102607T	19980216
DE19706155 A1	19980827	DE19971006155	19970217
DE29718655 U1	19980305	DE19972018655U	19971022
DE59805564 D1	20021024	DE19985005564	19980216
DK0862012 T3	20030127	DK19980102607T	19980216
EP0862012 A2	19980902	EP19980102607	19980216
EP0862012 A3	19990203	EP19980102607	19980216
EP0862012 B1	20020918	EP19980102607	19980216

Priority: DE19971006155 19970217; DE19972018655U 19971022; DE19985005564 19980216;

Cited documents: US3061039 A, DE9015414 U1, DE9015414 U, DE8432280 U1, DE8432280 U, DE3707617 A1, DE2518619 A1, DE2117105 A1, DE1962134 A1,

Assignee(s): (std): SOLVIS SOLARSYSTEME GMBH

Assignee(s): SOLVIS SOLARSYSTEME GMBH 38122 BRAUNSCHWEIG DE

Inventor(s): (std): PROF DR ING HAUSER GUENTHER ; TERSCHUEREN KLAUS HENNING ; TERSCHNIEN KLAUS HENNING

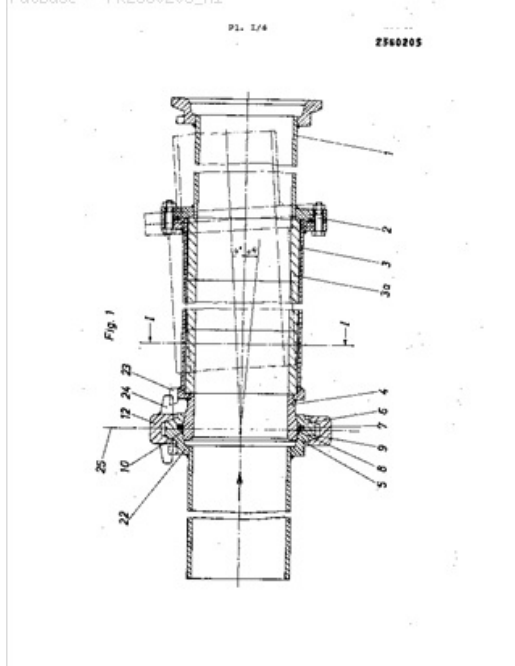
Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

13) Family number: 17110555 (FR2380205A)

Title: TUBE CONVOYEUR A DISPOSITIF DE RACCORDEMENT A CUVETTE PNEUMATIC CONVEYOR FOR MINE INFILLING - HAS MOVABLE JOINT AND SPHERICAL JOINT WITH SEALING RING FOR ADJACENT TUBULAR SECTIONS

Abstract:

Source: FR2380205A Tube convoyeur a dispositif de raccordement a cuvette. Le tube convoyeur est caracterise en ce que l'une des extremités du tube a raccorder presente une partie tubulaire 4 munie d'une surface d'appui exterieure en forme de zone spherique 5, que sur cette surface d'appui s'applique d'un cote un bourrelet annulaire 9 lie rigidement au tube suivant, tandis que de l'autre cote est monte un bourrelet annulaire 6 symetrique mais mobile librement. Application: materiel de remblayage pneumatique de mine. The conveyor tube (1) is bolted (2) to an intermediate tube (3) with an inner wear resistant layer (3a). A tube (4) welded to the first tube has an outer spherical support and bearing face (5). An annular rim (6) has a seating surface and freely movable. The inner edge of the rim has a groove which receives an elastic sealing ring (7). A rim (9) is rigidly connected to the adjacent tube and its inner surface also corresponds to the bearing face (5). Two pivotally connected half clamps (12) are locked on the rims (6, 9) holding them together. Relative rotation is limited by lugs (23, 24).



International class (IPC 8-9): B65G53/52 E21F15/08 F16L27/04 (Advanced/Invention);

B65G53/34 E21F15/00 F16L27/02 (Core/Invention)

International class (IPC 1-7): B65G51/18 B65G53/04 B65G53/52 E21F15/08 F16L27/06 F17D1/00

CPC: B65G53/52 E21F15/08 F16L27/04

European class: B65G53/52 E21F15/08 F16L27/04

Family:

Publication number	Pub. date	Application number	App. date
DE7704485 U1	19770526	DE19770004485U	19770215
FR2380205 A1	19780908	FR19780004129	19780214
PL122849 B1	19820831	PL19780204643	19780215
PL204643 A1	19781023	PL19780204643	19780215

Priority: DE19770004485U 19770215; DE1977704485U 19770215;

Cited documents: FR2028496 A1, DE814590 A, DE390304 A, DE1475795 A1, DE1000318 A, CH235520 A, BE568599 A,

Assignee(s): (std): BRIEDEN AND CO MASCHF K ; MASCHINENFABRIK KARL BRIEDEN UND CO DE

Assignee(s): MASCHF KARL BRIEDEN CO ; MASCHINENFABRIK KARL BRIEDEN AND CO 4630 BOCHUM ; MASCHINENFABRIK KARL BRIEDEN CO

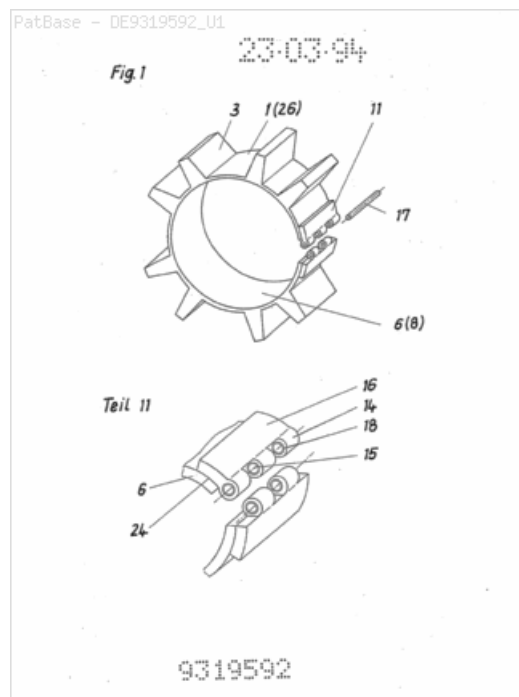
14) Family number: 17711828 (DE9319592U1)

Title: GLEITKUFENRING Skid shoes RING (Machine translation)

Abstract:

Source: DE9319592U1 (Claim 1) 1. Gleitkufenring fuer Rohr-in-Rohr-Systeme, Rohr-Durchfuehrungen od. dgl., der auf seinem Ruecken mit parallel und im Abstand zueinander axial verlaufenden Gleitkufen versehbar ist, deren Material einen moeglichst geringen Reibungskoeffizienten aufweist, insbesondere ein Kunststoff, vorzugsweise ein gegebenenfalls glasfaserverstaerktes Polyethylen, Polyamid od. dgl. ist, wobei der Gleitkufenring ueber ihm zuordbare Verschlussstuecke auf dem Medienrohr dieses im Schutzrohr fuehrend/zentrierend einen geschlossenen Ring bildend festsetzbar ist, dadurch gekennzeichnet, dass der Gleitkufenring aus einem elastischen, flexiblen, dehnbaren, vorzugsweise rueckstellbaren, insbesondere band-oder bandagenartigen, gummielastischen Grundkoerper (1, 2) besteht.

Machine translation: (Claim 1) 1 Insulator rings for pipe-in-pipe systems, pipe Bushings or the like, which is versehbar with on his back parallel and spaced apart axially extending skids, the material of the lowest possible friction coefficient, in particular a plastic material, preferably an optionally fiber reinforced polyethylene, polyamide or the like, wherein the insulator rings marked above him Verschlussstuecke assignable to the media this tube is a leader in protective tube / centering forming a tight ring be fixed, because the insulator rings made of a resilient, flexible, stretchable, preferably reset, especially bandages or band-like, elastic basic body (1, 2) exists.



International class (IPC 8-9): F16L7/00 (Advanced/Invention);

F16L7/00 (Core/Invention)

International class (IPC 1-7): F16L7/00

CPC: F16L7/00

European class: F16L7/00

Family:

Publication number	Pub. date	Application number	App. date
DE9319592 U1	19950601	DE19930019592U	19931221

Priority: DE19930019592U 19931221;

Cited documents: SU1613776 A1, GB1421542 A, GB1393176 A, DE3433099 A1, DE3322092 A1, DE3200188 A1, DE3130599 A1, DE2949126 A1, DE2906487 A1, DE2660735 C2, DE2647235 C2,

Assignee(s): (std): DSI ROHRLEITUNGSBAU ZUBEHOER ; SAAR GUMMIWERK GMBH

Assignee(s): SAAR GUMMIWERK GMBH 66687 WADERN DE ; DSI ROHRLEITUNGSBAU ZUBEHOER GMBH 72147 NEHREN DE

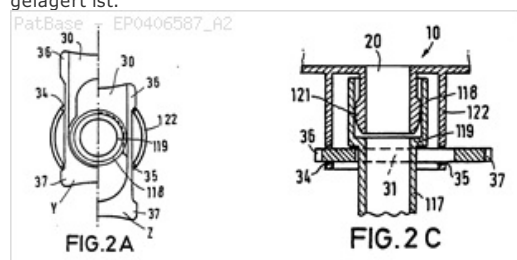
15) Family number: 17800427 (EP0406587A2)

Title: HOSE CONNECTION SCHLAUCHKUPPLUNG RACCORD DE TUYAUX FLEXIBLES

Abstract:

Source: EP0406587A2 A hose coupling between a holder (10) and a deformable container, for example a body secretion bag, which is to be suspended on the holder, consists of a connecting piece (121) on the holder (10), which is surrounded by a jacket pipe (122) at a radial distance, and of an inlet hose (117) on the container, which is plugged onto the connecting piece (121), surrounding the latter in a sealing manner. In this case, it is provided according to the invention that the inlet hose (117) has an outwardly projecting radial profile (119) underneath which there engages a lock, which can be unlocked, in the form of a slide (30) with a keyhole opening (31), which slide is supported in the jacket pipe (122). Such a design allows the hose coupling to absorb greater tensile forces, while maintaining the seal, so that the usage time of each bag can be

extended, by using larger bags, and the workload of the person looking after said container is eased. In addition, it is still easily detachable after sterilisation and relatively long storage, in order to replace the container, because the inlet hose (117) is not sucked firmly against the connecting piece (121). Eine Schlauchkupplung zwischen einem Halter (10) und einem an dem Halter aufzuhängenden verformbaren Behälter, z.B. einem Körpersekretbeutel, besteht aus einem Stutzen (121) an dem Halter (10), der von einem Mantelrohr (122) mit radialem Abstand umgeben ist und aus einem Zulaufschlauch (117) an dem Behälter, der auf den Stutzen (121) diesen abdichtend umgreifend aufgesteckt ist. Dabei ist erfindungsgemäß vorgesehen, dass der Zulaufschlauch (117) eine nach aussen vorspringende Radialprofilierung (119) aufweist, die von einer entsicherbaren Verriegelung in Form eines Schiebers (30) mit einer Schlüssellochoeffnung (31) untergriffen ist, der in dem Mantelrohr (122) gelagert ist.



International class (IPC 8-9): F16B21/06 F16B21/09 F16B7/20 F16L37/098 F16L37/14 F16L37/248 (Advanced/Invention); F16B21/00 F16B7/00 F16L37/00 (Core/Invention)

International class (IPC 1-7): A61M27/00 F16B2/20 F16L11/04 F16L33/00 F16L37/12 F16L37/24
CPC: F16B7/20 F16B21/065 F16B21/09 F16L37/0985 F16L37/144 F16L37/248

European class: F16B21/06A F16B21/09 F16B7/20 F16L37/098D F16L37/14B1 F16L37/248

Family:

Publication number	Pub. date	Application number	App. date
DE8908177 U1	19891019	DE19890008177U	19890705
EP0406587 A2	19910109	EP19900111043	19900612
EP0406587 A3	19910807	EP19900111043	19900612

Priority: DE19890008177U 19890705;

Cited documents: US4436125 A, EP0248979 A1, EP0071699 A2, EP0054714 A2, DE3502424 A1, DE2849133 A1, DE122735 A,

Assignee(s): (std): BRAUN MELSUNGEN AG

Assignee(s): B BRAUN MELSUNGEN 3508 MELSUNGEN DE AG ; B BRAUN MELSUNGEN AG ; B BRAUN MELSUNGEN AG 3508 MELSUNGEN DE

Inventor(s): (std): VOGES KARL FRIEDRICH

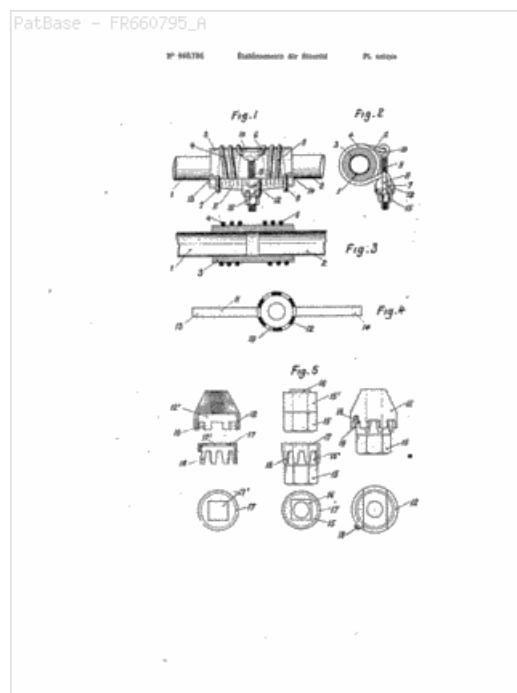
Designated states: AT BE CH DE FR GB IT LI LU NL SE

16) Family number: 18815405 (FR660795A)

Title: Raccord a manchon elastique pour tuyautage Coupling has elastic sleeve for piping (Machine translation)

Abstract:

Source: FR660795A [Source: Claim 1] 1 caracterises par un ou plusieurs des points suivants a. Le fil de serrage forme deux jeux de spires enroulees dans le meme sens, ces deux jeux etant separees par une partie paral- lele au tuyautage et les deux extremités etant terminees par des crochets, et que le dispo- sitif de serrage est constitue, d'une part par une tige filetee munie d'un ceii engage sur la partie droite du fil, et d'autre part par une barrette longitudinale engagee sous les deux crochets du fil qu'elle maintient lateralement par des dents, cette barrette etant en son milieu elargie et percee d'un trou dans lequel s'engage la tige filetee, la reunion et le serrage des deux pieces etant effectuees par un ecrou visse sur la tige file tee au dela de la barrette et muni de prefe rence d'un systeme de freinage. b. [1] Source: Claim 1 characterized by one or more of the following a. The wire clamp form two sets of coils wound in the same direction, these two sets being separated by a portion paral- lele at piping and both ends being terminated by hooks, and that the available clamping device is formed, a_ hand by a threaded rod fitted with a Ieci committed on the right side of the wire, and, on the other hand, by a bar engaged under the two hooks on the longitudinal wire that it maintains laterally by teeth, this bar being enlarged in its middle and bore hole in which engages the threaded rod, reunion and tightening the two pieces being performed by a nut threaded onto the stem file tee beyond the Strip and equipped with prefe reference of a braking system. b.



International class (IPC 8-9): F16L21/00 (Advanced/Invention); F16L21/00 (Core/Invention)

International class (IPC 1-7): F16L33/04

CPC: F16L21/005

European class: F16L21/00B2

Family:

Priority: 19280921;

Assignee(s): (std): AIR SECURITE ETS

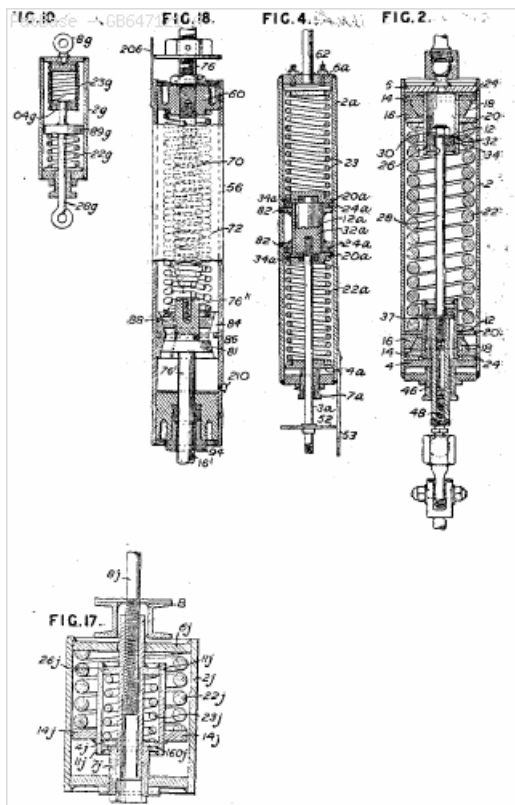
Assignee(s): ETABLISSEMENTS AIR SECURITE

17) Family number: 19570916 (GB647121A)

Title: Resilient supporting or steadying devices for piping

Abstract:

Source: GB647121A Nos. 11076/45, 1450/46 and 1451/46 [A Specification was laid open to inspection under Sect. 91 of the Acts, Oct. 15, 1945] [Class 99(ii)] [Also in Group XXXII] A spring supporting or steadying device for piping systems which allows relative movement between the piping and a support while preventing harmonic vibration of the piping, has connections respectively to the piping and to the fixed support from spring means in the device arranged for elastic deflection and recovery upon movement of the piping in opposite directions through and beyond its normal operating position under the action of alternating or intermittent forces, the deflection of the spring means being positively limited in one direction at a single pre-determined mid point which corresponds to the normal operating position, and the spring means being prevented from overshooting the mid point when going out of action. In the construction shown in Fig. 2 a single spring 22 is mounted in a tube 2 between abutment washers 20 each slidable on a tubular portion 12 of a respective piston 14. An annular ring 18 of frusto-conical profile is slidably mounted on each tube 12 and cooperates with a segmental friction ring 16. Outward movement of each piston 14 in the tube 2 is limited by end-plates 4, 6 welded to the tube 2 and neoprene c. cushioning washers 24. A piston rod 28 has an abutment in the form of a nut 30 welded to its inner end which engages through rigid and resilient washers 32, 34, a shoulder 26 formed within the upper tube 12. A shoulder 37 on the piston rod 28 similarly engages the lower piston assembly. A bronze or self-lubricating bearing bush 46 guides the outer end of the piston rod 28 which carries an adjustable threaded eye 48. The spring 22 may be pre-loaded but the eye 48 is adjusted so that both pistons seat on their respective abutments when the load or member to be supported is in its normal operating position. In the construction shown in Fig. 18, a tubular housing 56 has a gland 94 at its lower end for a piston rod 76<SP>1</SP> connected to the load or to the support at its outer end and carrying an integral frusto-conical shaped piston head 81 and integral cylindrical spigot 76" at its inner end. A frustoconical-shaped ring 88 is slidably mounted on the spigot 76" and co-operates with the head 81 to expand a segmental friction ring 84 into engagement with the inner wall of the housing 56 under the action of a compression spring 72 bearing on the ring 88 and a tension spring 70 pulling on the spigot 76<SP>1</SP>. The other end of the spring 72 bears on a plug 60 rigid with the upper end of the housing 56 and the other end of the spring 70 is secured to a spindle 76 threaded for axial adjustment in the plug 60 relative to an indicator scale 206. The housing may contain oil charged through a nipple 210 to provide liquid damping by flow past the piston assembly or alternatively through passages (not shown) provided in the assembly. Air trapped in the housing may provide additional cushioning. The springs 70, 72 (as shown) have deflection rates which vary along their lengths, and the outer ends of the spring 70 may be under initial stress before any deflection of the spring occurs. The segments of the friction' ring 84 may be of phosphor bronze and are united by a ring 86. In operation, the spindle 76 is adjusted so that the loads in the springs 70, 72 balance one another when the member to be supported is in its normal operative position. In the construction shown in Fig. 4, two springs 23, 22a which may be identical or may have different rates, are mounted in a tube 2a between upper and lower outer abutment discs 4a and inner abutment discs 20a. A piston 32a slidably mounted in a tube 12a rigidly secured to the tube 2a by welded discs 82, is connected to the supported member by a piston rod 3a, deflection of which above or below the normal operating position shown thus loads the spring 23 or the spring 22a respectively. The action is cushioned by resilient washers 24a, 34a and adjustment of the springs 23, 22a may be effected by rotation of a gland 7a and studs 62 respectively, in conjunction with an indicator 52 and pointer-disc 53. In an alternative mounting for the piston 30 (Fig. 5 not shown) the tube 12a may be resiliently mounted in the tube 2a by an assembly of annular rubber washers. A liner of antifriction metal may be provided between the piston 32a and the tube 12a. In a construction of piping sway-brace (Fig. 7, not shown) two tension springs are arranged horizontally in opposed relation between respective turn-buckle connection to I-section beams and respective headed stems, integral with a lug welded to the pipe. The stems slidably engage plugs carried by the respective ends of the spring so that for deflection of the pipe in one direction from the normal position, one of the stems slides freely through its plug while the head of the other stem engages its plug and deflects the respective spring. The springs, which may have different rates, may or may not be preloaded in the normal position in which they are both un-deflected. In a further construction (Fig: 8, not shown), two tension springs are screwed at their outer ends on to plugs having apertured load-connecting lugs, and at their inner ends to a common plug. A stem extends through the inner, and one of the outer plugs, is secured to one of them and is slidable within the other, the extent of displacement being limited by a head on the stem. On displacement of the load from the relaxed position of the spring-unit, both sections of the spring are extended until the stem head engages its respective plug to prevent further deflection of the section of the spring between the plugs through which the stem passes. The sections of the spring may be formed by separate springs united by the common plug. The non-limited section of the spring may be stronger than the other section and may be pre-stressed so that it does not come into action until the stem head is engaged. In the construction shown in Fig. 10, a tension spring 23g is secured to one end of a tube 2g connected to the piping or to the support at 8g and which also contains a compression spring 22g in abutment with the other end of the tube 2g and a piston 89g connected to the support or to the piping, by a piston rod 28g. An extension of the rod 28g extends slidably through a plug 104g secured to the inner end of the tension spring 23g. On deflection above the normal operating position (shown), the spring 23g remains un-deflected. The spring 23g may be pre-loaded in its un-deflected condition. In a similar construction (Fig. 11, not shown) the arrangement is modified so that the tension spring is in operation for deflections above and below the normal position while the compression spring operates only for deflections below. In a further construction (Fig. 9, not shown), tension and compression springs are connected in series so that both springs operate for deflections in one direction while the compression spring ceases to operate on deflection in the other direction from the normal position due to solid engagement of its coils. In a similar construction (Fig. 6, not shown), both springs are compression springs and either spring may be arranged to become solid at the normal position or alternatively either spring may be made ment between the two springs coming into non-operative at this position by the abutengagement with the other abutment of the respective spring. In the construction shown in Fig. 17, a tubular housing 2j secured to a pipe-supporting beam B, contains a main spring 22j and a weaker spring 23j. An inner tubular member 11j is rigid with a support member by a spindle 8j. The main spring 22j acts between an end plate 6j rigid with the housing 2j and an abutment 14j welded to the tube 11j. The spring 23j acts between an abutment 26j also welded to the tube 11j, and a washer 4j which is engaged by a member 7j rigid with the housing 2j. The downward deflection of the washer 4j is however limited by an annular abutment 160j welded to the tubular member 11j. A pipe (Fig 16, not shown) is supported centrally of the beam, each end of which is suspended from a respective channel-shaped support member by the spring unit of Fig. 17. The pipe may be connected upwardly or downwardly to a fixed point by a vertically-disposed rigid member which deflects the pipe as it expands in attaining working temperature from a cold condition. By this arrangement the springs 22j, 23j, are so loaded that the spring 23j is just at the point of going out of action in the normal operating position of the pipe at working temperature. In the constructions described which have a tubular housing, oil in the housing may provide a dashpot action in a similar manner for example as described in Specification 565,186.



International class (IPC 8-9): F16L3/18 F16L3/205 (Advanced/Invention); F16L3/16 (Core/Invention)

International class (IPC 1-7): F16L3/20

CPC: F16L3/18 F16L3/2053

European class: F16L3/18 F16L3/205B

Family:

Publication number	Pub. date	Application number	App. date
GB647121 A	19501206	GB19450011076	19450502

Priority: GB19450011076 19450502;

Assignee(s): (std): GEN SPRING CORP

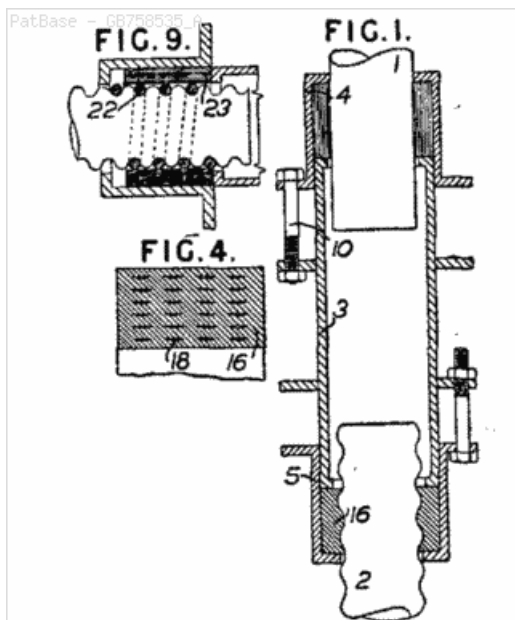
Assignee(s): GENERAL SPRING CORP

18) Family number: 19634750 (GB758535A)

Title: Improvements in or relating to pipe couplings

Abstract:

Source: GB758535A 758,535. Pipe joints. PIRELLI-GENERAL CABLE WORKS, Ltd., ARMAN, A. N., ASHFORD, B.O., and HOLDUP, W. H. Sept. 15, 1954 [Dec. 10, 1953], No. 34413/53. Class 99(1). In a fluid-tight coupling of the kind in which a bush 16, Fig. 1, of resilient impervious material is located between each of two circular, oval or flattened pipes 1, 2 and an enclosing sleeve 5, 3, 4, each bush is produced by winding a tape or cord of mouldable material around the corresponding pipe end until it almost fits the sleeve and causing the windings to coalesce into a coherent mass in non-adhesive contact with the pipe and sleeve by applying axial pressure, with heat if desired, as by tightening bolts 10 to draw in sleeve ends 4, 5. The bush material may be rubber, applied unvulcanized and heated after compression to vulcanize it and render it resilient. Alternatively the bush may be of a thermoplastic material, such as synthetic rubber or plasticized polyvinyl chloride, which is heated during compression to render it temporarily plastic instead of elastic. Spirally wound type may be used which is embossed or having part-spherical depressions on one surface which form voids 18, Fig. 4, in the compressed bush 16. With pipes corrugated axially by circumferential troughs the bush may be formed from touching turns of a single helical winding of solid or hollow cord or two superposed helical windings of solid cord. Fig. 9 shows a combined winding of cord 22 and tape 23 applied to a pipe corrugated by a helical trough.



International class (IPC 8-9): F16L13/00 F16L19/06 (Advanced/Invention);
F16L13/00 F16L19/00 (Core/Invention)

International class (IPC 1-7): F16L21/02

CPC: F16L13/00 F16L19/06

European class: F16L13/00 F16L19/06

Family:

Publication number	Pub. date	Application number	App. date
GB758535 A	19561003	GB19530034413	19531210

Priority: GB19530034413 19531210;

Assignee(s): (std): ADRIAN NEVILLE ARMAN ; BERTRAM OWEN ASHFORD ; PIRELLI GENERAL CABLE WORKS ; WILLIAM HENRY HOLDUP

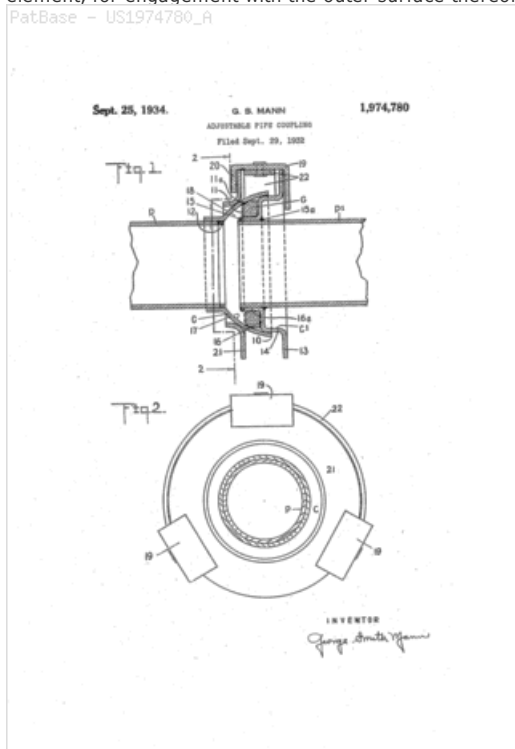
Assignee(s): PIRELLI GENERAL CABLE WORKS LIMITED

19) Family number: 19992247 (US1974780A)

Title: ADJUSTABLE PIPE COUPLING

Abstract:

Source: US1974780A 1. An adjustable pipe coupling comprising 9, pair of inner and outer coupling elements to which pipe sections are adapted to be connected; the outer element having annular surfaces of convex and concave cross section, the inner element comprising a perforated disc having a shoulder extending axially from the inner peripheral edge thereof, and the outer peripheral edge thereof having a collar, the collar having an outwardly extending fixed flange, an elastic ring gasket of approximately rectangular or rhomboid dimensions in cross section interposed between the coupling elements and carried by the shoulder of the inner element and being in an abutting relation to the inner concave surface of the outer element, said gasket having suitable elasticity and area, of cross section so that when exposed to the internal fluid pressure it is deformed, thereby causing the outer peripheral surface of the gasket to conform to the inner concave surface of the outer element, thereby providing a fluid tight seal between the coupling elements, a loose ring of internal diameter less than the outer diameter of the outer coupling element, for engagement with the outer surface thereof, and means to confine the loose ring against displacement away from the flange.



International class (IPC 8-9): F16L27/04 F16L27/073 (Advanced/Invention);
F16L27/02 (Core/Invention)

International class (IPC 1-7): F16L27/04

CPC: F16L27/04 F16L27/073
European class: F16L27/04 F16L27/073
US class: 285/113 285/266 285/270 285/334.3 285/364
Family:

Publication number	Pub. date	Application number	App. date
US1974780 A	19340925	US19320635378	19320929

Priority: US19320635378 19320929;

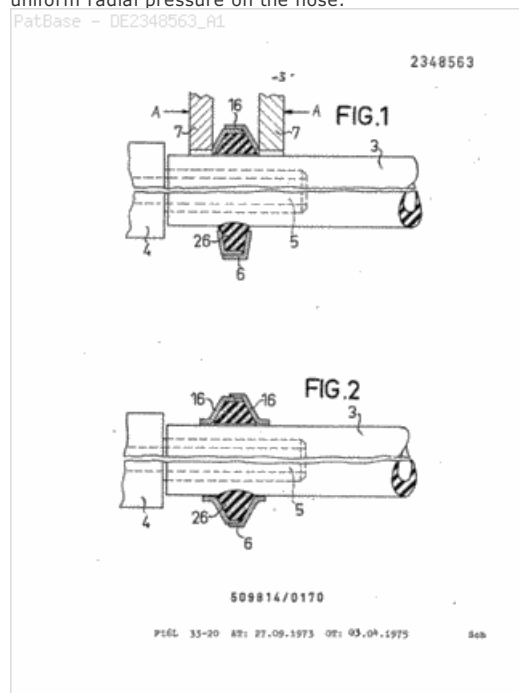
Assignee(s): (std): SMITH MANN GEORGE
Inventor(s): (std): SMITH MANN GEORGE
Inventor(s): MANN GEORGE SMITH

20) Family number: 2027630 (DE2348563A1)

Title: VERBINDUNGSANORDNUNG FUER BIEGSAME SCHLAEUCHE COUPLING FOR FLEXIBLE HOSES - USING HOSE CLIP MADE UP OF OUTER METAL SLEEVE ENCASING INNER ELASTIC RING

Abstract:

Source: DE2348563A1 Patentansprueche: 1 Verbindungsanordnung fuer biegsame Schlaeuche eingesetzten rohrartigen starren Anschlussstutzen' mit einer den Schlauch umfassenden und radial auf ihn einwirkenden ringfoermigen Schelle oder Klemme, dadurch gekennzeichnet, dass die Schelle (6) aus einem in Axialrichtung bleibend verformbaren aeusseren Hohlprofil ring (16) und einem in dessen dem Schlauch (3) zugekehrte Profil hoehlung eingelegten, diese in jeder Form im wesentlichen ausfuellenden elastisch verformbaren inneren Klemmring (26) zusammengesetzt ist 2. Two part clip is made of a metallic outer shell which can be deformed and an elastic inner ring in contact with the surface of the hose. The outer ring can be in the shape of an open trapeze before deformation and like a rectangle after its sides have been squeezed in thus squeezing up the inner ring which in turn will put uniform radial pressure on the hose. Instead of deforming the side walls the outer ring can be made in two parts which are threaded into one another so that by tightening up, the inner elastic ring will be squeezed into a smaller area to produce a similar uniform radial pressure on the hose.



International class (IPC 8-9): F16L33/207 (Advanced/Invention);
F16L33/20 (Core/Invention)

International class (IPC 1-7): F16L33/20

CPC: F16L33/2071

European class: F16L33/207B

Family:

Publication number	Pub. date	Application number	App. date
DE2348563 A1	19750403	DE19732348563	19730927

Priority: DE19732348563 19730927;

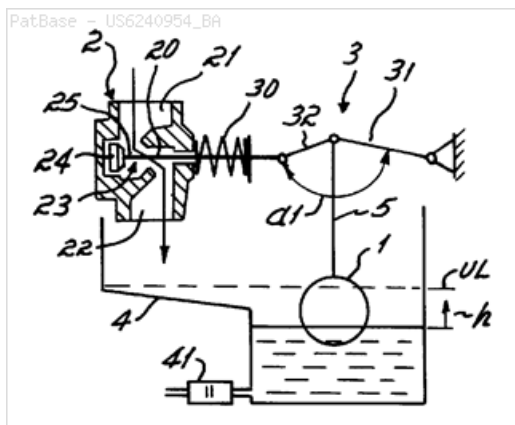
Assignee(s): (std): CONTINENTAL GUMMI WERKE AG
Inventor(s): (std): HECKER ROLF

21) Family number: 20683074 (US6240954B)

Title: BALANCE FLOAT CONTROLLED VALVE ASSEMBLY

Abstract:

Source: US6240954B The balance float (1) controlled valve assembly of the invention includes at least one valve means (2), a liquid receptacle (4), and at least one balance float (1) connected via a link (5) to a rotatable free end of a pivoted balance lever (31). The valve means (2) comprises a closure member having a valve shaft (25) that is slideably guided between a first end position and a second end position. The valve assembly further includes a mechanism (3) that is arranged between the balance lever (31) and the valve shaft (25) of the closure member of the valve means (2). The mechanism (3) is designed so as to having and staying in an approximately self-locked state when the valve shaft (25) of the closure member of the valve means (2) stays in its first end position. The approximately self-locked state of the mechanism (3) is substantially resistant to forces biasing the valve shaft (25) towards its second end position in the sense of closing the thoroughfare flow passage through the valve means (2), but the approximately self-locked state of the mechanism (3) is easily and rapidly released by the balance lever (31) when the torque exerted onto the balance lever (31) by the weight of the balance float (1) is reduced, and the balance lever (31) is lifted and turned in a direction opposite to the torque exerted thereon by the balance float (1).



International class (IPC 8-9): E03C1/04 E03C1/05 E03C1/242 E03D1/30 F16C11/00 F16D1/12 F16K11/10 F16K11/20 F16K13/08 F16K21/16 F16K21/18 F16K27/04 F16K3/08 F16K31/126 F16K31/18 F16K31/24 F16K31/26 F16K31/44 F16K33/00 F16K51/00 F16L55/00 G03B17/00 G03B17/56 (Advanced/Invention); E03C1/04 E03C1/05 E03C1/12 E03D1/30 F16C11/00 F16D1/00 F16K11/10 F16K13/00 F16K21/00 F16K27/04 F16K3/02 F16K31/126 F16K31/18 F16K31/44 F16K33/00 F16K51/00 F16L55/00 G03B17/00 G03B17/56 (Core/Invention)
International class (IPC 1-7): E03C1/04 E03C1/05 E03C1/242 E03D1/30 F16C11/00 F16D1/12 F16K11/10 F16K11/20 F16K13/08 F16K21/16 F16K21/18 F16K27/04 F16K3/08 F16K31/126 F16K31/18 F16K31/24 F16K31/26 F16K31/44 F16K33/00 F16K51/00 F16L55/00 G03B17/00 G03B17/56
CPC: Y10T137/5762 Y10T137/7323 F16K31/265
European class: F16K31/26B
US class: 137/312 137/398
Family:

Publication number	Pub. date	Application number	App. date
AU199892769 A1	19990405	AU19980092769	19980914
CN1100954 C	20030205	CN19988011025	19980914
CN1278895 A	20010103	CN19988011025	19980914
EP1012497 A1	20000628	EP19980945450	19980914
HU0002385 AB	20001128	HU20000002385	19980914
HU0002385 AC	20010328	HU20000002385	19980914
HU222946 B1	20040128	HU20000002385	19980914
HU9701533 A0	19971128	HU19970001533	19970912
HU9701533 AA	20000228	HU19970001533	19970912
HU9701534 A0	19971128	HU19970001534	19970912
HU9701534 AA	19990628	HU19970001534	19970912
HU9702556 A0	19980302	HU19970002556	19971231
HU9702556 AA	19991028	HU19970002556	19971231
HU9702557 A0	19980302	HU19970002557	19971231
HU9702557 AA	19991028	HU19970002557	19971231
HU9702558 A0	19980302	HU19970002558	19971231
HU9702558 AA	19991028	HU19970002558	19971231
HU9800084 A0	19980330	HU19980000084	19980119
HU9800084 AA	20000528	HU19980000084	19980119
HU9800375 A0	19980428	HU19980000375	19980223
HU9800375 AA	19991228	HU19980000375	19980223
HU9801788 A0	19980928	HU19980001788	19980804
US6240954 BA	20010605	US20000508737	20000310
WO9914523 A1	19990325	WO1998HU00084	19980914

Priority: HU19970001533 19970912; HU19970001534 19970912; HU19970002556 19971231; HU19970002557 19971231; HU19970002558 19971231; HU19980000084 19980119; HU19980000375 19980223; HU19980001788 19980804; HU19980001787 19980804; HU20000002385 19980914; WO1998HU00084 19980914;

Cited documents: US5230361 A, US5072751 A, US5067517 A, US4830040 A, US3055387 A, US2664100 A, US2392126 A, US2301972 A, US2158750 A, GB2067271 A1, FR1223714 A, EP0768487 A2, EP0709607 A2,

Assignee(s): (std): BEREZNAI ; BEREZNAI JOSERFF ; BEREZNAI JOZSEF ; JOZSEF BEREZNAI ; KARMAN ; NOVAK ; JOSERFF BEREZNAI

Assignee(s): NOVAK LASZLO ; KARMAN BALAZS ; SANITER SOLUTIONS CORP ; BEREZNAI JOZSEF BUDAPEST ; BERY INTELLECTUAL PROPERTIES SZELLEMI TULAJDONJOGO ; BERY INTELLECTUAL PROPERTIES SZELLEMI TULAJDONJOGOKAT HASZNOSITO ES KEZELO KORLATOLT FELELOSSEGU TARSASAG

Inventor(s): (std): BEREZNAI JOSERFF ; BEREZNAI JOZSEF ; JOZSEF BEREZNAI ; KARMAN BALAZS ; NOVAK LASZLO

Inventor(s): JOSERFF BEREZNAI

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

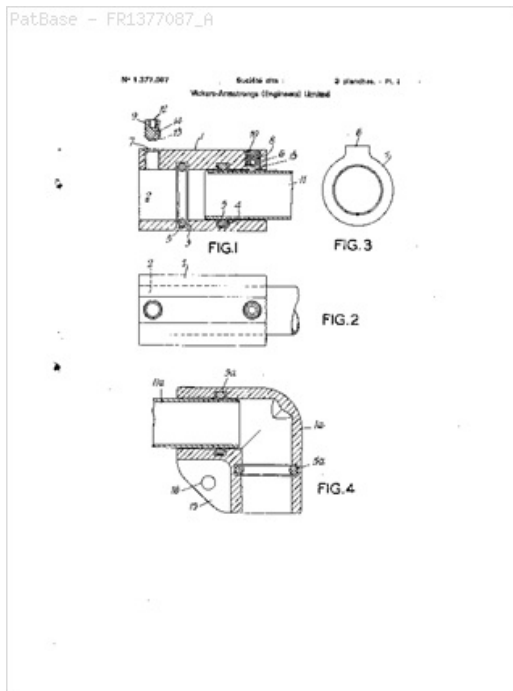
22) Family number: 21045762 (FR1377087A)

Title: RACCORD DE TUYAUTERIE PIPING (Machine translation)

Abstract:

Source: FR1377087A (Claim 1) 1 L'invention a trait a un raccord de tuyaute ries comprenant un corps pourvu d'un alesage pour recevoir une conduite ou tube, une rainure ou evi dement annulaire forme sur la face interne de l'ale sage pour recevoir un element elastique destine a assurer l'etancheite aux fluides, liquides ou gaz en tre le corps et un tube ou conduite introduit dans l'alesage, ce raccord etant egalement pourvu de moyens de fixation comprenant un element radiale- ment dispose, monte dans le corps et espace, axia- lement par rapport a l'alesage, de cette rainure ou evidement, cet element etant réglable radialement, par rapport a l'alesage, pour amener son extremite radialement interieure en engagement de fixation sur la conduite ou le tube introduit dans l'alesage du corps du raccord.

Machine translation: (Claim 1) 1 This invention relates to a connector ries fluted, including a body provided with a bore for receiving a pipe or tube, an annular groove or evi Dement form on the inside of the ale wise to receive an elastic element intended to seal the fluid, liquid or gas in the body and be a tube or pipe inserted into the bore, this connection being also provided with fastening means including a radially element has, gets into the body and space, axia- tion relative to the bore, this groove or recess, this element being adjustable radially relative to the bore, to bring its inner extremity radialement fastener engaging in the conduct or the tube inserted into the bore of the fitting body.



International class (IPC 8-9): F16L25/08 (Advanced/Invention);

F16L25/00 (Core/Invention)

International class (IPC 1-7): F16L21/08

CPC: F16L25/08

European class: F16L25/08

Family:

Publication number	Pub. date	Application number	App. date
FR1377087 A	19641031	FR19630956876	19631211

Priority: FR19630956876 19631211;

Assignee(s): (std): VICKERS ARMSTRONGS LTD

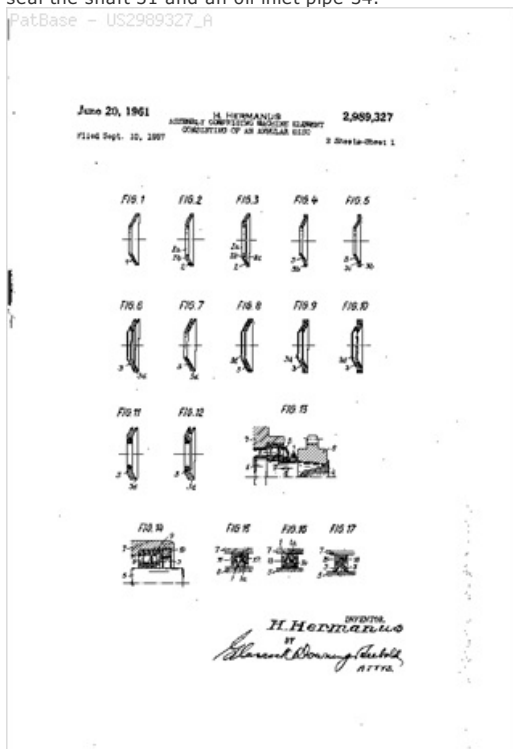
Assignee(s): VICKERS ARMSTRONGS ENGINEERS LIMITED ; VICKERS ARMSTRONGS ENGINEERS LTD

23) Family number: 22194814 (US2989327A)

Title: ASSEMBLY COMPRISING MACHINE ELEMENT CONSISTING OF AN ANNULAR DISC

Abstract:

Source: GB834075A 834,075. Stuffing-box packing. TARBUK, F. M., and PFLAUM, P., [trading as TARBUK and CO. F. M.], and HERMANUS, H. Sept. 11, 1957 [Sept. 12, 1956], No. 28678/57. Class 122 (5). [Also in Groups XXII, XXIV, XXV, XXVIII, XXXII and XXXIV] A resilient plastic disc-shaped element (see Group XXXII) may be used as a sealing element. Fig. 13 shows how a ball-bearing 6 is retained and sealed between a shaft 5 and a housing 7 by a spacer 9, a large disc 2 and a pair of smaller discs 1. In Fig. 14 ball-bearing 6 is sealed by a spacer 9, a disc 3 and a nut 10. Fig. 15 shows the sealing discs 1, 1a, in use between a shaft 5 and a bearing surface 7. Angle rings 11, 12 may be placed as shown or placed adjacent the shaft 5. In Fig. 17 an angle ring 15 is used in conjunction with discs 3 and a retaining ring 16. In a valve assembly 21, Fig. 18, a sliding member 23 is sealed by discs 1 clamped in place by a nut 24 and a ring 25. Fig. 19 shows a lubricating assembly for a shaft 31, discs 1 seal the shaft 31 and an oil inlet pipe 34.



International class (IPC 8-9): A47J31/043 B23Q1/28 F16B21/20 F16C33/20 F16C33/26 F16C33/74 F16C33/78 F16D1/06 F16D1/08 F16H57/00

F16H57/02 F16J15/32 F16J15/3204 F16J15/34 F16L19/08 G05G1/12 (Advanced/Invention);
A47J31/04 B23Q1/26 F16B21/00 F16C33/04 F16C33/72 F16C33/76 F16D1/06 F16H57/02 F16J15/32 F16J15/34 F16L19/00
G05G1/00 (Core/Invention)
International class (IPC 1-7): F16B2/02 F16B7/04 F16C25/08 F16D3/18 F16J15/36 F16J15/54 F16L19/06 F16L27/08 G05G1/08
CPC: F16C33/78 A47J31/043 F16C2322/39 G05G1/12 B23Q1/28 F16J15/3452 F16J15/3456 F16B21/20 F16C19/06 F16C25/083 F16C33/20
F16C33/26 F16C33/74 F16C33/7886 F16C2202/04 F16C2202/06 F16C2202/08 F16C2202/52 F16C2208/60 F16D1/06 F16D1/0841 F16H57/0025
F16J15/3204 F16L19/083 Y10S279/907 Y10T279/10 Y10T279/1993 Y10T403/7061
European class: A47J31/043
US class: 279/124 279/2.01 279/907 384/537 403/372
Family:

Publication number	Pub. date	Application number	App. date
BE560758 A	00000000		00000000
CH351464 A	19610115		19570911
FR1182537 A	19590625		19570910
FR72253 E	19600812		00000000
GB834075 A	19600504	GB19570028678	19570911
LU35574 A	00000000		00000000
US2989327 A	19610620	US19570683031	19570910

Priority: US19570683031 19570910; GB19570028678 19570911;

Cited documents: US807538 A, US2798748 A, US2768034 A, US2765185 A, US2707108 A, US2571560 A, US2460510 A, US2326866 A, US2236370 A, US2110098 A, US2091947 A, US2076218 A, US2012256 A, US1958089 A, US1918988 A,
Assignee(s): (std): F M TARBUK AND CO ; F M TARBUK AND CO SOC ; FRIEDRICH MARIA TARBUK ; PETER PFLAUM ; HEINRICH HERMANUS ; HERMANUS HEINRICH
Assignee(s): SOCIETE F M TARBUK AND CO ; FM TARBUK AND CO
Inventor(s): (std): AMATHIEU LUCIEN THADEE ; HERMANUS HEINRICH ; HEINRICH HERMANUS

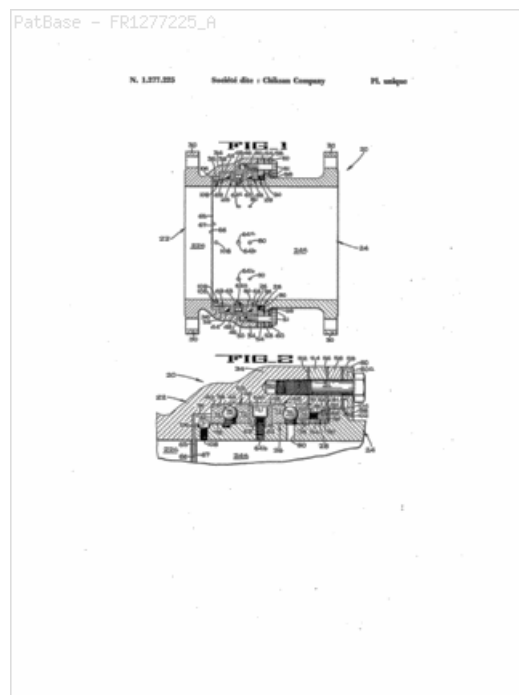
24) Family number: 23060510 (FR1277225A)

Title: RACCORD ORIENTABLE POUR TUYAUX ET PROCEDE POUR L'EMPECHER DE GELER FITTING ADJUSTABLE PIPE AND METHOD FOR PREVENTING FREEZING (Machine translation)

Abstract:

Source: FR1277225A (Claim 1) 1 On preleve une partie du fluide qui s'ecoule dans les tuyaux, pour former un courant secon daire qu'on dirige contre les elements interieurs relativement mobiles du raccord orientable, en maintenant ainsi ces elements interieurs dans un courant de fluide en mouvement continu, de facon a en exclure l'air et, par suite, un condensai de se former sur ces elements et de se congeler en empechant le raccord de fonctionner.

Machine translation: (Claim 1) is levied a part of the fluid which flows through the pipes to form a secondary ondry current which runs against the interior elements of relatively movable swivels, thus maintaining these interior elements in a fluid flow in continuous motion, so as to exclude air and, consequently, a condensai from forming on these elements and to freeze by preventing connection to function.



International class (IPC 8-9): F16L27/08 (Advanced/Invention);
F16L27/00 (Core/Invention)
International class (IPC 1-7): F16J15/54 F16L27/08
CPC: F16L27/0832
European class: F16L27/08B2C3
Family:

Publication number	Pub. date	Application number	App. date
FR1277225 A	19611124	FR19610848915	19610105

Priority: FR19610848915 19610105;

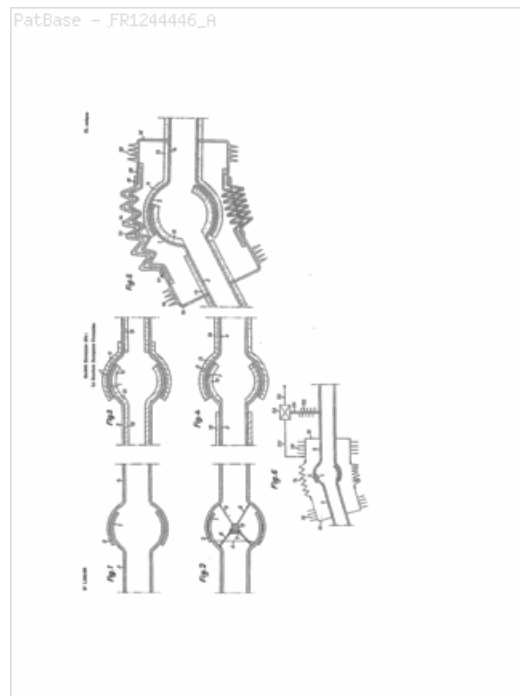
Assignee(s): (std): CHIKSAN CO
Assignee(s): CHIKSAN COMPANY

25) Family number: 23097112 (FR1244446A)

Title: JOINT D'ACCOUPLEMENT ORIENTABLE POUR TUYAUTERIE JOINT COUPLING ADJUSTABLE FOR PIPE (Machine translation)
Abstract:

Source: FR1244446A (Claim 1) 1 Joint d'accouplement orientable pour<I>tuyau-</I> terie de transport de fluides tres froids ou tres chauds, du type comportant une liaison a rotule formee par des pieces de surface spherique s'em boitant l'une dans l'autre et solidaires des deux tuyauteries a accoupler, caracterise par le fait que les deux elements de tuyauteries a accoupler com portent des tetes constituees par des portions de sphere creuse, en metal s'etendant sur plus d'une demi-sphere et s'emboitant l'une dans l'autre avec un faible jeu, par exemple de l'ordre du millieme du diametre.

Machine translation: (Claim 1) seal a rotating coupling for pipe- Tery fluid transport very cold or very hot, comprising a ball joint formed by pieces of spherical surface s 'em limping into each other and integral with the two pipes has mate, characterized by the fact that the two elements of a piping mate com bear heads consist of portions of hollow sphere, metal extending over more a half-sphere and which fit into each other with little clearance, for example about the thousandth of the diameter.



International class (IPC 8-9): F16L27/04 (Advanced/Invention); F16L27/02 (Core/Invention)

International class (IPC 1-7): F16L27/04

CPC: F16L27/04

European class: F16L27/04

Family:

Publication number	Pub. date	Application number	App. date
FR1244446 A	19601028	FR19590805452	19590918

Priority: FR19590805452 19590918;

Assignee(s): (std): SOUDURE AUTOGENE FRANCAISE

Assignee(s): LA SOUDURE AUTOGENE FRANCAISE

Inventor(s): (std): MAURICE PIERRE