

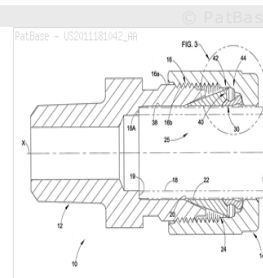
1) Family number: 49334144 (US2011181042A)

CONDUIT GRIPPING DEVICE HAVING RETAINING STRUCTURE FOR CONDUIT FITTING

**Abstract:** Source: US2011181042A The disclosure presents exemplary embodiments of a cartridge nut concept for conduit fittings. The cartridge nut concept may include the feature of loosely retaining one or more conduit gripping devices with a fitting component such as a male or female threaded nut. The cartridge nut concept may be realized using one or more geometry or shape features or characteristics of one or more conduit gripping devices. Still further, the cartridge nut concept may be realized in combination with a ferrule cartridge concept.

**Probable Assignee:** SWAGelok CO

**Earliest Publication Date:** 20110728



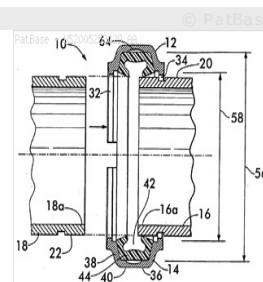
2) Family number: 32398909 (US2005253029A)

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.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20051117



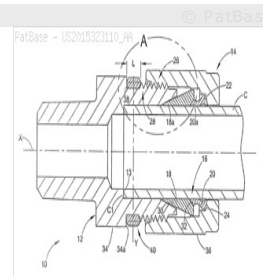
3) Family number: 60747426 (US2015323110A)

CONDUIT FITTING WITH COMPONENTS ADAPTED FOR FACILITATING ASSEMBLY

**Abstract:** Source: US2015323110A A fitting includes first and second threaded fitting components, a conduit gripping device, and a stroke resisting member having a first axial length, the stroke resisting member being disposed between a threaded portion of the first fitting component and a radially extending portion of the second fitting component. The stroke resisting member is axially engaged by the radially extending portion of the second fitting component when the first and second fitting components are joined together to a first relative axial position, such that a tightening torque beyond the first relative axial position is increased by the axial engagement. The stroke resisting member is plastically compressed to a second axial length smaller than the first axial length when the first and second fitting components are joined together to a second relative axial position advanced beyond the first relative axial position.

**Probable Assignee:** SWAGelok CO

**Earliest Publication Date:** 20151112



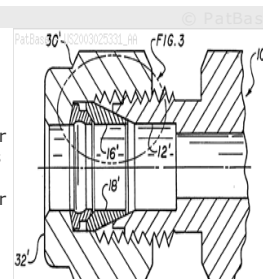
4) Family number: 28672485 (US2003025331A)

FERRULE WITH RELIEF TO REDUCE GALLING

**Abstract:** Source: US2003025331A High localized loading, galling, and high torque forces have been generally eliminated or greatly reduced in a two ferrule tube fitting assembly through suitable modification of the rear ferrule so as to redirect the reaction forces acting between the front ferrule and the drive nut. The rear ferrule has a cylindrical interior wall that closely surrounds the tube end and is provided on the interior cylindrical wall with a circumferentially continuous radial recess that is located between the nose and rear wall of the rear ferrule. The rear ferrule also has a radially external wall that is substantially conical and additionally shaped to extend radially outward toward the enlarged diameter portion or flange of the rear ferrule. The rear ferrule further includes a contoured face on the rear driven surface of the ferrule that engages the drive surface of the drive nut.

**Probable Assignee:** SWAGelok CO

**Earliest Publication Date:** 19981022



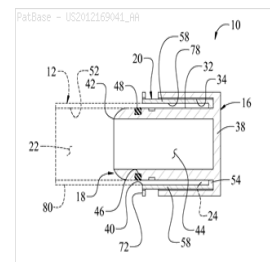
5) Family number: 51062612 (US2012169041A)

FITTINGS CONNECTABLE TO END PORTIONS OF PIPES AND RELATED METHODS

**Abstract:** Source: US2012169041A A fitting connectable to an end portion of a pipe generally includes a housing configured for receiving at least part of the end portion of the pipe into the housing, and an insert member disposed at least partly within the housing. The insert member is configured to be received at least partly within the end portion of the pipe when at least part of the end portion of the pipe is received into the housing. A retention member is movable relative to the housing for selectively connecting the fitting to the end portion of the pipe. The retention member is movable to press at least part of the end portion of the pipe radially against at least part of the insert member to help secure the fitting to the end portion of the pipe when the end portion of the pipe is received into the housing.

**Probable Assignee:** KING TECHNOLOGY OF MISSOURI INC

**Earliest Publication Date:** 20120508



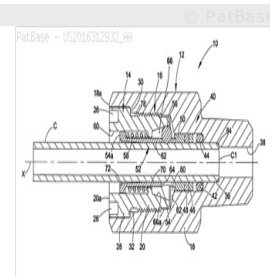
**6) Family number: 63860706 (US2016312932A)**

**SINGLE ACTION PUSH TO CONNECT CONDUIT FITTING WITH COLLETING**

**Abstract:** Source: US2016312932A A push to connect fitting assembly includes first and second fitting components joined to define an interior cavity, a seal device, and a retainer. The seal device is disposed in the interior cavity, and seals one of the first and second fitting components with an outer surface of a conduit end when the conduit end is inserted into the outboard end of the first fitting component. The retainer is assembled with at least one of the first and second fitting components, and includes a gripping portion that engages the inserted conduit over a first surface contact area to grip the conduit end, and a colletting portion outboard of the gripping portion. The colletting portion engages the inserted conduit end over a second surface contact area greater than the first surface contact area to collet the inserted conduit end.

**Probable Assignee:** SWAGELOK CO

**Earliest Publication Date:** 20161027



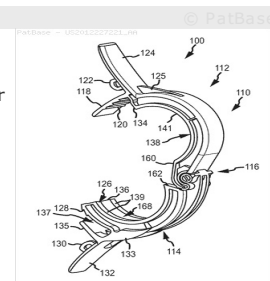
**7) Family number: 51895527 (US2012227221A)**

**CLAMP FOR SANITARY FITTING**

**Abstract:** Source: US2012227221A A clamp for sanitary fittings includes a clamp body formed of a first arcuate member and a second arcuate member movable about a hinge assembly from an open configuration to a closed, latched configuration. The hinge assembly detachably couples the first arcuate member to the second arcuate member. The hinge assembly includes an arcuate finger extending from an end of the first arcuate member, a pin-receiving recess formed within the arcuate finger, and a post formed on an end of the second arcuate member. Upon assembly, the arcuate finger cradles around the post and the post fits within the pin-receiving recess.

**Probable Assignee:** NORDSON CORP

**Earliest Publication Date:** 20120913



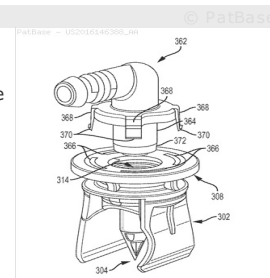
**8) Family number: 62458038 (US2016146388A)**

**FITTINGS FOR IRRIGATION SYSTEMS**

**Abstract:** Source: US2016146388A A fitting, for use in making a fluid connection with a pipe, generally includes a saddle adapted to couple the fitting to the pipe, and a tap integrally formed with the saddle and extending generally away from saddle. The tap is configured to press-fit into the pipe for establishing the fluid connection between the fitting and the pipe. The fitting also includes a passageway defined by the saddle and the tap, for receiving fluid from the pipe and into the fitting via the tap.

**Probable Assignee:** BLAZING PRODUCTS INC

**Earliest Publication Date:** 20160526



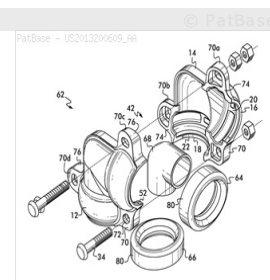
**9) Family number: 54512163 (US2013200609A)**

**FITTING FOR JOINING PIPE ELEMENTS**

**Abstract:** Source: US2013200609A A fitting for joining pipe elements together includes housing portions held preassembled in spaced apart relation to permit pipe elements to be inserted without disassembly of the fitting. Elbow and tee fittings include sealing elements which support the housing portions in spaced relation. Angled surfaces on each housing portion interact with one another to rotate the housing portions in opposite directions to form a rigid joint between the fitting and the pipe elements.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20130808



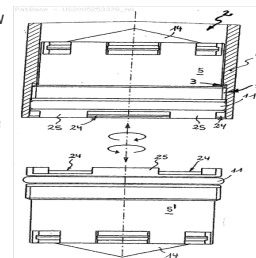
**10) Family number: 32840054 (US2005253378A)**

**TURNING TOOL FOR TURNING A PLUMBING FITTING**

**Abstract:** Source: US2005253378A A turning tool (5') for turning a jet regulator, a nozzle, an intermediate holder, a flow regulator, a non-return valve or a similar plumbing fitting (5) is provided. The fitting (5), on the outlet side, is detachably held on a plumbing water outlet armature (2) by a threaded connection or a bayonet connection, whereby the turning tool (5') can be placed on the plumbing fitting (5) in a rotationally fixed manner. The turning tool is characterized in that the turning tool is also provided in the form of a plumbing fitting or as a component of a plumbing fitting, that the turning tool (5') can be placed in a rotationally fixed manner on an outer or an inner periphery of the fitting (5) that is held on the water outlet armature, and/or that the turning tool (5') has a face profiling or contouring (24, 25) that can be placed in a rotationally fixed manner on a mating profiling or a mating contouring (25, 24) provided on the outlet face of the fitting (5) that is held in the water outlet armature (2).

**Probable Assignee:** NEOPERL GMBH

**Earliest Publication Date:** 20040408



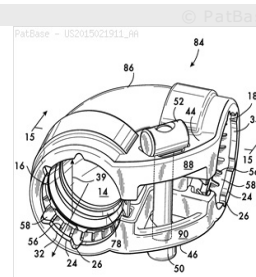
**11) Family number: 58338042 (US2015021911A)**

### FITTINGS HAVING ARCUATE STIFFNESS RIBS

**Abstract:** Source: US2015021911A Fittings, including elbow fittings and Tee fittings have bodies that surround a central space and define openings to receive pipe elements. Ribs surround the openings, and gaps are positioned between the ribs to permit deformation of the body when ends of the body in facing relation are brought together. The body may be formed of two housings or unitary in construction. The ribs may be grooved to accommodate toothed retainer rings providing mechanical engagement with pipe elements. The ribs have surfaces with radii of curvature that, when the ribs are undeformed, are substantially equal to the radii of curvature of the pipe elements they engage.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20150122



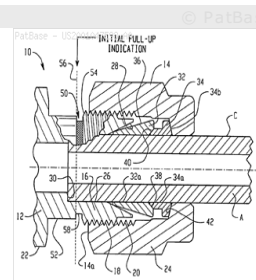
**12) Family number: 29748093 (US2001047593A)**

### INTRINSIC GAUGING FOR TUBE FITTINGS

**Abstract:** Source: US2001047593A An intrinsic gauging device for a ferrule type tube fitting of the type having a coupling nut, a coupling body and at least one ferrule, includes a precisely formed marking on the coupling body that is visually perceptible when the coupling is in a finger tight position, and that is covered or visually imperceptible or otherwise has a predetermined relationship with the coupling nut when the fitting has been initially pulled-up. In a preferred form, the marking is realized as a precision groove or recess machined into a surface of the coupling body. The groove can be made more easily visually perceptible such as by roughening or knurling the surface, or coloring the surface, for example. The groove defines an edge at a precise position that corresponds to a predetermined axial displacement of the nut relative to the body for initial pull-up. The marking may also be formed with a precise dimension such as an axial length to provide a second edge that corresponds to a predetermined axial displacement of the nut relative to the body beyond initial pull-up for fitting assemblies that are remade.

**Probable Assignee:** SWAGelok CO

**Earliest Publication Date:** 20010322



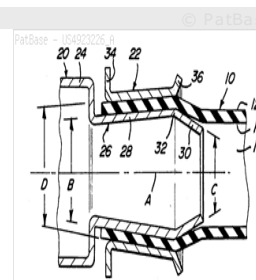
**13) Family number: 44875207 (US4923226A)**

### APPARATUS FOR ATTACHING A HOSE TO A FITTING

**Abstract:** Source: US4923226A A hose coupling for use with flexible hose comprises a biconical fitting which is inserted into a hose end and a frusto-conical locking sleeve located about the hose portion which grips the rearward conical section of the fitting. Sealing arrangements for specific embodiments of hose are disclosed. The double included angle of the conical portion of the sleeve and fitting, which engages the hose, is between one degree but less than ten degrees.

**Probable Assignee:** PROPRIETARY TECHNOLOGY INC

**Earliest Publication Date:** 19900508



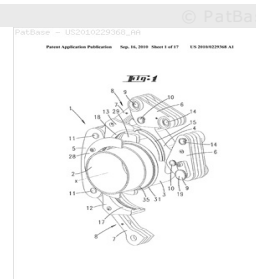
**14) Family number: 41519761 (US2010229368A)**

### METHOD FOR THE PRESSING OF A PRESS FITTING, AND PRESSING TOOL FOR THIS PURPOSE

**Abstract:** Source: US2010229368A The invention firstly relates to a method for the pressing of a press fitting (3), with a tube (2) inserted into the press fitting (3), by means of a pressing tool (1), wherein the press fitting (3) has an encircling bead (31) in which an O-sealing ring (32) is placed, wherein the tube (2) ends within the press fitting (3) and a first pressing is carried out within the bead (31), wherein, furthermore, a further pressing is carried out on the tube-insert side of the press fitting (3) at a distance from the bead, the further pressing leading to press fitting (3) and tube (2) obtaining a conicity which prevents them being pulled off and runs in the same direction. Furthermore, the invention relates to a pressing tool (1) suitable for carrying out the method. In order to further improve a method of the type under discussion, in particular for simplifying the handling over the course of the pressing operation, and in order to improve a pressing tool of the type under discussion, in particular in terms of handling while maintaining the functional reliability of the press connection which is to be produced, it is proposed, in terms of the method, that the head (31) is widened axially over the course of the pressing operation by being acted upon radially from the outside. In terms of the object, it is provided that the first pressing geometry (21), which is assigned to the bead (31), leaves the bead (31) space at least in one direction for the axial widening of the bead (31).

**Probable Assignee:** GUSTAV KLAUKE GMBH

**Earliest Publication Date:** 20080228



**15) Family number: 34327760** (US2007064389A)

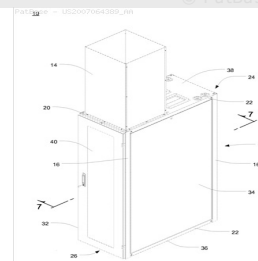
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### DUCTED EXHAUST EQUIPMENT ENCLOSURE

**Abstract:** Source: US2007064389A An electronic equipment enclosure comprises a frame structure formed from a plurality of support posts and at least partially enclosed by a plurality of panels. The panels include at least side, top and back panels defining an enclosure having a top, a bottom and a rear thereof. The top panel includes an opening there through that is rectangular in shape. The equipment enclosure further comprises an exhaust air duct extending upward from the top panel of the enclosure. The exhaust air duct is rectangular in cross-section and is disposed in surrounding relation to, and in fluid communication with, the top panel opening. The exhaust air duct is adapted to segregate hot air being exhausted from the enclosure from cool air entering the enclosure, thereby improving thermal management of the enclosure.

**Probable Assignee:** CHATSWORTH PRODUCTS INC

**Earliest Publication Date:** 20070322



**16) Family number: 53751413** (US2013127160A)

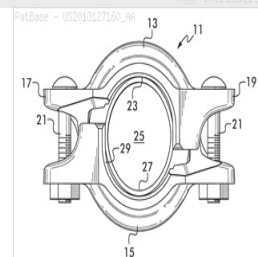
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### COUPLING HAVING GASKET POCKET OF VARYING DEPTH

**Abstract:** Source: US2013127160A A mechanical coupling for joining pipe elements has segments joined end to end, each segment having a pocket of varying depth for receiving a ring gasket. The varying depth of the pocket is used to control the distortion of the ring gasket between a round shape and a non-round shape when the segments are arranged in spaced apart relation around the ring gasket, the spacing between the segments being sufficient to permit insertion of the pipe elements without disassembly of the coupling.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20130523



**17) Family number: 53492512** (US2013093184A)

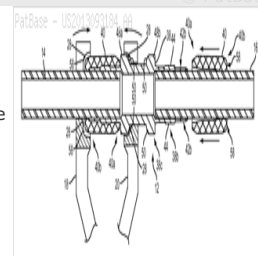
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### TOOL FOR COUPLING FLUID LINES

**Abstract:** Source: US2013093184A A swage or coupling tool is provided for use in coupling a fluid line to a compression fitting, a fluid coupler, or the like. The swage tool provides multiple degrees of freedom and/or multiple pivots or pivot joints to facilitate and maintain alignment of the jaws with the compression fitting during use of the swage tool to facilitate properly-aligned assembly of the compression fitting, and to limit bending or kinking of the fluid line when the fitting is being attached. The swage tool includes a pair of movable jaws, which may have stepped or rounded engagement surfaces, which may be forced against corresponding engagement surfaces of the compression fitting to securely assemble the fitting to the fluid line. The shape of the engagement surfaces facilitates properly-aligned assembly of the compression fitting, and limits bending or kinking of the fluid line when the fitting is being attached.

**Probable Assignee:** AGS CO AUTOMOTIVE SOLUTIONS LLC

**Earliest Publication Date:** 20130418



**18) Family number: 53408988** (US2001030422A)

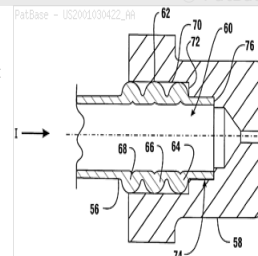
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### CONDUIT CONNECTOR AND METHOD

**Abstract:** Source: US2001030422A A conduit connection joint is formed to connect a tube and a fitting body in fluid tight relation. The joint is made by axially compressing the tube in a bore in the fitting body so as to cause formation of an outwardly extending tube bead and at least one inwardly extending tube bead. The engagement of the fitting body and the tube may be further strengthened by a retaining ridge. The retaining ridge may be formed in the fitting body to engage the outwardly extending tube bead to further hold the fitting body and tube in engaged relation.

**Probable Assignee:** BURNER SYSTEMS INT INC

**Earliest Publication Date:** 19980416



**19) Family number: 33993367** (US2006279080A)

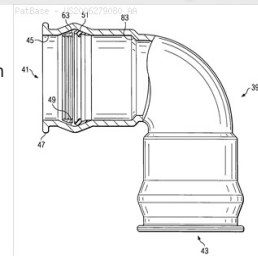
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### SELF RESTRAINED FITTING FOR PVC AND DUCTILE IRON PIPE

**Abstract:** Source: US2006279080A A combination sealing and restraint system for an as-cast ductile iron fitting is shown for both sealing and preventing separation of an iron pipe fitting and a mating male pipe. The restraint system includes both a sealing ring and a combination gripping ring which are installed in a groove provided in a mouth region of the iron fitting. The gripping ring has teeth on an inner surface which are initially angled away from an outer surface of the male pipe. The teeth are forced into engagement with the exterior surface of the mating male pipe as the pipe joint at the fitting is assembled. The teeth are oriented to allow movement of the male pipe in a first direction relative to an end opening of the fitting during assembly, but to resist movement in a opposite direction after the fitting joint has been assembled. The sealing ring and gripping ring are installed in the annular groove of the as-cast iron fitting after the iron casting operation at the factory.

**Probable Assignee:** S AND B TECHNICAL PRODUCTS INC

**Earliest Publication Date:** 20061214



**20) Family number: 49957809** (US2011284098A)

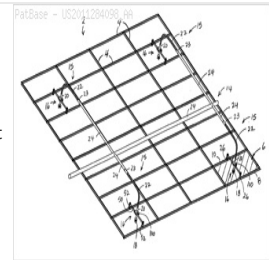
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## HUB WITH LOCKING MECHANISM

**Abstract:** Source: US2011284098A A hub assembly for supporting a portion of a flexible sprinkler assemblage within a ceiling, the hub assembly including a primary support mounted to a ceiling support member, and a secondary support member rotatable relative to a primary support member between an open position and a closed position. In the closed position, portions of the supports are overlapping and cut outs formed in the primary support cooperate together with cut outs formed in the secondary support to define a hub opening configured to receive the portion of the flexible sprinkler assemblage. The hub assembly also includes a locking mechanism configured to selectively connect the primary support to the secondary support, and an adjustment mechanism disposed on the primary support that is configured to secure the position of the portion of the flexible sprinkler assemblage within the hub opening, and is separate from the locking mechanism.

**Probable Assignee:** ANVIL INT LLC

**Earliest Publication Date:** 20111124



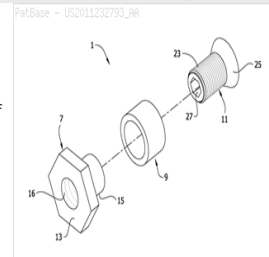
**21) Family number: 49624209 (US2011232793A)**

## WEDGE TYPE PLUG AND METHOD OF PLUGGING A LATERAL LINE

**Abstract:** Source: US2011232793A A plug for temporarily plugging a lateral line from lateral opening in a main pipeline. A distal end of the plug is inserted in the lateral line from the main pipeline. The plug includes a fitting tube and a wedge constructed for deforming a deformable portion of the fitting tube outward to plug the lateral opening. Axial movement of the wedge with respect to the fitting tube toward a flow area of the main pipeline causes deformation of the deformable portion. A gripping member may be positioned on an outer surface of the fitting tube. A tool such as a ratchet assembly is mounted on a robot sized and configured for navigating the main pipeline for installing the plug. The plug may include a fitting on the fitting tube to facilitate gripping of the plug by the tool. A cutting and brushing assembly may be used to remove the plug from the lateral line. Methods of installing and removing lateral plugs are also disclosed.

**Probable Assignee:** INA ACQUISITION CORP

**Earliest Publication Date:** 20110924



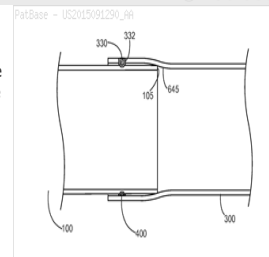
**22) Family number: 58855493 (US2015091290A)**

## METHOD AND APPARATUS FOR CONNECTING PIPES

**Abstract:** Source: US2015091290A Methods and apparatuses of joining a first pipe and a second pipe by injecting a pipe joining material into an interstitial space between abutting surfaces are provided. The methods and apparatuses may use a hollow fitting into which pipe ends may be inserted

**Probable Assignee:** CONRAD IN TRUST WAYNE

**Earliest Publication Date:** 20150327



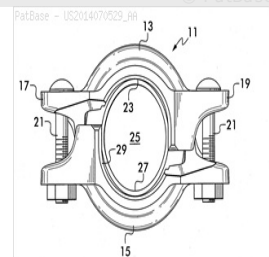
**23) Family number: 55977922 (US2014070529A)**

## COUPLING WITH NOTCHED PROJECTIONS HAVING GASKET POCKET OF VARYING DEPTH

**Abstract:** Source: US2014070529A A mechanical coupling for joining pipe elements has segments joined end to end, each segment having a pocket of varying depth for receiving a ring gasket. The varying depth of the pocket is used to control the distortion of the ring gasket between a round shape and a non-round shape when the segments are arranged in spaced apart relation around the ring gasket, the spacing between the segments being sufficient to permit insertion of the pipe elements without disassembly of the coupling. Notches in the projections which engage the pipe elements facilitate insertion of pipe elements and provide for a compact coupling design.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20140313



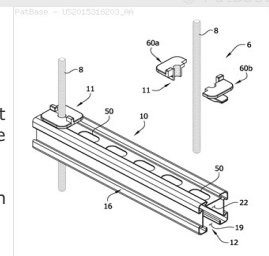
**24) Family number: 60700256 (US2015316203A)**

## TRAPEZE HANGER SYSTEM INCLUDING TWIST-LOCKING FITTING

**Abstract:** Source: US2015316203A A twist-locking fitting for securing a strut to a rod includes first and second fitting pieces. Each fitting piece includes a half-nut portion having an interior surface defining an axis extending through first and second axial ends of the half-nut portion. Each fitting piece includes an outer flange extending outward from adjacent the first axial end of the half-nut portion and an inner flange extending outward from adjacent the second axial end of the half-nut portion. The inner flange is spaced axially apart from the outer flange to define a clearance gap. The fitting pieces are positionable on the strut in an unsecured position in which the fitting pieces are movable relative to one another. The fitting pieces are rotatable relative to the strut to move from the unsecured position to a secured position, in which the fitting pieces are fixed relative to one another on the strut.

**Probable Assignee:** EATON INTELLIGENT POWER LTD

**Earliest Publication Date:** 20151030



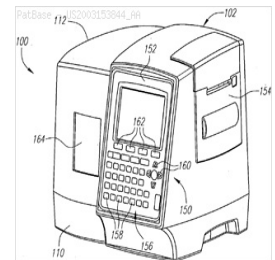
**25) Family number: 29993468 (US2003153844A)**

## INTEGRAL SAMPLE COLLECTION TIP

**Abstract:** Source: US2003153844A Assemblies are provided for collecting a sample from a mouth using an integrated sample collection tip. A sample collection assembly includes a sample collection body configured for being placed within the mouth, wherein the sample collection body includes a bore and one or more pores. The sample collection assembly further includes a conduit that disposed within the bore of the sample collection body and that is in fluid communication with the one or more pores. The conduit is bonded within the bore. The sample collection assembly can further include a hand piece that has a tip on which the sample collection body is mounted, and through which the conduit can extend. For example, the rear surface of the sample collection body can be bonded to the front surface of the sample collection tip. The pores can include a plurality of micropores. The sample collection body can be hydrophobic, and a hydrophilic surfactant can be disposed on the outer surface of the sample collection body.

**Probable Assignee:** LIFEPOINT INC

**Earliest Publication Date:** 20030731



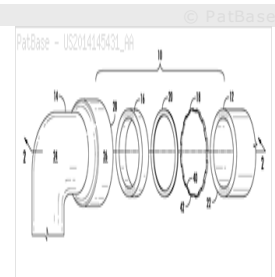
**26) Family number: 56544713 (US2014145431A)**

#### MECHANICAL PIPE COUPLING ASSEMBLY WITHOUT ADHESIVE OR BONDING AGENT

**Abstract:** Source: US2014145431A A mechanical coupling between a straight pipe end and a socket fitting comprises a seal ring and a locking ring disposed within the interior of the socket. The locking ring has a generally frusto-conical shape with a plurality of corrugations extending circumferentially thereabout, the corrugations presenting inner edge portions engaging the outer annular surface of the pipe end and outer edge portions engaging the interior annular surface of the socket for opposing withdrawal of the pipe end axially outwardly from the socket. In an advantageous embodiment, the locking ring is assembled with a support disk to optimally orient the locking ring with respect to the fitting and the pipe end.

**Probable Assignee:** CHARLOTTE PIPE AND FOUNDRY CO

**Earliest Publication Date:** 20140529



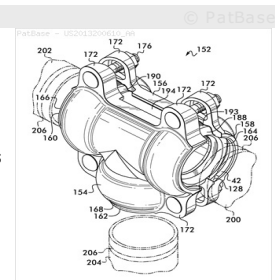
**27) Family number: 54513198 (US2013200610A)**

#### FITTING HAVING RECEPTACLE OF VARYING DEPTH

**Abstract:** Source: US2013200610A Elbow and tee fittings for joining pipe elements together include housing portions held preassembled in spaced apart relation to permit pipe elements to be inserted without disassembly of the fitting, the fittings having a receptacle of varying depth for receiving a sealing element. The varying depth of the receptacle is used to control the distortion of the sealing element between a round shape and a non-round shape when the housing portions are arranged in spaced apart relation around the sealing element.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20130808



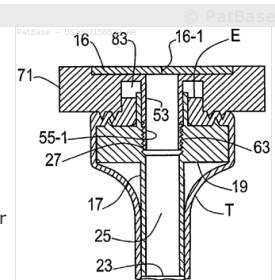
**28) Family number: 28995721 (US2003158539A)**

#### LOW PROFILE ADAPTOR FOR USE WITH A MEDICAL CATHETER

**Abstract:** Source: US2003158539A A low profile adaptor for use with a medical catheter. In one embodiment, the adaptor comprises a lower connector portion, an upper connector portion and a valve. The lower connector portion comprises a tubular portion and an annular portion, the annular portion radially surrounding the tubular portion along an intermediate length thereof. A helical thread is formed on the inside surface of the tubular portion. A circular lip projects upwardly a short distance from the top surface of the annular portion. The upper connector portion comprises a tubular section adapted for insertion into the tubular portion of the lower connector portion. An external helical thread is formed on the tubular section of the upper connector portion for mating engagement with the thread on the interior of the tubular portion of the lower connector portion. The upper connector portion also includes an annular base. The top of the base is shaped to include a cavity for receiving the valve, the cavity being in fluid communication with the tubular section. A double-walled circular lip is formed on the bottom of the base, the double-walled lip being sized and shaped to define a groove adapted to matingly receive the lip on the upper connector portion. In use, the lower connector portion is inserted into the end of a catheter, and the tubular section of the upper connector portion is screwed into the tubular portion of the lower connector, with the catheter being ensnared between the lips of the upper and lower connector portions.

**Probable Assignee:** BOSTON SCIENTIFIC SCIMED INC

**Earliest Publication Date:** 20030821



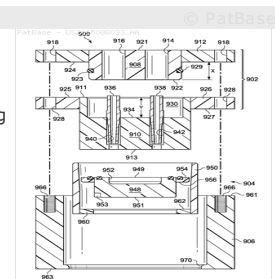
**29) Family number: 58774300 (US2015088033A)**

#### APPARATUSES AND METHODS FOR INLINE COLLECTION OF A FLUID SPECIMEN

**Abstract:** Source: US2015088033A A collection fitting, system, and method for sampling fluid from a tissue site is described. The collection fitting includes a switch fitting having a first passage and a second passage. The collection fitting also includes a bypass switch coupled to the switch fitting. The bypass switch is operable to fluidly couple the first passage and the second passage through the bypass switch. The bypass switch is also operable to fluidly couple the first passage and the second passage through a specimen container.

**Probable Assignee:** KCI LICENSING INC

**Earliest Publication Date:** 20150326



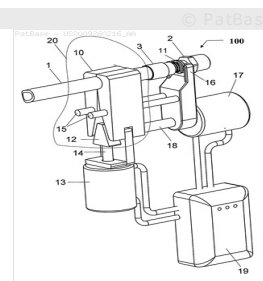
**30) Family number: 38521725** (US2009260216A)

#### DEVICE AND METHOD FOR COUPLING A PIPE FITTING TO A PIPE

**Abstract:** Source: US2009260216A A device and method for coupling a pipe and a fitting. The device includes a pipe holder for releasably gripping a pipe, a fitting retainer for releasably retaining a pipe fitting substantially coaxially with a pipe in the pipe holder, and means for driving together the pipe holder and the fitting retainer along a longitudinal axis in a relative motion between them. The device may optionally slide a reinforcing sleeve along the pipe to cover the end of the pipe on the fitting.

**Probable Assignee:** SAGIV AGUDAH SHITUFIT CHAKLAIT BE AM

**Earliest Publication Date:** 20080130



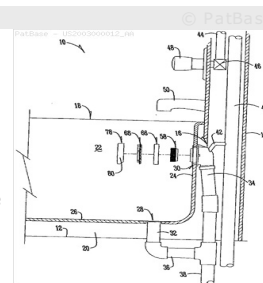
**31) Family number: 30396775** (US2003000012A)

#### OVERFLOW ASSEMBLY FOR BATHTUBS AND THE LIKE

**Abstract:** Source: US2003000012A An overflow system in the bathtub has an overflow port and has a drain pipe in connection with the overflow port. A threaded flange has a stub shoulder on one end which is forced-fitted into a circular sleeve on the overflow port. The threaded flange has exterior threads on its outer surface and a thin diaphragm secured to the end thereof opposite to the stub shoulder. A large sealing washer embraces the outside of the circular flange on the overflow port and extends partially over the threads of the threaded flange. A large internally threaded nut is threadably mounted on the outer end of the threaded flange and compresses the sealing washer against a vertical flange on the port to seal the connection between the threaded flange and the port. A decorative cap is frictionally snapped into engagement with protrusions on the outer surface of the nut. The cap can be removed when needed to permit the plumber to gain access to the diaphragm to cut it open for fluid flow after they system has been tested for leaks, or put in place after the cut takes place.

**Probable Assignee:** WCM IND INC

**Earliest Publication Date:** 20030102



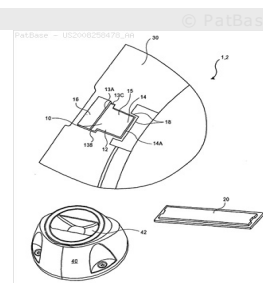
**32) Family number: 33078689** (US2008258478A)

#### SECURITY DEVICE HAVING A CABLE

**Abstract:** Source: US2008258478A Systems and apparatuses for a security device having a cable (922) are disclosed.

**Probable Assignee:** TYCO FIRE AND SECURITY GMBH

**Earliest Publication Date:** 20060615



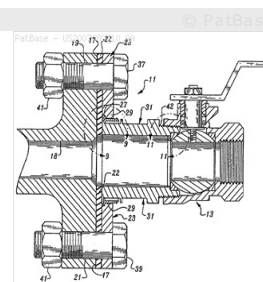
**33) Family number: 34381407** (US2007080310A)

#### ELECTROLYSIS-RESISTANT COUPLING ASSEMBLY FOR VALVES

**Abstract:** Source: US2007080310A An electrolysis-resistant coupling assembly for a valve within a fluid line. A line flange within the line includes a first mating surface and a fluid passageway therethrough. A valve flange downstream from the line flange includes a second mating surface. The valve flange has an aperture passing therethrough with first and second bores forming a lip. A valve coupler has an upstream end provided with a coupler flange having a third bore. A substantially non-compressible, non-metallic captive ring is interposed between the lip, and the flange and body of the valve coupler. Bolts and nuts assemble the valve flange to the line flange with a gasket therebetween, compressing the lip against the captive ring and the coupler flange. The valve is either sweat fitted or threadably attached to the downstream end of the valve coupler. Various configurations for the valve flange, the captive ring, and the valve coupler are disclosed.

**Probable Assignee:** GRUNDFOS PUMPS CORP

**Earliest Publication Date:** 20070412

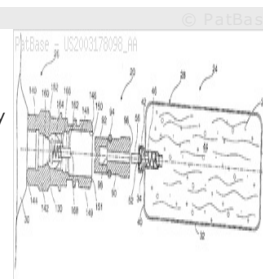


**34) Family number: 23889310** (US2003178098A)

#### APPARATUS AND METHOD FOR URGING FLUID INTO A PRESSURIZED SYSTEM

**Abstract:** Source: US2003178098A The present invention generally relates to an apparatus and method for urging fluid from a charging system to a pressurized system. The apparatus has a rigid body with a conduit defined therein. The body is mounted between, and connected to, a charging system containing pressurized fluid and a pressurized system. More specifically, a retractable discharge tube for actuating a first valve to allow the release of fluid held within the charging system, is inserted into a first end of the body. A depressor mounted at a second end of the body is inserted into a tubular fitting connected to the pressurized system. The fitting has a retractable pin for actuating a second valve to permit entry of the fluid into the pressurized system. Once the body is connected to both the charging system and the pressurized system, a force is applied on the charging system toward the pressurized system. The force causes the charging system and the pressurized system to mate with the body. The mating of the body structure to the charging system and the pressurized system urges the discharge tube to retract, thereby actuating the first valve to release fluid into the conduit, and urges the pin to retract, thereby actuating the second valve to permit the fluid in the conduit to enter the pressurized system.

**Probable Assignee:** BRASSCORP LTD



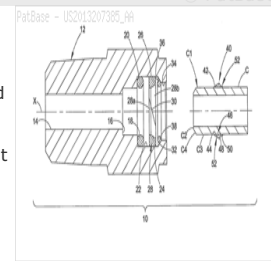
**35) Family number: 50952193** (US2013207385A)

### PUSH TO CONNECT CONDUIT FITTING WITH FERRULE

**Abstract:** Source: US2013207385A A push to connect fitting includes a body member adapted to receive a conduit end, a conduit comprising a first end that can be axially inserted into the body member and a conduit gripping device attached to an exterior surface of the conduit, and a retainer that retains the conduit in place when said conduit is fully inserted into the body member. Additional embodiments include providing a seal with the fitting that seals the exterior surface of the conduit, an optional load retaining sleeve for the conduit gripping device, and an optional gimbal. The push to connect aspect may be realized in the form of a single action unthreaded mechanical connection.

**Probable Assignee:** SWAGELOK CO

**Earliest Publication Date:** 20120419



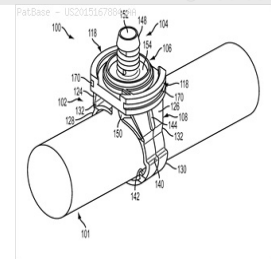
**36) Family number: 59511836** (US2015167884A)

### FITTINGS FOR PIPES, AND PRESSES FOR INSTALLING THE FITTINGS TO PIPES

**Abstract:** Source: US2015167884A A fitting for a pipe generally includes a saddle for coupling the fitting to the pipe and a tap for establishing fluid communication between the fitting and the pipe. The saddle defines a channel extending generally longitudinally through the saddle, and the channel is free of threads. And, the tap is configured to couple to the saddle within the channel of the saddle. A press for installing the fitting to the pipe generally includes a housing configured to releasably couple to the fitting, and a spike configured to releasably couple to the housing and extend at least partly through the fitting for piercing the pipe to thereby allow at least part of the fitting to be inserted into the pipe through the piercing in the pipe to thereby establishing fluid communication between the fitting and the pipe.

**Probable Assignee:** BLAZING PRODUCTS INC

**Earliest Publication Date:** 20150618



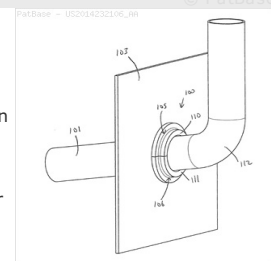
**37) Family number: 57225346** (US2014232106A)

### SUMP WALL PENETRATION FITTING

**Abstract:** Source: US2014232106A A penetration fitting includes a first fitting half having an inner surface and an outer surface opposite the inner surface, the first fitting half defining an arcuate channel, and a second fitting half having an inner surface and an outer surface opposite the inner surface, the second fitting half defining an arcuate channel, wherein the first and second fitting halves are adapted to abut one another with the inner surfaces of the first and second fitting halves together defining an inner end, the outer surfaces of the first and second fitting halves defining an outer end, and the arcuate channels of the first and second fitting halves cooperating to define a tapered opening configured to accept the at least one pipe segment, the opening having a larger diameter at the inner end and a smaller diameter at the outer end.

**Probable Assignee:** S BRAVO SYSTEMS INC

**Earliest Publication Date:** 20140821



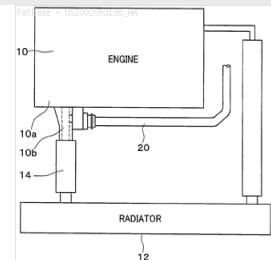
**38) Family number: 29685653** (US2002093198A)

### HOSE COUPLING ASSEMBLY

**Abstract:** Source: US2002093198A A hose coupling assembly wherein a hose 20 having a corrugated portion 22 is coupled to a fitting block 24 by a socket 50. The fitting block 24 has a block engagement catch 25c projecting from the outside rim of the block body 25. The socket 50 comprises a socket body 51 elastically expandable and contractible by being divided by a slit 51a, and a socket engagement catch 51b engages the block engagement catch 25c. To detach the socket 50 from the fitting block 24, force is applied in a rotation direction to a push operation portion 51c to cause the socket body 51 to undergo diametrical expansion, releasing the socket engagement catch 51b from the block engagement catch 25c.

**Probable Assignee:** TOYODA GOSEI CO LTD

**Earliest Publication Date:** 20020703



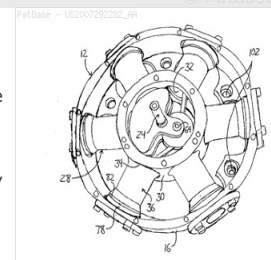
**39) Family number: 40924459** (US2007292282A)

### RECIPROCATING COMPRESSOR OR PUMP AND A PORTABLE TOOL POWERING SYSTEM INCLUDING A RECIPROCATING COMPRESSOR

**Abstract:** Source: US2007292282A A reciprocating compressor or pump features a manifold arranged not only to define a hollow interior for receiving fluid discharged from a plurality of cylinders but also to define a base or frame on which the cylinders are carried. Unique valves formed in part by flexible material reduces the likelihood of fatigue and increases efficiency by retaining less heat relative to conventional reed valves. A compressor or pump mounted at an end of a handle extending parallel to a motor housing likewise extending from the compressor or pump provides an easy to carry portable assembly. A fan mounted between a motor and a compressor pulls air through the compressor inlet to both cool the motor and feed the compressor. A portable tool system powers both pneumatic and electric tools. Connecting rod structures for radial compressors or pumps provide improved strength and easier assembly.

**Probable Assignee:** SCHUETZLE LARRY ALVIN

**Earliest Publication Date:** 20071213



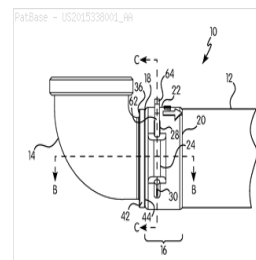
**40) Family number: 60227015** (US2015338001A)

## CLIP FOR ADJUSTABLE PIPE FITTING

**Abstract:** Source: US2015338001A A pipe connector includes a clip, first pipe fitting, and second pipe fitting. The clip includes a cross member having a first end and a second end and a leg extending from each end. The first pipe fitting includes a connecting portion comprising a first end, a second end, and a sidewall having two slots. The second pipe fitting includes a connecting portion and a first end, a second end, a sidewall extending therebetween, and a circumferential groove in an outer diameter of the sidewall. The circumferential groove aligns with the slots in the sidewall of the first pipe fitting when the second pipe fitting is inserted into the first pipe fitting, and the legs of the clip engage the circumferential groove in the connecting portion of the second pipe fitting, allowing the first pipe fitting and the second pipe fitting to rotate with respect to one another.

**Probable Assignee:** SDB IP HOLDINGS LLC

**Earliest Publication Date:** 20150825



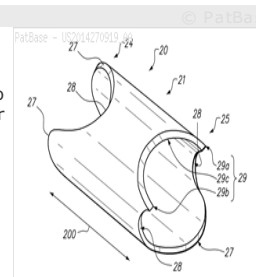
**41) Family number: 57428329** (US2014270919A)

## PRODUCT AND METHOD FOR BUILDING STRUCTURES FROM PIPE

**Abstract:** Source: US2014270919A A corner fitting includes a sleeve body having a hollow inner space and configured to coaxially fit over a pipe member of a predetermined size. An edge of the sleeve body at a second distal end has a corner cut portion, a protruding tab, and two recesses, the protruding tab being diametrically opposed to the corner cut portion in the radial direction of the sleeve body, and the recesses being diametrically opposed to each other in the radial direction of the sleeve body. The corner cut portion is configured and shaped such that the sleeve body fits together with an identical sleeve body on the pipe member of the predetermined size with the corner cut portions of the two sleeve bodies contacting each other and with the pipe being nested between the protruding tabs of the second distal ends of the two sleeve bodies.

**Probable Assignee:** KOKINAKIS KENNETH A

**Earliest Publication Date:** 20140918



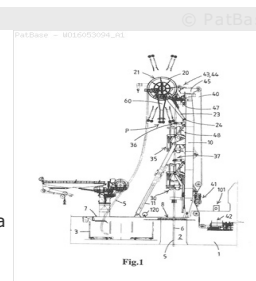
**42) Family number: 62066744** (WO16053094A1)

## END FITTING HANDLING IN A MARINE PIPELINE INSTALLATION SYSTEM

**Abstract:** A marine pipeline installation system for laying an offshore pipeline and/or installing a subsea riser. The system comprises a pipeline guide (20) mounted at an elevated position on the launch tower (10) providing an arcuate guide surface (21) in a vertical plane for guiding said pipeline from the storage reel into the firing line. The system further comprises flexible pipeline end fitting transfer mechanism adapted to transfer an end fitting on a flexible pipeline over the pipeline guide. This transfer mechanism comprises a rotatable transfer arm (60) provided with a first retainer (80) for an end fitting adapter (85) to retain, at the trailing side (68) of the transfer arm (60), a first end fitting (5a). And the transfer arm (60) is provided with a second retainer (90) to retain, at the leading side (67) of the transfer arm (60), a second end fitting (5b).

**Probable Assignee:** ITREC BV

**Earliest Publication Date:** 20160407



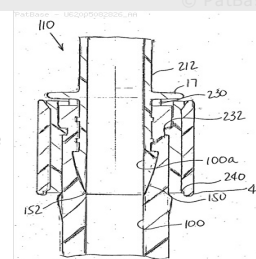
**43) Family number: 31842669** (US2005082826A)

## BARB CLAMP

**Abstract:** Source: US2005082826A A barb clamp is provided for fluid liquid or gaseous connection to a flexible tube, the flexible tube having an inner bore defined by a predetermined inner diameter for providing a fluid flow path. The barb clamp includes a barb connector having essentially the same predetermined inner diameter and a tapered end insertable into the tube. A sleeve and collet lock over the tubing and barb connector to prevent liquid material entering between the barb and tube. The tapered end of the barb connector terminates at a point so that there is essentially no transition between the inner diameter of the tube and the inner diameter of the barb connector to provide no pressure differential in the tubing between the outside and inside of the barb clamp.

**Probable Assignee:** SAINT GOBAIN SA

**Earliest Publication Date:** 20050421



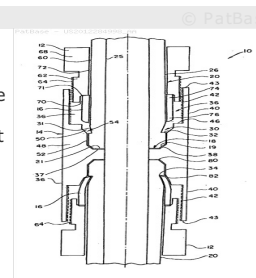
**44) Family number: 52344650** (US2012284998A)

## TUBE FITTING ASSEMBLY

**Abstract:** Source: US2012284998A A tube fitting for sealing an end of a tube uses a notch formed in the exterior surface of the tube as a sealing seat. An internally threaded body is configured to receive an externally threaded end of a nut, while the body and the nut are mounted in a surrounding relationship to the tube end. A ferrule mounted between the nut and the tube is forced to plastically deform and move into the notch to thereby seal the tube end.

**Probable Assignee:** RIETH PATRICK L

**Earliest Publication Date:** 20121115



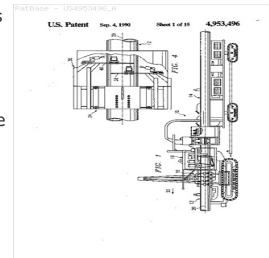
**45) Family number: 9305216** (US4953496A)

## HIGH PRESSURE WATER JET CLEANER AND COATING APPLICATOR

**Abstract:** Source: US4953496A An automated pipeline rehabilitation apparatus (10) is disclosed. The apparatus employs a centering assembly (24) with pivoting arms (26, 28) which can pivot between an operating position and a installation/removal position to allow the unit to be removed from a pipeline. Arcuate rings (38, 40) are mounted on the arms. Spray nozzles (44) are mounted on the arcuate rings for reciprocating arcuate motion along the rings to treat the pipeline. The nozzles (44) can be used to clean the pipeline and prepare the outer surface of the pipeline with high pressure water jets in training abrasives. The nozzles (44) can also be used to apply a coating, preferably a polyurethane coating to the pipeline.

**Probable Assignee:** CEPI HOLDINGS INC

**Earliest Publication Date:** 19900904



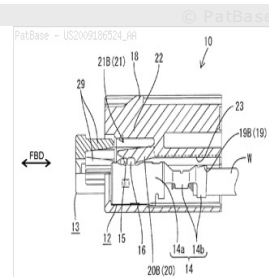
**46) Family number: 43522582** (US2009186524A)

#### CONNECTOR

**Abstract:** Source: US2009186524A First terminal fitting accommodating chambers (61A) are arranged in a width direction in a housing (41) of a connector (40) for receiving first terminal fittings (42). A second terminal fitting accommodating chamber (61B) for receiving a second terminal fitting (42) is adjacent the first terminal fitting accommodating chambers (61A) in a height direction and between the first terminal fitting accommodating chambers (61A) in the width direction. First lances (64A) are in the first terminal fitting accommodating chambers (61A) for engaging the inserted terminal fittings (42) and are deformable into first deformation spaces (65A) lateral to the second terminal fitting accommodating chamber (61B). A second lance (64B) is in the second terminal fitting accommodating chamber (61B) for engaging the second terminal fitting (42) and is deformable into a second deformation space (65B) between the first terminal fitting accommodating chambers (61A).

**Probable Assignee:** SUMITOMO WIRING SYSTEMS LTD

**Earliest Publication Date:** 20090722



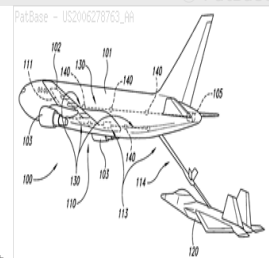
**47) Family number: 33990547** (US2006278763A)

#### ADJUSTABLE FITTINGS FOR ATTACHING SUPPORT MEMBERS TO FLUID CONDUITS, INCLUDING AIRCRAFT FUEL CONDUITS, AND ASSOCIATED SYSTEMS AND METHODS

**Abstract:** Source: US2006278763A Adjustable fittings for attaching support members to fluid conduits, including aircraft fuel conduits, are disclosed herein. An aircraft system in accordance with one embodiment of the invention includes a fluid conduit carried by an aircraft and a housing fixedly attached to the fluid conduit. The housing can include a first attachment feature having one of a projection extending outwardly from the housing or an aperture extending at least partially through the housing. The system further includes a support member having an attachment portion positioned proximate to the attachment feature. The attachment portion includes a support member aperture positioned over at least a portion of the first attachment feature. An adjustable fitting couples the support member to the housing. The adjustable fitting can include a first side, a second side opposite the first side, and an engagement portion at the second side positioned within at least a portion of the support member aperture. The fitting can also include a second attachment feature mated with the first attachment feature. The second attachment feature includes the other one of the projection or the aperture. The second attachment feature has a center point eccentrically offset from a center point of the fitting.

**Probable Assignee:** BOEING CO

**Earliest Publication Date:** 20061213



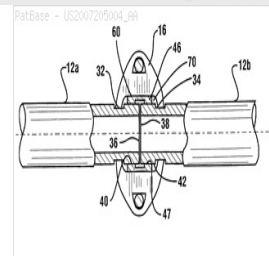
**48) Family number: 34300366** (US2007205004A)

#### SYSTEM AND METHOD OF ASSEMBLY OF CPVC FIRE SPRINKLER SYSTEM EMPLOYING MECHANICAL COUPLINGS AND SUPPORTS

**Abstract:** Source: US2007205004A Fire sprinkler system comprising a network of CPVC pipe lengths in which at least some of the pipe lengths are interconnected with mechanical devices having resilient sealing members that are chemically compatible with the CPVC composition. Repairs and system modifications can be made without the use of solvent cement. In-line joints are formed with a coupling device including a pair of arcuate coupling segments having a first end, a second end, and an interior concave surface extending between the first end and the second end. A longitudinal channel extends along the concave surface. At least one mechanical fastener is operative to detachably connect the pair of coupling segments. A resilient annular seal is located within the longitudinal channel of each segment. A branching device connects a branch pipe to a main pipe through an orifice in the main pipe utilizing a saddle-like sealing member. The pipe assemblies are able to pass UL testing protocols for wet fire sprinkler systems.

**Probable Assignee:** LUBRIZOL ADVANCED MATERIALS INC

**Earliest Publication Date:** 20070315



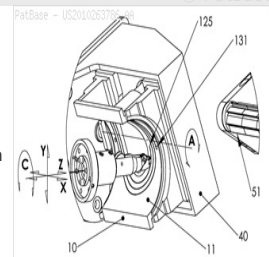
**49) Family number: 36002916** (US2010263786A)

#### WIRELAYING APPARATUS AND WIRELAYING METHOD FOR ELECTROFUSION WELDING

**Abstract:** Source: US2010263786A A wirelaying apparatus (2) includes a tool arm (21) with a tool head (22) which carries a wirelaying tool (30). The tool (30) has a cutting tip (31) through which a wire (12) is laid into a working surface (11) of a workpiece (10). The workpiece (10) is retained in a retainer (40) and is moved relative to the wirelaying tool (30). In use, the cutting tip (31) follows along an arcuate path while laying the (10) wire into the working surface (11) of the workpiece (10). Thus, more complex wirelaying configurations are achieved, such as a bi-helical wirelaying pattern in a generally cylindrical pipe fitting or a bi-spiral wirelaying pattern in a semi-cylindrical saddle coupler pipe fitting.

**Probable Assignee:** MSA ENGINEERING SYSTEMS LTD

**Earliest Publication Date:** 20081231



**50) Family number: 48910466** (US2011114195A)

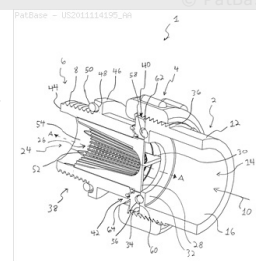
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## UNION COUPLING WITH REMOVABLE SCREEN

**Abstract:** Source: US2011114195A A union coupling having a removable screen is disclosed. The union coupling includes a pipe joint, a fitting that receives the screen, and a collar which clamps the fitting to the pipe joint. In one form, the fitting has an inner surface that defines a passage through the fitting and a pocket formed in the inner surface. The screen has a transverse extension that is received at least in part in the pocket with engagement of the transverse extension and pocket restricting passage of the screen past a predetermined position in the passage. A union coupling having a fitting comprising a fitting body with an outward flange and a shoulder element with an outward flange is also provided. The shoulder element is connected to the fitting body to captivate a collar between the outward flanges of the fitting so that the collar does not become separated from the fitting body. A method of assembling a union coupling is also provided.

**Probable Assignee:** RAIN BIRD CORP

**Earliest Publication Date:** 20110519



**51) Family number: 56090265** (US2016252113A)

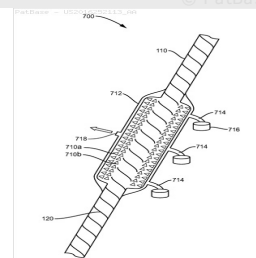
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## PIPELINE SYSTEMS AND METHODS

**Abstract:** Source: US2016252113A The present invention relates to a method and a device comprising a self-regulating pressure pipe for increasing a rate of a fluid flow of a fluid and configured to respond to the volume of the fluid or the viscosity of the fluid by decreasing or increasing the pressure within the self-regulating pressure pipe.

**Probable Assignee:** NG1 TECHNOLOGIS LLC

**Earliest Publication Date:** 20140327



**52) Family number: 50623572** (US2013119659A)

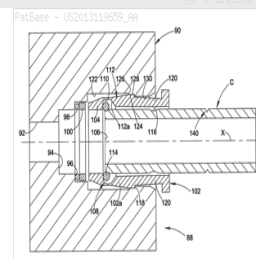
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## SINGLE AXIS PUSH TO CONNECT CONDUIT FITTING

**Abstract:** Source: US2013119659A A push to connect conduit fitting includes a first fitting component and a second fitting component and a releasable retaining structure for retaining the two fitting components in one or more retained axial positions as an unthreaded mechanical connection. In one of the retained axial positions a conduit may be inserted and a conduit retainer holds the conduit in position. A seal mechanism may also be provided to seal an outer surface of the conduit fitting assembly. Embodiments for a threaded mechanical connection are also disclosed.

**Probable Assignee:** SWAGelok CO

**Earliest Publication Date:** 20120209



**53) Family number: 51706806** (US2015151220A)

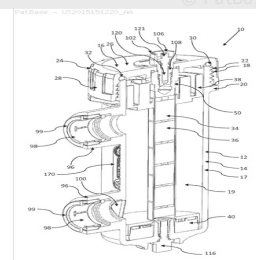
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## SEPARATOR DEVICE

**Abstract:** Source: US2015151220A A separator device for removing particles from suspension in a liquid includes a housing having first and second chambers with apertures for ingress and egress of liquid into the first chamber. Means are provided for setting up a swirl of liquid within the first chamber. Apertures enable flow of liquid between the first chamber and the second chamber. Means are also provided for setting up a swirl of liquid within the second chamber. The swirl in the second chamber is in substantially the opposite direction to the swirl in the first chamber, and there is no substantial flow in the second chamber which is in the same direction as the swirl in the first chamber.

**Probable Assignee:** ADEY HOLDINGS 2008 LTD

**Earliest Publication Date:** 20121128



**54) Family number: 65948434** (US2018031156A)

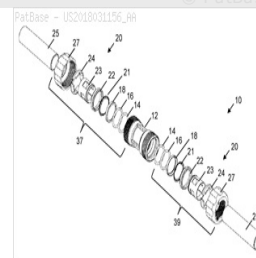
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## HYBRID PUSH-TO-CONNECT FITTING, DEVICE AND ASSEMBLY

**Abstract:** Source: US2018031156A A fitting device includes a fitting body having an interior surface defining an interior, a packing assembly maintained within the fitting body interior, a retaining nut, and a shoe member maintained between the retaining nut and the axially outer rim of the fitting body, whereupon inserted tubes or pipes can be securely inserted into the fitting interior and maintained therein.

**Probable Assignee:** QUICK FITTING INC

**Earliest Publication Date:** 20170606



**55) Family number: 27986250** (US2003006610A)

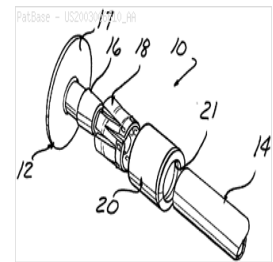
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## BARB CLAMP

**Abstract:** Source: US2003006610A A barb clamp provides a leakproof connection of a flexible tube in a barbed fitting. The barb clamp includes a collet and sleeve. The barb fitting is configured to fit snugly within the tube. The collet is slid over the tube. Shelves on the interior surface of the collet fit tightly around the tube and under an expanded portion of the barb fitting. The sleeve is then slid over the collet. As the sleeve moves over the collet, tangs on the collet are pushed radially inwardly into the tube and barb fitting. The sleeve is moved over the collet until an annular projection on the interior surface of the sleeve sits within an annular groove of the collet. Radial ledges on the exterior surface of the collet provide a stop and lock to prevent the annular projection on the sleeve to move out of the annular groove of the collet.

**Probable Assignee:** SAINT GOBAIN SA

**Earliest Publication Date:** 20030109



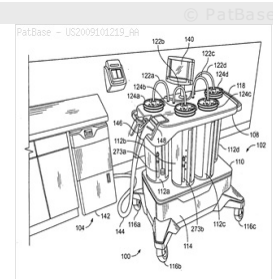
**56) Family number: 43113256** (US2009101219A)

## MEDICAL WASTE FLUID COLLECTION AND DISPOSAL SYSTEM

**Abstract:** Source: US2009101219A A medical waste fluid collection and disposal system includes a medical waste fluid collection cart including first and second fluid collection canisters. A valve assembly selectively communicates with the canisters and a valve drive system controls the valve assembly. A liquid level sensor is positioned within each of the canisters. A cart processor communicates with the liquid level sensors and the valve drive system. A cart drain line communicates with the valve assembly and a receptacle, a cart flushing line communicates with the valve assembly and the receptacle and a cart data line and a cart power line communicate with the cart processor and the cart receptacle. A station includes a drain pump that communicates with a drainage system and a station drain line, a flushing pump that communicates with a source of washing liquid and a station flushing line and a station processor in communication with the drain and flushing pumps. A station data line communicates with the station processor. A coupler communicates with the station drain line, flushing line and the station data line and a station power line. The station coupler removably engages the cart receptacle so operation of the cart and station components can be coordinated by the processors for drainage and flushing of the cart canisters.

**Probable Assignee:** DORNOCH MEDICAL SYSTEMS INC

**Earliest Publication Date:** 20090404



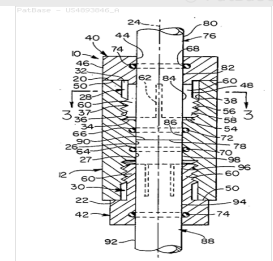
**57) Family number: 3304225** (US4893846A)

## CONNECTOR FITTINGS

**Abstract:** Source: US4893846A Fittings for cylindrical members such as pipes, tubes, and rods. A nut main body has internal camming surfaces formed by threads on a bore or recess inner surface, and a cap bolt has a through bore, and a longitudinally segmented shank defining clamping legs. External camming surfaces defined by threads on the remote ends of the clamping legs from the bolt head fit within the internal camming surfaces with the bolt head engaging the nut main body so that the internal and external camming surfaces are contained within the nut main body and protected against damage. A cylindrical member fits through the cap bolt bore and into the nut main body recess axially beyond the internal camming surfaces. Further tightening of the cap bolt causes camming action of the camming surfaces to occur, forcing the clamping legs to bend in cantilever fashion so that their remote ends clampingly grip the cylindrical member. Suitable seals are provided to keep the camming surfaces protected. Stop means in the nut main body may locate the cylindrical member end. The fitting may be axially extending or angularly formed, may clamp cylindrical members at both nut main body ends to join two such members together, or may have a pipe thread at one end opposite one cap bolt. Modifications may include tees, elbows, and X-shaped main bodies. Differently sized cylindrical members may be joined. In all arrangements the camming surfaces are so contained as to be protected against physical damage and contamination during handling, transport, and in use.

**Probable Assignee:** MCGRAW DOONAN DWIGHT NAPLES FLA

**Earliest Publication Date:** 19900116



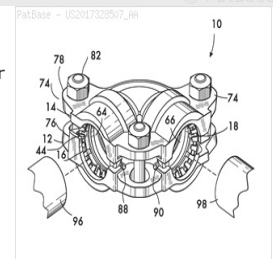
**58) Family number: 67491590** (US2017328507A)

## FITTING HAVING TABBED RETAINER AND OBSERVATION APERTURES

**Abstract:** Source: US2017328507A A pipe fitting for plain end pipe is formed of housing portions defining receptacles for receiving pipe elements. The receptacles are coaxial with respective axes oriented angularly with respect to each other. Each receptacle has a channel that faces a respective axis with floors at different radii of curvature. Retainers are received within the channels. The retainers have teeth and one or more offset tabs that cooperate with the channels to prevent improper assembly of the fitting. Ring seals are received within channels positioned adjacent to the receptacles. The ring seals cooperate with the retainers to hold the segments in spaced relation sufficient to insert pipe elements into the receptacles when the fitting is pre-assembled. Apertures are provided in the receptacles to permit visual determination of the presence of the retainers post assembly.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20171116



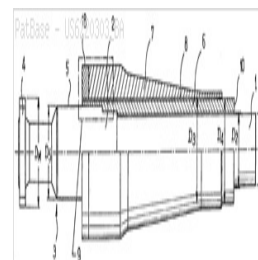
**59) Family number: 15031353** (US6220303B)

## DEVICE FOR LIMITING THE BENDING RADIUS OF A FLEXIBLE DUCT

**Abstract:** Source: US6220303B The invention concerns a device for limiting the bending radius of a flexible duct comprising at least a bend stiffener arranged around one length of the flexible duct and fixed by a rear part on a fixed end support, characterized in that it further comprises an element for maintaining the bend stiffener arranged between the flexible duct and the bend stiffener and comprising at least a portion capable of flexural bending extending over one length of the flexible duct located at least between the rear part and the end of the bend stiffener.

**Probable Assignee:** COFLEXIP

**Earliest Publication Date:** 19980903



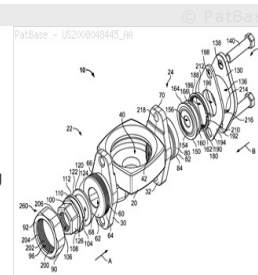
**60) Family number: 41555723** (US2008048445A)

# **INTEGRAL UNIVERSAL COUPLING ASSEMBLY FOR A FLUID DISTRIBUTION SYSTEM AND METHOD OF USING THE SAME**

**Abstract:** Source: US2008048445A A universal coupling assembly is provided including a housing having an inner bore that extends along an axis through a fluid port and a flange formed integral with the housing and the inner bore. The flange extends radially outward from the axis and has a mating surface. A nipple extends from the flange along the axis toward the fluid port. The nipple has a mating interface at an end thereof, and the nipple has a junction portion extending at least partially about the nipple and located between the mating interface and the flange. The junction portion and the mating interface are configured to receive at least two different types of interchangeable fittings based on a type of mating joint, and the junction portion is matable with one of a flange fitting, a threaded union fitting, a sweat fitting, an NPT fitting, and a barb fitting.

**Probable Assignee:** GRUNDFOS PUMPS CORP

**Earliest Publication Date:** 20080228



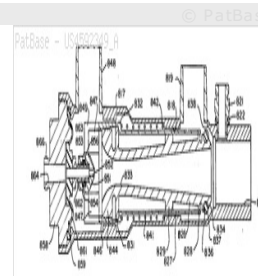
**61) Family number: 30159160** (US4592349A)

# **VENTILATOR HAVING AN OSCILLATORY INSPIRATORY PHASE AND METHOD**

**Abstract:** Source: US4592349A Ventilator for use with a source of gas under pressure for supplying such gas to the airway of a patient having an inlet adapted to be connected to the source of gas, and an outlet adapted to be connected to the airway of the patient. A pneumatic oscillator is connected to the inlet for supplying pulsatile gas in the form successive small volumes of gas to the airway of the patient during a breath of the patient to cause diffusive ventilation of the airway of the patient. An exhalation valve assembly is connected to the patient airway for permitting the patient to exhale gases introduced into the patient airway.

**Probable Assignee:** COCTOBER 10 2003 RESTATEMENT OF TRUST A UNDER FORREST M BIRD AND MARY P BIRD REVOCABLE TRUST DATED JULY 29 1983

**Earliest Publication Date:** 19860603



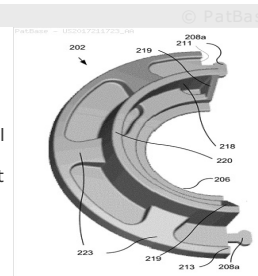
**62) Family number: 66452340** (US2017211723A)

# **PENETRATION FITTING**

**Abstract:** Source: US2017211723A Disclosed is an apparatus, a kit, and a method for repairing a sump wall pipe fitting. The apparatus may comprise first and second fitting halves for repairing a penetration fitting for a sump wall, the fitting halves having a semi-annular flange with a seal plate adapted to be sealed to the sump wall; at least one semi-cylindrical cuff that extends axially outward from surface of the semi-annular flange opposite the seal plate; and a semi-annular rib that extends radially inward from the semi-annular flange spaced at a distance between the seal plate and a rim of the at least one semi-cylindrical cuff. A dispensed bonder may also be included.

**Probable Assignee:** ICON CONTAINMENT SOLUTIONS LLC

**Earliest Publication Date:** 20170727



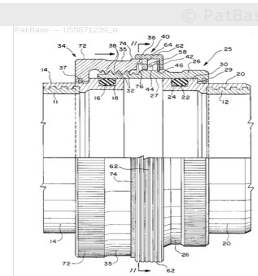
**63) Family number: 29421967** (US5871239A)

# **POSITIVE LOCK COUPLING**

**Abstract:** Source: US5871239A A threaded coupling assembly is provided for interconnecting the ends of first and second fluid-carrying conduit members in fixed releasably locking relationship. First and second coupling members are circumferentially engageable with the ends of the conduit members to hold them in fluid communication. The coupling members are rotatable in a locking direction and in an opposite unlocking direction. The first coupling member has a peripheral facing surface with a pair of annular slots, each of a different length and width. The second coupling member has a lock ring longitudinally slidable thereon with a facing surface having a pair of annular raised locking tabs. Each locking tab is of a predetermined height but of a different length and width which corresponds to the respective length and width of the annular slots. A resilient annular spring urges the lock ring toward the first coupling member so that the locking tabs engage their respective slots when the coupling is tightened to a predetermined extent during rotation in the locking direction to releasably and positively lock the coupling. An indicator stripe is provided on the peripheral edge of the first coupling member which is exposed before the locking tabs and slots are engaged. The indicator stripe is no wider than the height of the locking tabs so that it is covered by the lock ring when the lock ring snaps into locking engagement to provide a visual indication to the mechanic that the coupling assembly is positively locked.

**Probable Assignee:** STANLEY AVIATION CORP

**Earliest Publication Date:** 19980507



**64) Family number: 29962520** (US5489127A)

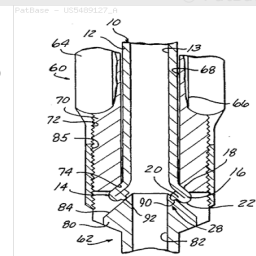
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#### MOUNTING APPARATUS WITH REDUCED RESISTANCE BEAD SEAL

**Abstract:** Source: US5489127A A reduced resistance bead seal is integrally formed on a mounting surface of one of two matingly engageable members to form a leak-free seal between the two members despite any eccentricity or angular variances between the two members. In one embodiment, the reduced resistance bead is formed on an inner conical flange of an inverted flared end of a hollow fluid conduit. The bead presents a deformable surface as a fitting urges the flared end of the conduit into engagement with a conical seat in a receiver where eccentricity or angular variances exist between the flared end of the conduit and the conical seat. A unique method and a unique forming tool are used to form the reduced resistance bead in the flared end of the conduit simultaneously with the flaring of the end of the conduit.

**Probable Assignee:** ITT CORP

**Earliest Publication Date:** 19950302



**65) Family number: 34321590** (US2007151612A)

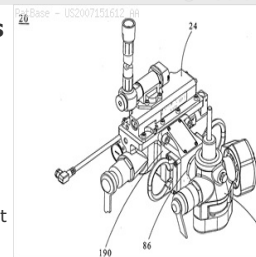
PatBase

#### QUICK CONNECT PRESSURE REDUCER/CYLINDER VALVE FOR SELF-CONTAINED BREATHING APPRATUS

**Abstract:** Source: US2007151612A A quick pressure reducer and cylinder valve for use with an SCBA includes a cylinder valve that connects to a pressure vessel, a pressure reduction assembly for reducing the pressure of breathing air provided by the pressure vessel, a probe, and an inlet/latch assembly. The probe includes a notch and a threadless probe tip, and the inlet/latch includes a corresponding receptacle and one or more latches adapted to fit into the notch to retain the probe in the receptacle. A pushbutton switch in the receptacle is triggered by insertion of the probe tip therein, thereby providing an electrical signal. Probes of different lengths may be used to correspond to different pressure capacities, and the inlet/latch assembly may be arranged either to permit the insertion of only probe size or may be arranged to accept both sizes but to function differently based on the size of the probe. The latches are inoperable except at or below a nominal pressure.

**Probable Assignee:** STI LICENSING CORP

**Earliest Publication Date:** 20070320



**66) Family number: 51928480** (US2012306118A)

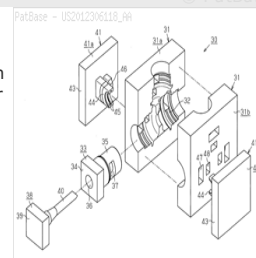
PatBase

#### JOINT AND METHOD FOR MANUFACTURING JOINT

**Abstract:** Source: US2012306118A An inner tubular portion (15) and an outer tubular portion 16 for forming an insertion space for a plastic pipe (11) are formed integrally with a joint body (13). Two fitting grooves (17) are formed in the outer peripheral surface of the inner tubular portion 15. Two sealing members (18) for maintaining water-tightness in the gap between the plastic pipe (11) received in the insertion space and the inner tubular portion (15) are fitted in the corresponding fitting grooves 17. A pair of view windows (25) for visually checking the fitting grooves (17) and the sealing members (18), which are fitted in the fitting grooves (17), from the exterior are formed in the outer tubular portion (16). The view windows (25) are arranged at opposing positions.

**Probable Assignee:** ONDA MFG CO LTD

**Earliest Publication Date:** 20120829



**67) Family number: 42146900** (US2008217914A)

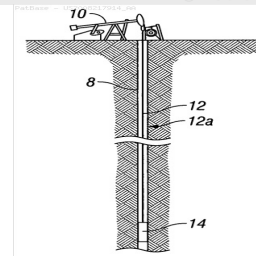
PatBase

#### METHOD OF ASSEMBLING SUCKER RODS AND END FITTINGS

**Abstract:** Source: US2008217914A An improved design and a method of assembly of end fittings to sucker rods which may be of conventional length or continuous sucker rods is described herein. The end fittings and rods are assembled so as to form wedges which enhance the connectability of the end fitting to the rod, and further, the wedge or wedges approach the rod asymptotically so as to avoid any abrupt discontinuities in the wedge or wedges thus substantially eliminating stress concentration areas and potential failure areas in the rod. The assembly method provides for integrity in the rod to end fitting assembly to promote longer connection life and fewer shop rejections and field failures.

**Probable Assignee:** ENDURANCE LIFT SOLUTIONS LLC

**Earliest Publication Date:** 20080910



**68) Family number: 55358788** (US2013334258A)

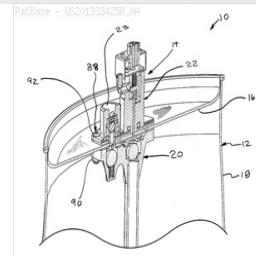
PatBase

#### INJECTION MOLDED DIAPHRAGM PUMP FOR LIQUID COLOR WITH QUICK RELEASE

**Abstract:** Source: US2013334258A A pneumatically powered pump for liquid color adapted to fit partially within a liquid color container having a body portion of the pump within the liquid color container adapted to be mounted on the underside of the container lid and being a single piece of molded plastic overlying an aperture in the container lid.

**Probable Assignee:** MAGUIRE STEPHEN B

**Earliest Publication Date:** 20131219



**69) Family number: 58855497** (US2015094417A)

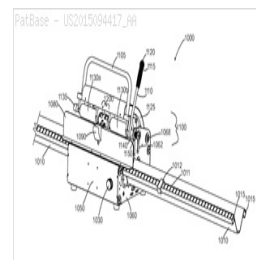
PatBase

#### PIPE JOINING MATERIAL FOR CONNECTING PIPES

**Abstract:** Source: US2015094417A A pipe joining material for connecting pipes and fittings and a method of making a pipe joining material are provided. The pipe joining material may include a thermoplastic material such as polyvinyl chloride (PVC) and/or chlorinated polyvinyl chloride (CPVC) and a bonding agent for the thermoplastic material.

**Probable Assignee:** CONRAD IN TRUST WAYNE

**Earliest Publication Date:** 20150327



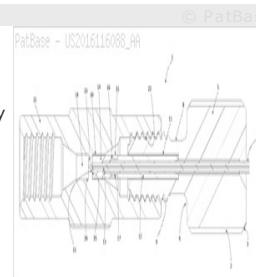
**70) Family number: 62183055 (US2016116088A)**

#### FACE-SEALING FLUIDIC CONNECTION SYSTEM

**Abstract:** Source: US2016116088A A tubing or fitting assembly has an inner tube layer, an outer tube layer, a sleeve, a tip portion, and can have a nut. Each of the nut, sleeve, inner and outer tubing layers, and tip portion have a passageway therethrough, with at least the passageways in the sleeve, tip portion, outer tube layer, and nut adapted to allow the inner tube layer to pass therethrough or extend over the inner layer. The tip portion can be molded over an end portion of the inner tube layer and also over a portion of the sleeve. The sleeve may include a retention feature in the form of a lip which extends into the tip portion, and also a narrower portion so that the tip portion and sleeve remain coupled together. The inner and outer tubing layers can also be retained by an interference fit. The ends of the tip portion and inner layer together define a substantially flat surface which can form a seal in a flat-bottomed port of a component such as may be found in any one of a number of components in an analytical instrument system, including for example a liquid chromatography system. The nut, tube, ferrule, and transfer tube or liner tube may comprise biocompatible materials. In addition, the nut may have a slot, such as a slot adapted to allow the tube and the nut to be easily and quickly separated or to allow a portion of the tube to be easily and quickly inserted in the nut.

**Probable Assignee:** IDEX HEALTH AND SCIENCE LLC

**Earliest Publication Date:** 20160428



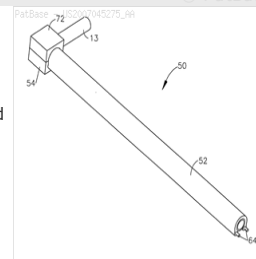
**71) Family number: 34216692 (US2007045275A)**

#### MODULAR HEATER SYSTEMS

**Abstract:** Source: US2007045275A A heat trace assembly for heating a conduit is provided that comprises at least one preformed heat trace section adapted to be placed around at least a portion of the conduit and a connector secured to the heat trace section. The connector is adapted for coupling the heat trace section to an adjacent heat trace section, and the heat trace section and the connector have mating mechanical features to allow the heat trace section to be quickly connected to and disconnected from the conduit. Additionally, a heat trace junction is provided that preferably defines a cross configuration and comprises a plurality of arms extending from a central portion of the heat trace junction. The plurality of arms are deformable to conform to a junction within a conduit system. Thermal insulation jacket configurations are also provided in accordance with several embodiments of the present invention.

**Probable Assignee:** WATLOW ELECTRIC MFG CO

**Earliest Publication Date:** 20070215



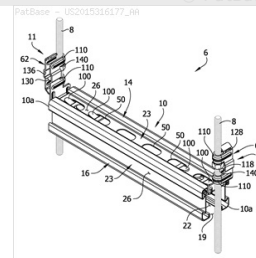
**72) Family number: 60700239 (US2015316177A)**

#### TRAPEZE HANGER SYSTEM INCLUDING TRAPEZE HANGER FITTING

**Abstract:** Source: US2015316177A A trapeze hanger fitting includes a strut connecting portion configured for insertion into an open interior of a strut through an open longitudinal end of the strut to connect the trapeze hanger fitting to the strut. A rod securement portion is connected to the strut connecting portion and configured for securement to a rod to secure the trapeze hanger fitting to the rod. The rod securement portion is configured to be disposed outside the open interior of the strut and longitudinally outward from the open longitudinal end of the strut when the strut connecting portion is inserted into the open interior of the strut.

**Probable Assignee:** EATON INTELLIGENT POWER LTD

**Earliest Publication Date:** 20151030



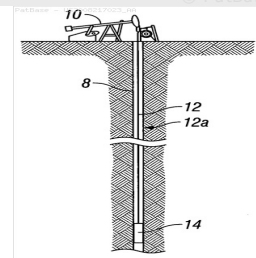
**73) Family number: 42146378 (US2008217023A)**

#### CONTINUOUS SUCKER ROD AND METHOD OF USING SAME

**Abstract:** Source: US2008217023A A continuous sucker rod preferably comprising fiberglass or composite material for use in an well is described herein. The continuous sucker rod may be connected at one end to a pump drive, via a polished rod, and at a second end to a downhole pump, via sinker bars or other weights. The continuous sucker rod preferably has at least two end fittings, one at each end of the continuous sucker rod. The end fittings, each having two ends and each being attached, at one end, to a respective end of the continuous sucker rod. The end fittings are preferably configured to enable connection to the polished rod and sinker bars respectively. The end fittings are connected to the continuous sucker rod so as to form wedges which enhance the connectability of the end fitting to the rod, and further, the wedge or wedges approach the rod asymptotically so as to avoid any abrupt discontinuities in the wedge or wedges thus substantially eliminating stress concentration areas and potential failure areas in the rod.

**Probable Assignee:** ENDURANCE LIFT SOLUTIONS LLC

**Earliest Publication Date:** 20080911



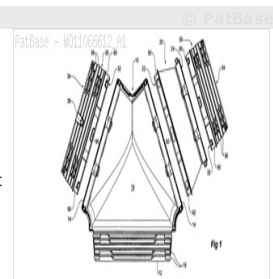
**74) Family number: 49013221** (WO11066612A1)

## DUCTED HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) COMPONENT AND SYSTEM IMPROVEMENTS

**Abstract:** This invention relates to a component for directing and/or controlling fluid flow in a ducted heating, ventilation and air conditioning (HVAC) system, the component comprising a fluid inlet and a fluid outlet, at least one of which comprises features for forming a component-to-component attachment between itself and either of a fluid inlet or outlet of a further HVAC component. Also disclosed is an associated system and assembly of HVAC components, where at least one of the components forming part of the system or assembly is adapted to form a component-to-component attachment between itself and at least one other of the system or assembly components.

**Probable Assignee:** AIR DIFFUSION AGENCIES PTY LTD

**Earliest Publication Date:** 20110609



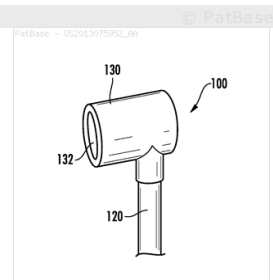
**75) Family number: 48745721** (US2013075952A)

## METHOD OF MAKING AN OVERMOLDED WATERWAY CONNECTION

**Abstract:** Source: US2013075952A A process for providing an overmolded waterway comprising inserting a shaft portion of a sacrificial core into an end of a tube, the shaft portion having a first opening therein, the sacrificial core having a second portion comprising a second opening and a contact surface about the second opening, the second opening in fluid communication with the first opening and the inside of the tube, in a mold cavity inserting a core pin transverse to the tube end, the sacrificial core contact surface engaging a mating surface of the core pin closing the second opening, injection overmolding over a portion of the tube end and core pin forming an overmolded waterway having an outlet portion in fluid communication with the second opening and the inside of the tube, and removing the core pin from the second opening through the outlet portion and removing the overmolded waterway from the mold cavity.

**Probable Assignee:** MERCURY PLASTICS LLC

**Earliest Publication Date:** 20110419



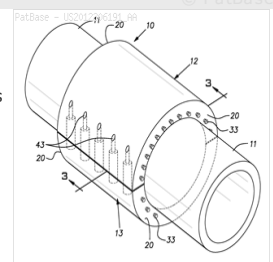
**76) Family number: 51724283** (US2012306191A)

## SPLIT FITTING FOR PIPE

**Abstract:** Source: US2012306191A A pipe repair fitting comprising a mating pair of generally semi-circular segments, each formed by an arcuate wall having arcuate ends, the segment walls carrying compressible seals for sealing two pairs of mating arcuate ends of the segments and sealing on the outer periphery of the pipe, at least one threaded hole in each arcuate wall end, a common bolt threaded into each of the threaded holes of each pair of mating arcuate ends and serving to sustain hoop forces in the fitting imposed by fluid leaking out of the pipe and contained by said seals.

**Probable Assignee:** PIPE LINE DEVELOPMENT CO

**Earliest Publication Date:** 20121205



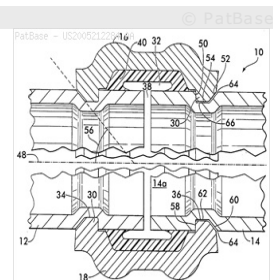
**77) Family number: 32275128** (US2005212284A)

## PIPE COUPLING HAVING WEDGE SHAPED KEYS

**Abstract:** Source: US2005212284A A coupling and pipes joined by the coupling are disclosed. The pipes have circumferential grooves adjacent their ends which are engaged by keys that project inwardly from the couplings. The keys are wedge shaped and substantially fill the grooves to provide a rigid joint. The grooves may have a shape that is complementary to the grooves. The keys may have convex or concave cross sectional shapes. The couplings have segments attached by fasters engaging lugs at either end of the coupling. The lugs are attached pad to pad or in spaced relationship. Gaps may be maintained between various surfaces on the keys and on the grooves through tolerances on the couplings.

**Probable Assignee:** VICTAULIC CO

**Earliest Publication Date:** 20050929



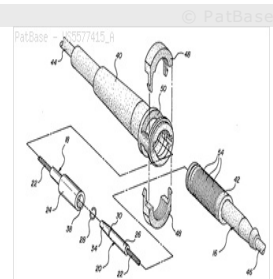
**78) Family number: 29149480** (US5577415A)

## NON-BUCKLING CORE ELEMENT CONNECTOR WITH SNAP-RING

**Abstract:** Source: US5577415A A connection for locking first (18) and second (20) core element sections together in a locked position mechanically prevented from moving relative to one another axially in either direction solely in response to axial forces transmitted along the core element sections (18,20) without buckling either of the core element sections (18,20). A male member (26) presents a male groove (30) and a female member (24) presents a female groove (32) and a lock ring (28) disposed in one of the grooves (30,32) with the lock ring (28) radially overlapping the male (30) and female (32) grooves in the locked position. A mechanical advantage comprising a female taper (34) of gentle slope forces the radial movement of the lock ring (28) as core element sections (18 and 20) are moved together without buckling the wire elements (22) of the core element sections (18, 20).

**Probable Assignee:** KONGSBERG AUTOMOTIVE ASA

**Earliest Publication Date:** 19961126



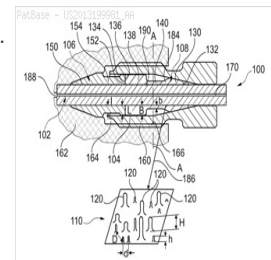
**79) Family number: 50918838** (US2013199981A)

## FERRULE CHUCK WITH SURFACE MICRO-GRIP

**Abstract:** Source: US2013199981A A fitting for coupling a capillary to another component of a fluidic device is disclosed. The fitting includes a ferrule configured for enclosing a front part of the capillary and for contributing to a fluidic sealing between the fitting and the other component; a ferrule chuck configured for enclosing a back part of the capillary; and a housing configured for accommodating at least a part of the ferrule chuck and for pushing the ferrule chuck against the ferrule.

**Probable Assignee:** AGILENT TECHNOLOGIES INC

**Earliest Publication Date:** 20130808



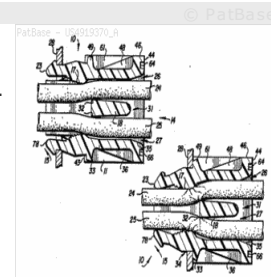
**80) Family number: 11747718 (US4919370A)**

#### CABLE FITTING

**Abstract:** Source: US4919370A The present invention is directed to a cable fitting for insertion in a protective enclosure. The fitting includes a plurality of cable channels and is constructed of a first staging portion for attachment to the electrical enclosure and a second portion which incorporates strain relief features with gripping teeth for clamping the cable. The fitting is designed for use with one or two cables. In use, it is installed in the enclosure to the staging position depth, the cables are inserted through the fitting via the cable channels into the box to the desired position for clamping, and the fitting is driven to the installed position to lock the fitting to the box and the cable within the fitting. The fitting may also be fully inserted and the cables installed thereafter.

**Probable Assignee:** THOMAS AND BETTS INT INC A OF DELAWARE CORP

**Earliest Publication Date:** 19900424



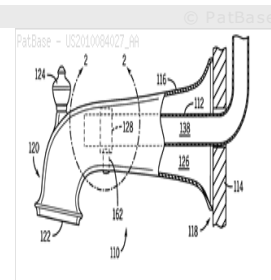
**81) Family number: 44866299 (US2010084027A)**

#### SLIP-FIT CLAMPING SYSTEM FOR MOUNTING A FITTING ON A WALL

**Abstract:** Source: US2010084027A Disclosed are fittings (e.g. tub spouts) suitable for mounting to a member (e.g. a water pipe). Special clamping structures are provided and located in a cavity of a fitting body. The clamping structures have at least two separate clamp parts that surround the water pipe or other member. A set screw can be extended radially inward from a hole in the fitting body to drive a clamp part. This helps to retain the end of the member in the cavity, while distributing clamping load away from a single point.

**Probable Assignee:** KOHLER CO

**Earliest Publication Date:** 20100408



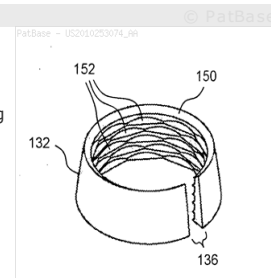
**82) Family number: 43231681 (US2010253074A)**

#### GRIP RING FOR FITTING

**Abstract:** Source: US2010253074A Grip rings (130) for pipe push-fit fitting devices (100), having an annular structure with an external surface which has a conical and spherical like structure (132). On the inner surface (134) of the grip ring two types of annular gripping teeth (150, 152) are placed. The annular grip ring of the present invention needs to be radially deformable and is a split type allowing the grip ring to be compressed.

**Probable Assignee:** PLASSIM FITTINGS LTD

**Earliest Publication Date:** 20090514



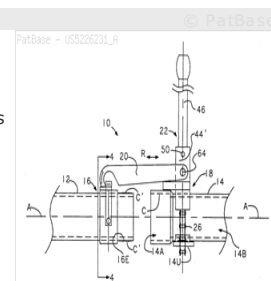
**83) Family number: 8522927 (US5226231A)**

#### PIPE JOINING TOOL

**Abstract:** Source: US5226231A A tool for joining plastic pipe and fittings that provides for a quarter turn rotation of a pipe fitting while simultaneously pulling a free end of a longitudinally aligned pipe section into the fitting. The tool includes an inner ring that slips over a free end of a pipe section and is secured thereto by inwardly directed mounting screws, and an outer ring coaxially circumposed about, and rotatably connected to, the inner ring. A detachable semicircular partial collar fits snugly about the outer ring and reversibly attaches to a pair of outwardly directed ribs positioned on opposite sides of the outer ring in a plane that bisects the pipe section. A crossbar is mounted between a pair of lugs attached to a central portion of the partial collar. A handle is pivotally mounted above a yoke and chain that encircle and grasp the fitting. Drawbars pivotally mounted to a lower end of the handle engage the crossbar so that longitudinal movement of the handle applies a longitudinal force equally to opposite sides of the pipe section, and rotation of the handle causes the fitting to twist about a longitudinal axis.

**Probable Assignee:** DE LEEBEECK MARCEL

**Earliest Publication Date:** 19930713



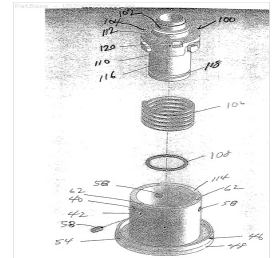
**84) Family number: 34362586 (US2007252386A)**

#### PRESSURE TANK FITTING ASSEMBLY

**Abstract:** Source: US2007252386A A fitting assembly for use with a component, such as a tank containing a fluid. The fitting assembly can be used with a pressurized tank coupled to a pressurized fluid system, including pressurized air. The fitting assembly includes a spud and a corresponding fitting wherein the spud or fitting include pins which cooperate with a corresponding groove or slot of the related spud or fitting.

**Probable Assignee:** SMC OF AMERICA CORP

**Earliest Publication Date:** 20070405



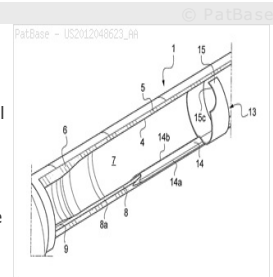
**85) Family number: 47543678 (US2012048623A)**

#### **HOLDING DEVICE INSERTABLE INTO THE CENTRAL BORE OF A TUBULAR DRILL STRING COMPONENT, AND CORRESPONDING TUBULAR DRILL STRING COMPONENT**

**Abstract:** Source: US2012048623A A holding device insertable into a central bore of a drill string component, the central bore having a first diameter along at least part of a central portion of the drill string component and a second diameter proximate ends of the drill string component. The second diameter is lower than the first diameter. The holding device includes an elongated body forming at least partly a housing for a transmission line. The elongated body has transversal dimensions lower than the second diameter. A plurality of arcuate elements are arranged along the elongated body and distinct from and attached to the elongated body. The arcuate elements are elastically bendable so as to be able to move through the second diameter and have a largest chord greater than the first diameter in a free state so as to be able to expand within the first diameter once past the second diameter.

**Probable Assignee:** VAM DRILLING FRANCE

**Earliest Publication Date:** 20101111



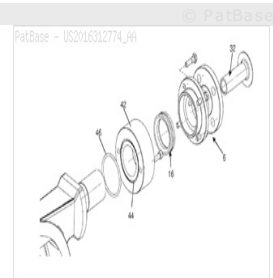
**86) Family number: 55800144 (US2016312774A)**

#### **END FITTING FOR A TUBE HOUSED BY A CAVITY AND A METHOD OF INSTALLING A TUBE IN A CAVITY**

**Abstract:** Source: US2016312774A An end fitting for a tube housed by a cavity and a method of installing a tube in a cavity are described which use a compression ring that defines a void having an axial extent and a radial extent. The compression ring is compressed between a bracket of the end fitting and a port of the cavity by drawing the bracket axially towards the port. This seals the port and deforms the void defined by the compression ring. The deformation of the void reduces its axial extent and increases its radial extent, thereby compressing the tube against an insert received within the interior of the tube.

**Probable Assignee:** WATSON MARLOW BREDEL BV

**Earliest Publication Date:** 20150617



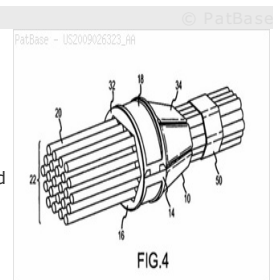
**87) Family number: 42859157 (US2009026323A)**

#### **NETWORK CABLE BUNDLING TOOL**

**Abstract:** Source: US2009026323A A network cable bundling tool is disclosed, comprising an inner fitting retained within an outer jacket assembly. The outer jacket assembly comprises a first outer jacket half coupled to a substantially identical second outer jacket half, securing the inner fitting therein. The outer jacket assembly comprises a cylindrical housing, an intake orifice defined within the intake housing, and a plurality of funneling projections coupled to the cylindrical housing wherein the plurality of funneling projections form an array assuming the general shape of a truncated faceted cone. In operation, network cable wires are inserted into the inner fitting, and the inner fitting is then secured within the outer jacket assembly. The network cable bundling tool is then displaced in the desired direction of combing, arranging the network cables into an organized and space-efficient shape.

**Probable Assignee:** PANDUIT CORP

**Earliest Publication Date:** 20090129



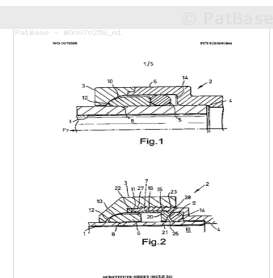
**88) Family number: 15310506 (WO0070258A1)**

#### **PIPE FITTING**

**Abstract:** A pipe-fitting (2) comprising a socket for receiving a pipe portion (1). The socket comprises a mouth and a bore, and the bore contains a retaining element (6) for retaining the pipe portion (1) within the socket and an annular seal (5) for sealing between the socket and the pipe portion (1). A sleeve (18) is, in use, situated within the socket, and comprises a radially inwardly directed flange (20) located in a region adjacent the seal (5), for protecting the seal (5) from the pipe portion (1) when it is inserted into the socket.

**Probable Assignee:** HEPWORTH BUILDING PROD

**Earliest Publication Date:** 20001115



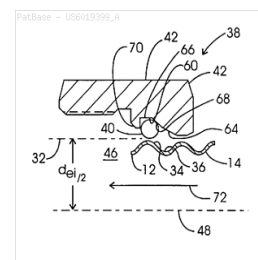
**89) Family number: 30245736 (US6019399A)**

#### **SPLIT-RING FLUID COUPLING FOR CORRUGATED TUBING AND METHOD OF ASSEMBLY**

**Abstract:** Source: US6019399A A fluid coupling for connecting a corrugated tube to a fitting. The coupling includes an annular compression member having an opening therethrough which extends from a forward end portion receivable coaxially over the tube to a rearward end portion threadably engagable with the fitting to urge the tube into a fluid-tight engagement therewith. The forward end portion of the opening has a rearward first end, a forward second end defining the inner diametric extent of the opening, and an inner radial surface extending therebetween from a rearward gland portion to a forward camming portion. An annular locking member is journaled within the gland to be received therewith over the tube. The locking member is expandable within the gland by the crest portions of the tube as the locking and compression members are received thereover, and is compressible within a root portion of the tube responsive to the bearing of the compression member camming surface thereon as the compression member is threadably engaged with the fitting. When compressed, the locking member delimits the forward advancement of the tube out of the opening of the compression member.

**Probable Assignee:** PARKER INTANGIBLES LLC

**Earliest Publication Date:** 19971113



**90) Family number: 28290264** (US2002130124A)

## ELECTROFUSION SOCKET FORMING SYSTEM

**Abstract:** Source: US2002130124A An electrofusion joint assembly includes a meltable member, such as a pipe or fitting, and a heating element secured to the pipe or fitting. The pipe or fitting may be tapered to facilitate receiving another pipe to form an electrofusion weld joint. Fasteners are used to secure the heating element and extend through a meltable zone and into a non-melt zone. Power supplied to the pipe melts the pipe proximal the heating element.

**Probable Assignee:** KARL HEINZ KRAH GMBH

**Earliest Publication Date:** 20020919

