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..SEMSEARCH "AUTOMATIC RELEASE SIGNAL" 8 "AUTOMATIC SIGNAL" 6 "BATTERY" 5 "BATTERY BACKUP" 12 "BOUSING OVER" 6 "CAM" 4 "CENTRAL AXIS" 29 "CENTRAL CONTROLLER" 44 "CENTRALIZED CONTROLLER" 26 "CHAMBER" 20 "CHAMBER CENTRAL AXIS" 7 "CHAMBER COVER" 6 "CHAMBER DEPTH" 6 "CHAMBER FLOOR" 6 "CHAMBER WALL" 29 "CHANNEL" 10 "CIRCULAR O RING" 6 "COMMON PLANE" 6 "CONFORMAL COATING" 6 "CONNECTION" 5 "CONNECTOR" 10 "CONNECTOR ORIENTATION" 7 "CONTROLLER" 6 "COVER PLATE" 22 "CYLINDRICAL THERMOPILE" 7 "DETERMINATION" 5 "DISPLAY SCREEN" 6 "DISPOSED" 11 "DISPOSED OVER" 11 "EDGE" 31 "ELONGATED PERIMETER" 13 "ENCAPSULANT COMPOUND FILLING" 7 "FASTENER" 5 "FIAT SURFACE" 6 "FIRE DETECTION" 12 "FIRE SUPPRESSION" 100 "FLAT" 4 "GASKET" 10 "GASKET CONTACT SURFACE" 73 "GASKET FACE" 33 "GASKET MEMBER" 100 "HEIGHT" 5 "HOUSING" 77 "HOUSING INNER SURFACE" 7 "HOUSING OPENING" 7 "INTERFACE" 5 "ISOLATION SWITCH" 6 "LATCH" 14 "LCD SCREEN" 17 "LIP" 4 "LIQUID CRYSTAL DISPLAY" 7 "MAN" 5 "MEMBRANE SWITCH" 24 "MICROPROCESSOR" 18 "MOLDED GASKET" 6 "NECK" 18 "NECK PORTION" 6 "OPENING" 57 "OPERATIVE SURFACE" 44 "OUTER CONTOUR" 12 "OUTER EDGE" 16 "OUTER SURFACE" 46 "OVERHANG" 10 "OVERLAPPING" 6 "PCB" 39 "PLANE" 14 "PLASTIC MATERIAL" 6 "PLATE PERIMETER" 6 "PLENUM" 10 "POST" 32 "POST END" 13 "POSTCENTRAL AXIS" 7 "POWER MODULE" 5 "POWER SOURCE" 6 "PROTECTIVE TRANSPARENT PLATE" 35 "RECESS" 9 "RIBBON" 10 "SCREEN" 4 "SEAL" 27 "SEAL HOUSING" 6 "SEALING" 5 "SEALING CONTACT" 12 "SEAM" 9 "SECURING" 6 "SEGMENT" 11 "SLOT" 4 "SPACE" 6 "SUPPRESSION" 100 "TAB" 4 "TAB RECEPTION" 6 "THERMOPILE" 48 "THERMOPILE HEIGHT" 6 "USER ENTRY KEY" 6 "USER INTERFACE" 18 "VIEWING AREA" 17 "VIEWING AREA DEFINITION" 13 "WALL" 4

18 Documents

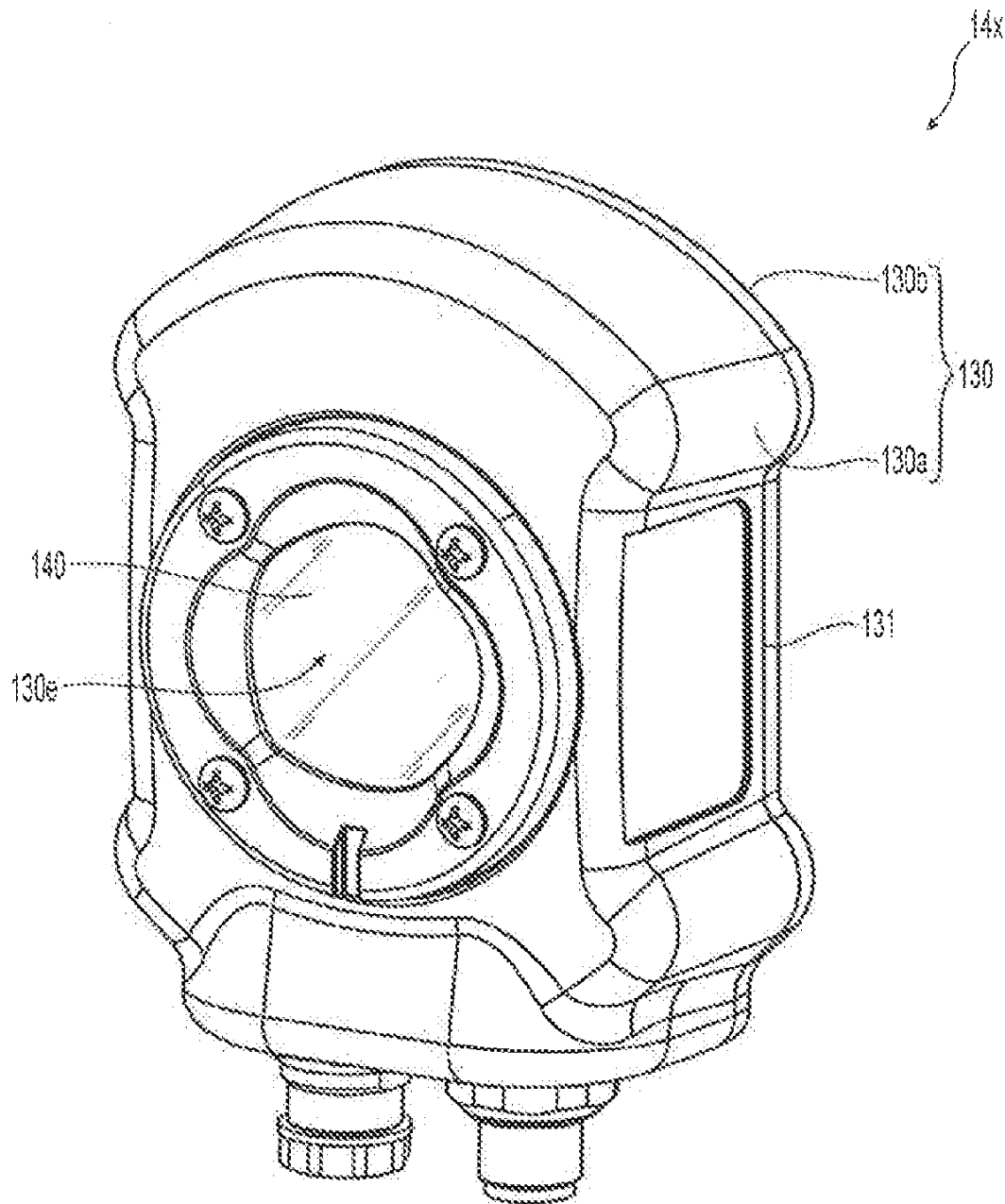
Publication numbers	Title	Current assignees
EP3439747 A1	Fire suppression system modules and methods of sealing	TYCO FIRE PRODUCTS
EP-638152 A1	Isolation gasket for critical service flow line applications	CORROSION CONTROL
US20200025098 A1	Bolted duct joints	UTC AEROSPACE SYSTEMS
WO9510720 A1	Tandem seal device for flow line applications	CORROSION CONTROL
US5758882 A	Screened gasket for high pressure fluid transmission applications	CORROSION CONTROL
US6290237 B1	Flat ring packing	IDT INDUSTRIE & DICHUNGSTECHNIK
US2513178 A	Bolted flange connection	PITTSBURGH DES MOINES
US6402159 B1	Dielectric gasket	KOHN GARY A.
US20150021863 A1	Mutiple-Leak Proof Sealiing System	WANG JUI-KUNG
WO9819094 A1	Connector for hydraulic and pneumatic systems	FOR
US4406467 A	High pressure electrical isolation flange gasket	ATLANTIC RICHFIELD
EP-698190 A1	Face seal assembly and method of making same	PARKER INTANGIBLES
DE9403963 U1	Sealing Element	ALBERT ZIMMERMANN & SOEHNE GMB
WO200501315 A2	Rebuildable composite seal	GARLOCK SEALING TECHNOLOGIES
US5333913 A	Galvanic isolation device	HUNTINGTON INGALLS
EP1869356 A1	Isolation gasket, system and method of manufacture	CORROSION CONTROL
WO200017547 A2	Gasket assembly	NASA - NATIONAL AERONAUTICS & SPACE ADMINISTRATION
US3869132 A	Fire resistant sealing ring combination	EG&G PRESSURE SCIENCE

Family 1/18 - FAMPAT - ©Questel

Title

(EP3439747)

Fire suppression system modules and methods of sealing

Images**Publication numbers with kind code & date**

US20190160316	A1	2019-05-30	US20190160316
PE20190386	A1	2019-03-13	PE038602019
EP3439747	A1	2019-02-13	EP3439747
BR112018070643	A2	2019-02-05	BR112018070643
CN109310902	A	2019-02-05	CN109310902
MX2018012241	A	2019-01-30	MX2018012241
CL2018002847	A1	2019-01-25	CL201802847
CO2018011417	A2	2018-12-14	CO2018011417
AU2017246741	A1	2018-10-25	AU2017246741



BR112018070643	A1	2018-10-16	BR112018070643
CA3020320	A1	2017-10-12	CA3020320
WO2017/177000	A1	2017-10-12	WO2017177000

**IPC - International classification**

A62C-037/08; A62C-099/00; G01D-011/24; G01D-011/24; H05K-005/06

Abstract

(EP3439747)

Fire suppression systems (10) include modules (14x) interconnected with a centralized controller(12). The modules (14x) are configured, assembled and sealed for system operation in harsh environments. Modules of the system include a printed circuit board (PCB, 32, 132), a microprocessor (34), and an operative component (36)assembled within a housing (30, 130). A gasket member (38) is disposed about the component to form a seal about the component. Operative components may include fire detection elements (14x, 50)or an LCD screen (36, 236). Modules of the system can include an encapsulant compound for filling a void between the housing inner surface and the printed circuit board. Modules of the system can include a sealed chamber with a port to interface a computer device. A power module of the system includes a sealed housing with connectors positioned to protect against moisture and debris and an isolating switch to permit maintenance of the system.

Inventors

COUNTS BRIAN LEE

RYCZEK CHAD LEE

FERNSTRUM MARVIN B

Latest standardized assignees - inventors removed

TYCO FIRE PRODUCTS

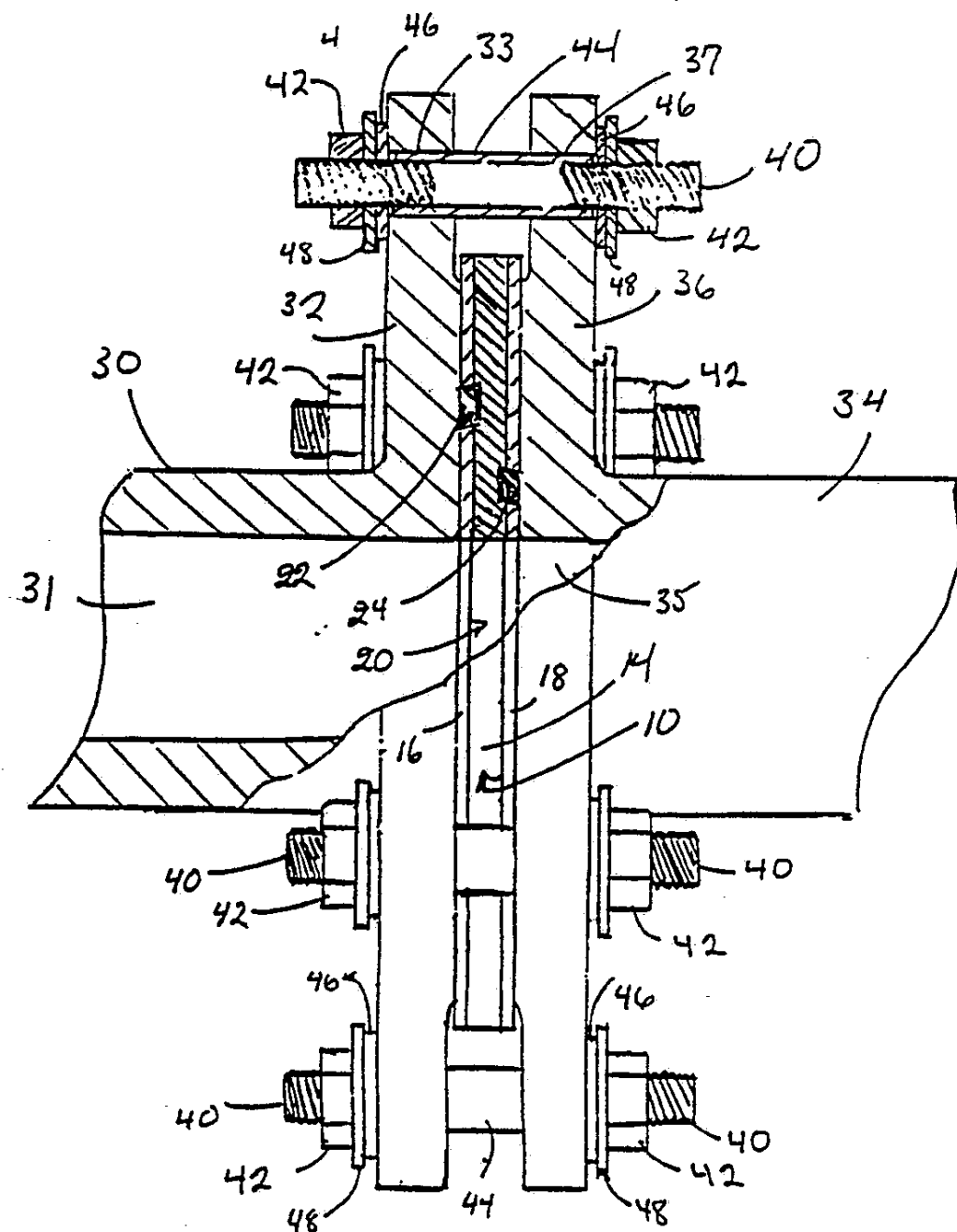
Family 2/18 - FAMPAT - ©Questel

Title

(EP-638152)

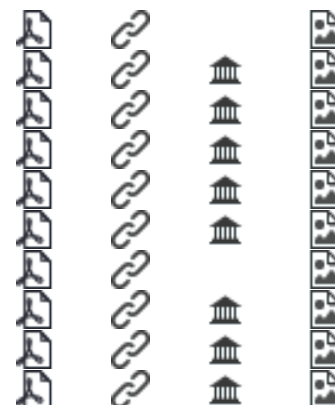
Isolation gasket for critical service flow line applications

Images



Publication numbers with kind code & date

SA437	B1	2005-10-05	SA----437
CA2132438	C	1999-11-30	CA2132438
EP0638152	B1	1997-12-03	EP-638152
EP0638152	A4	1995-04-26	EP-638152
EP0638152	A1	1995-02-15	EP-638152
NO943483	L	1994-11-17	NO-943483
NO943483	D0	1994-09-19	NO9403483
US5316320	A	1994-05-31	US5316320
CA2132438	A1	1993-09-30	CA2132438
WO93/19312	A1	1993-09-30	WO9319312



IPC - International classification

F16L-023/16; F16L-023/18

Abstract

(EP0638152)

An isolation gasket (10) is provided for interposition between joined pieces of a flow line. The gasket (10) has a gasket

body (12) which electrically isolates the pieces from one another. In one embodiment the gasket (10) has a pair of composite, insulative linings (16, 18) laminated on opposite sides of a metal core (14). An endless channel on each side of the gasket body (12) surrounds a central flow opening (20) and is formed of a depth sufficient to extend through the insulative lining (16, 18) and into the metal core (14). The outer sidewall (54, 74) of each endless channel (50, 70) is at an acute angle to its bottom wall (52, 72), and the inner sidewall (56, 76) is at an angle of at least ninety degrees with respect to the bottom wall (52, 72). The channels (50, 70) may be opposed to or offset from another.

Inventors

BREAKER JOHN V

Latest standardized assignees - inventors removed

CORROSION CONTROL

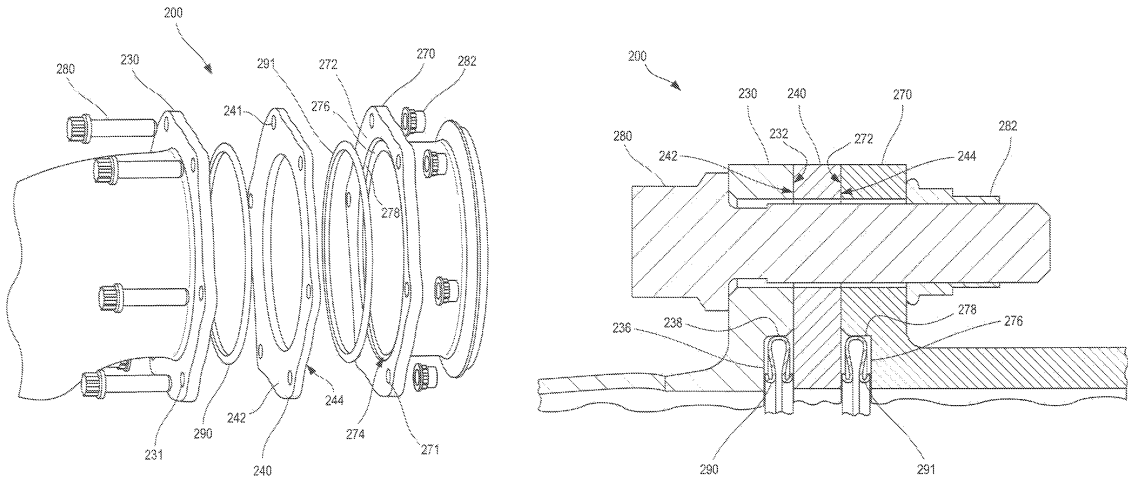
Family 3/18 - FAMPAT - ©Questel

Title

(US20200025098)

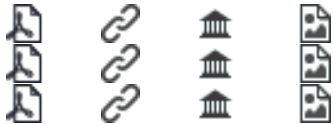
Bolted duct joints

Images



Publication numbers with kind code & date

US20200025098	A1	2020-01-23	US20200025098
US10287990	B2	2019-05-14	US10287990
US20160040810	A1	2016-02-11	US20160040810



IPC - International classification

F01D-011/00; F02C-006/08; F02C-007/28; F16L-017/08; F16L-021/04; F16L-021/08; F16L-023/20; F16L-023/24

Abstract

(US20200025098)

A first duct segment may include a first flange including a first planar mating face and a first recess. A second duct segment may include a second flange including a second planar mating face and a second recess. The first duct segment and the second duct segment may be installed in a gas turbine engine. A first E-seal may be inserted in the first recess, and a second E-seal may be inserted in the second recess. A gap may be measured between the first flange and the second flange. A flat shim may be selected based on the size of the gap. The flat shim may be inserted between the first flange and the second flange. A plurality of bolts may be inserted through the first flange, the flat shim, and the second flange to seal the first duct segment to the second duct segment.

Inventors

WINKLER RICHARD

Latest standardized assignees - inventors removed

UTC AEROSPACE SYSTEMS

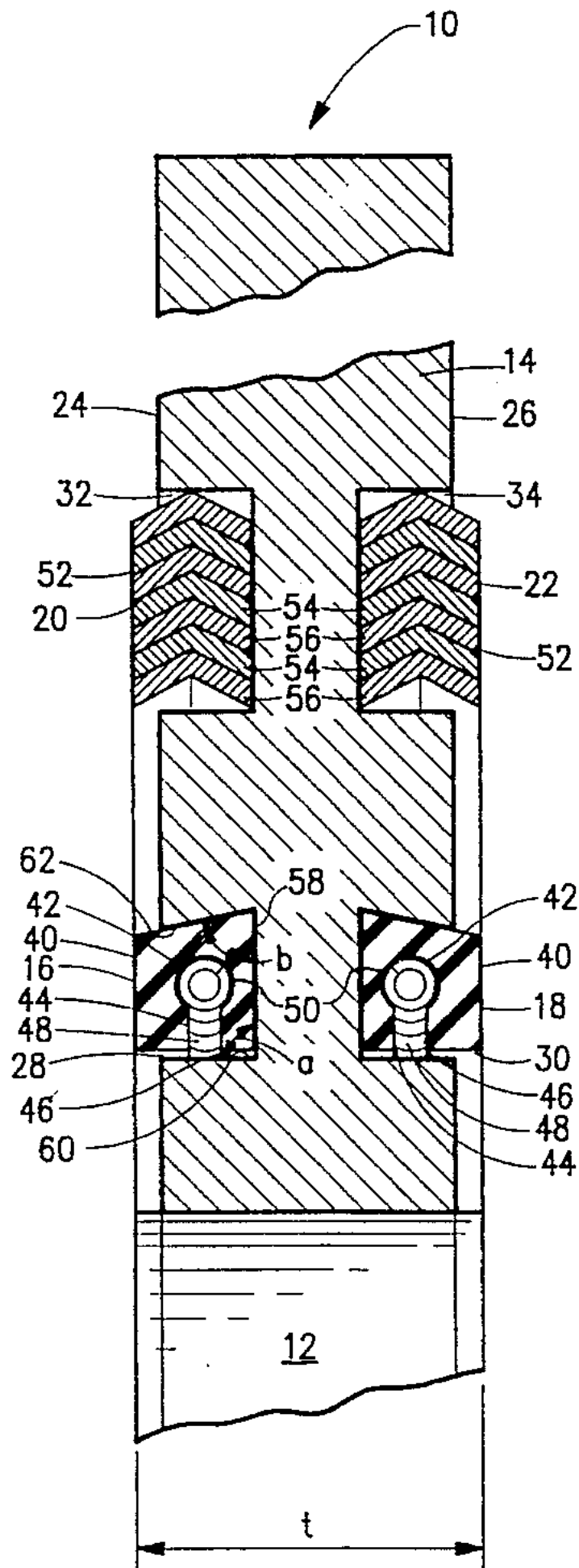
Family 4/18 - FAMPAT - ©Questel

Title

(WO9510720)

Tandem seal device for flow line applications

Images



Publication numbers with kind code & date

US5564715	A	1996-10-15	US5564715
AU1039595	A	1995-05-04	AU9510395
WO95/10720	A1	1995-04-20	WO9510720

**IPC - International classification**

F16J-015/12; F16L-023/16

Abstract

(WO95/10720)

A tandem seal device (10) for use in fluid flow lines has a retainer body (14) with a central opening (12). An inner pair of continuous grooves (28, 30) carry a first pair of seal elements (16, 18), and an outer pair of continuous grooves (32, 34) carry a second pair of seal elements (20, 22). The first and second pair of seal elements are fabricated of different materials having different protective characteristics. The retainer body (14) is preferably annular, and annular seal elements (16, 18, 20, 22) are received in circular grooves (28, 30, 32, 34). Materials for the construction of seal elements (16, 18, 20, 22) include: corrosion-resistant material, and a variety of specific materials are disclosed. The seal elements (16, 18, 20, 22) may be activated seals. Preferably, the retainer body (14) is rigid material such as metal, and it may include outer epoxy laminations.

Inventors

WALLACE THOMAS C

Latest standardized assignees - inventors removed

CORROSION CONTROL

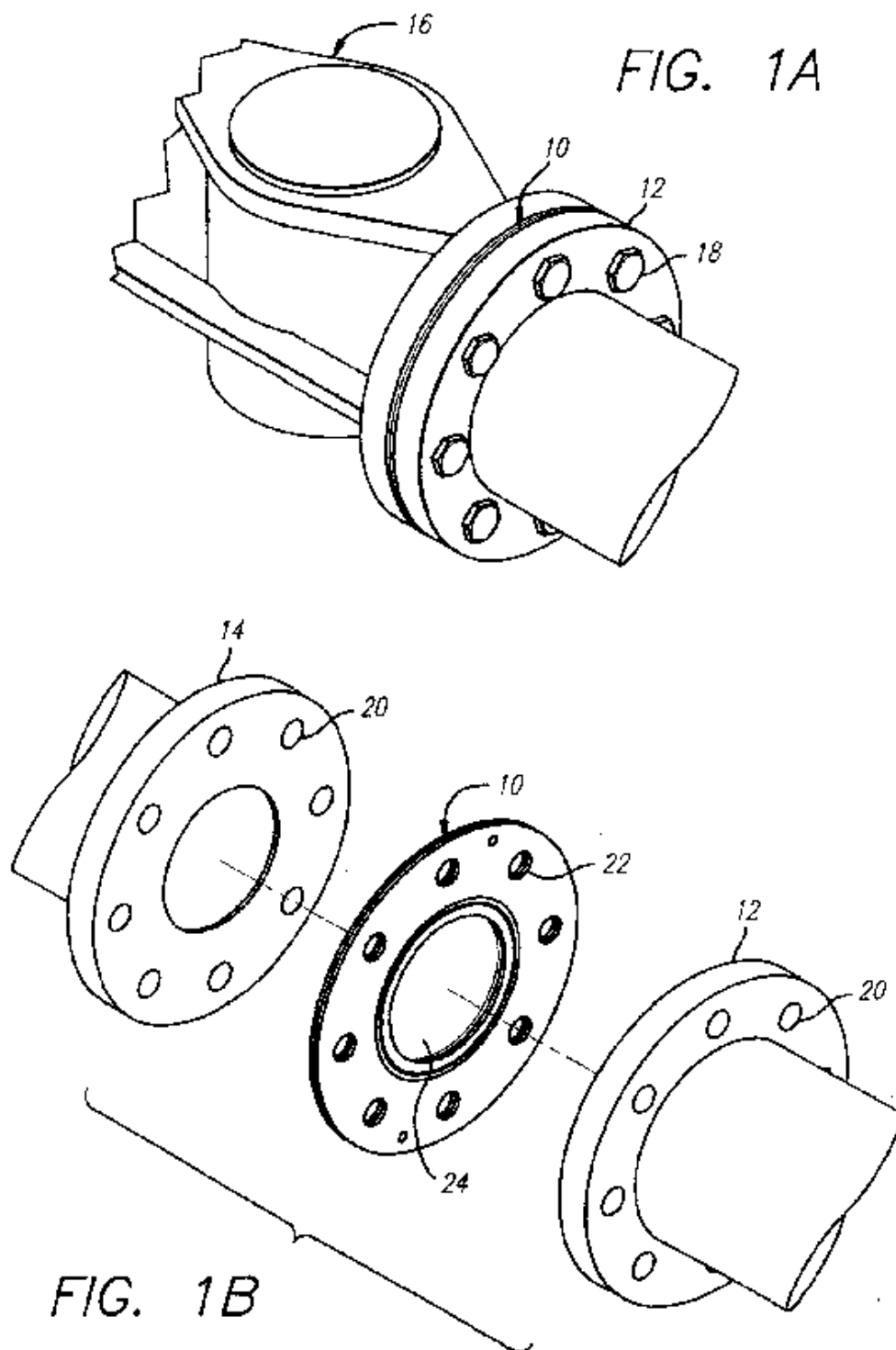
Family 5/18 - FAMPAT - ©Questel

Title

(US5758882)

Screened gasket for high pressure fluid transmission applications

Images

**Publication numbers with kind code & date**[US5758882](#)

A

1998-06-02

US5758882

**IPC - International classification**

F16J-015/06; F16J-015/06

Abstract

(US5758882)

A screened gasket for sealing a junction and filtering fluid flowing through the junction includes a sandwich-type structure with first and second gasket members holding a central screen securely therebetween. An inner seal annularly surrounds the screen and prevents radial fluid leakage between the two gasket members. Outer seals are provided which engage the surfaces of the flanges of the junction.

Inventors

TORZEWSKI LEO F

Latest standardized assignees - inventors removed

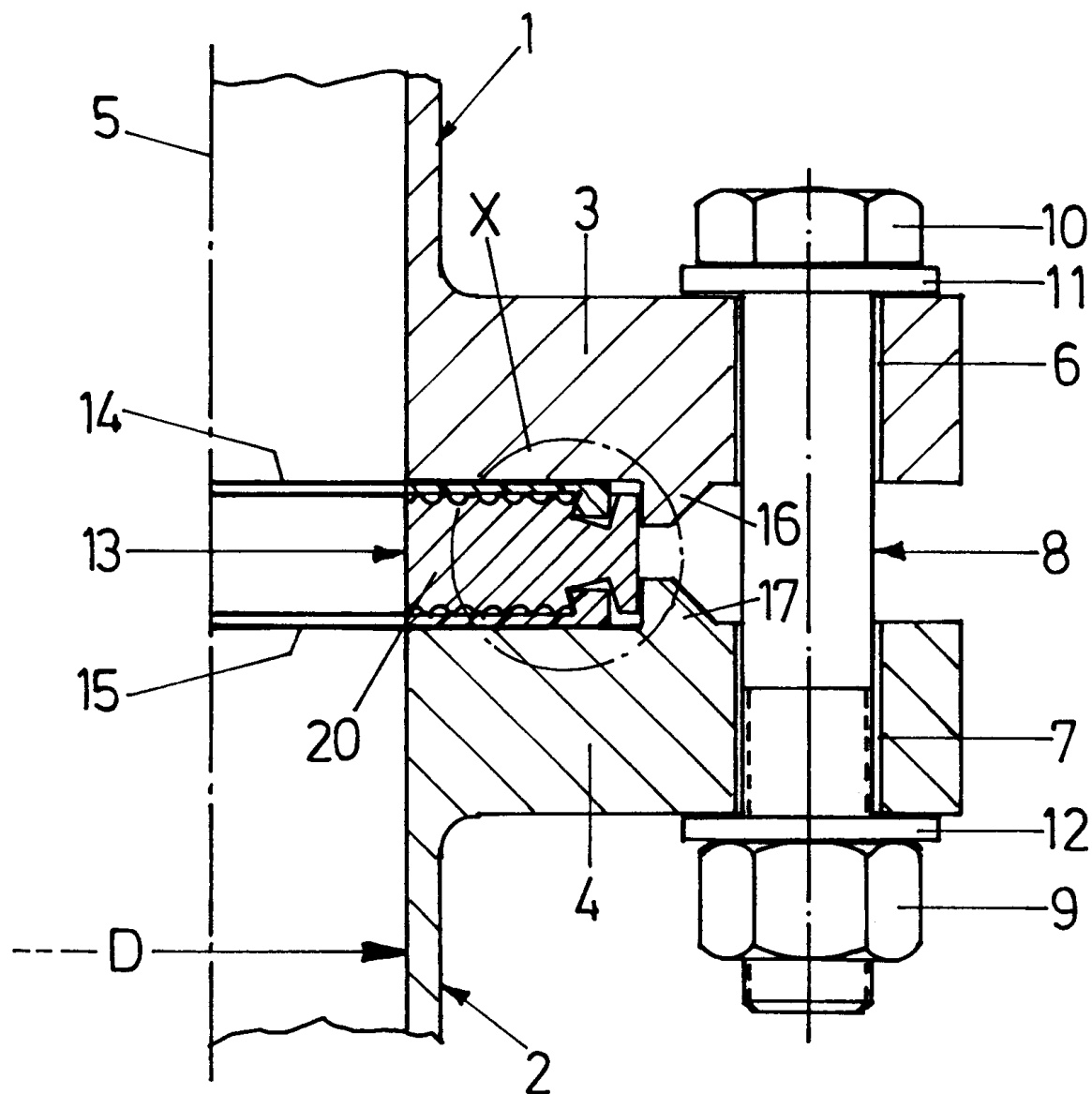
CORROSION CONTROL

Family 6/18 - FAMPAT - ©Questel

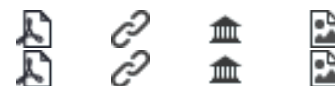
Title

(US6290237)

Flat ring packing

Images**Publication numbers with kind code & date**

US6290237	B1	2001-09-18	US6290237
DE29812929	U1	1998-10-08	DE29812929

**IPC - International classification**

F16L-023/18; F16L-023/18

Abstract

(US6290237)

A flat ring packing to be placed between two flanges comprises two packing layers of packing material and an intermediate ring of metal, which is disposed between the two packing layers and has a common central longitudinal axis therewith. Each packing layer is fixed on the intermediate ring substantially without play radial and parallel to the axis by means of a connection.

Inventors

GRAUPNER EDGAR

Latest standardized assignees - inventors removed

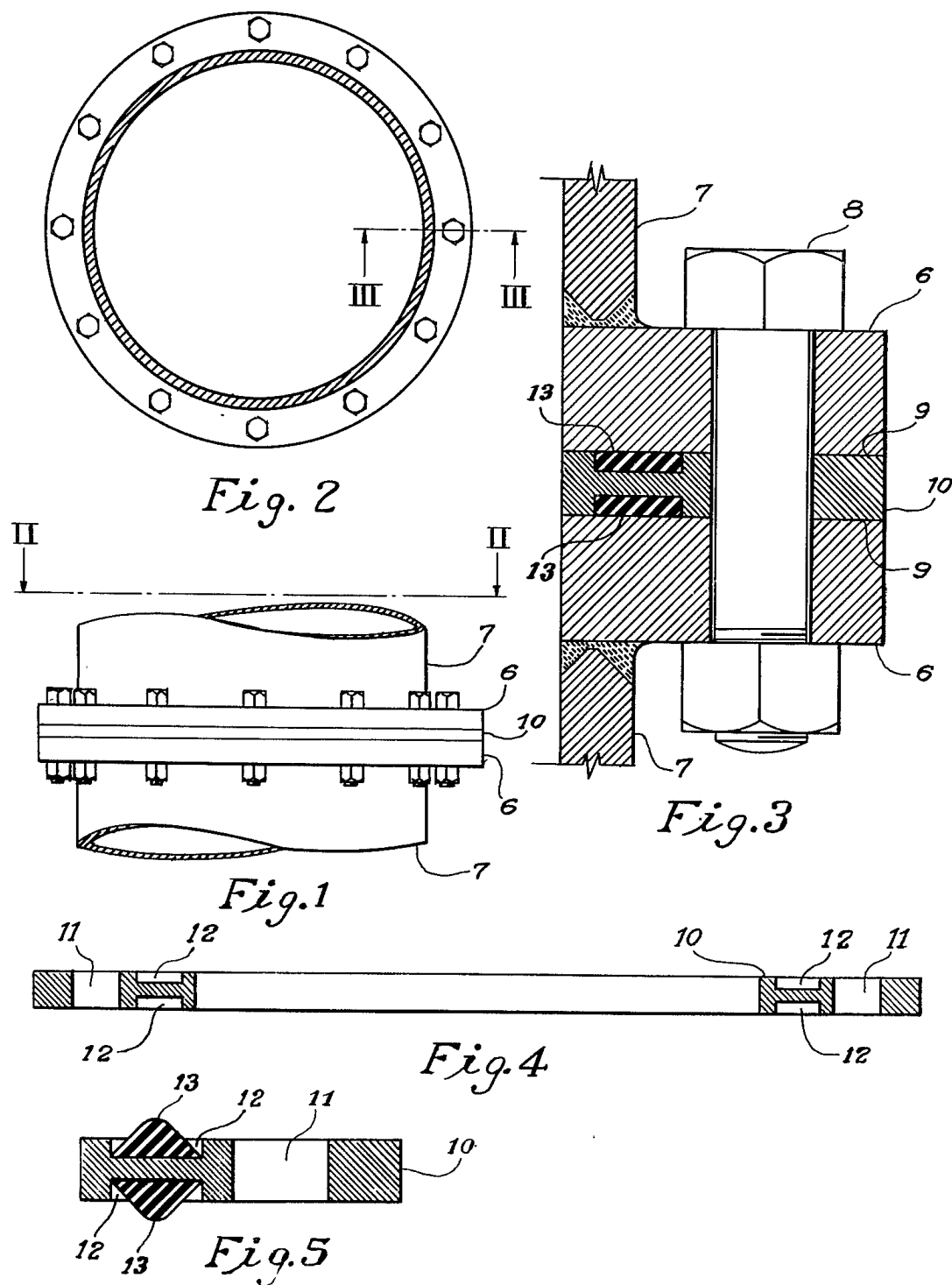
IDT INDUSTRIE & DICHTUNGSTECHNIK

Family 7/18 - FAMPAT - ©Questel

Title

(US2513178)

Bolted flange connection

Images

BY

INVENTOR
James O. Jackson
Green & McCallister
his ATTORNEYS

Publication numbers with kind code & date

[US2513178](#) A 1950-06-27 US2513178

**IPC - International classification**

F16L-023/22; F16L-023/22

Inventors

JACKSON JAMES O

Latest standardized assignees - inventors removed

PITTSBURGH DES MOINES

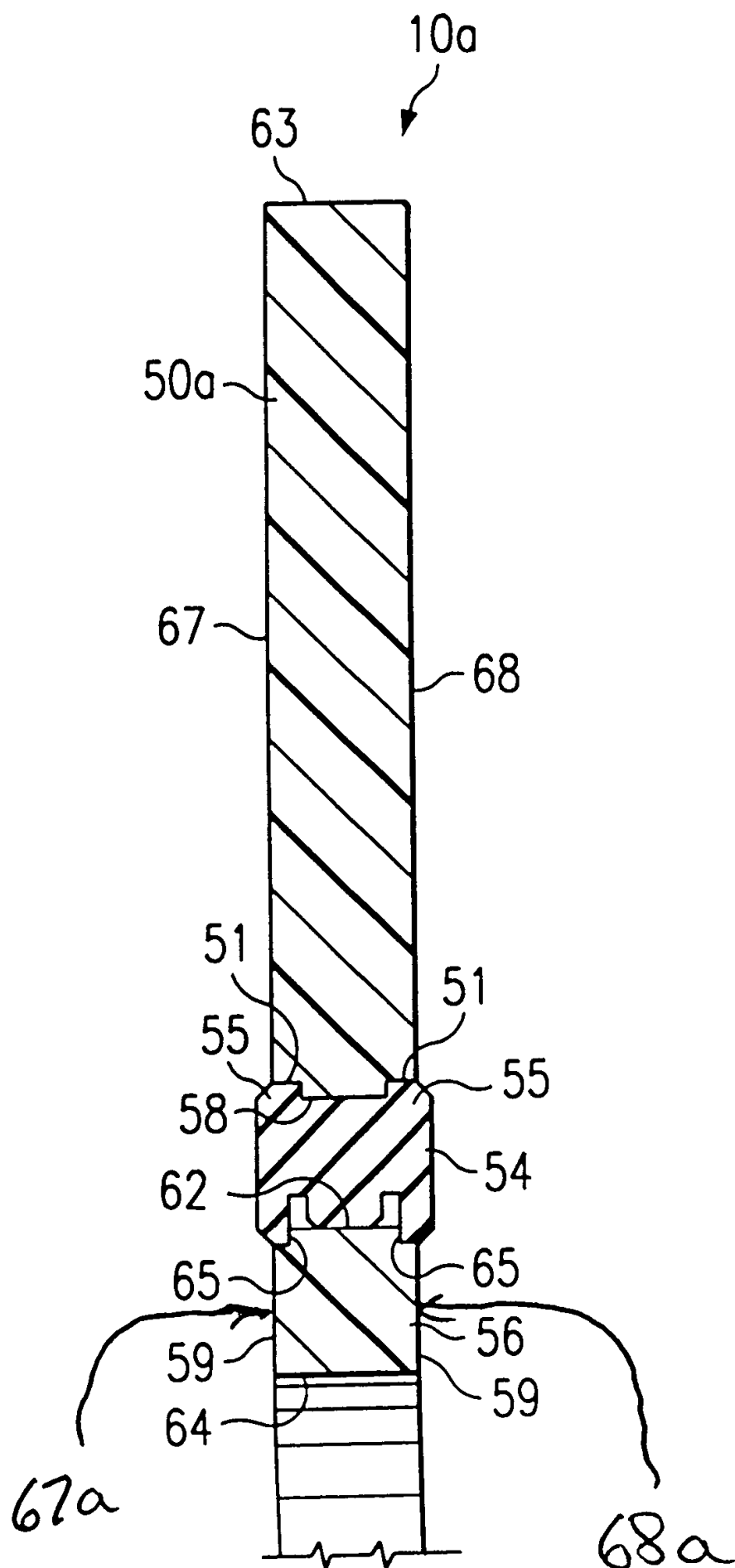
Family 8/18 - FAMPAT - ©Questel

Title

(US6402159)

Dielectric gasket

Images



Publication numbers with kind code & date

US6402159

B1 2002-06-11

US6402159

**IPC - International classification**

F16L-023/16; F16L-025/02

Abstract

(US6402159)

A dielectric gasket (10) includes an outer annular disk (50) and an inner annular disk (56) both formed, at least in part, from electrically non-conducting materials. A seal (54) is disposed between an inside diameter (58) of the outer annular disk (50) and an outside diameter (62) of the inner annular disk (56). The outer annular disk (50), the inner annular disk (56), and the seal (54) operate to form an insulating barrier of electrically non-conducting material between adjacent pipe flanges (12, 14).

Inventors

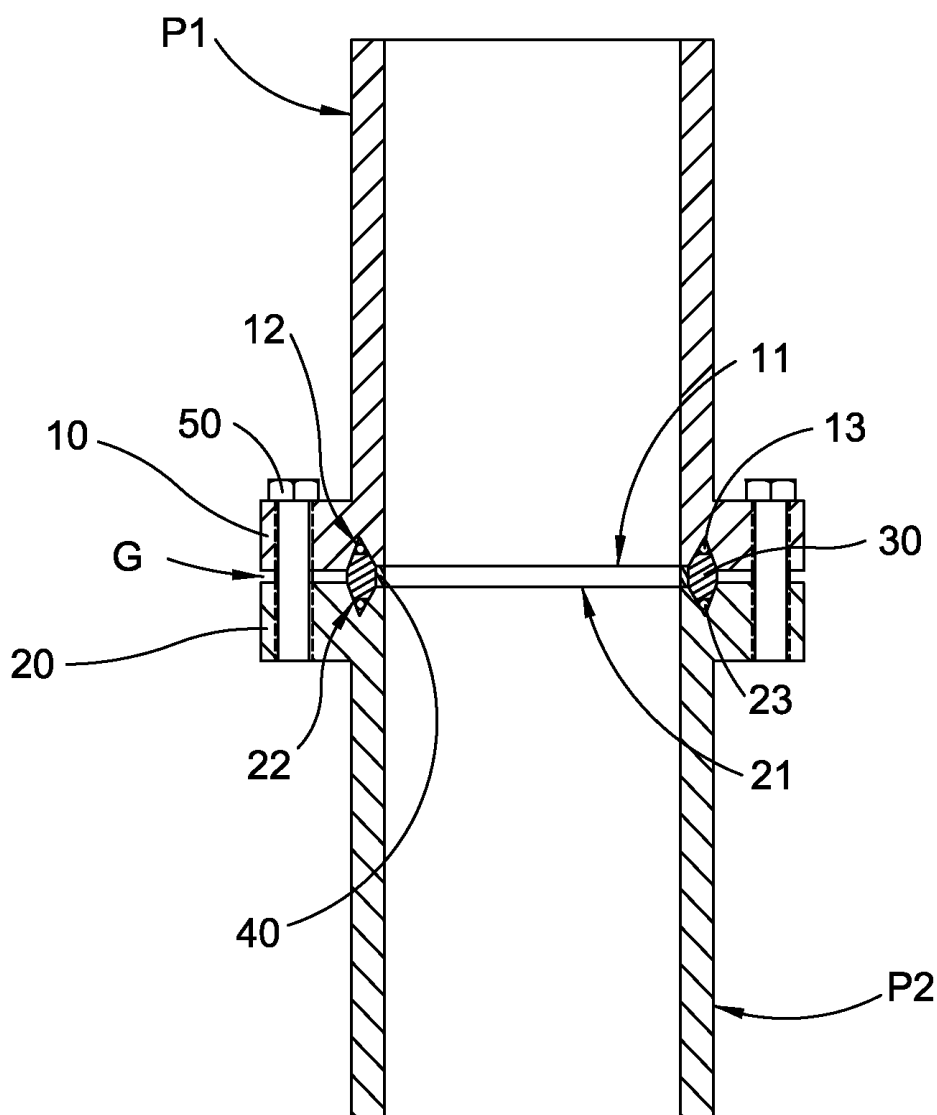
KOHN GARY A

Family 9/18 - FAMPAT - ©Questel

Title

(US20150021863)

Mutiple-Leak Proof Sealiing System

Images

Publication numbers with kind code & date

US20150021863

A1 2015-01-22

US20150021863

**IPC - International classification**

F16L-023/18; F16L-023/18

Abstract

(US20150021863)

A Multiple-leak proof sealing system which is used to join two components sealed together and comprises: a first adapter ring and a second adapter ring and comprising a first joint face and a second joint face, which are opposite to each other, respectively, wherein the first joint face and the second joint face have gasket grooves which are opposite to each other; sealing gaskets which are embedded into the first adapter ring's and the second adapter ring's gasket grooves; a metal sealing ring installed between sealing gaskets on the first adapter ring and the second adapter ring; an auxiliary sealing ring joining the sealing ring's radial inner wall. The sealing structure with multiple sealing surfaces is developed when the first adapter ring and the second adapter ring join together by fastenings.

Inventors

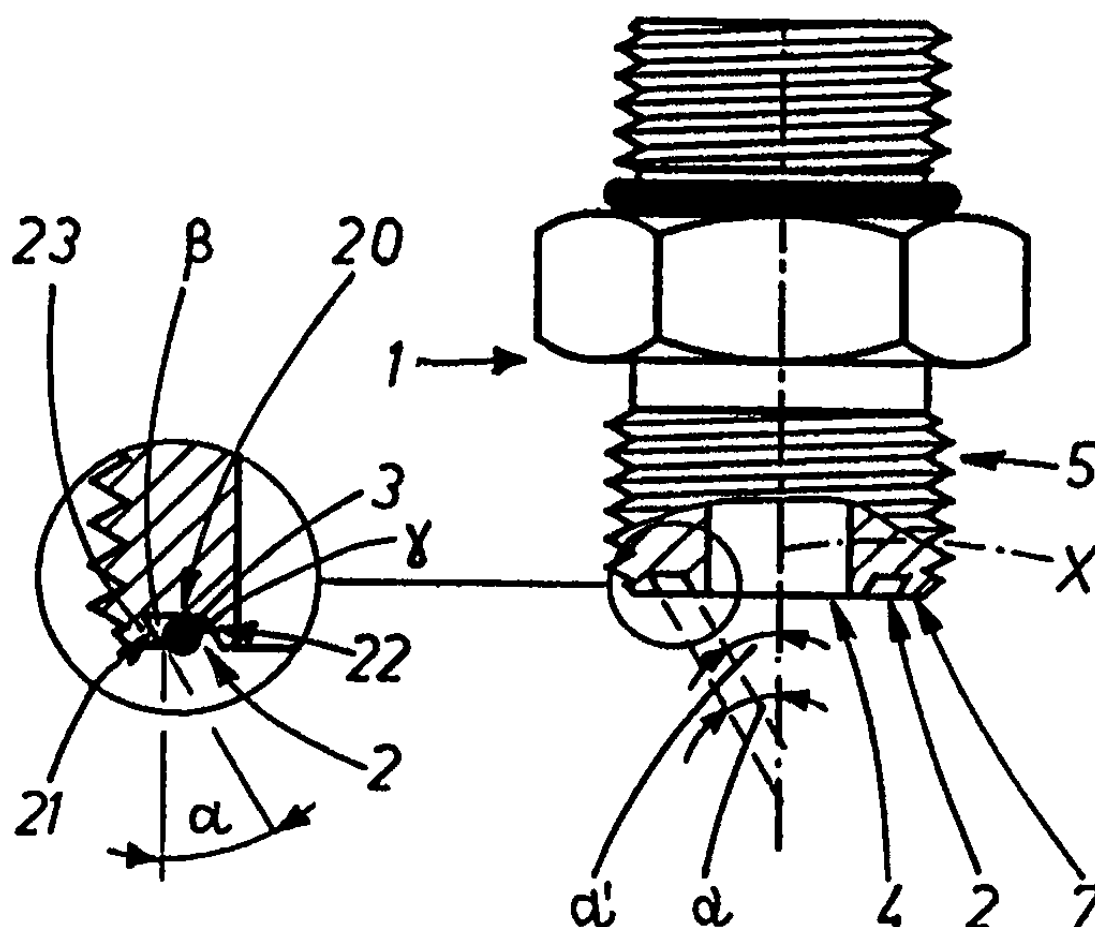
WANG JUI-KUNG

Family 10/18 - FAMPAT - ©Questel

Title

(WO9819094)

Connector for hydraulic and pneumatic systems

Images**Publication numbers with kind code & date**

IT1286740

B1 1998-07-17

IT1286740

AU4883097

A 1998-05-22

AU9748830

WO98/19094

A1 1998-05-07

WO9819094



ITBO960554

A1 1998-04-30

IT96BO0554



ITBO960554

D0 1996-10-31

IT96BO0554

IPC - International classification

F16L-017/06; F16L-023/16

Abstract

(WO98/19094)

The present invention relates to a connector (1) for hydraulic and pneumatic systems of the type presenting a hole (4) for the passage of a fluid and a seat (2) with circular development arranged coaxially with respect to the hole (4) of the connector and destined to house an annular gasket (3); the seat (2) seen according to a section coplanar to the axis (X) of the hole (4), is shaped as an open quadrilateral, with a base portion or base (20) essentially perpendicular to the axis (X) of the hole (4) and two walls (21, 22) defined by rotational surfaces; at least one of the walls (21, 22) is tilted with respect to the base (20), i.e., it is not perpendicular thereto, so as to define a tooth (23) delimiting the seat (2) and able to hold the gasket (3) stably inserted in the seat (2) itself

Inventors

CREMONINI VALTER

Latest standardized assignees - inventors removed

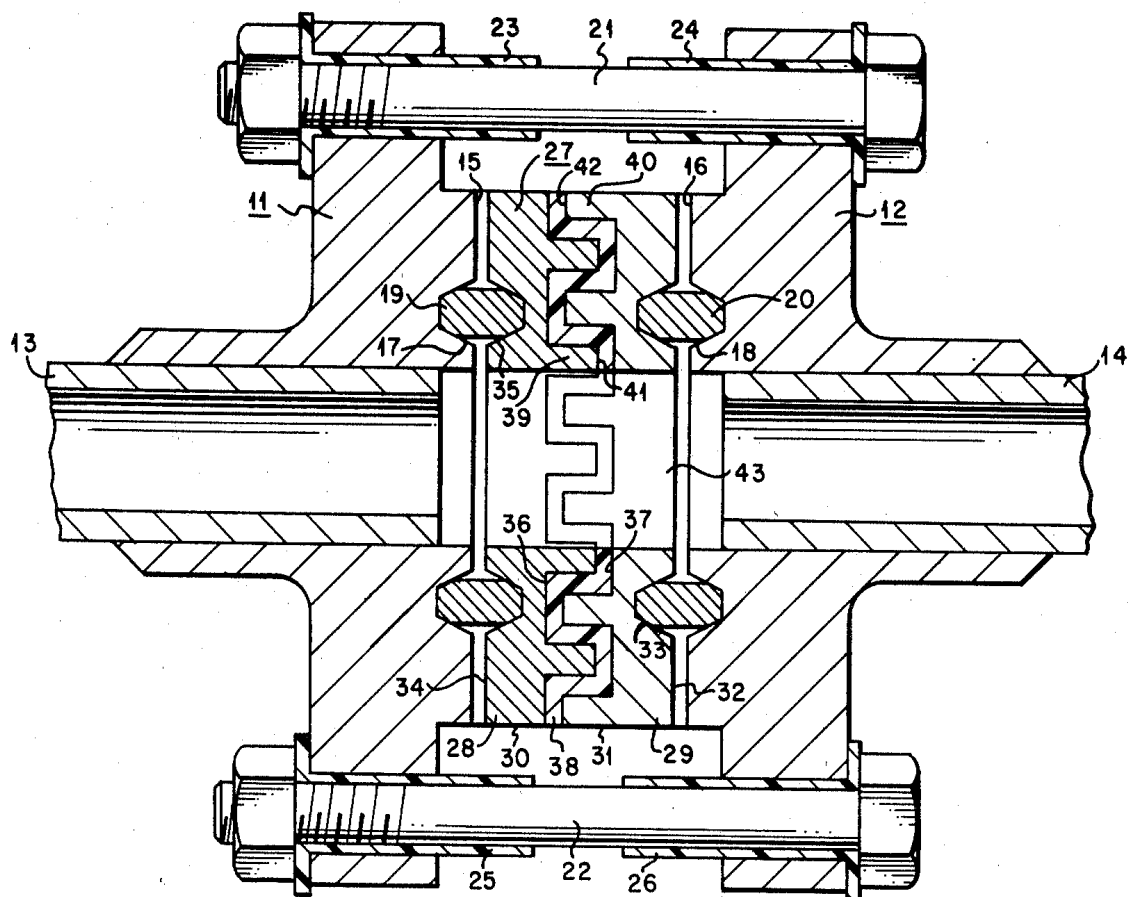
FOR

Family 11/18 - FAMPAT - ©Questel

Title

(US4406467)

High pressure electrical isolation flange gasket

Images**Publication numbers with kind code & date**

US4406467

A 1983-09-27

US4406467

**IPC - International classification**

F16L-025/02

Abstract

(US4406467)

An electrical isolation, high pressure resistant gasket for API or ANSI seal ring flanges has four combined features. The gasket has two relatively thick, unyielding metal plates electrically separated from each other by an insulating material. The outer face surfaces of the metal plates are grooved for metal seal rings. The inner face surfaces have metal ridges. The insulating material electrically isolates the plates and the strength of the plates and metal ridges prevent distortion of the plates and blowout of the insulation material. Preferably, the metal ridges extend inwardly overlapping each other. The metal plates may be made of dissimilar metals.

Inventors

BURGER EDWARD D

KOHN GARY A

Latest standardized assignees - inventors removed

ATLANTIC RICHFIELD

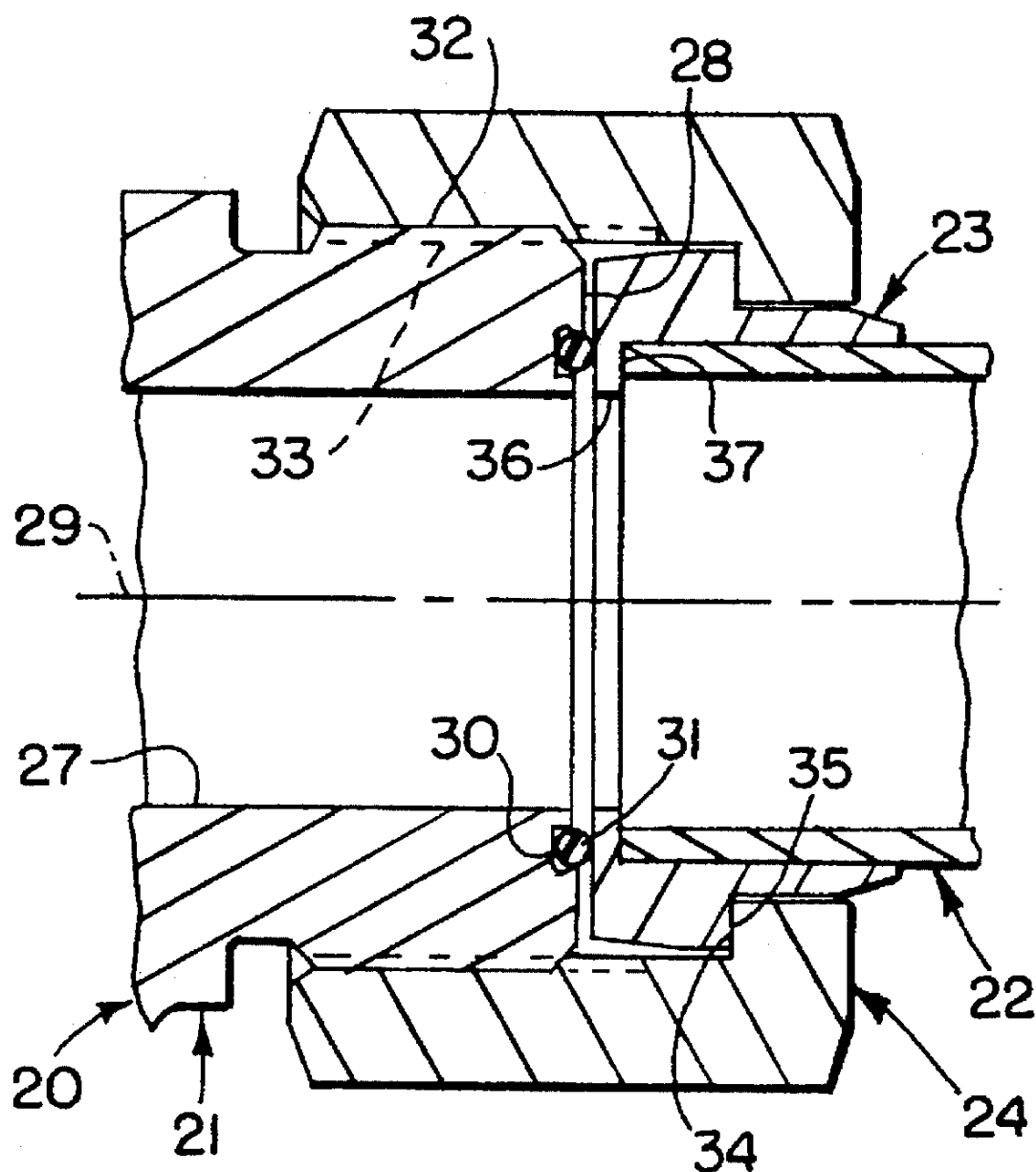
Family 12/18 - FAMPAT - ©Questel

Title

(EP-698190)

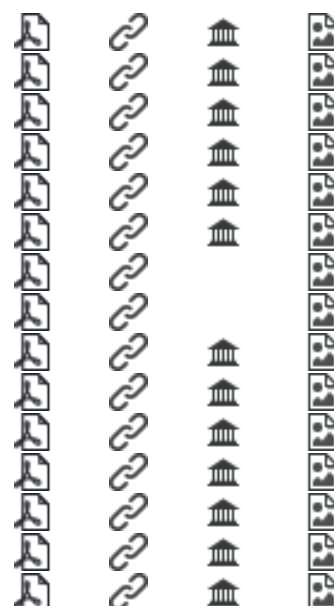
Face seal assembly and method of making same

Images



Publication numbers with kind code & date

DE69415803	T2	1999-05-20	DE69415803
DE69415803	D1	1999-02-18	DE69415803
EP0698190	B1	1999-01-07	EP-698190
AU686615	B2	1998-02-12	AU-686615
JPH08511079	A	1996-11-19	JP08511079
US5564177	A	1996-10-15	US5564177
KR19960702084	A	1996-03-28	KR19967002084
KR960702084	A	1996-03-28	KR19960702084
EP0698190	A1	1996-02-28	EP-698190
US5490680	A	1996-02-13	US5490680
BR9406058	A	1995-12-26	BR9406058
WO94/24466	A3	1995-02-09	WO9424466
AU6528594	A	1994-11-08	AU9465285
CA2159625	A1	1994-10-27	CA2159625
WO94/24466	A2	1994-10-27	WO9424466



IPC - International classification

F16J-015/06; F16J-015/18; F16L-019/02

Abstract

(EP0698190)

A fitting body is provided with a lip that protrudes radially from at least one of the side walls of the seal groove in the sealing face toward the other side wall to form an undercut whereby an annular seal is trapped axially behind the lip to prevent the annular seal from falling out of the groove. The lip is formed by forming the fitting body with a ledge that is integral with the fitting body and protrudes axially from the sealing face adjacent one of the side walls of the groove in the sealing face. The ledge is then flattened to form the lip and an annular seal such as an elastomeric O-ring seal is then inserted into the groove with the annular seal being mechanically trapped axially behind the lip to prevent the annular seal from falling out of the groove.

Inventors

PATEL HIRALAL V

FERNANDES EDWARD M

Latest standardized assignees - inventors removed

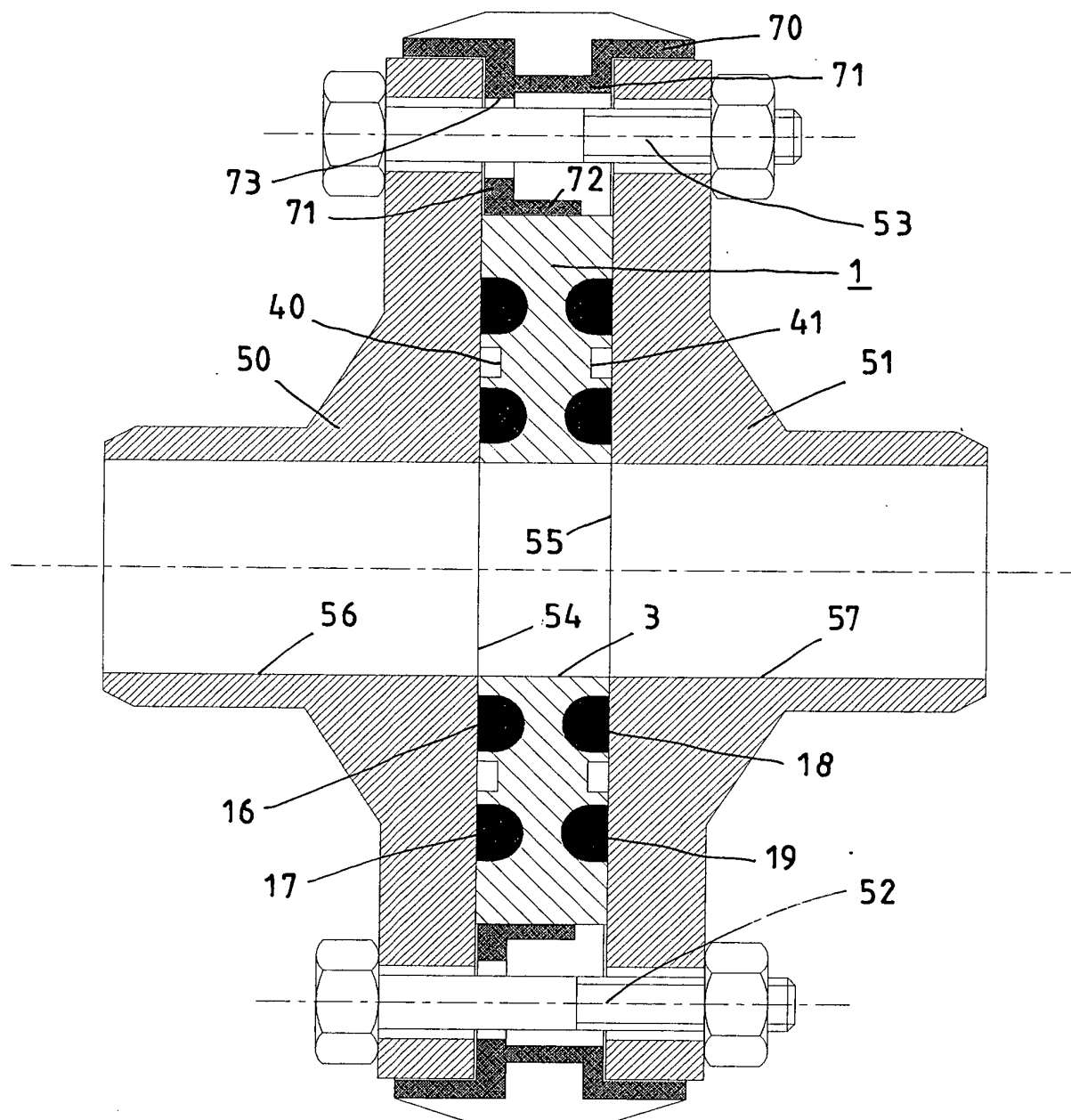
PARKER INTANGIBLES

Family 13/18 - FAMPAT - ©Questel

Title

(DE9403963)

Sealing Element

Images

Publication numbers with kind code & date

DE19507736	B4	2008-05-08	DE19507736
DE19507736	A1	1995-09-14	DE19507736
DE9403963	U1	1994-05-05	DE9403963

**IPC - International classification**

F16J-015/06; F16J-015/06; F16J-015/12; F16L-023/16; F16L-023/18; F16L-023/18

Abstract

(DE9403963)

The seal has a rigid ring (1) of metal etc. with grooves (16 to 19) on each side concentric to the central axis. Elastic sealing rings are pressed into the grooves to seal to the flange connections and to secure the seal. The flanges are pulled together by threaded fasteners (53) with the rigid ring limiting the stress on the sealing rings. The grooves can be located at similar radii on each face of the rigid ring. Venting grooves between the sealing rings are linked to drainage ducts to drain out any leakages which might seep into the space between the rings.

(From DE19507736 A1)

Inventors

ARMAND GUNTER

Latest standardized assignees - inventors removed

ALBERT ZIMMERMANN & SOEHNE GMB

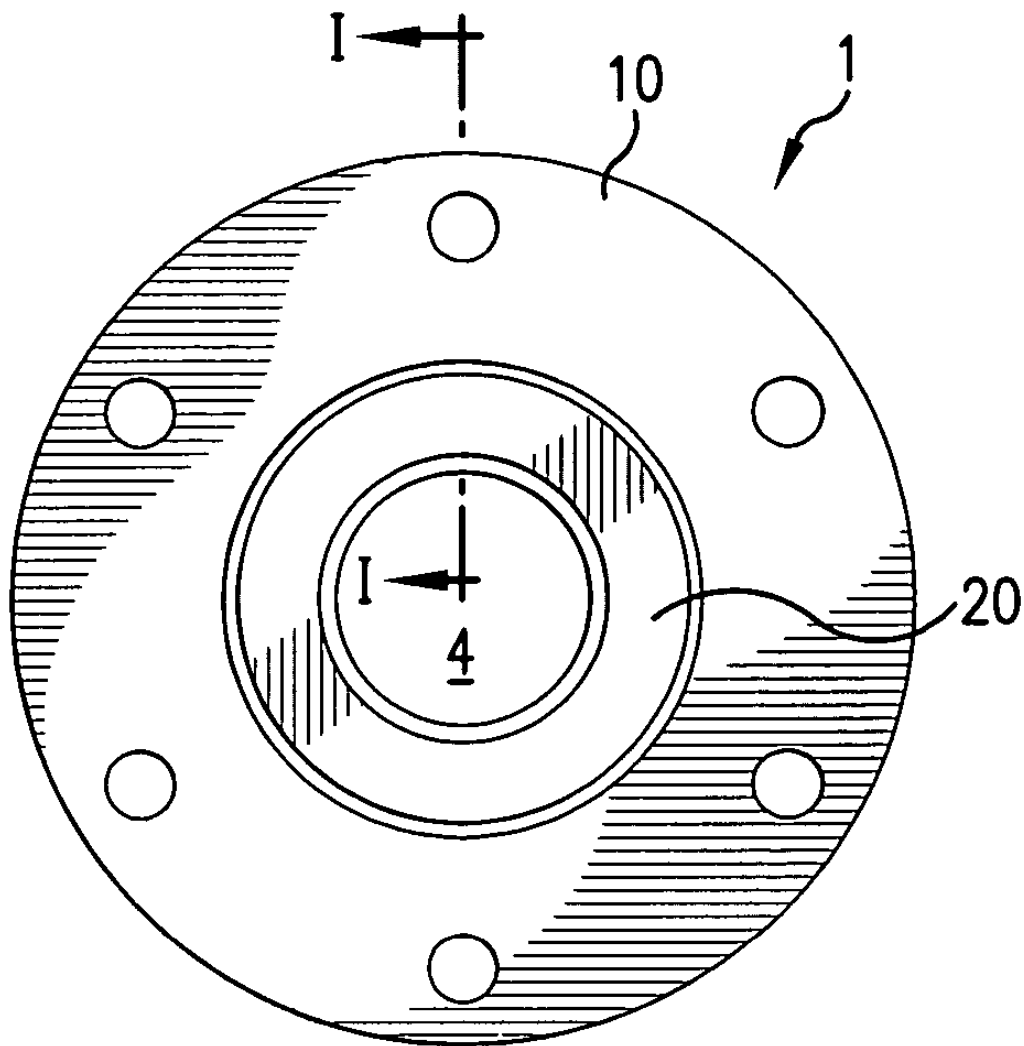
Family 14/18 - FAMPAT - ©Questel

Title

(WO200501315)

Rebuildable composite seal

Images

**Publication numbers with kind code & date**

WO2005/001315	A3	2005-11-24	WO200501315
WO2005/001315	A2	2005-01-06	WO200501315
US20040262851	A1	2004-12-30	US20040262851

**IPC - International classification**

F16L-023/18; F16L-023/18; F16L-025/02

Abstract

(WO2005/001315)

A seal assembly is provided comprising an annular retainer comprising first and second flat circular faces and a central aperture extending through the center of said faces to allow fluid to flow therethrough, said annular retainer further comprising a pair of annular grooves formed in the first and second circular faces between said central aperture and the radially outer edge of the retainer, said grooves comprising a cross section including a width and a depth. A pair of annular seal elements disposed at least partially within the grooves and comprise cross sections including a width and a thickness wherein the thickness of the seal elements is greater than the depth of the grooves, and the seal elements are retained within the grooves with an adhesive.

Inventors

TONES MATT

REID DAN

Latest standardized assignees - inventors removed

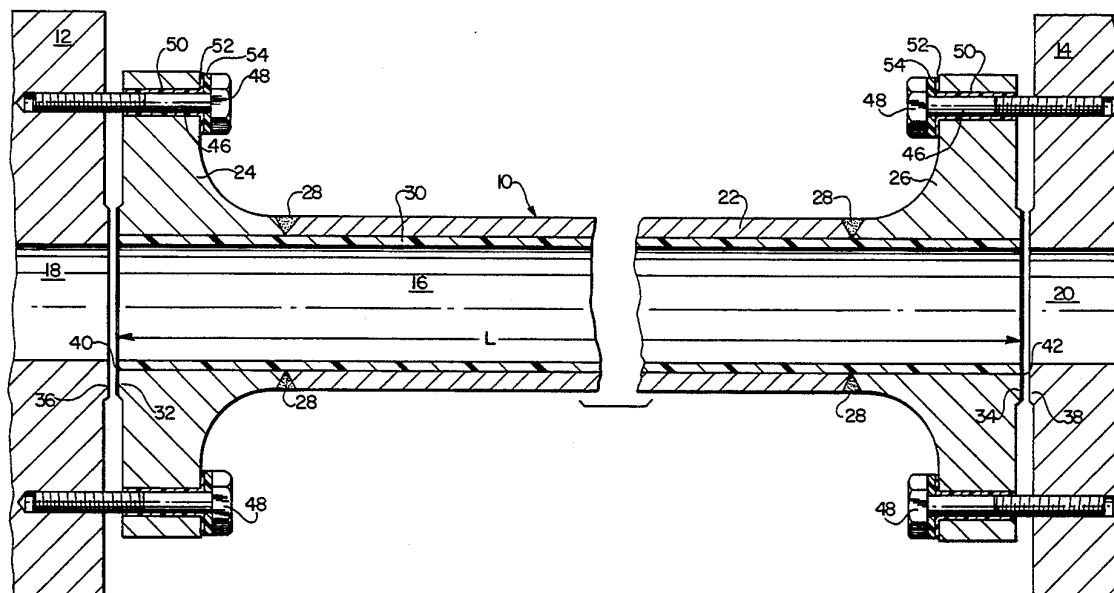
GARLOCK SEALING TECHNOLOGIES

Family 15/18 - FAMPAT - ©Questel

Title

(US5333913)

Galvanic isolation device

Images**Publication numbers with kind code & date**[US5333913](#)

A

1994-08-02

US5333913

**IPC - International classification**

F16L-025/02; F16L-058/18

Abstract

(US5333913)

Galvanic isolation between two fluid-conducting members made of dissimilar materials is provided by a coupling pipe that separates the two members (e.g. a pipe and a valve). The coupling pipe includes a tubular section and two flange sections, which mate with the two fluid-conducting members. An insulating liner on the inside diameter of the tubular and flange sections of the coupling device extends the entire length of coupling pipe and is coextensive with flange insulators that separate the coupling pipe from the two fluid-conducting members. The substantial separation distance provided by the coupling pipe with continuous insulation prevents or significantly reduces electrochemical corrosion.

Inventors

STALLARD III CLINTON W

Latest standardized assignees - inventors removed

HUNTINGTON INGALLS

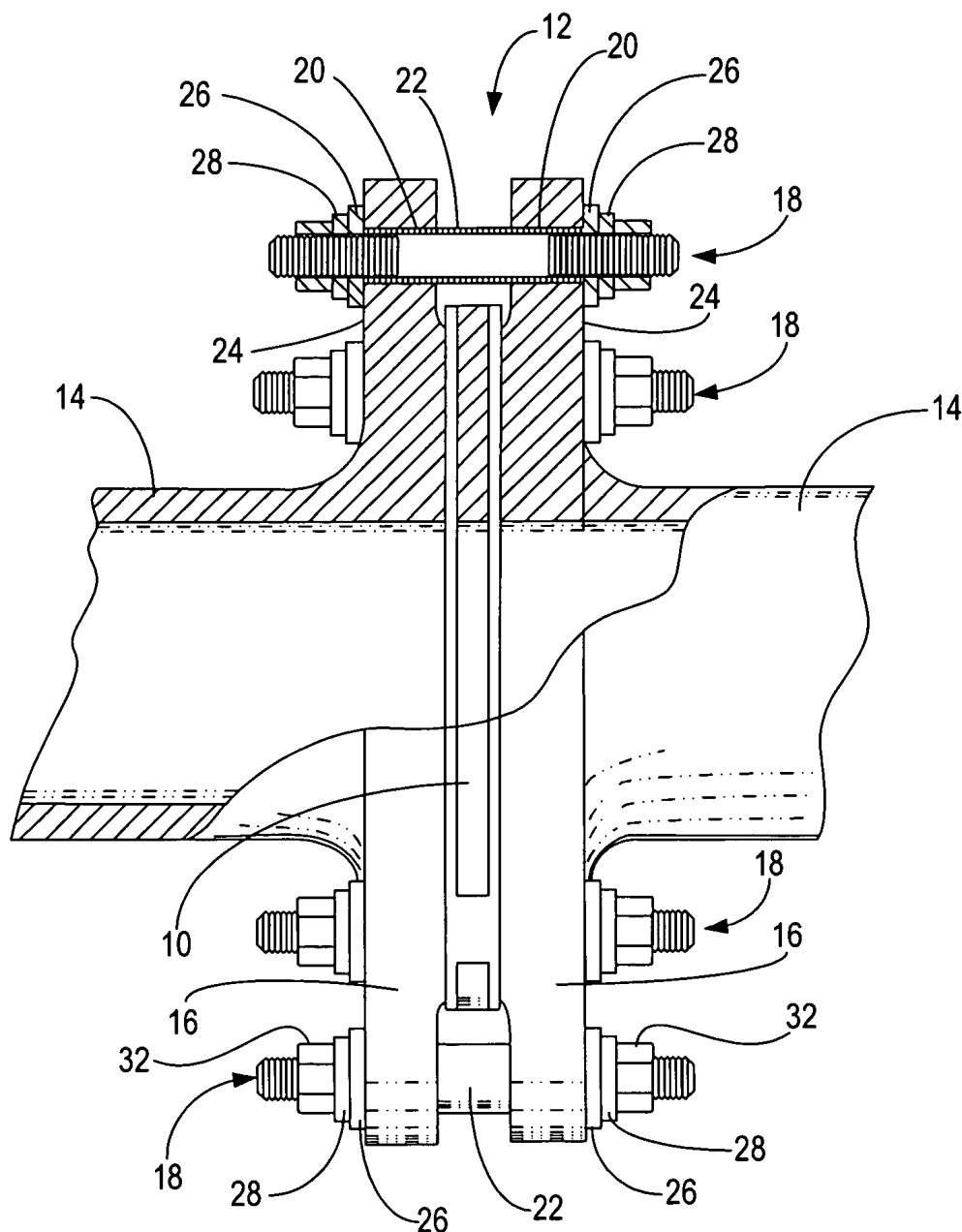
Family 16/18 - FAMPAT - ©Questel

Title

(EP1869356)

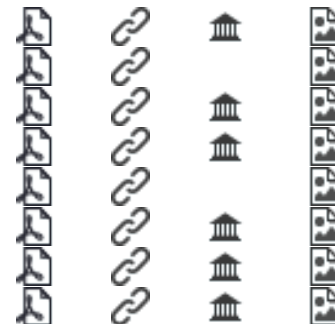
Isolation gasket, system and method of manufacture

Images



Publication numbers with kind code & date

DE602006011864	D1	2010-03-11	DE602006011864
AT455996	T	2010-02-15	ATE455996
EP1869356	B1	2010-01-20	EP1869356
EP1869356	A1	2007-12-26	EP1869356
AR053205	A1	2007-04-25	AR--53205
CA2604849	A1	2006-10-12	CA2604849
WO2006/107798	A1	2006-10-12	WO2006107798
US20060220324	A1	2006-10-05	US20060220324



IPC - International classification

F16J-015/06; F16J-015/12; F16L-005/02; F16L-023/18; F16L-023/18; F16L-025/02

Abstract

(EP1869356)

An isolation gasket (10) for use between joined pieces (16) in a flow line (15) includes, for example, a flat annular metal plate (40) having an opening (44) formed therethrough with a sheet of dielectric material (42) laminated to its opposing side surfaces and a groove (46, 48) formed on the opposing side surfaces which penetrates through the dielectric material and

into the metal plate. Each groove extends completely around the opening in the gasket, and a layer of insulating material, as well as a seal element (50, 52) , is disposed in each of the grooves. An isolation system between joined flange pieces utilizes the isolation gasket in combination, for example, with an insulating sleeve (22) receivable in an aligned bore (20) of each of the joined flange pieces, an elongate metal fastener (30) receivable in the insulating sleeve for connecting the joined flange pieces with the isolation gasket therebetween. A flat metal washer (26) with a sheet of dielectric material laminated to one of its opposing side surfaces is receivable on the elongate metal fastener with the laminated dielectric material abutting one of the flange piece outer faces (24) , and at least one metal spring force exerting component (28) is also receivable on the fastener abutting the flat metal washer.

Inventors

ANDERSON THORNTON J

WALLACE THOMAS

Latest standardized assignees - inventors removed

CORROSION CONTROL

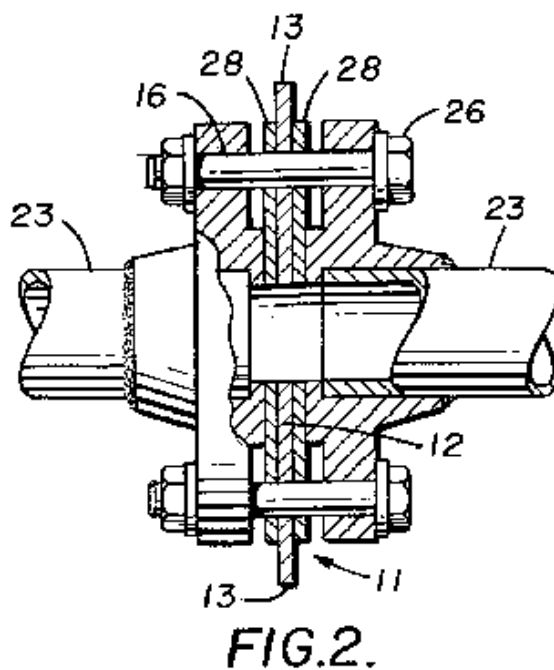
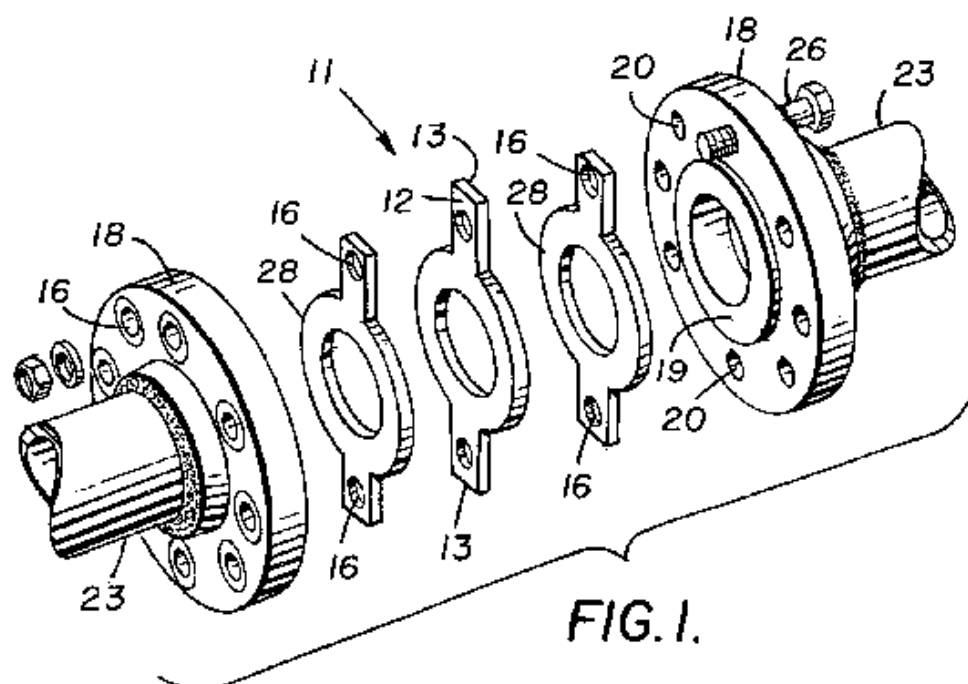
Family 17/18 - FAMPAT - ©Questel

Title

(WO200017547)

Gasket assembly

Images



Publication numbers with kind code & date

US6578851	B1	2003-06-17	US6578851
US6142483	A	2000-11-07	US6142483
WO00/17547	A3	2000-08-24	WO200017547
WO00/17547	A2	2000-03-30	WO200017547



IPC - International classification

F16J-015/12; F16L-023/18

Abstract

(WO00/17547)

A gasket assembly (11) for securing a pair of surfaces (19) together wherein an electrically conductive gasket base (12) having a central opening is provided with a pair of layers (28) secured to opposite sides of the gasket base, with the layers

being a fusible alloy, a brazing alloy or a synthetic, thermoplastic material which will melt, without degrading, when the gasket base is heated. The surfaces may be secured to each other by a plurality of bolts (26) to squeeze the gasket assembly therebetween or by some other clamping means. An electrical current is passed through the gasket base to heat it to a temperature sufficient to melt the layers to seal the surfaces to opposite sides of the gasket base.

Inventors

BRYANT MELVIN A III

Latest standardized assignees - inventors removed

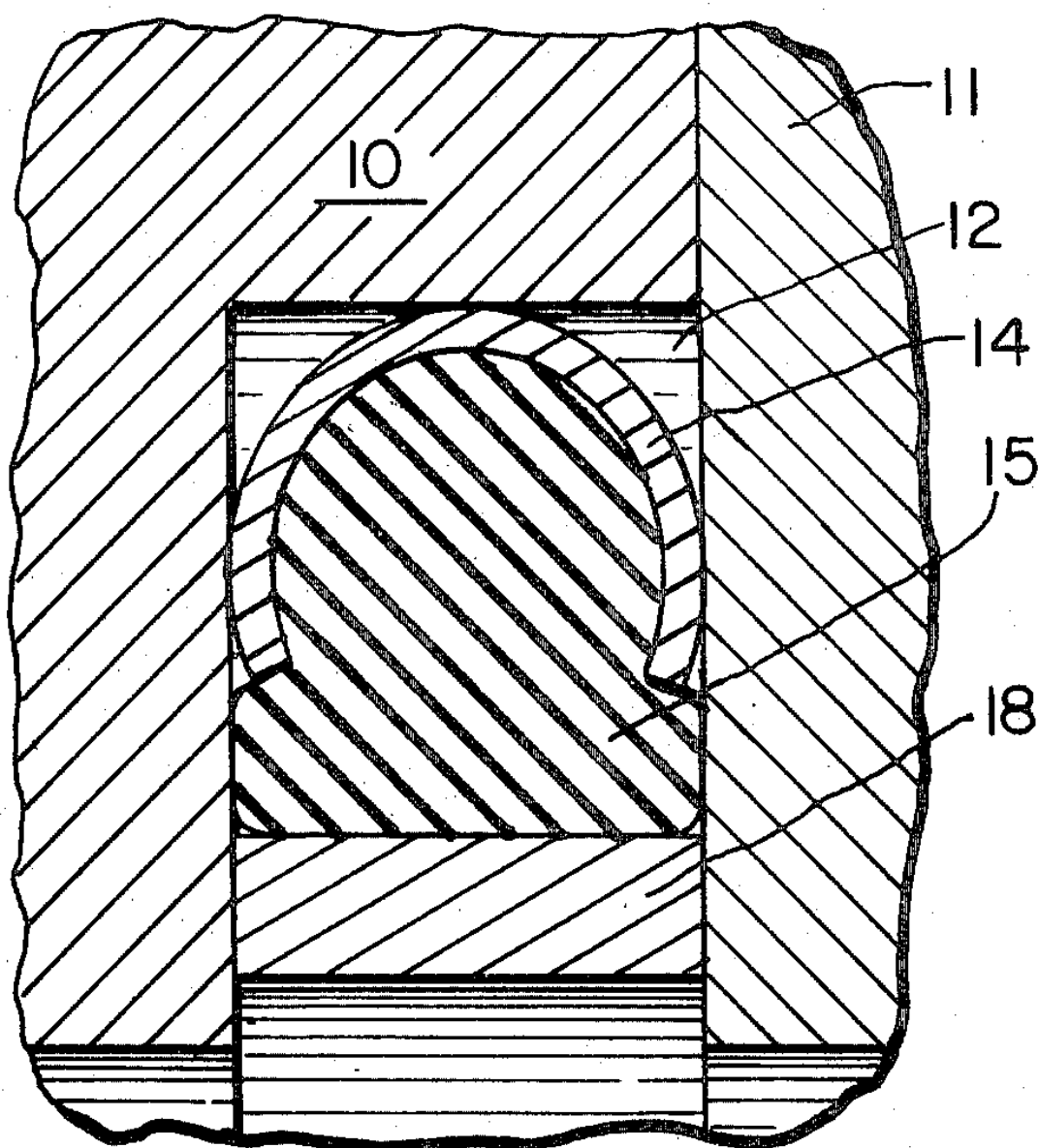
NASA - NATIONAL AERONAUTICS & SPACE ADMINISTRATION

Family 18/18 - FAMPAT - ©Questel

Title

(US3869132)

Fire resistant sealing ring combination

Images**Publication numbers with kind code & date**

FR2238098	B3	1977-04-08	FR2238098
GB1441207	A	1976-06-30	GB1441207
US3869132	A	1975-03-04	US3869132
FR2238098	A1	1975-02-14	FR2238098



DE2431664

A1

1975-02-06

DE2431664

**IPC - International classification**

F16J-015/00; F16J-015/06; F16J-015/12; F16L-023/18

Abstract

(US3869132)

There is disclosed a fail-safe fire resistant sealing ring combination which provides a tight seal in a joint, such as in a fuel line. The primary sealing means for providing a tight seal under normal conditions is achieved by the use of an elastomeric sealing ring. A backup metallic sealing ring having radial leg portions which at least partially surround the elastomeric sealing ring is also provided. Another metallic confining means, e.g., a metallic ring which may be separate from or integral with one of the flanges forming the cavity in which the sealing rings are located, is situated contiguous to the sealing portion of the elastomeric sealing ring on the side opposite of the metallic sealing ring, i.e., in contact with the fluid which is being confined. Under conditions of extremely high temperatures such as generated by fire, the elastomeric seal will initially expand providing a driving force for the metallic sealing ring causing it to be driven with greater force into zero leakage sealing engagement with the sides of the line which is being sealed. When the elastomeric seal subsequently disintegrates due to the high temperature, the metallic seal provides a no-leak fuel seal. In the event of a fire, when fuel is flowing through the pipe, the inner metallic confining means prevents the disintegrating elastomeric compound from entering the fuel stream. It also prevents erosion of the elastomeric seal by the fuel flow during normal operation of the system.

Inventors

TAYLOR DUDLEY D

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Latest standardized assignees - inventors removed

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