

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

ARMATURENFABRIK FRANZ
SCHNEIDER GMBH + CO. KG,

Plaintiff,

v.

RJ MACHINE COMPANY, INC.,

Defendant.

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Civil Case No.: 6:23-cv-00680

JURY TRIAL DEMANDED

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT AGAINST RJ MACHINE

NATURE AND BASIS OF ACTION

1. This is a civil action for infringement of U.S. Patent No. 9,851,030 arising under the patent laws of the United States at 35 U.S.C. § 1, *et seq.* and 28 U.S.C. § 271, *et seq.*, and with subject matter jurisdiction afforded this Court under 28 U.S.C. §§ 1331 and 1338(a).

PARTIES, JURISDICTION, AND VENUE

2. Plaintiff Armaturenfabrik Franz Schneider GmbH + Co. KG (“AS-Schneider”) is a German limited liability company with its headquarters located at Bahnhofplatz 12, 74226 Nordheim, Germany.

3. Defendant RJ Machine Company, Inc. (“RJ Machine”) is a Texas corporation with its principal place of business at 130 Northridge Rd, Marble Falls, TX 78654.

4. RJ Machine may be served through its registered agent, Gary H. Martin, 130 Northridge Rd, Marble Falls, TX 78654.

5. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338 because it arises under the Patent Laws of the United States, United States Code, Title 35.

6. This Court has personal jurisdiction over RJ Machine because it (i) is domiciled in the State of Texas, (ii) has, directly or through its subsidiaries, divisions, groups, employees, representatives, and/or agents, sufficient minimum contacts with this forum as a result of business conducted within the State of Texas, and/or (iii) has its corporate offices in this District.

7. Venue is proper under 28 U.S.C. § 1400 because RJ Machine resides in this District. Moreover, venue is also proper under 28 U.S.C. § 1400 because RJ Machine has committed acts of infringement and has a regular and established place of business in this District.

AS-SCHNEIDER AND U.S. PATENT NO. 9,851,030

8. AS-Schneider is a family-owned company founded in 1875. AS-Schneider has become a worldwide innovator and leader in the design and manufacturing of instrumentation valves and manifolds.

9. Among other locations worldwide, AS-Schneider has a U.S. subsidiary named AS-Schneider America, Inc. which was formed in 2013 and is currently located at 17449 Village Green Dr., Houston, TX 77040.

10. AS-Schneider owns, by assignment, U.S. Patent No. 9,851,030 (“the ’030 Patent”) in its entirety and has title and interest in and to the ’030 Patent.

11. The ’030 Patent was issued by the United States Patents and Trademark Office (“USPTO”) on December 26, 2017 and is entitled “Connecting Apparatus for Creating a Connection Between a Measuring Instrument/Valve Block and a Pipeline.”

12. A true and correct copy of the ’030 Patent is attached hereto as Exhibit A.

13. The USPTO duly and legally issued the ’030 Patent.

14. Among other rights in and to the ’030 Patent, AS-Schneider owns the right to

enforce the '030 Patent and recover past, present, and future damages for infringement by others of the '030 Patent.

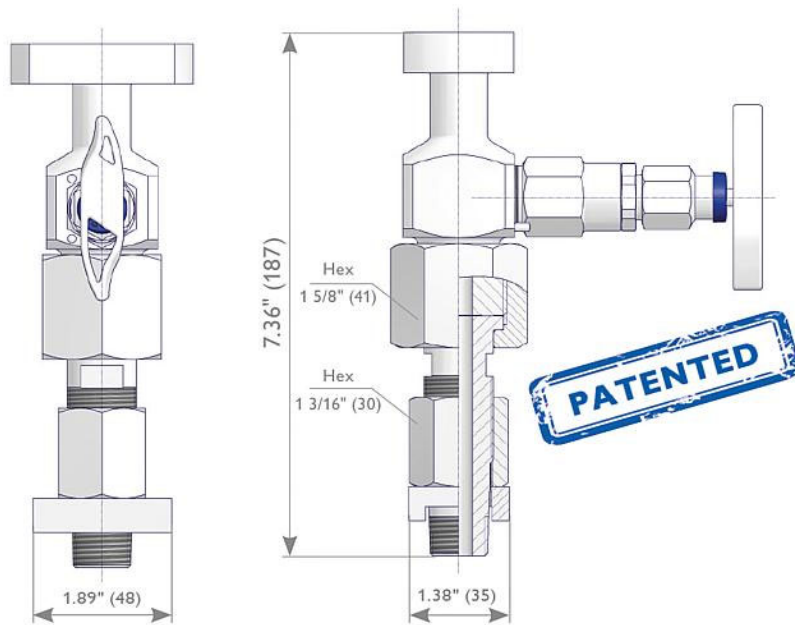
15. The '030 Patent is generally directed to a connecting apparatus positioned between a pipeline and a device used to measure a flow rate (or pressure) in the pipeline.

16. A conventional connecting apparatus used to facilitate pipeline pressure measurement typically has had an integrated shutoff valve that extends or projects perpendicularly away from the body of the connecting apparatus. As a result, for example, when desiring to use two such conventional apparatuses in close proximity to determine pressure based on differential pressure within the pipeline upstream and downstream of the location at which the connecting apparatuses are connected to the pipeline, it becomes difficult, time-consuming, laborious, expensive, or not even possible to install the second connecting apparatus when the first connecting apparatus is already installed. This is because the projecting shutoff valve on the second connecting apparatus collides with the first connecting apparatus when the second connecting apparatus is rotated when attempting to screw it in.

17. The new and improved connecting apparatus conceived by the '030 Patent inventors and described and claimed in the '030 Patent overcomes the challenges presented with conventional connecting apparatuses. The '030 Patent connecting apparatus comprises a first connecting device, a second connecting device, and a connecting unit to which the first and connecting devices can be sealingly attached. As described in more detail in the specification of the '030 Patent, the arrangement, structure, and operation of the connecting unit, among other benefits and advantages, allows for the installation of the first and second connecting devices without the need to rotate the first and second connecting devices.

18. AS-Schneider has sold and continues to sell, including through its U.S. subsidiary

AS-Schneider America, Inc., stabilized connectors covered by the '030 Patent:



<https://www.as-schneider.com/gb/en/Products/Instrumentation-Valves-and-Manifolds/Schneider-DirectMount-Systems/Stabilized-Connectors.html>.

RJ MACHINE

19. RJ Machine manufactures, uses, markets, and sells machined products and components for industrial applications, such as instrument valves and manifolds for natural gas pipelines. *See, e.g.,* <https://rjmachineonline.com/rj-products/> (last visited September 17, 2023).

20. In 2022, former AS-Schneider America, Inc. Deputy General Manager James Dean left AS-Schneider to work for RJ Machine. Another former AS-Schneider America, Inc. employee, Linda MacDonald, left AS-Schneider America, Inc. in late 2019 to work for, on behalf of, or for the benefit of RJ Machine. Both Mr. Dean and Ms. MacDonald had access to AS-Schneider confidential product information, including detailed manufacturing specifications for AS-Schneider's stabilized connector product covered by the '030 Patent.

21. Further, on information and belief, one or more of Mr. Dean and Ms. MacDonald

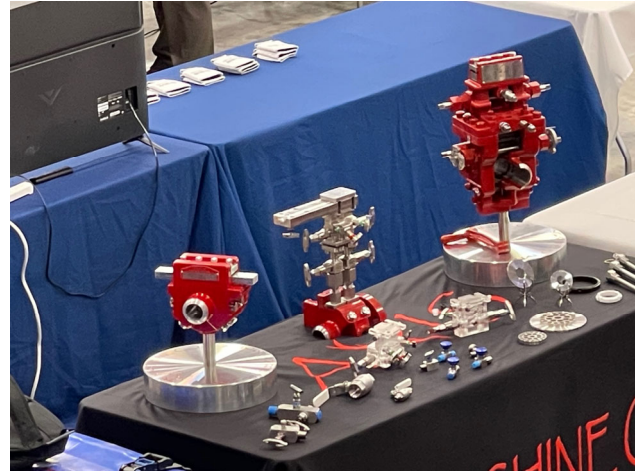
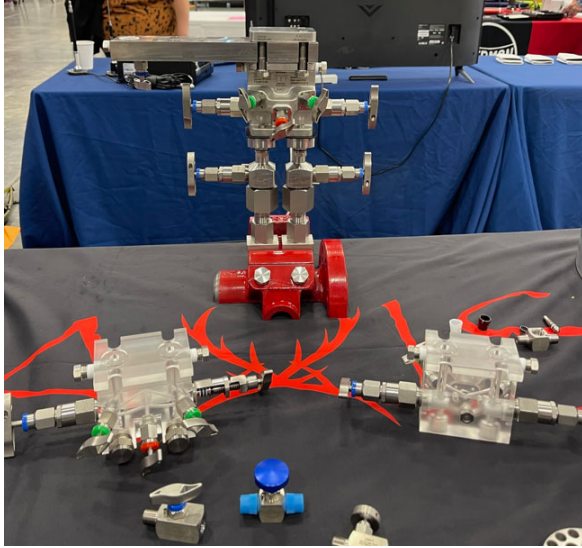
were aware of the '030 Patent before they began and during their work for RJ Machine.

22. RJ Machine has manufactured and sold, and continues to do so, its "AXIS" stabilized connector ("Accused Product"), due to which as alleged below, RJ Machine infringes one or more claims of the '030 Patent.

23. On July 7, 2023, AS-Schneider sent a letter to RJ Machine that specifically identified and attached the '030 Patent, asserted that the Accused Product infringed the '030 Patent, and demanded that RJ Machine immediately discontinue all commercial activities relating to the Accused Product, including as to the manufacturing, marketing, and selling of that product. AS-Schneider also demanded that RJ Machine immediately discontinue any use or sharing of AS-Schneider confidential information such as manufacturing specifications.

24. On July 19, 2023, counsel for RJ Machine responded by letter to AS-Schneider acknowledging receipt of AS-Schneider's July 7, 2023 letter. While RJ Machine's letter did not deny infringement of the '030 Patent, the letter did not indicate that RJ Machine would cease the activities complained of in AS-Schneider's letter.

25. Despite AS-Schneider's July 7, 2023 letter, RJ Machine has continued to actively market the Accused Product, including at industry events and through distribution of product catalogs/brochures. For example, on or around July 31 – August 3, 2023, RJ Machine marketed and displayed for sale the Accused Product at the AGMSC Appalachian Gas Measurement Short Course & Exhibit held in Moon Township, Pennsylvania:

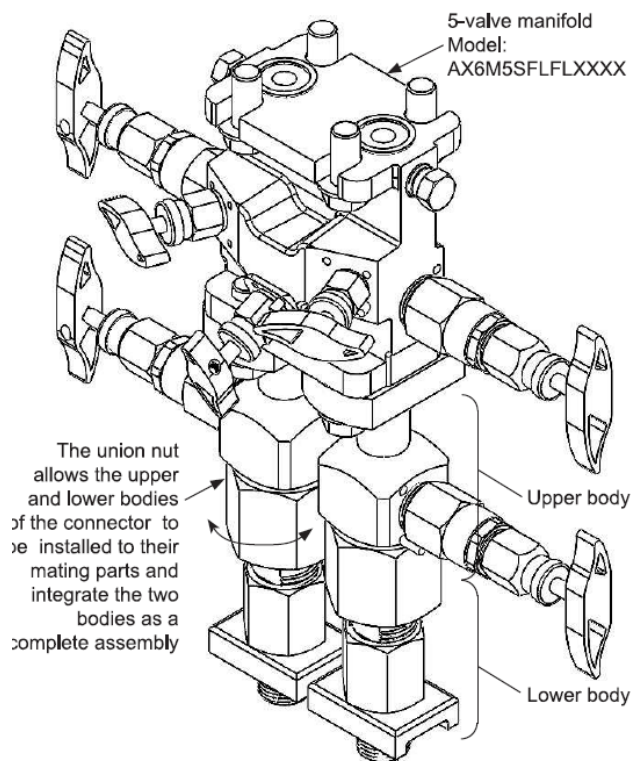
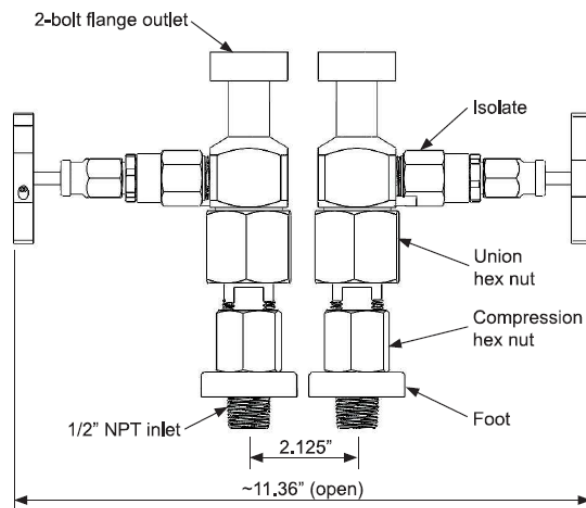
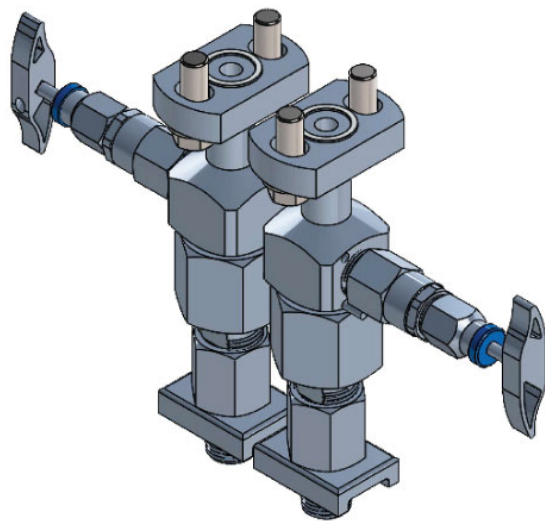


COUNT I
RJ MACHINE'S DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,851,030

26. AS-Schneider incorporates as if fully set forth herein its allegations in each of the preceding paragraphs.

27. RJ Machine, in violation of 35 U.S.C. § 271(a), has infringed, literally and/or through the doctrine of equivalents, and continues to infringe the '030 Patent by making, using, selling, and/or offering for sale in the United States, and specifically in this District, the Accused Product. "Accused Product" includes RJ Machine's "AXIS" stabilized connector and any and all prior or current versions thereof regardless of name.

28. In addition to the pictures of the Accused Product shown above, exemplary depictions of the Accused Product are as follows:



RJ MACHINE "AXIS" STABILIZED CONNECTOR

29. An exemplary claim chart detailing RJ Machine's infringement of claim 1 of the '030 Patent is attached hereto as Exhibit B.

30. RJ Machine has directly infringed at least claim 1 of the '030 Patent due to RJ

Machine's manufacture, use, offering for sale, and sale of the Accused Product as recited in claim 1 of the '030 Patent.

31. RJ Machine has had actual notice of the '030 Patent and RJ Machine's alleged infringing acts at least as early as July 19, 2023, when counsel for RJ Machine acknowledged receipt of AS-Schneider's July 7, 2023 letter to RJ Machine asserting infringement of the '030 Patent due to RJ Machine's activities with respect to the Accused Product.

32. On information and belief, RJ Machine was specifically aware of the '030 Patent prior to July 7, 2023.

33. On information and belief, RJ Machine has copied AS-Schneider's stabilized connector product covered by the '030 Patent in furtherance of RJ Machine's manufacture and sale of the Accused Product.

34. At least based on RJ Machine's pre-suit knowledge of the '030 Patent and AS-Schneider's infringement allegations, RJ Machine's direct infringement of the '030 Patent is, has been, and continues to be willful and deliberate.

35. RJ Machine has continued and will continue to directly infringe one or more claims of the '030 Patent unless enjoined by this Court.

36. On information and belief, RJ Machine, through its employees, agents, and representatives, has sought to displace and undercut AS-Schneider products and services in the market with the Accused Product and sales attendant with the Accused Product.

37. Unless RJ Machine's ongoing direct infringement is enjoined, AS-Schneider will suffer irreparable injury for which there is no adequate remedy at law.

38. As a direct and proximate result of RJ Machine's direct infringement of the '030 Patent, AS-Schneider has been and continues to be damaged in an amount yet to be determined.

39. There is an actual and justiciable controversy between the parties arising under the Patent Act, 35 U.S.C. § 1, *et seq.* concerning RJ Machine's direct infringement of one or more claims of the '030 Patent.

40. This is an exceptional case such that AS-Schneider should be entitled to its reasonable attorneys' fees and expenses incurred in prosecuting this action and defending any allegations and counterclaims brought by RJ Machine.

COUNT II
RJ MACHINE'S INDIRECT INFRINGEMENT OF U.S. PATENT NO. 9,851,030

41. AS-Schneider incorporates as if fully set forth herein its allegations in each of the preceding paragraphs, including those allegations in the exemplary claim chart attached hereto as Exhibit B.

42. RJ Machine has indirectly infringed at least claim 1 of the '030 Patent under 35 U.S.C. § 271(b), literally and/or under the doctrine of equivalents, by actively, knowingly, and intentionally inducing infringement of the '030 Patent by others (*e.g.*, RJ Machine's customers).

43. RJ Machine actively advertises, instructs, and encourages users – *e.g.*, product documentation – to use and implement the Accused Product in a manner that infringes one or more claims of the '030 Patent.

44. RJ Machine has had actual notice of the '030 Patent and RJ Machine's alleged infringing acts at least as early as July 19, 2023, when counsel for RJ Machine acknowledged receipt of AS-Schneider's July 7, 2023 letter to RJ Machine asserting infringement of the '030 Patent due to RJ Machine's activities with respect to the Accused Product.

45. On information and belief, RJ Machine was specifically aware of the '030 Patent prior to July 7, 2023.

46. On information and belief, RJ Machine has copied AS-Schneider's stabilized

connector product covered by the '030 Patent in furtherance of RJ Machine's manufacture and sale of the Accused Product.

47. At least based on RJ Machine's pre-suit knowledge of the '030 Patent and AS-Schneider's infringement allegations, RJ Machine's indirect infringement of the '030 Patent is, has been, and continues to be willful and deliberate.

48. RJ Machine has continued and will continue to indirectly infringe one or more claims of the '030 Patent unless enjoined by this Court.

49. On information and belief, RJ Machine, through its employees, agents, and representatives, has sought to displace and undercut AS-Schneider products and services in the market with the Accused Product and sales attendant with the Accused Product.

50. Unless RJ Machine's ongoing indirect infringement is enjoined, AS-Schneider will suffer irreparable injury for which there is no adequate remedy at law.

51. As a direct and proximate result of RJ Machine's indirect infringement of the '030 Patent, AS-Schneider has been and continues to be damaged in an amount yet to be determined.

52. There is an actual and justiciable controversy between the parties arising under the Patent Act, 35 U.S.C. § 1, *et seq.* concerning RJ Machine's indirect infringement of one or more claims of the '030 Patent.

53. This is an exceptional case such that AS-Schneider should be entitled to its reasonable attorneys' fees and expenses incurred in prosecuting this action and defending any allegations and counterclaims brought by RJ Machine.

AS-SCHNEIDER'S PRAYER FOR RELIEF

AS-Schneider respectfully requests that the Court:

A. Enter judgment in AS-Schneider's favor that RJ Machine has directly infringed

the '030 Patent and that such infringement was willful;

- B. Enter judgment in AS-Schneider's favor that RJ Machine has indirectly infringed the '030 Patent and that such infringement was willful;
- C. Enter an order stating that RJ Machine is liable to AS-Schneider for damages in an amount not less than recovery of lost profits, a reasonable royalty, treble damages, costs, expenses, and prejudgment and post-judgment interest for RJ Machine's infringement of the '030 Patent, as provided under 35 U.S.C. § 284;
- D. Enter an order permanently enjoining RJ Machine and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all other actors acting in active concert therewith from infringing the '030 Patent, as provided under 35 U.S.C. § 283;
- E. Enter an order stating that AS-Schneider is a prevailing party and that this is an exceptional case, and thereby award AS-Schneider its costs, disbursements, and reasonable attorneys' fees pursuant to 35 U.S.C. § 285 and any other applicable statutes, rules, or common law; and
- F. Grant such other and further relief that the Court deems just and appropriate in law or equity.

AS-SCHNEIDER'S JURY DEMAND

AS-Schneider requests a trial by jury on all issues so triable.

Date: September 20, 2023

Respectfully submitted,

By: /s/ Wasif H. Qureshi

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EXHIBIT A

(10) **Patent No.:** US 9,851,030 B2
(45) **Date of Patent:** Dec. 26, 2017

USPC 285/120.1, 122.1, 125.1, 133.11, 133.4,
285/386; 251/326
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,270,371 A 1/1942 Frazier
2,272,861 A 2/1942 Yohpe
(Continued)

FOREIGN PATENT DOCUMENTS

DE 20120042 U 4/2003

OTHER PUBLICATIONS

Office Action (Search Report) dated Jan. 30, 2015 for the corresponding German Application No. 102014005783.6.

Primary Examiner — Aaron Dunwoody

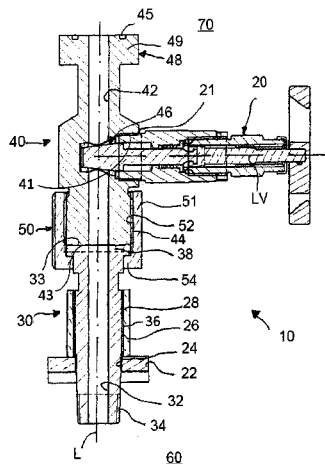
(74) *Attorney, Agent, or Firm* — Leason Ellis LLP

(57) **ABSTRACT**

(51) **Int. Cl.**
F16L 39/00 (2006.01)
F16L 19/02 (2006.01)
 (Continued)

(52) **U.S. CI.**
CPC *F16L 19/0231* (2013.01); *F16K 3/246*
(2013.01); *F16K 27/02* (2013.01); *F16L 15/00*
(2013.01); *F16L 19/025* (2013.01); *F16L*
41/008 (2013.01); *G01F 1/00* (2013.01);
G01F 1/40 (2013.01); *G01F 1/42* (2013.01);
F16L 23/003 (2013.01); *F16L 41/10* (2013.01)

7 Claims, 7 Drawing Sheets



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(51) **Int. Cl.**

F16L 15/00	(2006.01)
F16L 19/025	(2006.01)
F16L 41/00	(2006.01)
G01F 1/00	(2006.01)
G01F 1/40	(2006.01)
G01F 1/42	(2006.01)
F16K 3/24	(2006.01)
F16K 27/02	(2006.01)
F16L 41/10	(2006.01)
F16L 23/00	(2006.01)

(56)

References Cited

U.S. PATENT DOCUMENTS

3,041,880	A	7/1962	McCarvell et al.	
3,337,181	A	8/1967	Wennerstrom	
3,430,917	A	3/1969	Pellett	
4,778,204	A *	10/1988	Berger	F16L 47/04 285/353
4,898,705	A *	2/1990	Kyomen	B23P 11/02 264/242
4,920,626	A	5/1990	Nimberger	
4,974,308	A	12/1990	Nimberger	
5,000,031	A	3/1991	Potvin	
5,152,499	A *	10/1992	Silverman	F16L 19/0231 251/148
6,302,446	B1 *	10/2001	Spears	F16L 19/0231 285/33
D615,617	S	5/2010	Hutton	
2001/0037829	A1	11/2001	Shaw et al.	
2009/0211053	A1	8/2009	George et al.	
2013/0118623	A1	5/2013	Nguyen	

* cited by examiner

U.S. Patent

Dec. 26, 2017

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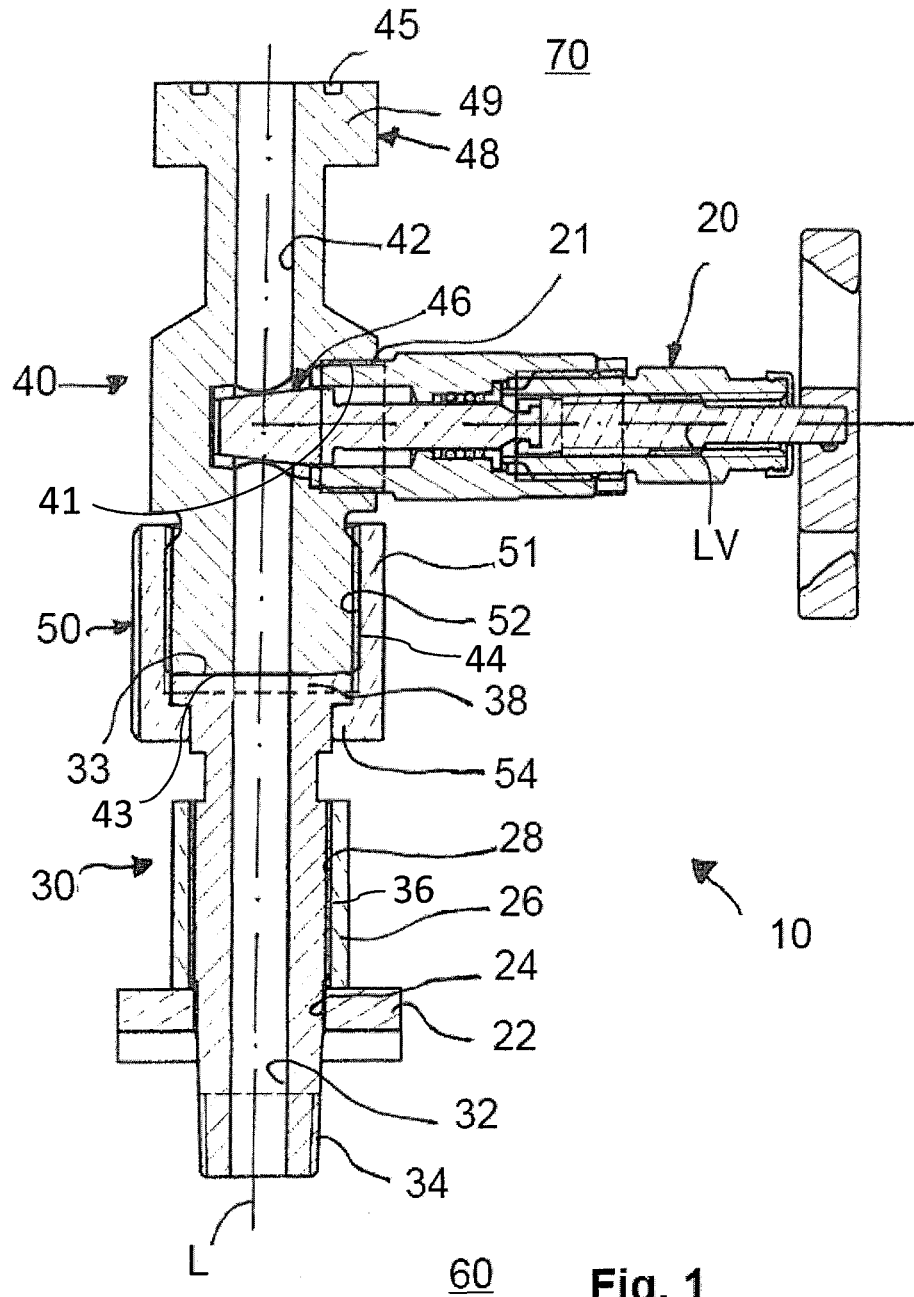


Fig. 1

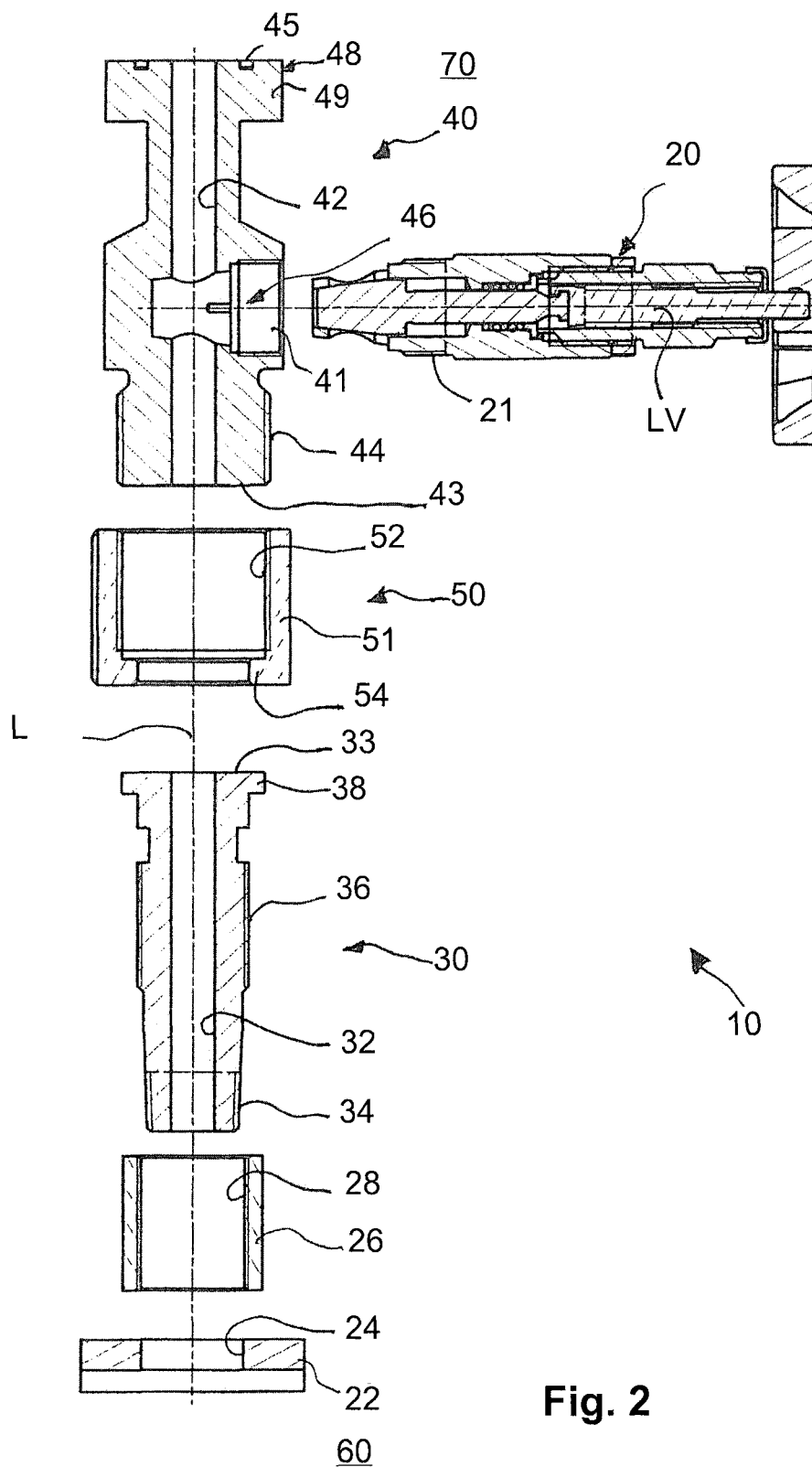


Fig. 2

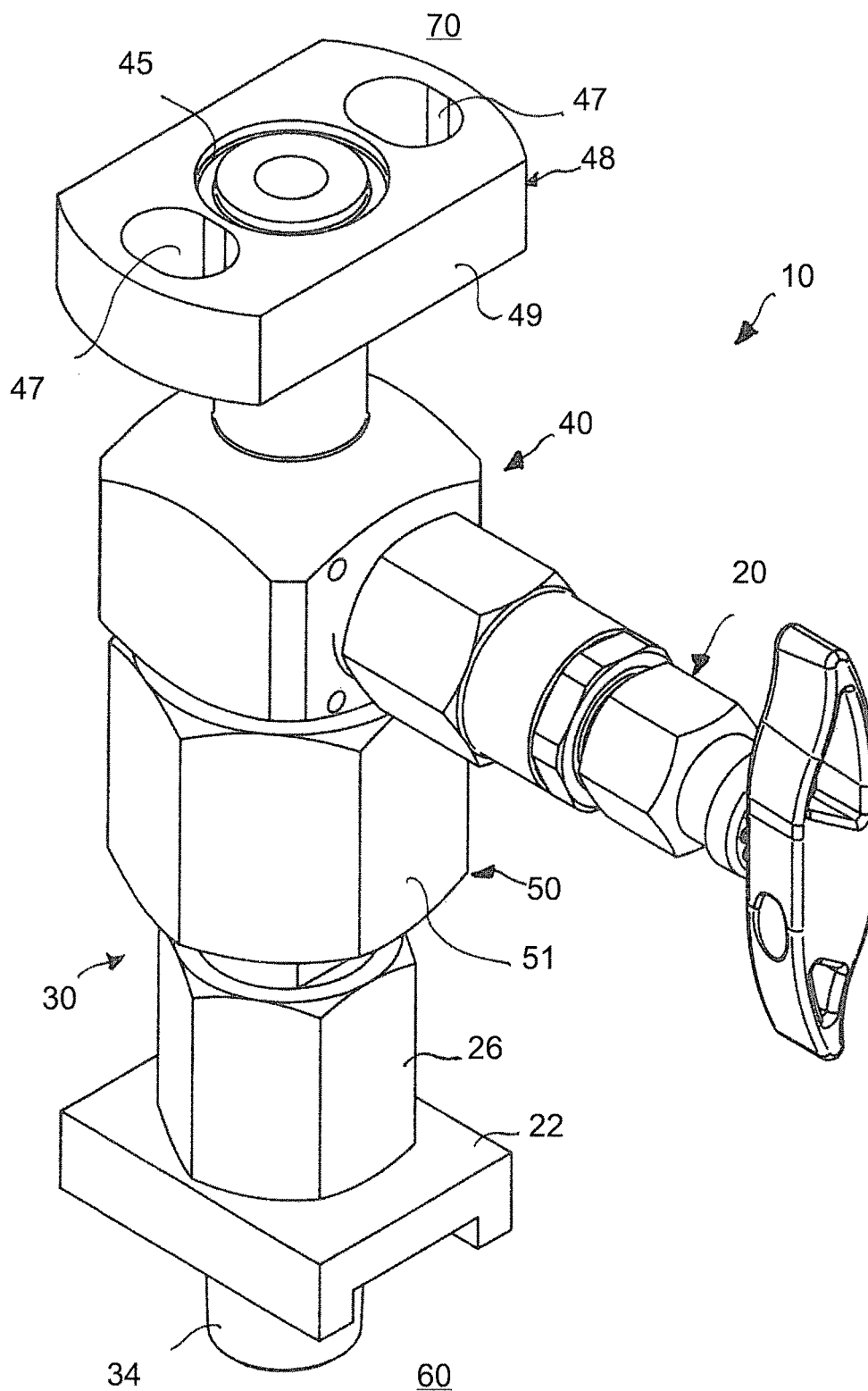
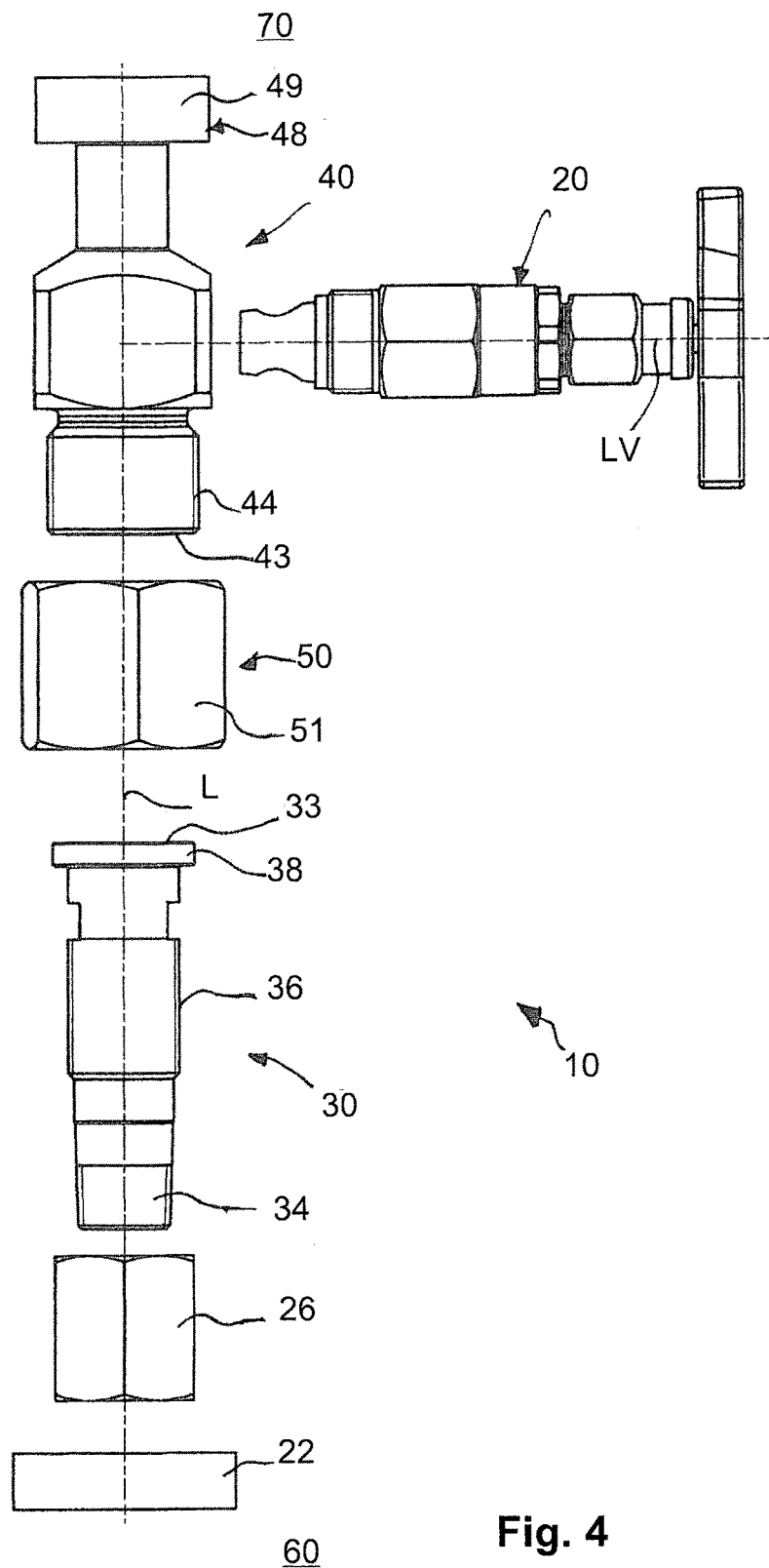


Fig. 3



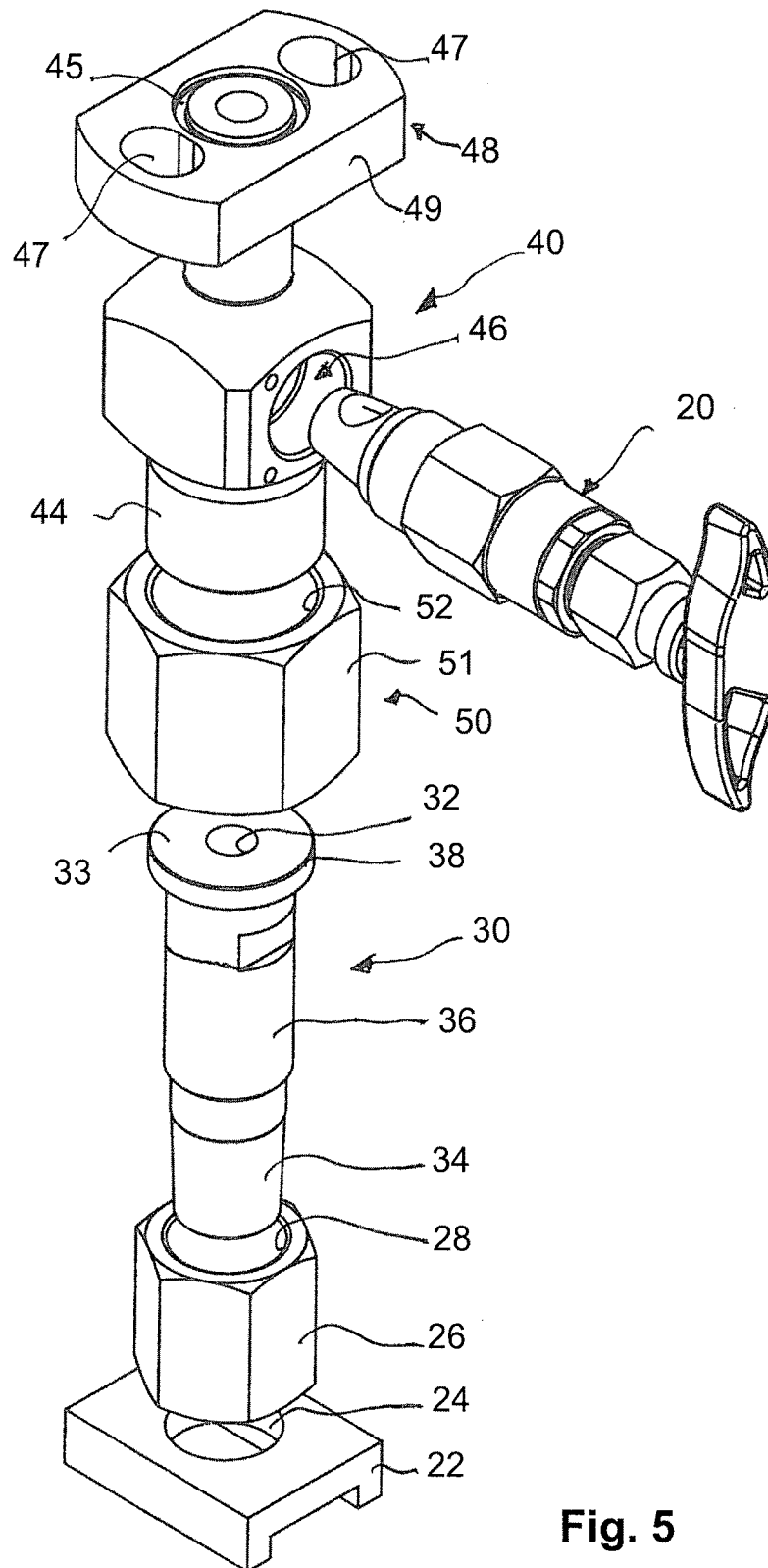


Fig. 5

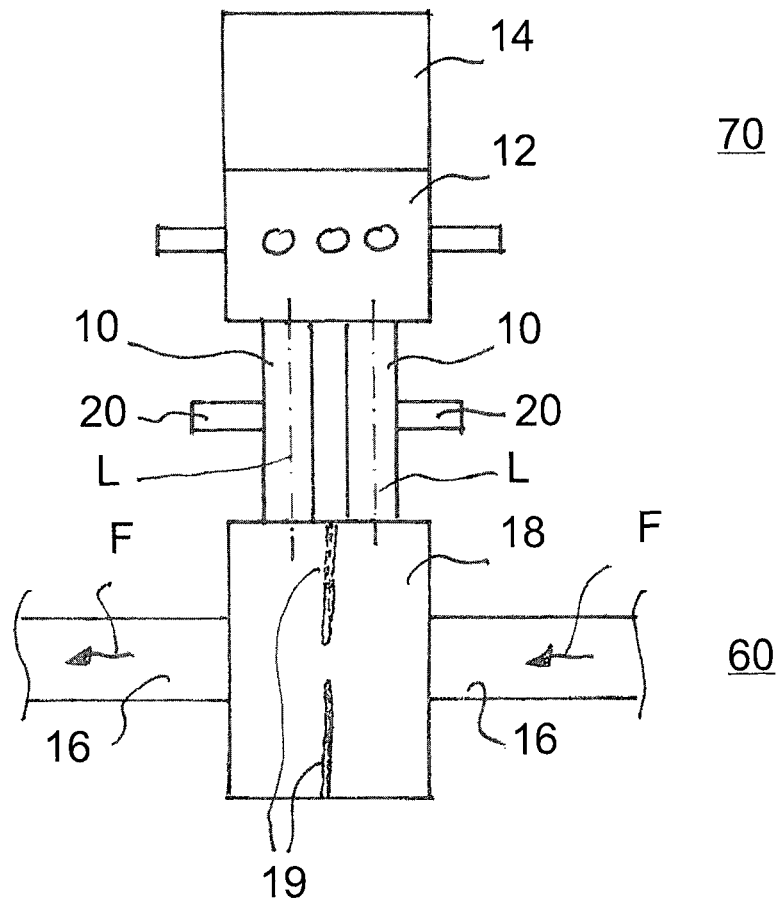


Fig. 6

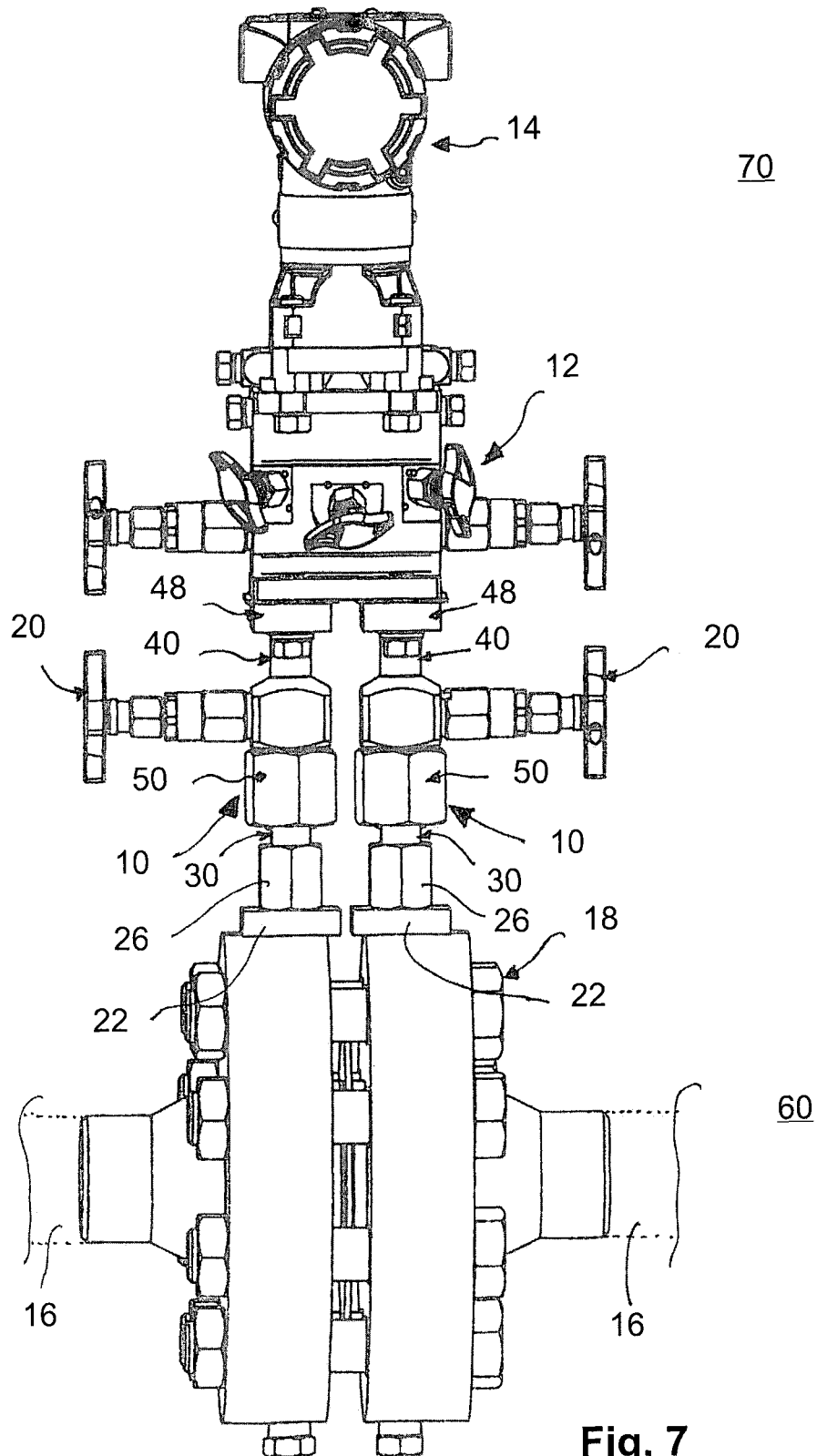


Fig. 7

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CONNECTING APPARATUS FOR CREATING A CONNECTION BETWEEN A MEASURING INSTRUMENT/VALVE BLOCK AND A PIPELINE

This application claims the benefit of German Patent Application No. 102014005783.6, filed Apr. 23, 2014, which is incorporated by reference in its entirety herein.

FIELD OF THE INVENTION

The present invention relates to a connecting apparatus for creating a connection to a measuring instrument or to a valve block/valve with a measuring instrument, and a connection to a pipeline or to a metering orifice device installed in a pipeline, having a first connecting device for the direct or indirect sealing connection to the pipeline or to the metering orifice device with a first recess extending through in the longitudinal direction, and having a second connecting device for the direct or indirect sealing connection to the measuring instrument or to the valve block/valve with a second recess extending through in the longitudinal direction, wherein the first and second connecting devices are interconnected with sealing effect.

BACKGROUND OF THE INVENTION

In pipelines, especially gas pipelines, it is necessary to check the flow rate during continuous operation. To this end, use is made of measuring instruments which operate according to the differential pressure method. In this case, a metering orifice device is installed in the pipeline and the pressure inside the pipeline is measured upstream of the orifice of the metering orifice device and downstream of the orifice of the metering orifice device and the flow rate calculated from the difference. The measuring instrument is usually connected in this case to a 3-way or 5-way valve block. A connecting apparatus is installed in each case between the metering orifice device and the valve block so that the measuring instrument is in communication via the connecting apparatus with the interior of the pipeline upstream and downstream of the metering orifice device in each case and the pressure ratios can be measured.

Using such connecting apparatuses enables a direct installation of the valve block or of the measuring instrument on the metering orifice device. In comparison to remote, piped installation, with direct installation there is the advantage that measurement errors are significantly reduced and the measuring system becomes more reliable. Such connecting apparatuses have to ensure a permanently reliable sealing function during heavy duty at different temperatures and also in the event of severe vibrations occurring inside the fluid system.

A connecting apparatus, which is designed in one piece, is known from U.S. Pat. No. 4,974,308 and U.S. Pat. No. 4,920,626. In the end region facing the metering orifice device provision is made for a conical thread which is screwed into a corresponding thread of the metering orifice device until a sealing effect is provided. In the opposite end region, the connecting apparatus has a connecting flange which via a threaded connection is connected by a valve block to the measuring instrument.

Also known are connecting apparatuses which additionally have an integrated shutoff valve. In this case, however, the following problems ensue: Since the measuring instrument operates according to the principle of differential pressure measurement there is always a requirement for two

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connecting apparatuses which are to be arranged at a relative small distance from each other since the metering orifice device, to which are connected the connecting apparatuses, have to be of a relatively compact design in order to deliver reliable values. The shutoff valve is normally arranged perpendicularly to the longitudinal direction of the connecting apparatus and is constructionally higher than the distance between the two connecting apparatuses. As a result, with the first connecting apparatus installed the second connecting apparatus can no longer be screwed into the metering orifice device by rotation since the projecting shutoff valve collides with the first connecting apparatus when being screwed in.

There are also solutions in one piece in which the valve top part is supplied loose and after installation of the connecting apparatuses on the metering orifice device the client then has to install said top part. As a result, the following disadvantages ensue: The valve has to be installed at the work site so that a leak test or strength test by the valve manufacturer cannot be carried out and therefore no guarantee for leak tightness can be accepted either. If now during practical operation leaks occur, conflicts frequently occur between manufacturer and user since the leak can be caused by a faulty valve or a by faulty installation.

A valve apparatus according to the features of the preamble of claim 1 is known from U.S. Pat. No. 7,938,453 B2. The first connecting device is screwed into the metering orifice device via a conical thread. The second connecting device, which on the upper side has a connecting flange for the valve block, is screwed into the first connecting device, wherein the first connecting device has a corresponding blind hole opening with female thread and the second connecting device has a male thread.

This solution, however, requires an adjustment of the first and second connecting devices in relation to each other so that the connecting flange on the measuring instrument side can be brought into position.

An optimally integrated shutoff valve could also be installed at site only after installing the connecting apparatus.

In the case of two-part embodiments, in which the two connecting devices are connected by means of a flange, the shutoff valve can admittedly already be installed beforehand but there is the disadvantage that the connecting device, which has to be screwed into the metering orifice device, has to be already installed in position so that the connection to the valve block can be made.

SUMMARY OF THE INVENTION

Starting from the referenced prior art, the present invention is based on the technical problem or the object of disclosing a connecting apparatus of the type referred to in the introduction which can be economically produced, enables a simple and fast installation, especially in the case of connecting apparatuses with an associated shutoff valve, and ensures a permanently reliable function.

The connecting apparatus according to the invention of the type referred to in the introduction is distinguished accordingly by the fact that provision is made for a connecting unit, which is connected to the first and second connecting device, for the sealing connection of said first and second connecting devices and is designed so that the sealing connection can be created solely by rotation of the connecting unit without rotation of the first and second connecting devices.

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The installation apparatus according to the invention eliminates the previous problems during installation since with this solution the following installation is made possible: The first connecting device, by the conical thread, is screwed into the metering orifice device or the like, specifically just as much as is necessary in order to ensure the necessary leak tightness. The fitter has no need to worry about the position of the connecting device with regard to the connection of the remaining components. The second connecting device can then be screwed down by means of the connecting unit, wherein this is possible in any chosen rotational position of the second connecting device. It is even possible that the fitter, before he activates the connecting unit or forcibly screws it down, has already installed the valve block on the second connecting device and in the process has aligned the flanges of the connecting devices with the connecting interface of the valve block, and only then screws down tight the connecting unit.

A constructionally, particularly simple and preferred embodiment is distinguished by the fact that the upper edge region of the first connecting device which faces away from the pipeline has an outwardly pointing connecting flange and an end-face sealing surface, the lower edge region of the second connecting device facing the pipeline has a male thread and an end-face sealing surface, and the connecting unit is designed as a nut unit with a female thread and an inwardly pointing inner flange arranged in the lower edge region facing the pipeline, wherein the outer flange of the first connecting unit fits behind the inner flange of the nut unit and the female thread of the nut unit is screwed onto the male thread of the second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped to each other with sealing effect.

This embodiment ensures a particularly simple installation. The first connecting device is introduced into the nut unit in this case until the connecting flange comes to butt against the inner flange. After the screwing of the first connecting device into the metering orifice device, and after attaching the second connecting device, this can then be clamped in a simple manner by rotating the nut unit together with the first connecting device without the second connecting device having to execute a rotation. At the same time, the second connecting device can be positioned so that the flange corresponds to the connecting interface of the valve block or of the measuring instrument.

An especially preferred embodiment is distinguished by the fact that a shutoff valve, the longitudinal axis of which extends obliquely to the longitudinal axis of the apparatus, especially at an angle of 90°, is connected to the second connecting device. By an additional shutoff valve being provided on the connecting apparatus, the valve block unit or the measuring instrument can, for example, if required, be exchanged without any problem in the case of a defect.

A constructionally particularly simple preferred embodiment is distinguished by the fact that the outer flange and the inner flange are provided in an encompassing manner on the first connecting device or the nut unit, wherein according to an advantageous development sealing means are arranged between the upper end side/end face of the outer flange of the first connecting device and the lower end side/end face of the second connecting device.

These sealing means can be designed in a wide variety of forms. For example, provision can be made for O-rings consisting of sealing plastic such as PTFE, elastomer or graphite, which for example are arranged inside a groove. A coating of the end faces with sealing material also come into

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consideration. An especially good sealing function with high press-on pressure can also be ensured by, for example, the end face of the first connecting device having a face-turned surface and by the end face of the second connecting device having a turned projecting nose unit.

An advantageous embodiment, which ensures a reliable, sealed connection to the metering orifice device, is distinguished by the fact that the first connecting device has a thread, especially a conical thread, in its lower edge region facing the pipeline. In this case, the thread is preferably formed as an NPT connecting thread according to US standard ASME B1.20.1.

In order to ensure a stable connection of the connecting apparatus to the metering orifice device or to the pipeline, an advantageous embodiment is distinguished by the fact that the first connecting device has a male thread onto which can be screwed a clamping nut with female thread, wherein the clamping nut can be clamped directly or indirectly on the surface. This variant is advantageous if a flat connecting surface is present. An alternative embodiment, which ensures a high connecting stability even in the case of curved surfaces, is distinguished by the fact that beneath the clamping nut provision is made for a baseplate with through-openings through which the first connecting device can pass, in certain sections, in the longitudinal direction, which baseplate can be clamped on the surface of the pipeline by means of the clamping nut.

A simple connection of the second connecting device to the valve block or to the measuring instrument is distinguished according to a preferred embodiment by the fact that the second connecting device in its upper edge region facing away from the pipeline has an outwardly pointing connecting flange for connecting to a valve block or to a measuring instrument.

Further embodiments and advantages of the invention are provided by the features which are additionally cited in the claims and also by the exemplary embodiment specified below. The features of the claims can be combined with each other in any way providing they are not obviously mutually exclusive.

BRIEF DESCRIPTION OF THE DRAWING

The invention and also advantageous embodiments and developments of such are described and explained in more detail in the following text based on the examples represented in the drawings. The features which are to be gathered from the description and from the drawings can be applied according to the invention individually or in groups in any combination. In the drawings:

FIG. 1 shows a schematic cross section through a connecting apparatus with a first and second connecting device which can be clamped together with sealing effect via a nut unit, wherein the second connecting device has a shutoff valve,

FIG. 2 shows a schematic cross-sectional view of the connecting apparatus according to FIG. 1 in exploded view,

FIG. 3 shows a schematic perspective view of the connecting apparatus according to FIG. 1,

FIG. 4 shows a schematic side view of the connecting apparatus according to FIG. 2 in exploded view,

FIG. 5 shows a schematic perspective view of the connecting apparatus according to FIG. 3 in exploded view,

FIG. 6 shows a schematic side view of a measuring instrument, which is connected to a 5-way valve block, and a metering orifice device which is arranged inside a pipeline, wherein two connecting apparatuses, spaced apart in parallel

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in the longitudinal direction, according to FIG. 1 with an outwardly pointing shutoff valve in each case, are installed between the valve block and the metering orifice device, shown in a greatly schematized representation, and

FIG. 7 shows a constructional exemplary embodiment of the use of two connecting apparatuses according to the configuration shown in FIG. 6.

DETAILED DESCRIPTION OF THE INVENTION

Shown greatly schematized in FIG. 6 is the field of application of a connecting apparatus 10 according to the invention. In the figures, the lower side is basically provided with the designation 60 and the upper side is basically provided with the designation 70 so that the terms “upper side” and “lower side” used in the further embodiments are clearly defined.

Provision is made in the lower side for a pipeline 16, which can be a natural gas pipeline, for example, through which flows natural gas in the fluid flow direction F. Installed in the pipeline 16 is a metering orifice device 18 with an orifice unit 19 provided on the inside so that in the region of this metering orifice device 18 there is a cross-sectional constriction for the through-flowing fluid so that different pressure ratios result directly upstream of the orifice unit 19 and directly downstream of the orifice unit 19 and are evaluated for determining the flow rate. The evaluation is carried out via a measuring instrument 14 arranged on the upper side, which in the represented exemplary embodiment is mounted on a 5-way valve block 12. The connection between the valve block 12, and therefore the measuring instrument 14, and the metering orifice device 18 is created by means of two connecting apparatuses 10 according to the invention which in each case are in communication with the inside of the fluid cross section directly upstream and directly downstream of the orifice unit 19 of the metering orifice device 18 so that the measuring instrument 14 can measure the pressures which are present and can calculate the flow rate of the fluid based on the difference. The measuring instrument 14 indicates either the determined differential pressure/the determined flow rate and/or transmits this to a control station, which is not shown in more detail in FIG. 6. The longitudinal direction of the connecting apparatus 10 is provided with the designation L in FIG. 6 and in the remaining figures.

In addition, a shutoff valve 20 is connected to each connecting apparatus 10, which shutoff valve projects outward by its geometry in each case and by means of which the connection between pipeline 16 and measuring instrument 14 can be opened or closed via the connecting apparatus 10. The provision of shutoff valves 20 is especially advantageous to the effect that exchanging the valve block or the measuring instrument is possible in a simple manner without the fluid flow having to be interrupted. In addition, the shutoff valve 20 constitutes additional safety in conjunction with the valves of the valve block 12.

In the following text, with reference to FIGS. 1 to 5, a constructional exemplary embodiment of an inventive apparatus 10 according to the invention is described.

The individual components of the exemplary embodiment of the connecting apparatus 10 according to the invention are particularly clearly evident with their details from the exploded sectional view according to FIG. 2. The connecting apparatus 10 according to the invention has a first connecting device 30 and a second connecting device 40, wherein the two connecting devices 30, 40 via a connecting

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unit 50 are interconnected with sealing effect by, for example, the connecting unit 50 clamping an end-face sealing surface 43 of the second connecting device 40 to an end-face sealing surface 33 of the first connecting device 30 with sealing effect. The first connecting device 30 is suitable for being connected to the metering orifice device 18 (see FIG. 6) and the second connecting device 40 is suitable for being connected to the valve block 12 (see FIG. 6).

The first connecting device 30 has a conical thread 34 on the lower side. A male thread 36 is formed in the middle outer wall region of the first connecting device 30. In the upper end region, the first connecting device 30 has an outwardly pointing, encompassing connecting flange 38.

Beneath the first connecting device 30, a clamping nut 26 with a female thread 28 is shown in FIG. 2, wherein the inside diameter of the clamping nut 26 is designed so that this can be screwed onto the male thread 36 of the first connecting device 30.

Beneath the clamping nut 26, a baseplate 22, which has a through-opening 24, is shown in FIG. 2. The baseplate through-opening 24 is selected to be of such size in this case that the baseplate 22 can be pushed from the bottom onto the first connecting device 30 up to the lower end of the male thread 36.

The first connecting device 30 furthermore has a first through-opening 32 in the longitudinal direction L.

The second connecting device 40 similarly has a second through-opening 42 in the longitudinal direction L. In its lower edge region, provision is made for a male thread 44. Formed in the approximately middle region of the second connecting device 40 is a connecting unit 46 which is suitable for connecting a shutoff valve 20 with sealing effect, the longitudinal axis LV of which extends in the main at right angles to the longitudinal axis L and by means of which the through-opening 42 of the second connecting device 40 can be selectively opened or closed. The connection of the shutoff valve 20 to the second connecting device 40 is carried out in the exemplary embodiment via a female thread 41 of the connecting unit 46, into which is screwed a male thread 21 of the shutoff valve 20.

In its upper end region, the second connecting device 40 has an upper connecting unit 48 which is designed as an outwardly projecting double-sided connecting flange 49. The upper connecting unit 48 has a threaded opening 47 oppositely disposed on each outer side (see FIG. 5). By means of each threaded opening 47, the valve block can be flanged on via screw units. Moreover, a groove 45, inside which are arranged sealing means—not shown in more detail—is formed in the upper end side of the connecting unit 48.

The upper connecting unit 48 serves for creating a sealing connection to the valve block 12 (see FIG. 6).

In its lower end-face region, the second connecting device 40 has a sealing surface 43.

The connecting unit 50 is designed as a nut unit 51 with a female thread 52 and an inwardly pointing inner flange 54 provided in the lower edge region. The inner flange 54 has an end-face sealing surface 33 on the upper side.

In FIGS. 1 and 3, the connecting apparatus 10 is shown in the assembled state.

The great advantage of the connecting apparatus 10 according to the invention lies in the fact that the connection between first connecting device 30 and second connecting device can be created via the connecting unit 50 without the installed position of the first connecting device 30 or of the second connecting device 40 having to be altered, but by the clamping action with sealing effect being carried out solely

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by operation, that is to say by rotation, of the connecting unit **50**. In this case, the two sealing surfaces **33**, **43** are clamped together with sealing effect.

Apart from that, the connecting apparatus **10** according to the invention can be delivered ex-works to the work site in a preassembled state as “one” component, as described below.

First of all, at the factory the shutoff valve **20** is connected to the second connecting device **40** and leak tested.

After this, the first connecting device **30** is introduced from the top into the connecting unit **50**, wherein the end position is formed by the abutment of the connecting flange **38** of the first connecting device **30** against the inner flange **54** of the connecting unit **50**.

Following this, the clamping nut **26** is screwed from the bottom onto the male thread **36** of the first connecting device **30** and the baseplate **22** is threaded from the bottom via its opening **24** onto the first connecting device **30**.

In the factory, the second connecting device **40** can now be loosely screwed from the top via its male thread **44** into the female thread **52** of the connecting unit **50** (nut unit **51**).

As a result, the connecting device according to the invention is “ready for dispatch” and can be delivered to the work site. At the work site, the first connecting device **30** is then screwed into the metering orifice device **18** via the conical thread **34** until a reliable sealing function is created. Following this, the baseplate **22** is clamped on the upper-side outer surface of the metering orifice device **18** by rotation of the clamping nut **26** so that a particular rigid fixing of the first connecting device **30** on the metering orifice device **18** is provided. The second connecting device **40** is aligned with regard to the upper-side connection of the valve block **12**, which is possible without any problem since the female thread **52** of the connecting unit **50** in conjunction with the male thread **44** of the second connecting device **40** still has not created a clamping connection.

As soon as the alignment or possibly the connection of the second connecting device **40** to the valve block **12** has been carried out, the sealing connection between first connecting device **30** and second connecting device **40** is achieved in a simple manner by the connecting unit **50** (nut unit **51**) being made to rotate until the end-face sealing surface **33** of the outer flange **38** of the first connecting device **30** comes to bear with pressure on the end-face sealing surface **43** of the second connecting device **40**.

In an embodiment variant, which is not shown, provision is made between the end-face sealing surface **43** and the end-face sealing surface **33** for sealing means which ensure a permanently reliable sealing function.

By means of the connecting apparatus **10** according to the invention, a sealing connection can therefore be created in a simple manner between valve block **12** and metering orifice device **18** without the fitter having to take into account the respective rotational position of the first or second connecting device **30**, **40**. This is set beforehand and experiences no change during the sealing connection by rotation of the connecting unit **50**.

Shown in FIG. 7 is a constructional exemplary embodiment of the use of connecting apparatuses **10** according to the invention, with reference to the greatly schematized view in FIG. 6.

The two connecting apparatuses **10** required for the connection of the measuring instrument **14** can be arranged compactly next to each other, wherein the additional provision of an outwardly projecting shutoff valve **20** on the connecting apparatuses **10** does not present a problem. With the connecting apparatus **10** according to the invention, an

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exceptionally simple installation is possible, wherein in the installed state a permanently reliable function is ensured.

LIST OF DESIGNATIONS

10 Connecting device
12 Valve block
14 Measuring instrument
16 Pipeline
18 Metering orifice device
19 Orifice unit
20 Shutoff valve
21 Male thread
22 Baseplate
24 Baseplate opening
26 Clamping unit
28 Female thread of **26**
30 First connecting device
32 First through-opening of **30**
33 End-face sealing surface of **30**
34 Conical thread of **30**
36 Male thread of **30**
38 Connecting flange of **30**
40 Second connecting device
41 Female thread
42 Second through-opening of **40**
43 End-face sealing surface of **40**
44 Male thread of **40**
45 Groove
46 Connecting unit of **40** for **20**
47 Threaded opening
48 Upper connecting unit of **40**
49 Connecting flange
50 Connecting unit
51 Nut unit
52 Female thread of **51**
54 Inner flange of **51**
60 Lower side
70 Upper side
F Fluid flow direction
L Longitudinal axis of **10**
LV Longitudinal axis of **20**

The invention claimed is:

1. A connecting apparatus comprising:

a first connecting device that is connectable to a pipeline or to a metering orifice device in a sealing manner, said first connecting device having a first through-opening in a longitudinal direction;

a second connecting device that provides a sealing connection to a measuring instrument or to a valve block/valve, said second connecting device having a second through-opening in a longitudinal direction; and

a connecting unit that provides a sealing connection to the first and second connecting devices, wherein the first and second connecting devices are interconnected with sealing effect,

the connecting unit is designed so that the sealing connection can be created solely by rotation of the connecting unit without rotating the first and second connecting devices,

an upper edge region of the first connecting device has an outwardly pointing outer flange and an end-face sealing surface,

a lower edge region of the second connecting device has a male thread and an end-face sealing surface,

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the connecting unit is designed as a nut unit with a female thread and an inwardly pointing inner flange which is arranged in the lower edge region,
 the outwardly pointing outer flange of the first connecting device fits behind the inner flange of the nut unit,
 the female thread of the nut unit is screwed onto the male thread of the second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect,
 a shutoff valve is connected to the second connecting device, a longitudinal axis of which extends obliquely to a longitudinal axis of the apparatus,
 the outer flange and the inner flange are provided in an encompassing manner on the first connecting device or on the nut unit, and
 sealing means are arranged between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device.

2. The connecting apparatus as claimed in claim 1, wherein
 the first connecting device has a thread in a lower edge region of the first connecting device.

3. The connecting apparatus as claimed in claim 2, wherein the thread has a conical shape.

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4. The connecting apparatus as claimed in claim 1, wherein
 the first connecting device has a male thread upon which can be screwed a clamping nut with female thread, wherein the clamping nut can be clamped on the surface of the first connecting device.

5. The connecting apparatus as claimed in claim 4, further comprising:
 a baseplate that has through-openings through which the first connecting device can pass, in certain sections, in the longitudinal direction, said baseplate being clamped by means of the clamping nut on the surface of the pipeline.

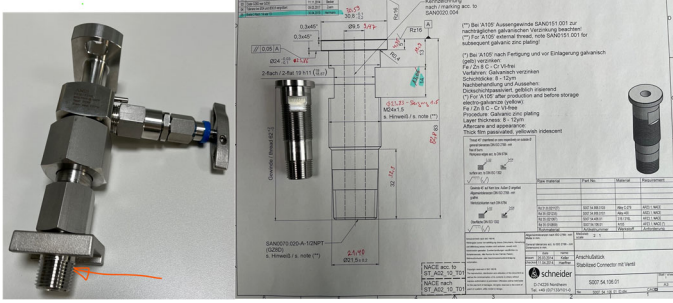
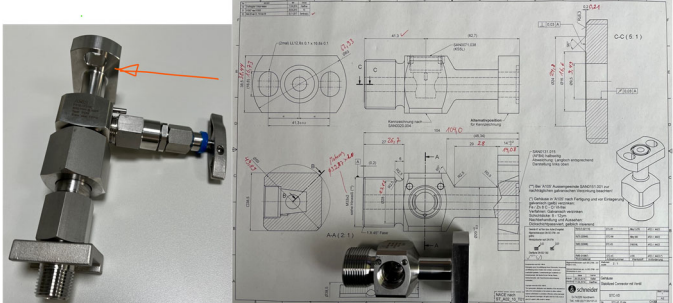
6. The connecting apparatus as claimed in claim 1, wherein
 the second connecting device has an outwardly pointing outer flange in an upper edge region of the second connecting device that is connectable to a valve block or to a measuring instrument.

7. The connecting apparatus as claimed in claim 1, wherein the longitudinal axis of the shutoff valve extends to the longitudinal axis of the apparatus at an angle of 90°.

* * * * *

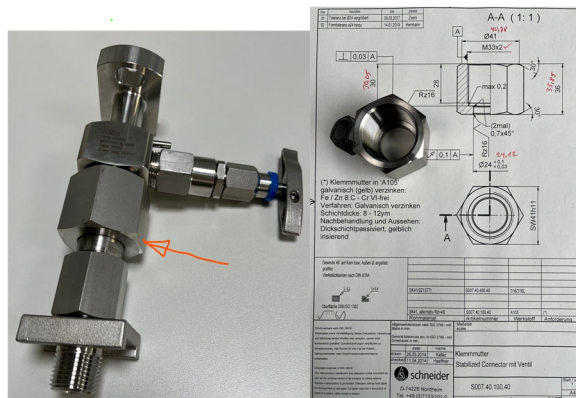
EXHIBIT B

Exemplary Infringement Claim Chart Detailing RJ Machine's Infringement

U.S. Patent No. 9,851,030 – claim 1	RJ Machine “AXIS” stabilized connector
[1a] 1. A connecting apparatus comprising: a first connecting device that is connectable to a pipeline or to a metering orifice device in a sealing manner, said first connecting device having a first through-opening in a longitudinal direction;	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector in connection with what appears to be copying of the AS product specifications: 
[1b] a second connecting device that provides a sealing connection to a measuring instrument or to a valve block/valve, said second connecting device having a second through-opening in a longitudinal direction; and	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector in connection with what appears to be copying of the AS product specifications: 

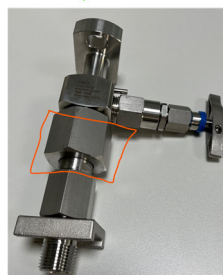
[1c] a connecting unit that provides a sealing connection to the first and second connecting devices, wherein

This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector in connection with what appears to be copying of the AS product specifications:



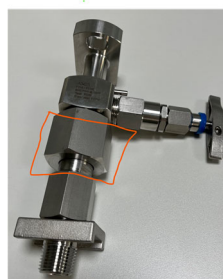
[1d] the first and second connecting devices are interconnected with sealing effect,

This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector:

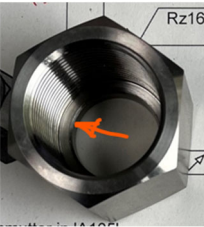


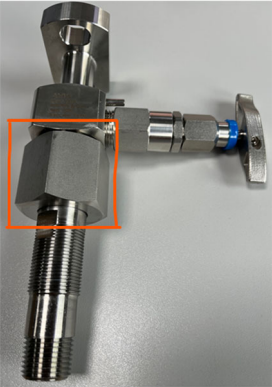
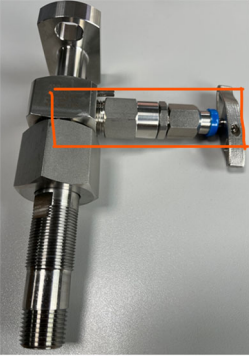
[1e] the connecting unit is designed so that the sealing connection can be created solely by rotation of the connecting unit without rotating the first and second connecting devices,

This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector:



The sealing connection can be realized by rotation of the red-annotated part without rotating the first and second connecting devices identified with respect to claim elements [1a] and [1b].

[1f] an upper edge region of the first connecting device has an outwardly pointing outer flange and an end-face sealing surface,	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector: 
[1g] a lower edge region of the second connecting device has a male thread and an end-face sealing surface,	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector: 
[1h] the connecting unit is designed as a nut unit with a female thread and an inwardly pointing inner flange which is arranged in the lower edge region,	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector: 

[1i] the outwardly pointing outer flange of the first connecting device fits behind the inner flange of the nut unit,	This claim element is present in the accused RJ connector: 
[1j] the female thread of the nut unit is screwed onto the male thread of the second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect,	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector: 
[1k] a shutoff valve is connected to the second connecting device, a longitudinal axis of which extends obliquely to a longitudinal axis of the apparatus,	This claim element is present in the accused RJ connector as illustrated by the following annotation of the RJ connector: 

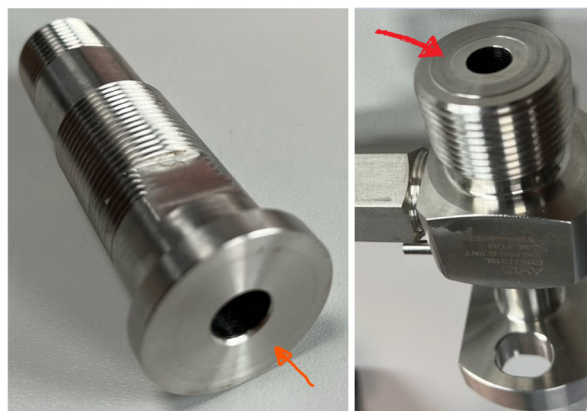
[11] the outer flange and the inner flange are provided in an encompassing manner on the first connecting device or on the nut unit, and

This claim element is present in the accused RJ connector as illustrated by the following annotations of the RJ connector:



[1m] sealing means are arranged between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device.

This claim element is present in the accused RJ connector as illustrated by the following annotations of the RJ connector:



CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

ARMATURENFABRIK FRANZ SCHNEIDER GMBH + CO. KG

(b) County of Residence of First Listed Plaintiff Nordheim, Germany
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)

Wasif Qureshi, Jackson Walker LLP, 1401 McKinney St,
Ste. 1900, Houston, TX 77010, Tel: 713-752-4521

DEFENDANTS

RJ MACHINE COMPANY, INC.

County of Residence of First Listed Defendant _____
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | PTF | DEF | | PTF | DEF |
|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
| Citizen of This State | ☐ 1 | ☐ 1 | Incorporated or Principal Place of Business In This State | ☐ 4 | ☐ 4 |
| Citizen of Another State | ☐ 2 | ☐ 2 | Incorporated and Principal Place of Business In Another State | ☐ 5 | ☐ 5 |
| Citizen or Subject of a Foreign Country | ☐ 3 | ☐ 3 | Foreign Nation | ☐ 6 | ☐ 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

Click here for: [Nature of Suit Code Descriptions.](#)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES	
☐ 110 Insurance ☐ 120 Marine ☐ 130 Miller Act ☐ 140 Negotiable Instrument ☐ 150 Recovery of Overpayment & Enforcement of Judgment ☐ 151 Medicare Act ☐ 152 Recovery of Defaulted Student Loans (Excludes Veterans) ☐ 153 Recovery of Overpayment of Veteran's Benefits ☐ 160 Stockholders' Suits ☐ 190 Other Contract ☐ 195 Contract Product Liability ☐ 196 Franchise	PERSONAL INJURY ☐ 310 Airplane ☐ 315 Airplane Product Liability ☐ 320 Assault, Libel & Slander ☐ 330 Federal Employers' Liability ☐ 340 Marine ☐ 345 Marine Product Liability ☐ 350 Motor Vehicle ☐ 355 Motor Vehicle Product Liability ☐ 360 Other Personal Injury ☐ 362 Personal Injury - Medical Malpractice	☐ 365 Personal Injury - Product Liability ☐ 367 Health Care/Pharmaceutical Personal Injury Product Liability ☐ 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY ☐ 370 Other Fraud ☐ 371 Truth in Lending ☐ 380 Other Personal Property Damage ☐ 385 Property Damage Product Liability	☐ 625 Drug Related Seizure of Property 21 USC 881 ☐ 690 Other LABOR ☐ 710 Fair Labor Standards Act ☐ 720 Labor/Management Relations ☐ 740 Railway Labor Act ☐ 751 Family and Medical Leave Act ☐ 790 Other Labor Litigation ☐ 791 Employee Retirement Income Security Act IMMIGRATION ☐ 462 Naturalization Application ☐ 465 Other Immigration Actions	☐ 422 Appeal 28 USC 158 ☐ 423 Withdrawal 28 USC 157 PROPERTY RIGHTS ☐ 820 Copyrights ☒ 830 Patent ☐ 835 Patent - Abbreviated New Drug Application ☐ 840 Trademark ☐ 880 Defend Trade Secrets Act of 2016 SOCIAL SECURITY ☐ 861 HIA (1395ff) ☐ 862 Black Lung (923) ☐ 863 DIWC/DIWW (405(g)) ☐ 864 SSID Title XVI ☐ 865 RSI (405(g)) FEDERAL TAX SUITS ☐ 870 Taxes (U.S. Plaintiff or Defendant) ☐ 871 IRS—Third Party 26 USC 7609	☐ 375 False Claims Act ☐ 376 Qui Tam (31 USC 3729(a)) ☐ 400 State Reapportionment ☐ 410 Antitrust ☐ 430 Banks and Banking ☐ 450 Commerce ☐ 460 Deportation ☐ 470 Racketeer Influenced and Corrupt Organizations ☐ 480 Consumer Credit (15 USC 1681 or 1692) ☐ 485 Telephone Consumer Protection Act ☐ 490 Cable/Sat TV ☐ 850 Securities/Commodities/Exchange ☐ 890 Other Statutory Actions ☐ 891 Agricultural Acts ☐ 893 Environmental Matters ☐ 895 Freedom of Information Act ☐ 896 Arbitration ☐ 899 Administrative Procedure Act/Review or Appeal of Agency Decision ☐ 950 Constitutionality of State Statutes
REAL PROPERTY ☐ 210 Land Condemnation ☐ 220 Foreclosure ☐ 230 Rent Lease & Ejectment ☐ 240 Torts to Land ☐ 245 Tort Product Liability ☐ 290 All Other Real Property	CIVIL RIGHTS ☐ 440 Other Civil Rights ☐ 441 Voting ☐ 442 Employment ☐ 443 Housing/Accommodations ☐ 445 Amer. w/Disabilities - Employment ☐ 446 Amer. w/Disabilities - Other ☐ 448 Education	PRISONER PETITIONS Habeas Corpus: ☐ 463 Alien Detainee ☐ 510 Motions to Vacate Sentence ☐ 530 General ☐ 535 Death Penalty Other: ☐ 540 Mandamus & Other ☐ 550 Civil Rights ☐ 555 Prison Condition ☐ 560 Civil Detainee - Conditions of Confinement			

V. ORIGIN (Place an "X" in One Box Only)

- ☒ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from Another District (specify) ☐ 6 Multidistrict Litigation - Transfer ☐ 8 Multidistrict Litigation - Direct File

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):

35 U.S.C. § 271

Brief description of cause:

Patent Infringement

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P.

DEMAND \$

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE _____ DOCKET NUMBER _____

DATE

Sep 20, 2023

SIGNATURE OF ATTORNEY OF RECORD

/s/ Wasif Qureshi

FOR OFFICE USE ONLY

RECEIPT # _____ AMOUNT _____ APPLYING IFP _____ JUDGE _____ MAG. JUDGE _____

Petitioner's Exhibit 1004

INSTRUCTIONS FOR ATTORNEYS COMPLETING CIVIL COVER SHEET FORM JS 44

Authority For Civil Cover Sheet

The JS 44 civil cover sheet and the information contained herein neither replaces nor supplements the filings and service of pleading or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. Consequently, a civil cover sheet is submitted to the Clerk of Court for each civil complaint filed. The attorney filing a case should complete the form as follows:

- I.(a) Plaintiffs-Defendants.** Enter names (last, first, middle initial) of plaintiff and defendant. If the plaintiff or defendant is a government agency, use only the full name or standard abbreviations. If the plaintiff or defendant is an official within a government agency, identify first the agency and then the official, giving both name and title.
 - (b) County of Residence.** For each civil case filed, except U.S. plaintiff cases, enter the name of the county where the first listed plaintiff resides at the time of filing. In U.S. plaintiff cases, enter the name of the county in which the first listed defendant resides at the time of filing. (NOTE: In land condemnation cases, the county of residence of the "defendant" is the location of the tract of land involved.)
 - (c) Attorneys.** Enter the firm name, address, telephone number, and attorney of record. If there are several attorneys, list them on an attachment, noting in this section "(see attachment)".
- II. Jurisdiction.** The basis of jurisdiction is set forth under Rule 8(a), F.R.Cv.P., which requires that jurisdictions be shown in pleadings. Place an "X" in one of the boxes. If there is more than one basis of jurisdiction, precedence is given in the order shown below.
- United States plaintiff. (1) Jurisdiction based on 28 U.S.C. 1345 and 1348. Suits by agencies and officers of the United States are included here. United States defendant. (2) When the plaintiff is suing the United States, its officers or agencies, place an "X" in this box.
- Federal question. (3) This refers to suits under 28 U.S.C. 1331, where jurisdiction arises under the Constitution of the United States, an amendment to the Constitution, an act of Congress or a treaty of the United States. In cases where the U.S. is a party, the U.S. plaintiff or defendant code takes precedence, and box 1 or 2 should be marked.
- Diversity of citizenship. (4) This refers to suits under 28 U.S.C. 1332, where parties are citizens of different states. When Box 4 is checked, the citizenship of the different parties must be checked. (See Section III below; **NOTE: federal question actions take precedence over diversity cases.**)
- III. Residence (citizenship) of Principal Parties.** This section of the JS 44 is to be completed if diversity of citizenship was indicated above. Mark this section for each principal party.
- IV. Nature of Suit.** Place an "X" in the appropriate box. If there are multiple nature of suit codes associated with the case, pick the nature of suit code that is most applicable. Click here for: [Nature of Suit Code Descriptions](#).
- V. Origin.** Place an "X" in one of the seven boxes.
- Original Proceedings. (1) Cases which originate in the United States district courts.
- Removed from State Court. (2) Proceedings initiated in state courts may be removed to the district courts under Title 28 U.S.C., Section 1441.
- Remanded from Appellate Court. (3) Check this box for cases remanded to the district court for further action. Use the date of remand as the filing date.
- Reinstated or Reopened. (4) Check this box for cases reinstated or reopened in the district court. Use the reopening date as the filing date.
- Transferred from Another District. (5) For cases transferred under Title 28 U.S.C. Section 1404(a). Do not use this for within district transfers or multidistrict litigation transfers.
- Multidistrict Litigation – Transfer. (6) Check this box when a multidistrict case is transferred into the district under authority of Title 28 U.S.C. Section 1407.
- Multidistrict Litigation – Direct File. (8) Check this box when a multidistrict case is filed in the same district as the Master MDL docket.
- PLEASE NOTE THAT THERE IS NOT AN ORIGIN CODE 7.** Origin Code 7 was used for historical records and is no longer relevant due to changes in statute.
- VI. Cause of Action.** Report the civil statute directly related to the cause of action and give a brief description of the cause. **Do not cite jurisdictional statutes unless diversity.** Example: U.S. Civil Statute: 47 USC 553 Brief Description: Unauthorized reception of cable service.
- VII. Requested in Complaint.** Class Action. Place an "X" in this box if you are filing a class action under Rule 23, F.R.Cv.P.
- Demand. In this space enter the actual dollar amount being demanded or indicate other demand, such as a preliminary injunction.
- Jury Demand. Check the appropriate box to indicate whether or not a jury is being demanded.
- VIII. Related Cases.** This section of the JS 44 is used to reference related pending cases, if any. If there are related pending cases, insert the docket numbers and the corresponding judge names for such cases.

Date and Attorney Signature. Date and sign the civil cover sheet.