

# US Patent & Trademark Office

## Patent Public Search | Text View

United States Patent Application Publication

20250257914

Kind Code

A1

Publication Date

August 14, 2025

Inventor(s)

NOJIMA; Yasumitsu

### ACCUMULATOR FIXING MECHANISM AND COMPRESSOR

#### Abstract

An accumulator fixing mechanism for fixing an accumulator to a side of a compressor body includes a band formed in an elongated band-like shape; and a holder that is fixed to the compressor body and fixes the accumulator by holding both end portions of the band arranged along an outer circumference of the accumulator. The holder includes a fixing portion fixed to an outer circumferential surface of the compressor body; a folded-back portion that is provided near at least one end portion of the holder, extends toward the accumulator, and is folded back toward the compressor body; and a recessed portion formed by notching an end portion of the folded-back portion. A ratio of a depth dimension of the recessed portion to a width dimension of the recessed portion is set to 0.4 or more. Alternatively, a ratio of a depth dimension of the recessed portion to a width dimension of the end portion is set to 0.3 or more.

**Inventors:** NOJIMA; Yasumitsu (Shizuoka, JP)

**Applicant:** CARRIER JAPAN CORPORATION (Tokyo, JP)

**Family ID:** 1000008495781

**Appl. No.:** 19/052875

**Filed:** February 13, 2025

#### Foreign Application Priority Data

JP 2024-020379

Feb. 14, 2024

#### Publication Classification

**Int. Cl.:** F25B43/00 (20060101)

**U.S. Cl.:**

CPC F25B43/006 (20130101); F25B2500/12 (20130101); F25B2500/13 (20130101)

## Background/Summary

### CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This is a Non-Provisional patent application which relies on and claims priority to Japanese Patent Application No. JP 2024-020379, filed on Feb. 14, 2024, the entire contents of which are incorporated herein by reference.

### FIELD OF THE INVENTION

[0002] The present embodiment relates to an accumulator fixing mechanism and a compressor.

### BACKGROUND OF THE INVENTION

[0003] For example, some rotary compressors comprise an accumulator. The accumulator is usually fixed to a compressor body when in use. Conventionally, a fixing mechanism for fixing the accumulator to the compressor body uses, for example, a holder fixed to an outer surface of the compressor body by welding or the like and a band that is elastically deformable. In this case, an operator performs the fixation by manually wrapping the band around the accumulator and hooking the band onto the holder.

[0004] However, in the conventional fixing mechanism, if the band is incompletely attached to the holder during assembly of the compressor, the band may be detached from the holder due to vibrations during transport or operation of the compressor, resulting in noises due to vibrations or dropping-off due to breakage of the accumulator.

[0005] Thus, an accumulator fixing mechanism that can inhibit a band from being detached from a holder, and a compressor comprising the accumulator fixing mechanism are to be provided.

### SUMMARY OF THE INVENTION

[0006] An accumulator fixing mechanism according to an embodiment is for fixing an accumulator to a side of a compressor body, and comprises: a band formed in an elongated band-like shape; and a holder that is fixed to the compressor body and fixes the accumulator by holding both end portions of the band arranged along an outer circumference of the accumulator. The holder comprises: a fixing portion fixed to an outer circumferential surface of the compressor body; a folded-back portion that is provided near at least one end portion of the holder, extends toward the accumulator and is folded back toward the compressor body; and a recessed portion formed by notching an end portion of the folded-back portion. A ratio ( $L/D1$ ) of a depth dimension ( $L$ ) of the recessed portion to a width dimension ( $D1$ ) of the recessed portion is set to 0.4 or more.

Alternatively, a ratio ( $L/D2$ ) of a depth dimension ( $L$ ) of the recessed portion to a width dimension ( $D2$ ) of the end portion is set to 0.3 or more.

[0007] In addition, a compressor according to an embodiment comprises: the compressor body; the accumulator; and the accumulator fixing mechanism.

---

## Description

### BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a diagram schematically showing an example of a compressor comprising an accumulator fixing mechanism according to an embodiment;

[0009] FIG. 2 is a sectional view shown along line X2-X2 in FIG. 1 for an example of a compressor comprising an accumulator fixing mechanism according to an embodiment, showing a configuration around the accumulator fixing mechanism in an enlarged scale;

[0010] FIG. 3 is a diagram showing, for an example of a compressor comprising an accumulator fixing mechanism according to an embodiment, a state where a locking portion of a band of the accumulator fixing mechanism is detached from a holder from the state of FIG. 2;

[0011] FIG. 4 is a front view showing an example of a holder for an example of an accumulator

fixing mechanism according to an embodiment;

[0012] FIG. 5 is a sectional view of a holder shown along line X5-X5 of FIG. 4 for an example of an accumulator fixing mechanism according to an embodiment;

[0013] FIG. 6 is a front view showing an example of a holder and a band for an example of an accumulator fixing mechanism according to an embodiment; and

[0014] FIG. 7 is a front view showing another example of a holder for an example of an accumulator fixing mechanism according to an embodiment.

#### DETAILED DESCRIPTION OF THE INVENTION

[0015] In the following, several embodiments will be described with reference to the drawings. A compressor **1** shown in FIG. 1 can be used as a component of a refrigeration cycle, for example. The compressor **1** is connected to external equipment such as an evaporator or condenser when in use, for example. The compressor **1** suctions a coolant flowing out of external equipment, compresses the coolant in the compressor **1**, and supplies the coolant to external equipment, for example. The compressor **1** can be composed of a rotary compressor of a one-cylinder type with one compression chamber in a compressor body **10**, or a two-cylinder type with two compression chambers, or a three-cylinder type with three compression chambers, for example.

[0016] As shown in FIG. 1, the compressor **1** comprises a discharge pipe **2**, an inlet pipe **3**, a suction pipe **4**, a compressor body **10**, an accumulator **20**, and an accumulator fixing mechanism **30**. Note that, in the following description, the accumulator fixing mechanism **30** may be referred to simply as a fixing mechanism **30**. In addition, the compressor **1** shown in FIG. 1 is an example of a two-cylinder rotary compressor. The compressor **1** is installed in the orientation in FIG. 1 when in use, and the up-down direction on the paper of FIG. 1 is defined as the up-down direction of the compressor **1**.

[0017] The compressor body **10** comprises a sealed container **11**. The sealed container **11** is made of metal and formed in a cylindrical shape as a whole, for example. In the sealed container **11**, a driving mechanism and a compression mechanism are incorporated and a coolant is charged, which are not shown in detail. The driving mechanism includes a motor and a cylinder and operates the compression mechanism. The compression mechanism is operated by the driving mechanism, and compresses the coolant in the sealed container **11** and discharges the coolant out of the sealed container **11**. In this case, the discharge pipe **2** is connected to an upper portion of the sealed container **11** and extends out above the sealed container **11**, for example.

[0018] The accumulator **20** has a function of temporarily storing the coolant flowing into the compressor body **10**, accumulating the pressure of the coolant and releasing the pressure as necessary. The accumulator **20** is made of metal and is formed in a tubular shape as a whole, and is formed to be smaller than the compressor body **10**, for example. The accumulator **20** is fixed to a side surface of the compressor body **10**, floating from an installation surface **90** of the compressor **1**. The inlet pipe **3** is connected to an upper portion of the accumulator **20**, extends out above the accumulator **20** and is connected to external equipment not shown, for example.

[0019] The accumulator **20** and the compressor body **10** are connected by the suction pipe **4**. The suction pipe **4** extends out from a bottom portion of the accumulator **20** and is connected to a lower portion of the outer side surface of the sealed container **11**. During operation of the compressor body **10**, the coolant in the compressor body **10** is compressed. Then, the compressed coolant is discharged out of the compressor body **10** from the discharge pipe **2** and is supplied to external equipment not shown.

[0020] In addition, the discharge of the coolant forms a negative pressure on the suction pipe **4** side of the compressor body **10**. Thus, the coolant in the accumulator **20** is suctioned into the compressor body **10** through the suction pipe **4**, and the coolant flowing out of external equipment not shown is suctioned from the inlet pipe **3** into the accumulator **20**. Then, the coolant flowing into the accumulator **20** is adjusted to a certain pressure and supplied to the compressor body **10**.

[0021] The fixing mechanism **30** has a function of removably attaching, that is, fixing the

accumulator **20** to a side of the compressor body **10**. The fixing mechanism **30** fixes the accumulator **20** to a side surface of the compressor body **10** with the accumulator **20** floating from the installation surface **90**, that is, in an orientation in which the bottom portion of the accumulator **20** does not contact the installation surface **90**.

[0022] As shown in FIGS. **2** to **5**, the fixing mechanism **30** comprises a band **40** and a holder **50**. The band **40** is formed by bending an elongated band-like member that is longer in one direction, for example. The band **40** is formed in a shape that is bent into a curve with a curvature radius larger than the outer diameter of the accumulator **20**, for example, with no external force acting on the band **40**. In addition, the band **40** is composed of a member that is deformable to a certain extent along the outer circumferential surface of the accumulator **20** when the accumulator **20** is attached to the compressor body **10**. The band **40** can be composed of an elastically deformable member such as spring steel, for example, or can also be composed of a different material.

[0023] The band **40** has a support portion **41** and a locking portion **42**. The support portion **41** and the locking portion **42** are respectively provided at both end portions of the band **40**. The support portion **41** is a portion that is fixed to the holder **50** prior to the locking portion **42** when the accumulator **20** is fixed to the compressor body **10**. In addition, the support portion **41** is a portion that serves as a support of the band **40** when the band **40** is arranged along the outer circumferential surface of the accumulator **20**.

[0024] The support portion **41** is formed in a shape in which one end portion of the band **40** is bent in a mountain fold toward the inside of the curve of the band **40**, that is, toward the accumulator **20**, for example. The locking portion **42** is a portion that is fixed to the holder **50** subsequent to the support portion **41** when the accumulator **20** is fixed to the compressor body **10**. The locking portion **42** is configured to be more easily attached and detached to the holder **50** than the support portion **41**. The locking portion **42** is formed in a shape in which an end portion of the band **40** opposite the support portion **41** is bent in a mountain fold toward the inside of the curve of the band **40**, that is, toward the accumulator **20**, and is thereafter bent in a valley fold in a direction away from the accumulator **20**, for example. Note that either the support portion **41** or the locking portion **42** may also be configured to be fixed to the holder **50** with a screw or the like.

[0025] The holder **50** is fixed to the compressor body **10**. In addition, the holder **50** has a function of fixing the accumulator **20** by holding both end portions of the band **40** arranged along the outer circumference of the accumulator **20**, that is, the support portion **41** and the locking portion **42**.

[0026] The holder **50** is made of metal such as stainless steel and is formed in a shape in which an elongated member is bent, for example. In this case, as shown in FIG. **1**, the dimension of the holder **50** in the width direction is larger than the dimension of the band **40** in the width direction. Note that the dimensions of the band **40** and the holder **50** in the width direction refer to their dimensions in a direction perpendicular to the longitudinal direction of the band **40** and the holder **50**, that is, their dimensions in the up-down direction in FIG. **1**.

[0027] The holder **50** has a fixing portion **51**, a folded-back portion **52**, and a recessed portion **53**. The fixing portion **51** is a portion provided in a region astride the center of the holder **50** in the longitudinal direction and fixed to the outer circumferential surface of the compressor body **10**, that is, the outer circumferential surface of the sealed container **11**. The fixing portion **51** is fixed to the outer circumferential surface of the compressor body **10** by welding or the like, for example.

[0028] The folded-back portion **52** is provided near at least one end portion of the holder **50**. The folded-back portion **52** corresponds to at least the locking portion **42** of the band **40** and is configured to be capable of locking the locking portion **42**. The folded-back portion **52** is provided in a region from a boundary portion of the fixing portion **51** to an end portion of the band **40**. The folded-back portion **52** is formed in a shape in which it extends from the boundary portion of the fixing portion **51** toward the accumulator **20** and is then folded back toward the compressor body **10**.

[0029] In the case of the present embodiment, folded-back portions **52** are respectively provided at

both end portions of the holder **50**. In addition, the folded-back portions **52** are configured such that both the support portion **41** and the locking portion **42** of the band **40** can be attached thereto. In this case, as shown in FIGS. **4** and **5**, the holder **50** can be formed in a shape that is symmetrical with respect to the center of the holder **50** in the longitudinal direction, for example.

[0030] The recessed portion **53** is formed by notching an end portion of the folded-back portion **52**. That is, as shown in FIG. **4**, the recessed portion **53** is formed in a notched shape in which both width-direction edges of the holder **50** are notched in the longitudinal direction of the holder **50**. Here, defining the bottom of the recessed portion **53** as a bottom portion **54**, protruding portions **55** protruding from the bottom portion **54**, which is the bottom of the recessed portion **53**, toward the outside of the holder **50** in the longitudinal direction are formed on both sides of the band **40** in the width direction with respect to the recessed portion **53**.

[0031] In this configuration, an operator can fix the accumulator **20** to the compressor body **10** in the following manner. That is, when fixing the accumulator **20** to the compressor body **10**, the operator first hooks the support portion **41** of the band **40** onto one folded-back portion **52** of the holder **50**, as shown in FIG. **3**. The operator arranges the band **40** to be wrapped around the outer circumferential surface of the accumulator **20** while bending the band **40** by using the support portion **41** of the band **40** as a support.

[0032] Then, the operator hooks the locking portion **42** of the band **40** onto one folded-back portion **52** of the holder **50**, as shown in FIG. **2**. At this time, the operator positions the locking portion **42** inside the recessed portion **53**, that is, inside the protruding portion **55**. In this manner, the locking portion **42** fits inside the recessed portion **53**, and thus movements of the locking portion **42** in the horizontal direction and the up-down direction are restricted, as a result of which the accumulator **20** is fixed to the compressor body **10**.

[0033] In addition, the operator can detach the accumulator **20** from the compressor body **10** by performing a procedure reversed from that mentioned above. That is, when detaching the accumulator **20** from the compressor body **10**, the operator holds a portion near the locking portion **42** in the state of FIG. **2**, and moves the locking portion **42** in a direction away from the holder **50** to open the band **40**. Then, as shown in FIG. **3**, the locking portion **42** is detached from the recessed portion **53**. In this manner, the locking of the locking portion **42** is released, and the accumulator **20** can be detached from the compressor body **10**.

[0034] Here, the operation of hooking or detaching the locking portion **42** of the band **40** onto or from the folded-back portion **52** of the holder **50** requires a relatively large force since it is necessary to elastically deform the entire band **40** by using the support portion **41** as a support. Thus, the holder **50** in the present embodiment is formed in a shape that is symmetrical with respect to the center of the holder **50** in the longitudinal direction. In this manner, the operator can hook the support portion **41** and the locking portion **42** of the band **40** onto either of the two folded-back portions **52** of the holder **50**. Therefore, the operator can change the attachment orientation of the band **40** according to his/her dominant hand.

[0035] In other words, in the operation of attaching the band **40** to the holder **50** to fix the accumulator **20** to the compressor body **10**, the operator typically performs the operation from the opposite side to the compressor body **10** with respect to the accumulator **20**, for example, that is, from the right side on the paper of FIGS. **1** to **3**. In this case, if the operator is right-handed, for example, as shown in FIG. **3**, the operator hooks the support portion **41** of the band **40** onto the folded-back portion **52** on the left side when facing toward the holder **50**, that is, on the lower side on the paper of FIG. **3**, and then hooks the locking portion **42** of the band **40** onto the folded-back portion **52** on the right side when facing toward the holder **50**, that is, on the upper side on the paper of FIG. **3**. In this case, it is easy for the operator to handle the locking portion **42** by the right hand, which is the dominant hand.

[0036] Conversely, if the operator is left-handed, for example, contrary to FIG. **3**, the operator hooks the support portion **41** of the band **40** onto the folded-back portion **52** on the right side when

facing toward the holder **50**, that is, on the upper side on the paper of FIG. **3**, and then hooks the locking portion **42** of the band **40** onto the folded-back portion **52** on the left side when facing toward the holder **50**, that is, on the lower side on the paper of FIG. **3**. In this case, it is easy for the operator to handle the locking portion **42** by the left hand, which is the dominant hand.

[0037] Thus, according to the accumulator fixing mechanism **30** in the present embodiment, it is easy for the operator to handle the locking portion **42** by his/her dominant hand, whether the operator is right-handed or left-handed. As a result, the operation is easily performed by the dominant hand, which can reduce misoperations.

[0038] According to the above-described embodiment, the fixing mechanism **30** is for fixing the accumulator **20** to a side of the compressor body **10**. The fixing mechanism **30** comprises the band **40** and the holder **50**. The band **40** is formed in an elongated band-like shape. The holder **50** is fixed to the compressor body **10**. The holder **50** fixes the accumulator **20** to the compressor body **10** by holding the locking portion **42**, which are both end portions of the band **40** arranged along the outer circumference of the accumulator **20**.

[0039] The holder **50** has the fixing portion **51**, the folded-back portion **52**, and the recessed portion **53**. The fixing portion **51** is a portion fixed to the outer circumferential surface of the compressor body **10**. The folded-back portion **52** is provided near at least one end portion of the holder **50**, and is formed in a shape in which it extends toward the accumulator **20** and is folded back toward the compressor body **10**. The recessed portion **53** is formed by notching an end portion of the folded-back portion **52**.

[0040] Here, with reference to FIG. **6**, the principle on which the locking portion **42** is detached from the recessed portion **53** due to vibrations, is described. Note that dash-dot-dot lines A, B in FIG. **6** indicate how the locking portion **42** vibrates. In addition, dash-dot-dot line C in FIG. **6** indicates how the locking portion **42** overrides the protruding portion **55**. In the following description, the dimension of the recessed portion **53** of the holder **50** in the width direction is defined as a recessed portion width dimension D1, the dimension of the end portion of the holder **50** in the width direction is defined as an end portion width dimension D2, and the dimension of the recessed portion **53** of the holder **50** in the longitudinal direction is defined as a recessed portion depth dimension L.

[0041] Note that, as shown in FIG. **6**, the dimension W of the band **40** in the width direction, that is, the dimension W of the locking portion **42** in the width direction is set to be slightly smaller than the recessed portion width dimension D1 such that the locking portion **42** easily fits into the recessed portion **53** and to such an extent that the locking portion **42** does not largely rattle with respect to the recessed portion **53**.

[0042] Here, if the fixation of the band **40** to the holder **50** is incomplete, such as if the fitting of the locking portion **42** into the recessed portion **53** is shallow, or if there are large vibrations during transport or operation of the compressor **1**, for example, the locking portion **42** vibrates as indicated by dash-dot-dot lines A, B in FIG. **6**, for example, due to those vibrations. In this case, if the depth dimension L of the recessed portion **53** is small relative to the vibration amplitude of the locking portion **42**, the locking portion **42** overrides the protruding portion **55** as indicated by dash-dot-dot line C in FIG. **6**.

[0043] If the vibrations continue with the locking portion **42** overriding the protruding portion **55**, the locking portion **42** moves downward due to the vibrations and the weight of the band **40** itself. Finally, the locking portion **42** goes over the protruding portion **55** and is detached from the recessed portion **53**, and as a result, the accumulator **20** drops off of the compressor body **10**. In this case, increasing the depth dimension L of the recessed portion **53** makes the locking portion **42** less prone to be detached from the recessed portion **53**. However, if the depth dimension L of the recessed portion **53** is excessively increased, it is necessary to largely deform the band **40** when releasing the locking of the locking portion **42**, which lowers workability.

[0044] Thus, the inventor of the present application has experimentally found appropriate

dimensional relationships for the band **40** and the holder **50**. That is, the inventor of the present application has found that, by setting the ratio  $L/D1$  of the recessed portion depth dimension  $L$  to the recessed portion width dimension  $D1$  to 0.4 or more, the locking portion **42** is less prone to override the protruding portion **55** even when the locking portion **42** vibrates. Similarly, the inventor of the present application has found that, by setting the ratio  $L/D2$  of the recessed portion depth dimension  $L$  to the end portion width dimension  $D2$  to 0.3 or more, the locking portion **42** is less prone to override the protruding portion **55** even when the locking portion **42** vibrates.

[0045] In addition, the inventor of the present application has found that, by setting either one or both of the ratio  $L/D1$  of the recessed portion depth dimension  $L$  to the recessed portion width dimension  $D1$  and the ratio  $L/D2$  of the recessed portion depth dimension  $L$  to the end portion width dimension  $D2$  to 1.0 or less, it is possible to detach the locking portion **42** from the recessed portion **53** without excessively deforming the band **40**.

[0046] Note that the recessed portion depth dimension  $L$  of the holder **50** can be set to 5 mm or more and 10 mm or less, for example. In this case, if the recessed portion depth dimension  $L$  is 5 mm, the recessed portion width dimension  $D1$  is set to 5 mm or more and 12.5 mm or less, and the end portion width dimension  $D2$  is set to 5 mm or more and 50/3 mm or less. Alternatively, if the recessed portion depth dimension  $L$  is 10 mm, the recessed portion width dimension  $D1$  is set to 10 mm or more and 25 mm or less, and the end portion width dimension  $D2$  is set to 10 mm or more and 100/3 mm or less.

[0047] In addition, in the present embodiment, as shown in FIG. 3, the depth dimension  $M1$  of the bending of the support portion **41** and the depth dimension  $M2$  of the bending of the locking portion **42** of the band **40** are set in a range from 0.8 times to 1.3 times the recessed portion depth dimension  $L$  of the recessed portion **53**. In this manner, it is possible to ensure a sufficient holding force to keep the band **40** attached to the holder **50** while making it easy for the operator to recognize when a state of insufficient attachment occurs due to a misoperation, which can reduce misoperations during the attachment operation.

[0048] According to the above-described embodiment, the fixing mechanism **30** is for fixing the accumulator **20** to a side of the compressor body **10**. The fixing mechanism **30** comprises the band **40** formed in an elongated band-like shape and the holder **50**. The holder **50** is fixed to the compressor body **10**. The holder **50** fixes the accumulator **20** by holding the support portion **41** and the locking portion **42**, which are both end portions of the band **40** arranged along the outer circumference of the accumulator **20**.

[0049] The holder **50** has the fixing portion **51**, the folded-back portion **52**, and the recessed portion **53**. The fixing portion **51** is fixed to the outer circumferential surface of the compressor body **10**. The folded-back portion **52** is provided near at least one end portion of the holder **50**, and is formed in a shape in which it extends toward the accumulator **20** and is folded back toward the compressor body **10**. The recessed portion **53** is formed by notching an end portion of the folded-back portion **52**.

[0050] In addition, in the fixing mechanism **30**, the ratio  $L/D1$  of the depth dimension  $L$  of the recessed portion **53** to the width dimension  $D1$  of the recessed portion **53** is set to 0.4 or more.

[0051] In this manner, it is possible to inhibit the locking portion **42** from overriding the protruding portion **55** when the compressor **1** undergoes vibrations due to transport or operation and, as a result, to inhibit the band **40** from being detached from the holder **50**. In addition, this can prevent a state of incomplete assembly such as a misalignment during the attachment operation.

[0052] In addition, in the fixing mechanism **30**, the ratio  $L/D2$  of the depth dimension  $L$  of the recessed portion **53** to the width dimension  $D2$  of the recessed portion **53** is set to 0.3 or more.

[0053] In this manner as well, it is possible to inhibit the locking portion **42** from overriding the protruding portion **55** when the compressor **1** undergoes vibrations due to transport or operation and, as a result, to inhibit the band **40** from being detached from the holder **50**.

[0054] The holder **50** of the fixing mechanism **30** can be modified as shown in FIG. 7, for example.

A holder **50A** shown in the example of FIG. 7 has a recessed portion **53A**. The recessed portion **53A** is formed in a trapezoidal shape in which its width dimension decreases from both ends of the holder **50A** toward its center in the longitudinal direction. In this case, defining the width dimension **D1** of the recessed portion **53A** as the distance between the two protruding portions **55**, the width dimension **D3** of the bottom portion **54** at the bottom of the recessed portion **53A** is set to be smaller than the width dimension **D1** of the recessed portion **53A**.

[0055] In this configuration as well, it is possible to achieve operational effects similar to those in the configurations of FIGS. 1 to 6 described above. Further, since edges **56** on both sides of the recessed portion **53A** are inclined in a tapered shape, when fitting the locking portion **42** into the recessed portion **53A** and when detaching the locking portion **42** from the recessed portion **53A**, it is easy for the operator to move the locking portion **42** along the edges **56** with the tapered shape. This improves the workability for fitting the locking portion **42** into the recessed portion **53A** and detaching the locking portion **42** from the recessed portion **53A**.

[0056] While the present disclosure has been described in accordance with the embodiments, it is to be understood that the present disclosure is not limited to the embodiments and structures. The present disclosure encompasses various modifications as well as variations within the scope of equivalents. In addition, various combinations and forms as well as other combinations and forms including only one or more or less elements in addition to those fall within the scope and concept of the present disclosure.

## Claims

1. An accumulator fixing mechanism for fixing an accumulator to a side of a compressor body, comprising: a band formed in an elongated band-like shape; and a holder that is fixed to the compressor body and fixes the accumulator by holding both end portions of the band arranged along an outer circumference of the accumulator, wherein the holder comprises: a fixing portion fixed to an outer circumferential surface of the compressor body; a folded-back portion that is provided near at least one end portion of the holder, extends toward the accumulator and is folded back toward the compressor body; and a recessed portion formed by notching an end portion of the folded-back portion, and a ratio ( $L/D1$ ) of a depth dimension (**L**) of the recessed portion to a width dimension (**D1**) of the recessed portion is set to 0.4 or more.
  2. An accumulator fixing mechanism for attaching an accumulator to a side of a compressor body, comprising: a holder fixed to the compressor body; and a band arranged along an outer circumference of the accumulator and removably held to the holder, wherein the holder comprises: a fixing portion fixed to an outer circumferential surface of the compressor body; a folded-back portion that is provided near at least one end portion of the holder, extends toward the accumulator and is folded back toward the compressor body; and a recessed portion formed by notching an end portion of the folded-back portion, and a ratio ( $L/D2$ ) of a depth dimension (**L**) of the recessed portion to a width dimension (**D2**) of the end portion is set to 0.3 or more.
  3. The accumulator fixing mechanism according to claim 1, wherein the recessed portion is formed in a trapezoidal shape in which its width dimension decreases from both ends of the holder toward a center of the holder in a longitudinal direction.
  4. A compressor comprising: the compressor body; the accumulator; and the accumulator fixing mechanism according to claim 1.
  5. The accumulator fixing mechanism according to claim 2, wherein the recessed portion is formed in a trapezoidal shape in which its width dimension decreases from both ends of the holder toward a center of the holder in a longitudinal direction.
  6. A compressor comprising: the compressor body; the accumulator; and the accumulator fixing mechanism according to claim 2.
-



