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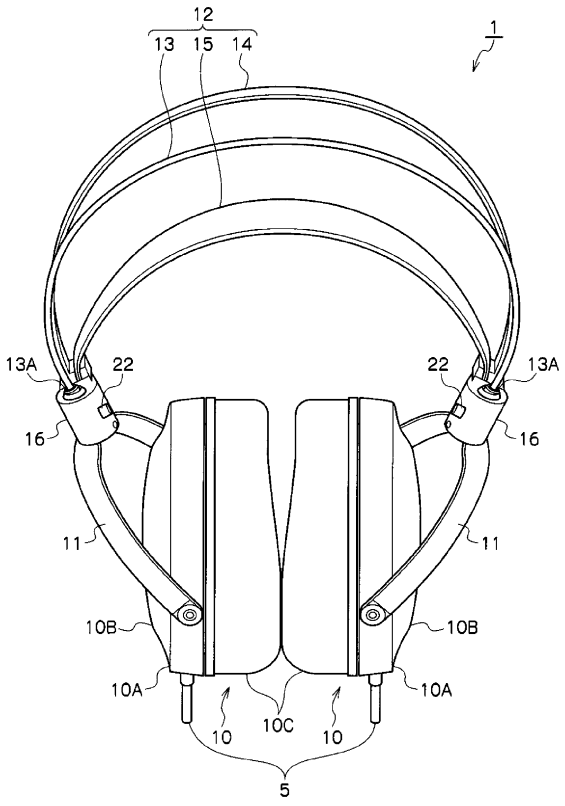
(54) Headphone

(57) The headphone 1 includes a pair of sound emitting parts 10 including a speaker unit 2, a headband unit 12, and a supporting arm part 11 connecting the sound emitting part 10 and the headband unit 12. The supporting arm part 11 includes a connecting part 16 connecting the headband unit 12 and the supporting arm part 11. The headband unit 12 includes a side pressure supplying member 13. The connecting part 16 includes a removable part 20 that allows the side pressure supplying member 13 to be attached to and removed from the connecting part 16, and the removable part 20 includes an engaging member 21 engaged with a part of the side pressure supplying member 13 which is connected with the connecting part 16, and a releasing member 22 releasing the engagement between the engaging member 21 and the part of the side pressure supplying member 13. The releasing member 22 is provided displaceable against the connecting part 16, and the displacement of the releasing member 22 against the connecting part 16 distances the engaging member 21 from the side pressure supplying member 13. With this configuration, the side pressure supplying member is easily attached and removed, thereby an incumbent replacement operation of the side pressure supplying member is resolved.

Fig. 1



EP 2 475 187 A2

Description

FIELD OF THE INVENTION

[0001] The present invention relates to a headphone.

BACKGROUND OF THE INVENTION

[0002] The conventional headphone as described in the following patent literature 1 includes a pair of housings (sound emitting parts) including a speaker unit, and a headband unit supporting these housings. In a headband unit in the conventional headphone, a member positioning the sound emitting part by having contact with a head of a user and a member supplying a side pressure pressing the sound emitting part to the ears of a user are separately configured.

PATENT LITERATURE

[0003] [Patent literature 1] A microfilm of Utility Model Application No. Hei 2—52773 (Publication of Unexamined Utility Model Application No. Hei 4—12789)

PROBLEMS TO BE SOLVED BY THE INVENTION

[0004] In the conventional headphone, which includes a member (side pressure supplying member) supplying a side pressure pressing a sound emitting part to the ears of a user, the supplied side pressure is varied in accordance with the head shape of a user and the adhesive property between the sound emitting part and the ear of the user is varied, and thus there is a possibility that the sound emitting part cannot preferably seal the ear of the user. If the sound emitting part cannot have tight contact with the ear of a user, the sound emitted from the sound emitting part leaks to the outside, causing the surrounding people to have unpleasant feelings, while the ambient noise enters the ears of the user, thereby preventing the user from comfortably listening to the sound emitted from the sound emitting part.

[0005] In response to the aforementioned problem, the side pressure supplying member can be replaced with another one, which can supply a proper pressure in accordance with the head shape of a user. However, since a cumbersome replacement operation is required, a headphone capable of providing easy attachment and removal of the side pressure supplying member has been desired.

[0006] One of the objects of the present invention is to cope with the aforementioned problem. That is, an object of the present invention is to preferably improve the adhesive property between the sound emitting part and the ear of a user by selecting a side pressure supplying member suited to the user, and resolve the cumbersome replacement operation for the side pressure supplying member by easily attaching and releasing the side pressure supplying member.

MEANS FOR SOLVING THE PROBLEMS

[0007] To achieve the object described above, the headphone according to the present invention is provided with at least the following configuration.

A headphone includes a pair of sound emitting parts including a speaker unit, a headband unit, and supporting arm parts connecting the sound emitting parts and the headband unit. The supporting arm part includes connecting part, and the connecting part connects the headband unit and the supporting arm part, and the headband unit includes a side pressure supplying member, and the connecting part includes a removable part, and the removable part attaches and releases the side pressure supplying member to and from the connecting part, and the removable part includes an engaging member engaged with a part of the side pressure supplying member that is connected with the connecting part and a releasing member releasing the engagement between the engaging member and the part of the side pressure supplying member, and the releasing member is provided displaceably to the connecting part, and the displacement of the releasing member with respect to the connecting part distances the engaging member from the side pressure supplying member.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008]

- Fig. 1 is a side view illustrating a headphone according to an embodiment of the present invention;
- Fig. 2 is a view illustrating a connecting part of the headphone according to the embodiment of the present invention (Fig. 2(a) is an external view and Fig. 2(b) is a view illustrating the inside of the headphone);
- Fig. 3 is a view illustrating a removable part in the connecting part of the headphone according to the embodiment of the present invention;
- Fig. 4 is an exploded view of the removable part in the connecting part of the headphone according to the embodiment of the present invention;
- Fig. 5 is a view illustrating a vibration preventing part in the headphone according to the embodiment of the present invention; and
- Fig. 6 is a view illustrating the vibration preventing part in the headphone according to the embodiment of the present invention.

BEST MODE FOR PRACTICING THE INVENTION

[0009] Hereinafter, an embodiment of the present invention is described with reference to the drawings. Fig. 1 is a side view illustrating a headphone according to an embodiment of the present invention. A headphone 1 according to the embodiment of the present invention includes a pair of sound emitting parts 10, 10 including

speaker units, a headband unit 12 and a supporting arm part 11 connecting the sound emitting part 10 and the headband unit 12. The supporting arm part11 includes a connecting part 16 connecting the headband unit 12 and the supporting arm part 11. The headband unit 12 supports the sound emitting part 10 via the pair of the supporting arm parts 11, 11 at both ends of the headband unit 12. A part of the headband unit 12 (end part) is connected with the supporting arm part 11 via the connecting part 16.

[0010] The sound emitting part 10 includes a housing 10A and a speaker unit 2 is arranged inside the housing 10A (see Fig. 5). A cable 5 is connected to the speaker unit 2 inside the housing 10A, supplying a voice signal from the outside to the speaker unit 2. A contacting part 10C is attached to the housing 10A on the sound emission side of the speaker unit. Further, a covering member 10B is attached to the housing 10A in the opposite side of the sound emission side of the speaker unit 2.

[0011] In the example shown in the drawing, the housing 10A of the sound emitting part 10 is supported by both end parts of the supporting arm part 11. More specifically, the housing 10A is connected with the supporting arm part 11 rotatably around a given rotating axis of the supporting arm part 11. The aforementioned rotating axis is provided in the direction along the face of the housing 10A, which is arranged near the connecting part 16. The rotating axis passes through the connecting part. The support of the housing10A with respect to the supporting arm part 11 is not limited to the above-mentioned example, the housing 10A only needs to be supported by a part of the supporting arm part 11.

[0012] In the headphone 1 according to the embodiment of the present invention, the headband unit 12 includes at least one side pressure supplying member. In the example shown in the drawing, the headband unit 12, which has both end parts supporting a pair of sound emitting parts 10, 10, includes a first side pressure supplying member 13, a second side pressure supplying member 14 and a positioning band 15. The first and the second side pressure supplying members 13, 14 are elastic members including curved shape, which are formed along the positioning band 15 and supply a side pressure pressing a pair of sound emitting parts 10, 10 to a counterpart attachment position. With the positioning band 15 placed on the head of a user, the sound emitting parts 10, 10 are positioned with respect to the ears of the user.

[0013] Both end parts of the headband unit 12 (the first and the second side pressure supplying members 13, 14 and the positioning band 15) are connected with a pair of the supporting arm parts 11, 11 via the connecting parts 16. In the example shown in the drawing, the positioning band 15 and the second side pressure supplying member14 are attached to the connecting part 16. In the first side pressure supplying member 13, the end part 13A of the first side pressure supplying member 13 is attached to the connecting part 16. The end part 13A of the first side pressure supplying member 13 is removably attached to the connecting part 16.

[0014] The connecting part 16 of the headphone 1 is described in detail with reference to Figs. 2 to 4. Fig. 2 is a view illustrating the connecting part 16 of the headphone 1. Fig. 2(a) is an external view and Fig. 2(b) is a view illustrating the inside of the headphone. Fig. 3 is a view illustrating the removable part 20 in the connecting part 16 of the headphone 1. Fig. 4 is an exploded view of the removable part 20 in the connecting part 16.

[0015] In the example shown in the drawing, the end part 15A of the positioning band 15 is attached to the second side pressure supplying member 14 via an attaching member 17 configured with a screw 17A, an attachment pat 17B and a counter attachment pat 17C. The attaching member 17 is attached to the second side pressure supplying member 14 such that the position of the positioning band can be changed with respect to the second side pressure supplying member 14. More specifically, the second side pressure supplying member 14 passes through the hole part of the attaching member 17. Further, the attaching member 17 is arranged at a prescribed position along the second side pressure supplying member 14. Thereby, with the attaching member 17 arranged at the prescribed position of the second side pressure supplying member 14, the positioning headband 15 can be arranged in accordance with user preferences. A plurality of protruding parts 14A are provided spaced-apart a predetermined interval on a face of the second side pressure supplying member 14, defining the positions of the attaching member 17(see Fig. 5). The attaching member 17 is arranged at the position in relation to this protruding part 14A and the positioning band 15 is positioned so as to correspond with the ears of a user.

[0016] Further, the end part of the second side pressure supplying member 14 is attached to the connecting part 16, and the second side pressure supplying member 14 is fixed to the connecting part 16. In response to a change in position of the positioning headband 15 with respect to the second side pressure supplying member 14, a position of the pair of the sound emitting parts 10 is changed with respect to the ears of a user. Further, a side pressure to the ears of a user may be changed at the same time.

[0017] The connecting part 16 includes an inserting hole part 16B into which the end part 13A of the first side pressure supplying member 13 is inserted. Further, the connecting part 16 includes a tubular shape part 16C configuring the inserting hole part 16B. The tubular shape part 16C has a face opposing the end part 13A of the first side pressure supplying member 13. With the end part 13A of the first side pressure supplying member 13 inserted into the inserting hole part16B of the connecting part 16, the end part 13A is removably fixed to the connecting part 16. When the end part 13A of the first side pressure supplying member 13 is attached to the connecting part 16, the end part 13A may have contact with

the face of the tubular shape part 16C.

[0018] The connecting part 16 includes a removable part 20, which allows the side pressure supplying member to be inserted into or removed from the connecting part 16. In the example shown in the drawing, the connecting part 16 is provided with the removable part 20, which allows the end part 13A of the first side pressure supplying member 13 to be inserted into or removed from the connecting part 16 when a cover 16F of the connecting part 16 is removed. The removable part 20 includes an engaging member 21 and a releasing member 22. The engaging member 21 is engaged with a part of the first side pressure supplying member 13 that is connected with the connecting part 16 and a releasing member 22 releases the engagement between the engaging member 21 and the part of the first side pressure supplying member 13.

[0019] The releasing member 22 is provided displaceable against the connecting part 16. Also, a part of the engaging member 21 is attached to one end part of the releasing member 22. And, the engaging member 21 and the first side pressure supplying member 13 are spaced apart each other due to the displacement of the releasing member 22 against the connecting part16. More specifically, the releasing member 22 is displaced against the connecting part 16, thereby the engaging member 21 is elastically deformed and is moved away from the end part 13A of the first side pressure supplying member 13 in response to this elastic deformation of the engaging member 21, and thus the engagement between the engaging member 21 and the end part 13A of the first side pressure supplying member 13 is released.

[0020] Hereinafter, the removable part 20 is described in more detail. As shown in Fig. 4, the engaging member 21 includes a first part 21A fixed to the inside of the connecting part 16, and a second part 21B that is displaced against the first part 21A around the end part 13A of the first side pressure supplying member13, which is inserted into the inside of the connecting part 16. More specifically, the engaging member 21 is configured with a plate-shaped elastic member and includes a bending part 21C between the first part 21A and the second part 21B along the axis direction of the end part 13A of the first side pressure supplying member13. The first part 21A and the second part 21B are substantially bent or folded at this bending part 21C such that the second part 21B is displaced against the first part 21A. The second part 21B is displaced in the axis direction of the releasing member 22.

[0021] As shown in the drawing, the first part 21A of the engaging member 21 includes an attaching hole 21E, and an attaching member (screw) 18 inserted into the attaching hole is attached to an attaching counterpart 16E of the connecting part 16 such that the first part 21A is fixed to the inside of the connecting part 16. On the other hand, the second part 21B of the engaging member 21 is attached to a first flange part 22A provided at the end part of the releasing member 22 by an attaching member 22E.

[0022] The second part 21B of the engaging member 21 includes an engaging part 21B1, which is engaged with an engaging counterpart 13A1, which is arranged inside the connecting part 16. A part of the first side pressure supplying member 13 has the engaging counterpart 13A1. The engaging counterpart 13A1 is provided at the end part 13A of the first side pressure supplying member 13.

[0023] The engaging counterpart (recessed part) 13A1 provided at the end part13A of the first side pressure supplying member 13 includes a recessed cross-sectional shape toward the inside of the end part 13A. In contrast, the engaging part 21B1 of the engaging member 21 includes a cross-sectional shape, which is folded from the second part 21B in the axis direction of the end part 13A of the first side pressure supplying member 13 to the axis direction of the releasing member 22.

[0024] The releasing member 22 includes one end part arranged inside the connecting part 16 and the other end part arranged outside the connecting part 16, and the one end part of the releasing member 22 is connected with the second part 21B of the engaging member 21. And, the releasing member 22 includes a first flange part 22A connected with the second part 21B of the engaging member 21, a second flange part 22B opposite the inner side face of the connecting part 16, and a release-operating part 22C arranged outside the connecting part 16. A release-operating part 22C passes through the inside of the hole part 16A of the connecting part 16 and projects to the outside. Further, the outer diameter of the second flange part 22B is larger than the inner diameter of the hole part 16A. Thereby, the second flange part 22B functions as retaining that allows the release-operating part 22C to project outside the connecting part 16 by a predetermined length.

[0025] The releasing member 22 includes a pole part 22D between the first flange part 22A and the second flange part 22B, and the pole part 22D has a face opposing the end part 13A of the first side pressure supplying member 13, which is provided on the side of the connecting part 16. When the end part 13A of the first side pressure supplying member 13 is inserted into the inserting hole part 16B of the connecting part 16, the tip of the end part 13A has contact with the face of the pole part 22D of the releasing member 22, thus the length of the end part 13A inserted into the connecting part 16 is defined. Further, as shown in Fig. 4, when the tip of the end part 13A has contact with the pole part 22D, the engaging part 21B1 of the engaging member 21 is engaged with the engaging counterpart 13A1 of the end part 13A. Further, when the end part 13A is attached to the connecting part 16, the end part 13A may have contact with the pole part 22D or a given interval may be provided between the end part 13A and the pole part 22D.

[0026] The end part 13A of the first side pressure supplying member 13 includes an inclined face 13A2. This inclined face 13A2 is configured such that the outer di-

ameter of the end part 13A is decreased from the engaging counterpart 13A1 to the tip of the end part 13A. On the other hand, the second flange part 22B has an inclined face 22B1 opposite the inclined face 13A2 provided at the end part 13A of the first side pressure supplying member 13. This inclined face 22B1 is configured to have contact with the inclined face 13A2. For example, the inclined face 22B1 has a face along the inclined face 13A2.

[0027] The inside of the connecting part 16 has a space that allows the engaging member 21 and the releasing member 22 to be displaced. When the release-operating part 22C of the releasing member 22 is pressed, a part of the releasing member 22 is displaced in the space inside the connecting part 16. In response to the displacement of the part of the releasing member 22, the second part 21B of the engaging member 21 attached to the first flange part 22A of the releasing member 22 is displaced against the first part 21A. In response to the displacement of the second part 21B, the engagement between the engaging part 21B1 of the engaging member 21 and the engaging counterpart 13A1 provided at the end part 13A of the first side pressure supplying member 13 is released. Further, the engagement between the engaging part 21B1 and the engaging counterpart 13A1 is released, while the displacement of the releasing member 22 in the direction from the second flange part 22B to the first flange part 22A causes the end part 13A of the first side pressure supplying member 13 to be displaced in the direction from the inside to the outside of the connecting part 16. That is, the displacement of the releasing member 22 causes the inclined face 22B1 provided at the second flange part 22B of the releasing member 22 to have contact with the inclined face 13A2 provided at the end part 13A of the first side pressure supplying member 13, and the contact between the inclined face 22B1 and the inclined face 13A2 and the displacement of the releasing member 22 causes the end part 13A of the first side pressure supplying member 13 to be pushed toward the outside of the connecting part 16.

[0028] The headphone 1 may have a plurality of different first side pressure supplying members 13. As plurality of the first side pressure supplying members 13, for example, the cross-sectional shape for one of the first side pressure supplying members 13 may have an outer diameter larger than that for another one of the first side pressure supplying members 13. In this example, the outer shapes (curving diameters) of the first side pressure supplying members 13 may be substantially equal to each other, or the outer shapes (curving diameters) of the plurality of the first side pressure supplying members 13 may be changed to be different from each other. With the cross-sectional shapes or the outer shapes of the first side pressure supplying members configured to be different each other, the bending rigidities of the first side pressure supplying members 13 are different each other, thereby the side pressures of the plurality of the first side pressure supplying members 13 can be altered. Further, as described above, the positions of a pair of the sound emitting parts 10 with respect to the ears of a user is changed in accordance with the position change of the positioning headband with respect to the second side pressure supplying member 14. In this case, a side pressure can be adjusted by attaching the first side pressure supplying member 13 that is suited to the user to the connecting part 16, even if the side pressure of the sound emitting parts 10 for ears of the user is changed.

[0029] According to the headphone 1 as configured above, the end part 13A of the first side pressure supplying member 13 is inserted into the inserting hole part 16B of the connecting part 16, and thereby the engaging part 21B1 of the engaging member 21 is engaged with the engaging counterpart 13 A1 of the end part 13A. When replacing a first side pressure supplying member 13 with the one, which is selected from a plurality of the first side pressure supplying members 13 so as to supply a preferable side pressure for the user, the end part 13A of the first side pressure supplying member 13 can be easily removed from the connecting part 16 by pressing the release-operating part 22C of the releasing member 22.

[0030] As such, the adhesive property between the sound emitting part 10 and the ears of a user can be preferably improved by selecting a first side pressure supplying member 13, which is suited to the user. Also, the cumbersome replacement operation of the first side pressure supplying member 13 can be resolved by the easy attachment and removal of the first side pressure supplying member 13.

[0031] The headphone 1 according to the embodiment of the present invention includes the aforementioned removable part of the first side pressure supplying member 13 as well as a vibration preventing part, which prevents the vibration of the speaker unit from being transmitted to the headband part 12. Figs. 5 and 6 are views illustrating the vibration preventing part of the headphone according to the embodiment of the present invention.

[0032] In the headphone 1, the headband part 12, the supporting arm part 11, and the housing 10A of the sound emitting part 10 are configured with a metal member. And, the supporting arm part 11 is attached to the housing 10A via a first resin member 3. Further, the sound emitting part 10 includes the housing 10A, the speaker unit 2 attached to the housing 10A, and a covering member 10B that covers the speaker unit 2, and the covering member 10B arranged in the opposite side of the sound emission side of the speaker unit 2 and the speaker unit 2 are attached to each other via a second resin member 4. The covering member 10B may be configured with a metal member having a plurality of hole parts.

[0033] Both end parts of the supporting arm part 11 is connected with housing 10A via an attaching member 19 having a pole part and a flange part. The attaching member 19 may be fixed to the supporting arm part 11. If the supporting arm part 11 is fixed to the attaching member19, the supporting arm part 11 is rotatably con-

nected with the sound emitting part 10 via a rod-shaped member inserted into the hole part of the attachment member 19 and arranged inside the housing 10A. The attaching member 19 and the rod-shaped member are configured with a metal member. Also, the housing 10A includes an attaching hole 10A1 in which the attaching member 19 is arranged. The first resin member 3 is provided so as to cover the periphery of this attaching member 19. The first resin member 3 has a hole into which the attaching member 19 is inserted. The attaching member 19 is inserted into the hole of this first resin member 3 and the first resin member 3 is placed between the supporting arm part 11 and the housing 10A, and thereby the vibration transmitted from the speaker unit 2 to the supporting arm part 11 can be reduced by the first resin member 3. That is, the vibration generated by the speaker unit 2 can be prevented from being transmitted to the supporting arm part 11.

[0034] Further, the covering member 10B is attached to the backside of the speaker unit 2 (opposite to sound emission side) via a spacer 10D, and a second resin member 4 is fitted in the attaching counterpart 2A arranged on the backside of the speaker unit 2 (opposite side with respect to sound emission side), and the spacer 10D and the covering member10B are attached via this second resin member 4. Thereby, the vibration transmitted from the speaker unit 2 to the covering member 10B can be reduced by the second resin member 4. That is, the vibration generated by the speaker unit 2 can be prevented from being transmitted to the covering member 10B.

[0035] The headphone 1 including such vibration preventing part can suppress the trouble of noise caused by the vibration, which is generated by the speaker unit 2 and transmitted to the sound emitting part 10 or the metal member of the headband part 12. Also, the headphone 1 can suppress the trouble of the vibration, which is generated by the speaker unit 2 and transmitted to the user via the sound emitting part 10 or the headband part 12.

[0036] As disclosed above, the embodiments of the present invention are described in detail with reference to the drawings, however, a specific configuration is not limited to these embodiments, and any modifications or alterations to design without departing from the subject matter of the present invention are included within the scope of the present invention. In the embodiments shown in the above drawings, each description can be combined unless particular contradictions or problems occur in the object, the configuration, etc. Also, the description of each drawing can be independent embodiment respectively, and the embodiment of the present invention should not be limited to one embodiment combining each drawing.

EXPLANATION OF SYMBOL

[0037]

1: headphone
2: speaker unit
3: first resin member
4: second resin member
5: cable
10: sound emitting part
10A: housing
10B: covering member
10C: contacting part
11: supporting arm part
12: headband unit
13: first side pressure supplying member
13A: end part
13A1: engaging counterpart (recessed part)
13A2: inclined face
14: second side pressure supplying member
15: positioning headband
16: connecting part
16A: hole part
16B: inserting hole part
16C: tubular shape part
17: attaching member
20: removable part
21: engaging member
21A: first part
21B: second part
21B1: engaging part
21C: bending part
22: releasing member

22A: first flange part

22B: second flange part

22B1: inclined face

22C: release-operating part

22D: pole part

Claims

1. A headphone comprises:

a pair of sound emitting parts including a speaker unit;
a headband unit; and
supporting arm parts connecting said sound emitting parts and said headband unit; wherein said supporting arm parts includes connecting part, and said connecting part connects said headband unit and said supporting arm part;
said headband unit includes a side pressure supplying member;
said connecting part includes a removable part, and the removable part attaches and releases said side pressure supplying member to and from said connecting part;
said removable part includes an engaging member engaged with a part of said side pressure supplying member that is connected with said connecting part and a releasing member releasing the engagement between said engaging member and the part of said side pressure supplying member;
said releasing member is provided displaceably to said connecting part; and
the displacement of said releasing member with respect to said connecting part distances said engaging member from said side pressure supplying member.

2. The headphone according to claim 1, wherein said headband unit includes said side pressure supplying member and a positioning band, and said side pressure supplying member has a shape formed along said positioning band.

3. The headphone according to claim 2, comprising a plurality of said side pressure supplying members, wherein
the cross-sectional shape for one of said side pressure supplying members is larger than that for another one of said side pressure supplying members.

4. The headphone according to claim 3, wherein the plurality of said side pressure supplying members have bending rigidities different from each other.

5. The headphone according to any one of claims 1 to 4, wherein said engaging member is configured with an elastic member;
said engaging member includes a first part fixed to the inside of said connecting part and a second part that is displaced against the first part;
said second part includes an engaging part engaged with an engaging counterpart provided at said side pressure supplying member, which is arranged inside said connecting part;
said releasing member includes one end part arranged inside said connecting part and the other end part arranged outside said connecting part; and
the one end part of said releasing member is connected with the second part of said engaging member.

6. The headphone according to claim 5, wherein said engaging member has a plate shape and includes a bending part between said first part and said second part, in the axis direction of an end part of said side pressure supplying member.

7. The headphone according to claim 6, wherein the engaging counterpart of said side pressure supplying member has a recessed cross-sectional shape toward the inside of said side pressure supplying member, and
said engaging part has a cross-sectional shape folding from said second part toward the axis direction of said releasing member.

8. The headphone according to any one of claims 5 to 7, wherein said releasing member includes a first flange part connecting to a second part of said engaging member, a second flange part opposite the inner side face of said connecting part, and a release-operating part arranged outside said connecting part, and
said release-operating part passes through a hole part provided at said connecting part, and the outer diameter of said second flange part is larger than the inner diameter of the hole part of said connecting part.

9. The headphone according to claim 8, wherein said releasing member includes a pole part between said first flange part and said second flange part, and
said pole part has a face opposite said end part of side pressure supplying member provided on the side of said connecting part.

10. The headphone according to claim 8 or 9, wherein said end part of side pressure supplying member includes an inclined face;
said inclined face is configured such that the outer

diameter of said end part of side pressure supplying member is decreased from said engaging counterpart toward the tip side of said end part of side pressure supplying member; and
said second flange part has an inclined face opposite the inclined face provided at said end part of side pressure supplying member.

11. The headphone according to claim 10, wherein the inclined face provided at said second flange part includes a face along the inclined face provided at the end part of said side pressure supplying member, and
the displacement of said releasing member in the direction from said second flange part to said first flange part causes said end part of side pressure supplying member to be displaced in the direction from the inside of said connecting part to the outside of said connecting part.

12. The headphone according to claim 11, wherein said connecting part includes an inserting hole part into which said end part of side pressure supplying member provided on the side of said connecting part is inserted.

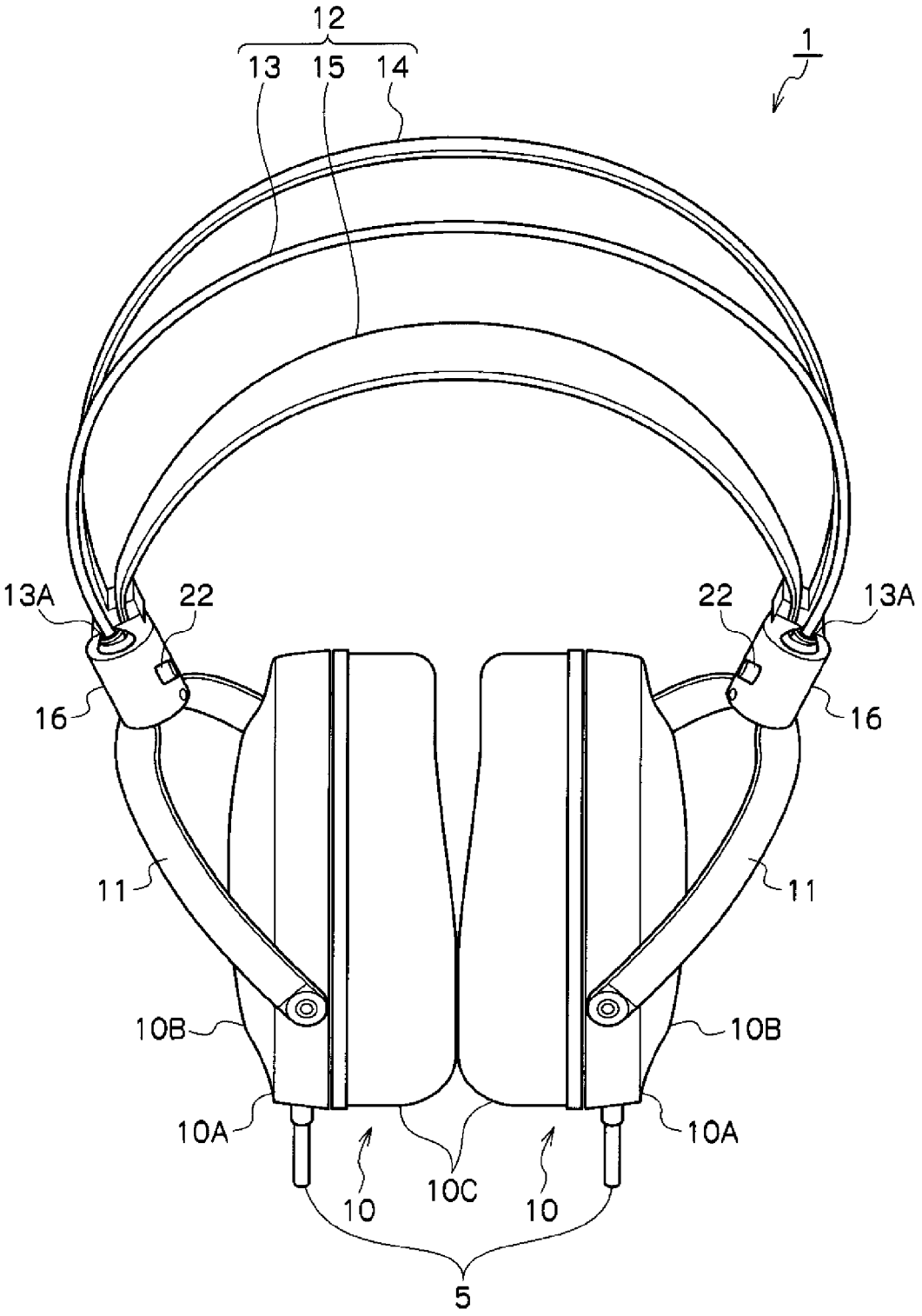
13. The headphone according to claim 12, wherein
said connecting part has
a face opposite said end part of side pressure supplying member and,
a tubular shape part configuring said inserting hole.

14. The headphone according to any one of claims 1 to 13, wherein a space allowing said engaging member and said releasing member to be displaced is arranged inside of said connecting part.

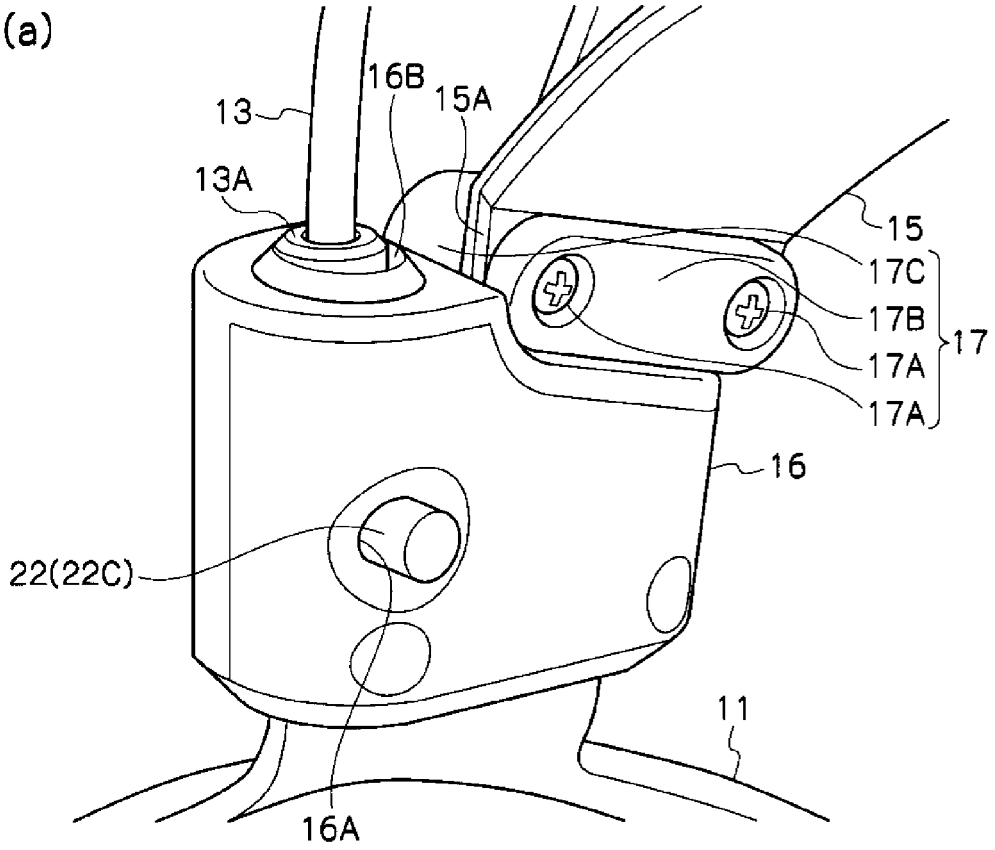
15. The headphone according to any one of claims 1 to 14, wherein said headband unit, said supporting arm part and a housing of said sound emitting part are configured with a metal member, and said supporting arm part is attached to said housing via a first resin member.

16. The headphone according to claim 15, wherein said sound emitting part includes a covering member, said housing and a speaker unit arranged between said housing and said covering member, and
said covering member, which is arranged in the side opposite the sound emission side of said speaker unit, and said speaker unit are attached via a second resin member.

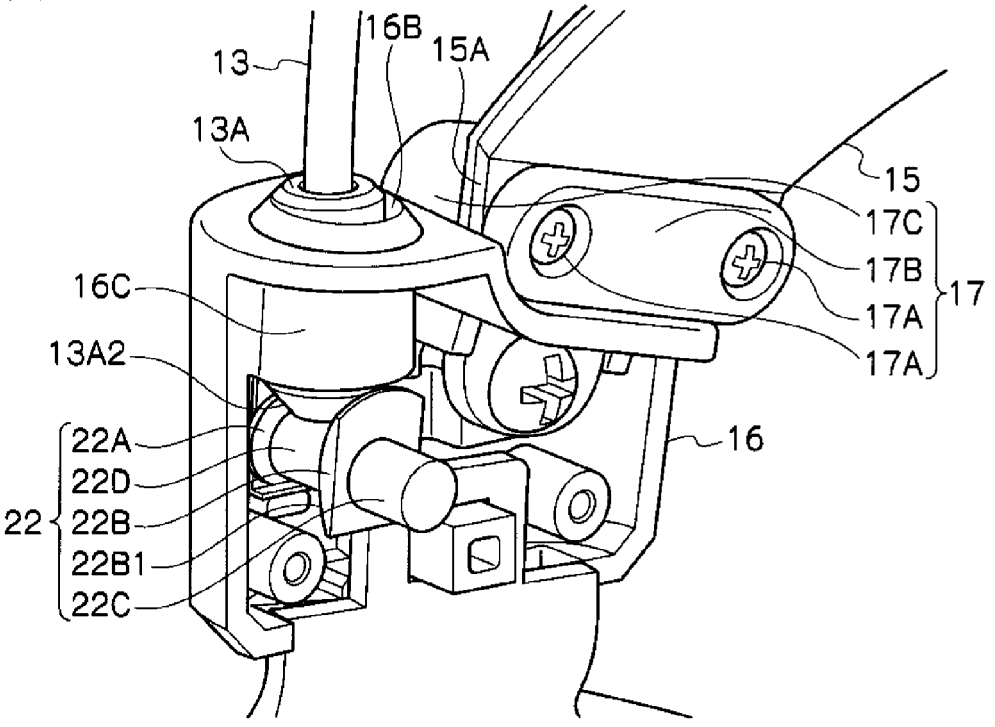
Fig. 1



(a)


13
16B
15A
13A
15
17C
17B
17
17A
17A
16
22(22C)
11
16A

(b)


13
16B
15A
13A
15
17C
17B
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17A
17A
16C
13A2
22A
22D
22
22B
22B1
22C
16

Fig. 3

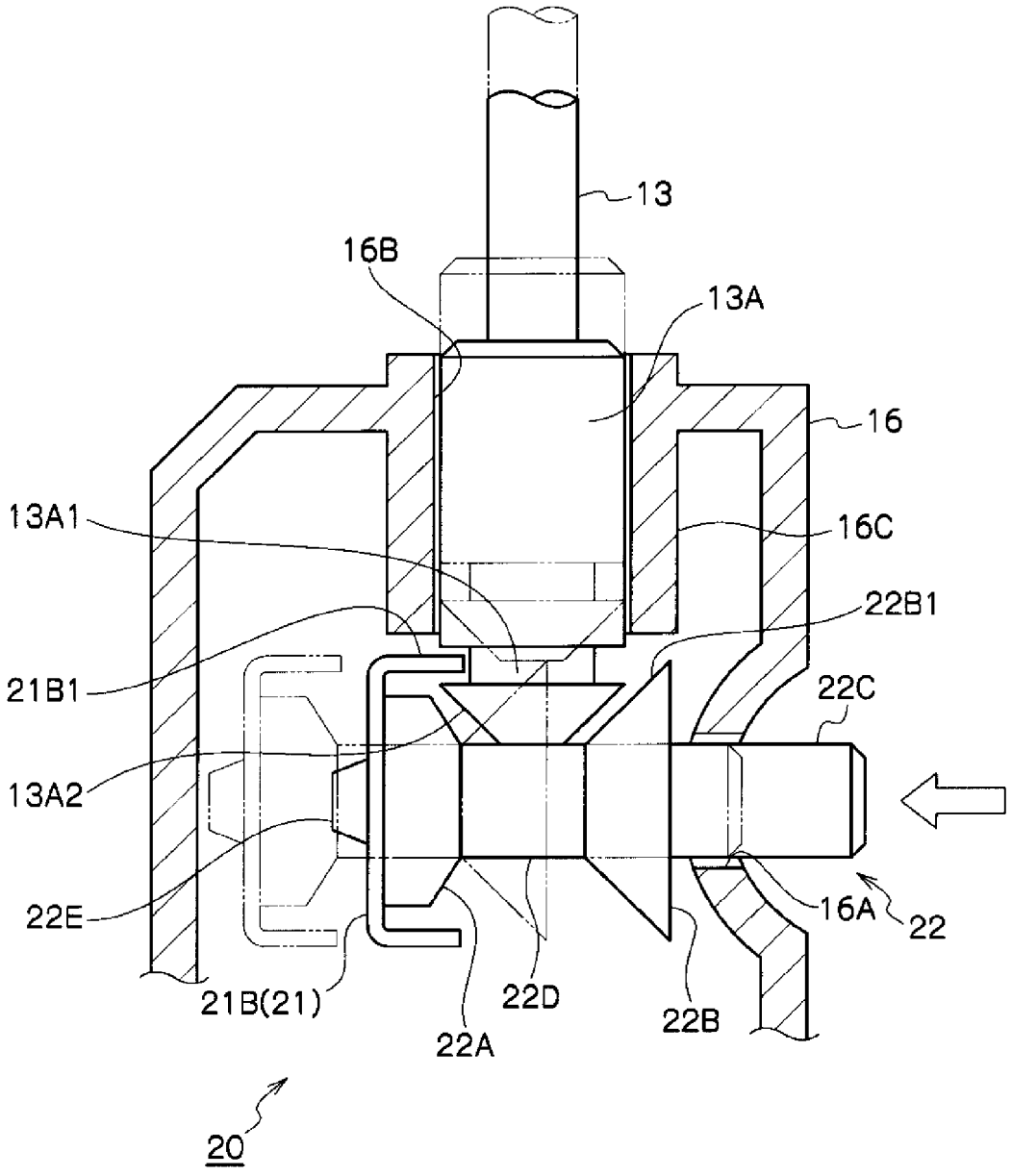
13
16B
13A
16
13A1
16C
22B1
21B1
22C
13A2
22E
16A
22
21B(21)
22D
22B
22A
20

Fig. 4

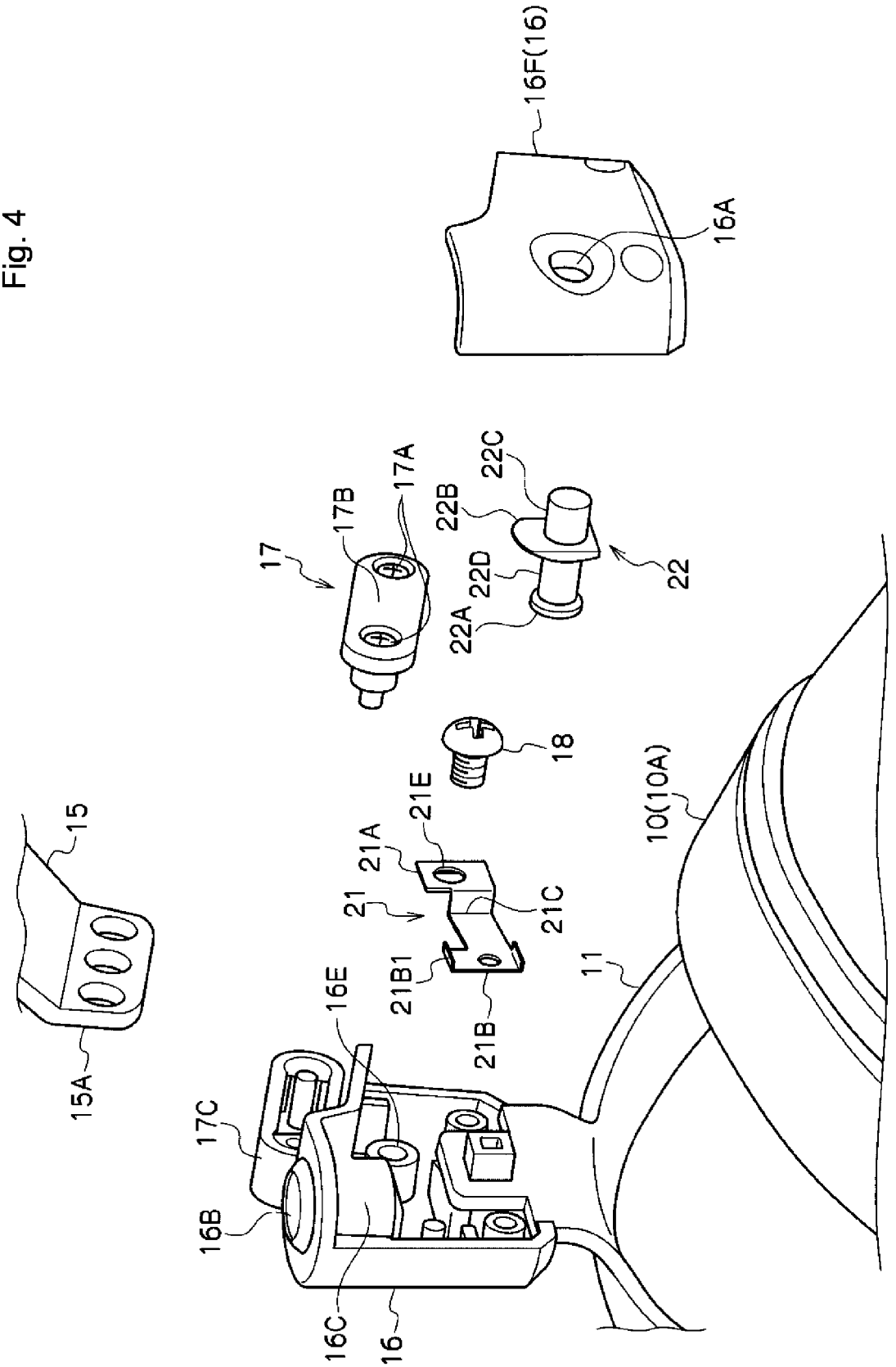
16F(16)
16A
17
17B
17A
22C
22B
22D
22A
22
18
21E
21A
21
21C
21B1
21B
16E
17C
16B
16C
16
15
15A
11
10(10A)

Fig. 5

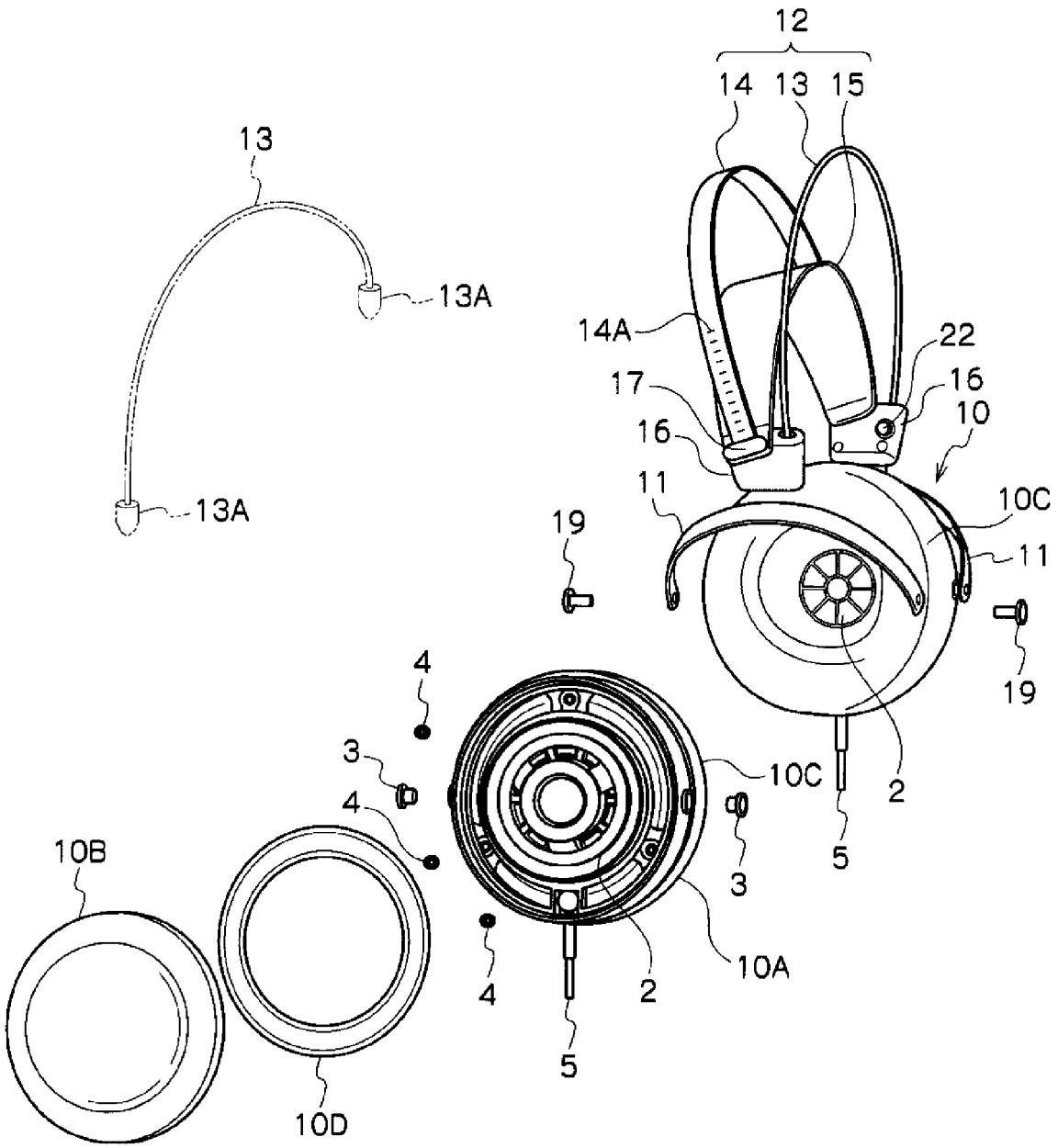
12
14
13
15
13
13A
13A
14A
22
17
16
16
10
11
10C
11
19
19
4
3
4
10B
10C
2
5
3
10A
4
2
5
10D

Fig. 6