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(54) **MASSAGE DEVICE**

(71) Applicant: **AISIN CORPORATION**, Kariya (JP)

(72) Inventors: **Minori MURAI**, Kariya-shi (JP); **Takashi OGISO**, Kariya-shi (JP); **Noriko FUJII**, Kariya-shi (JP); **Tomoko KANBARA**, Kariya-shi (JP)

(73) Assignee: **AISIN CORPORATION**, Kariya (JP)

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(57) **ABSTRACT**

A massage device includes a base sheet with a sheet shape and an air bag supported by the base sheet. When one surface of the base sheet is a front surface and a surface opposite to the front surface is a back surface, the air bag includes a bag that is located on a side of the front surface of the base sheet, and that is inflated with air intake and deflated with air exhaust, and a sandwiching portion that is located on a side of the back surface of the base sheet and sandwiches the base sheet between the sandwiching portion and the bag in a thickness direction.

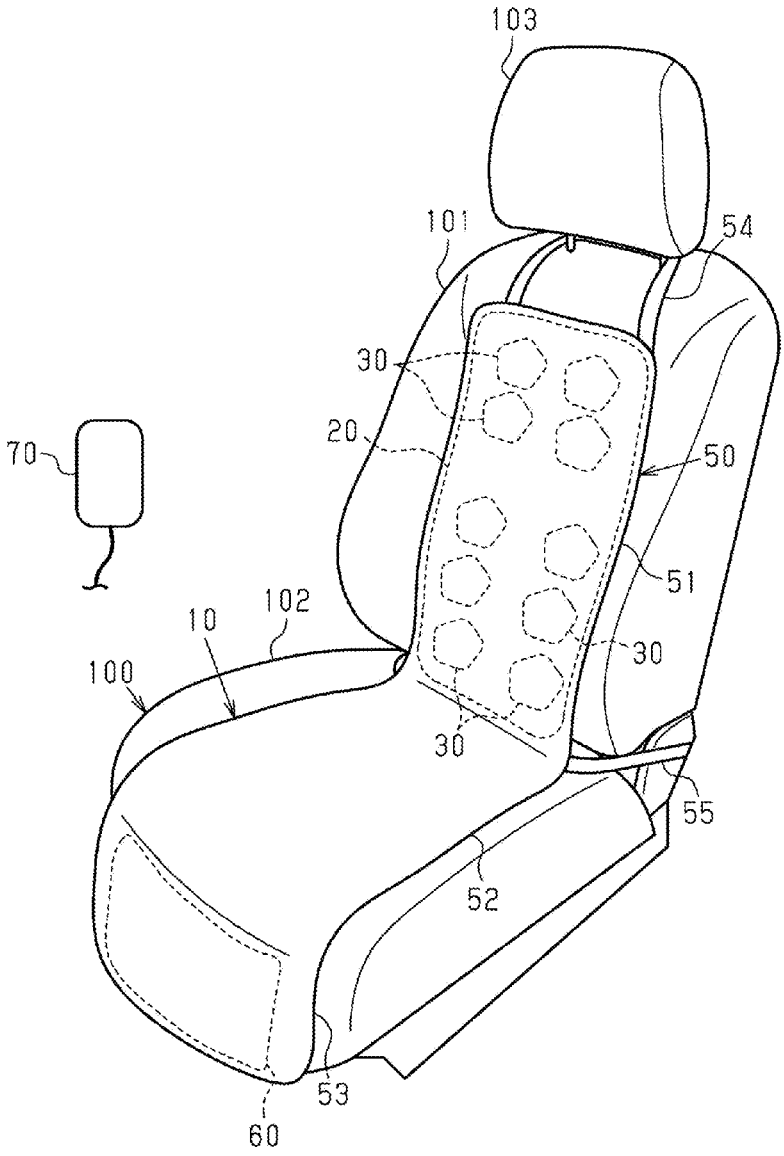


FIG. 1

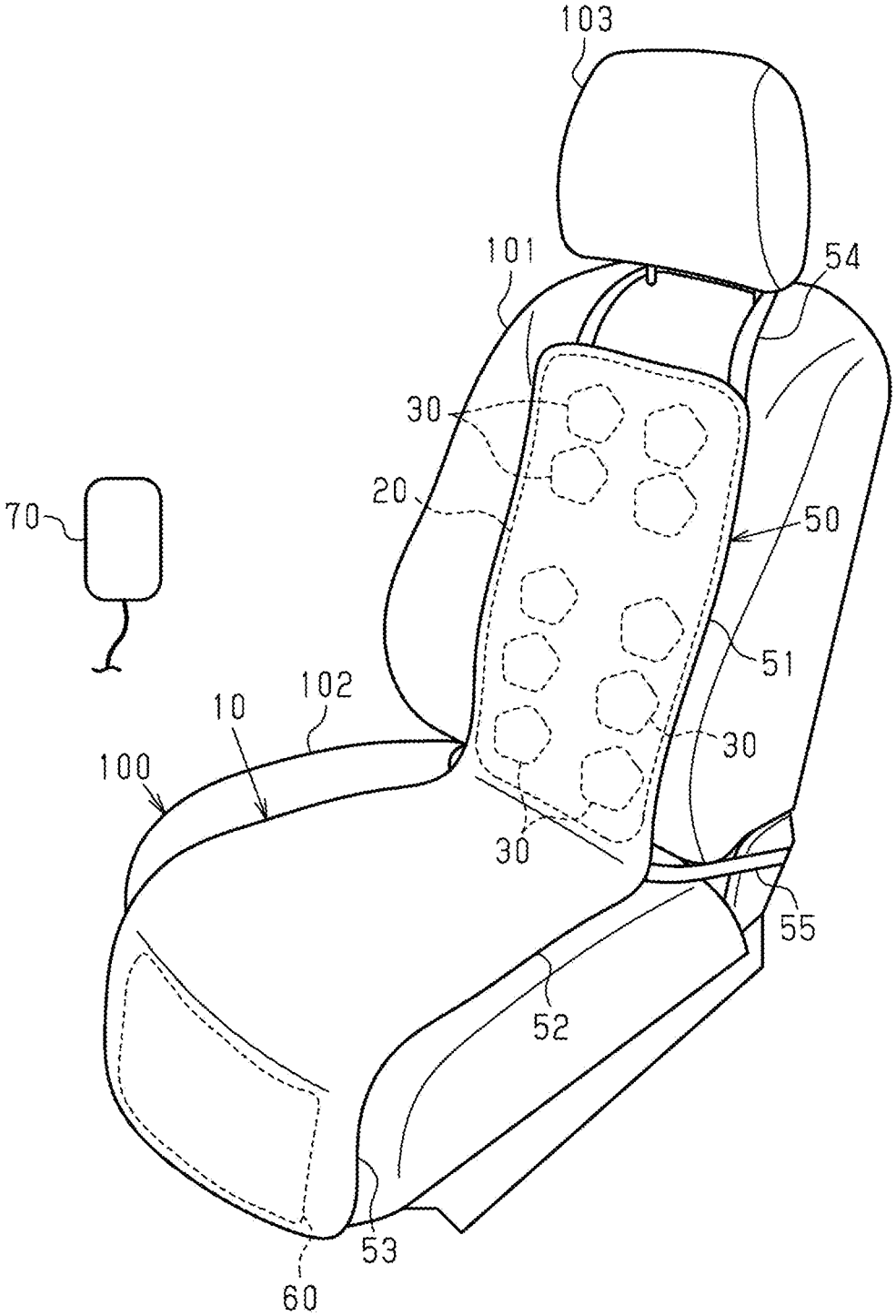
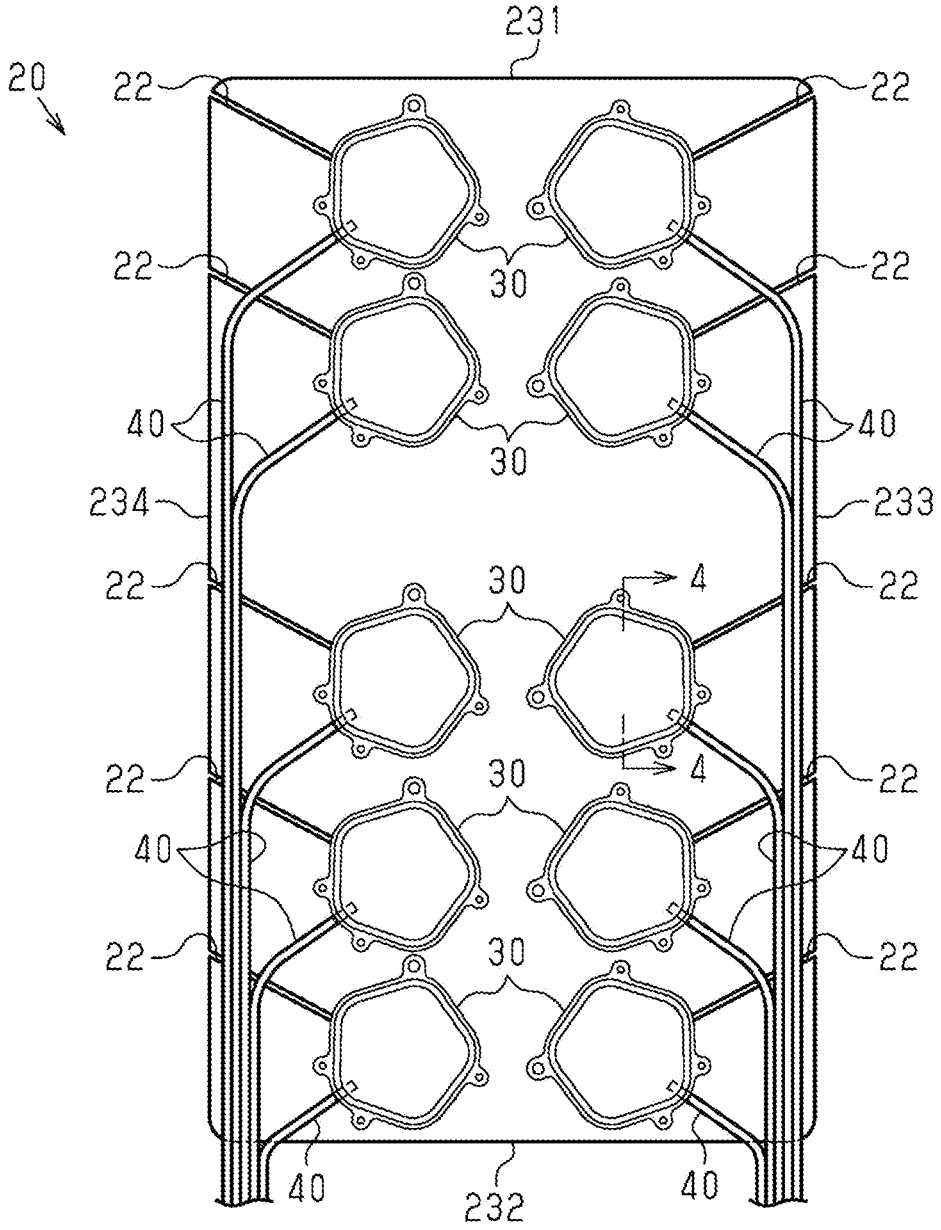


FIG. 2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20
22
22
22
22
30
40
40
30
234
233
22
30
4
22
22
4
22
30
40
40
22
30
22
40
232
40

FIG. 3

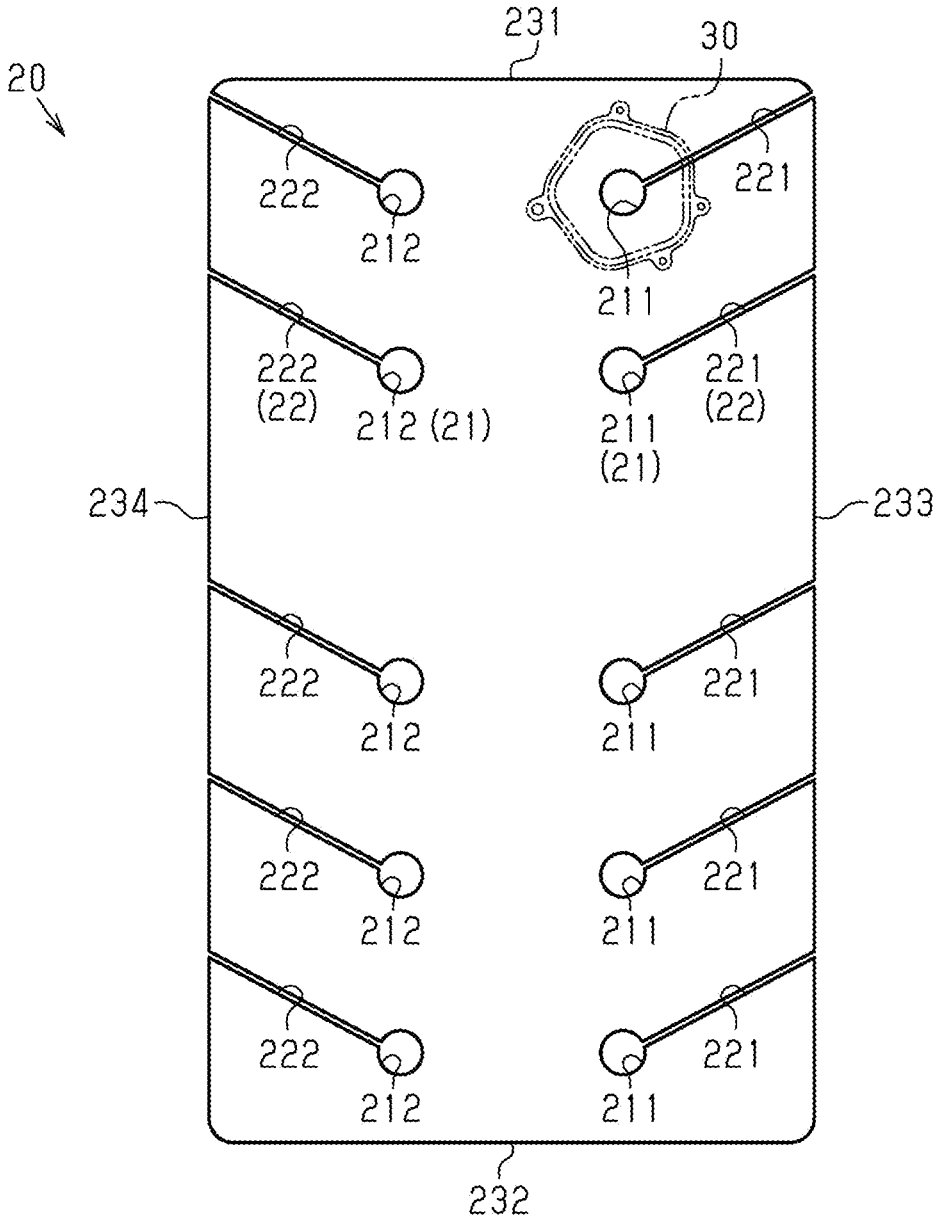

231
30
20
222
212
221
211
222
(22)
212 (21)
211
(21)
221
(22)
234
233
222
212
211
221
222
212
211
221
222
212
211
221
232

FIG. 4

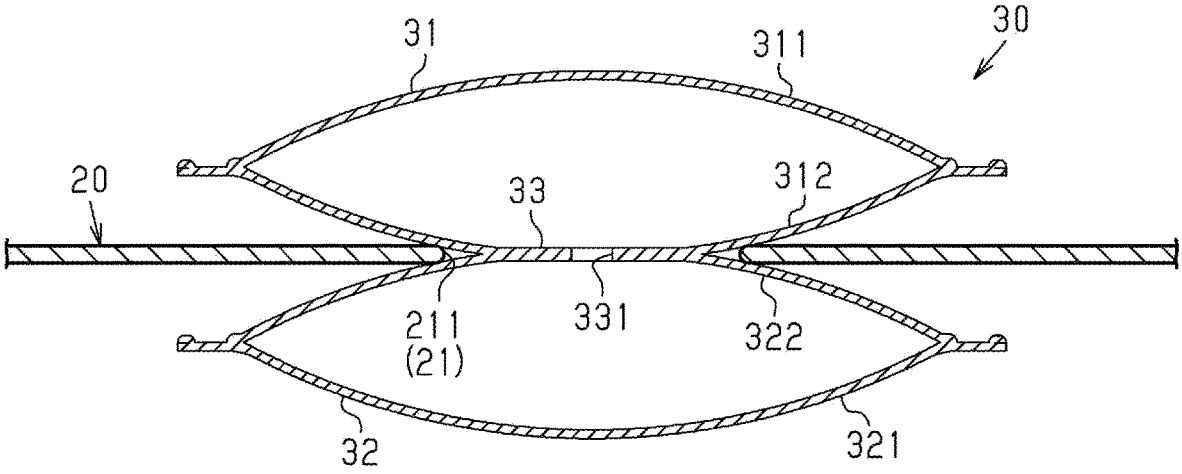

31
311
30
20
33
312
211
(21)
331
322
32
321

FIG. 5

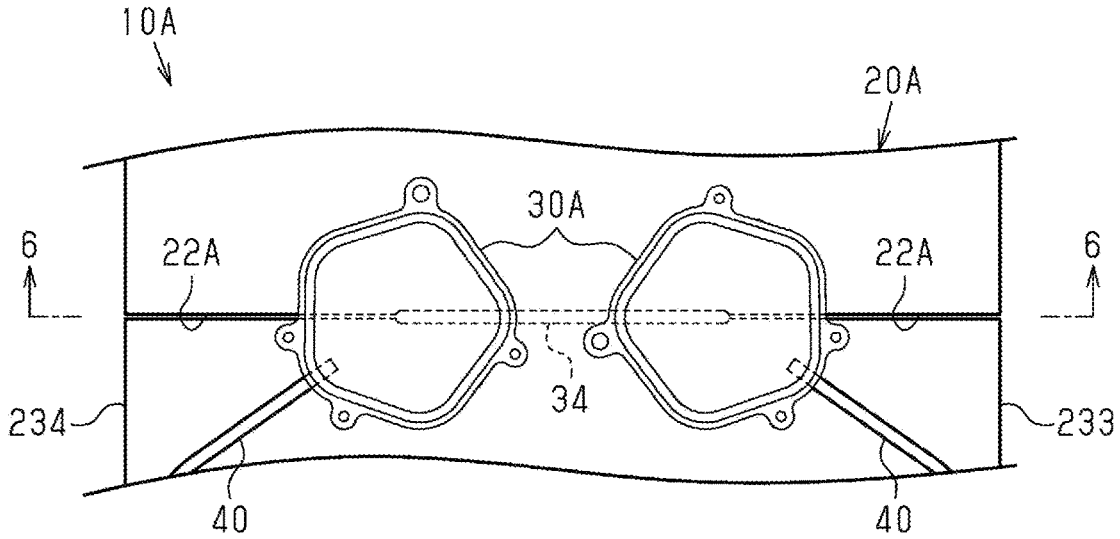

10A
20A
30A
6
22A
22A
6
34
234
233
40
40

FIG. 6

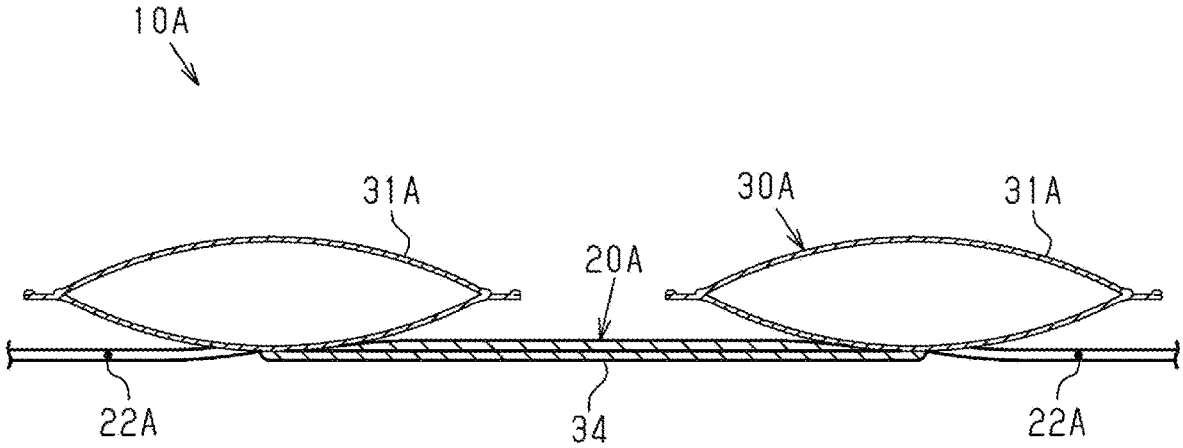

10A
31A
30A
31A
20A
22A
34
22A

FIG. 7

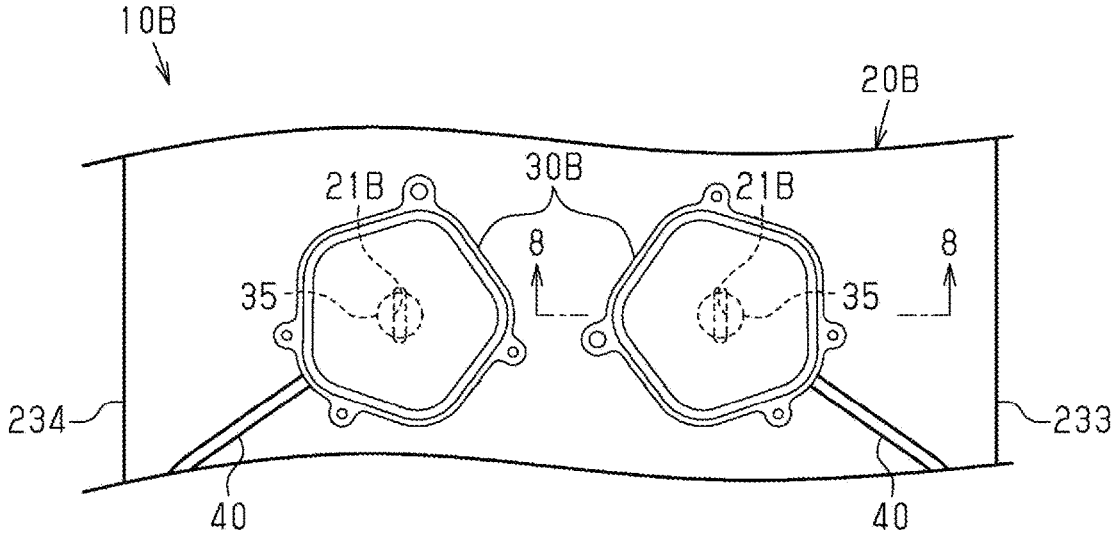
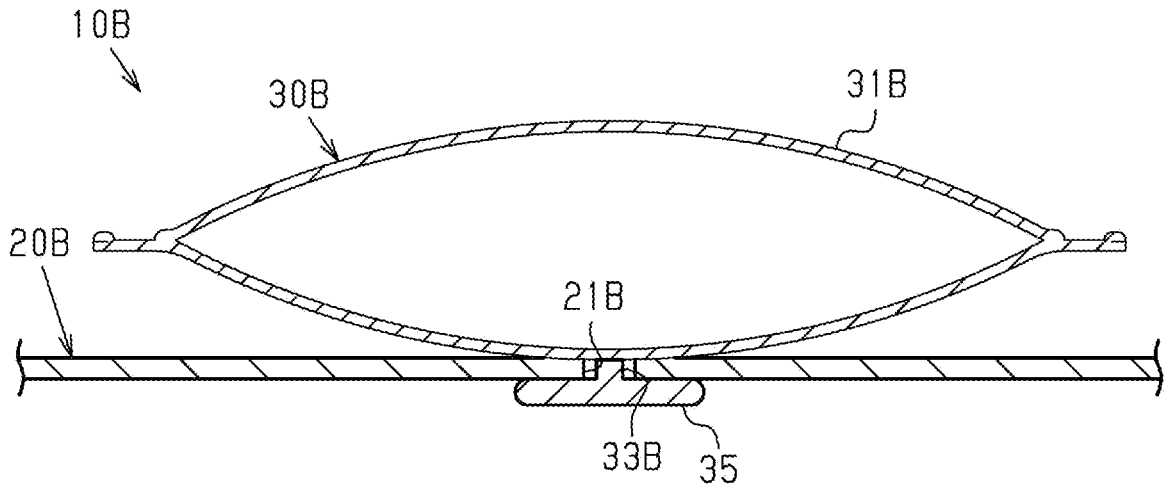

10B
20B
30B
21B
21B
8
8
35
35
234
233
40
40

FIG. 8



MASSAGE DEVICE

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is based on and claims priority under 35 U.S.C. § 119 to Japanese Patent Application No. 2022-093662, filed on Jun. 9, 2022, the entire content of which is incorporated herein by reference.

TECHNICAL FIELD

[0002] The present disclosure relates to a massage device.

BACKGROUND DISCUSSION

[0003] A known massage device that is detachable from a seat of a vehicle is disclosed in JP 2004-121279 A. The massage device includes an air bag that is inflated or deflated with air supply and exhaust, a sheet-like member that supports the air bag, and an air supply and exhaust device that supplies and exhausts air to and from the air bag.

[0004] The massage device has been desired to improve work efficiency when the air bag is supported by the sheet-like member.

[0005] A need thus exists for a massage device which is not susceptible to the drawback mentioned above.

SUMMARY

[0006] A massage device includes a base sheet with a sheet shape, and an air bag supported by the base sheet, wherein when one surface of the base sheet is a front surface and a surface opposite to the front surface is a back surface, the air bag includes a bag that is located on a side of the front surface of the base sheet, and that is inflated with air intake and deflated with air exhaust, and a sandwiching portion that is located on a side of the back surface of the base sheet and sandwiches the base sheet between the sandwiching portion and the bag in a thickness direction.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The foregoing and additional features and characteristics of this disclosure will become more apparent from the following detailed description considered with the reference to the accompanying drawings, wherein:

[0008] FIG. **1** is a perspective view of a massage device mounted on a chair;

[0009] FIG. **2** is a plan view of a base sheet that supports an air bag and a connection tube;

[0010] FIG. **3** is a plan view of the base sheet;

[0011] FIG. **4** is a cross-sectional view taken along line IV-IV in FIG. **2**;

[0012] FIG. **5** is a partial plan view of a massage device according to a first modification;

[0013] FIG. **6** is a cross-sectional view taken along line VI-VI in FIG. **5**;

[0014] FIG. **7** is a partial plan view of a massage device according to a second modification; and

[0015] FIG. **8** is a cross-sectional view taken along line VIII-VIII in FIG. **7**.

DETAILED DESCRIPTION

[0016] Hereinafter, an embodiment of a massage device will be described. The massage device is detachable from a chair such as a vehicle seat. In the following description, the massage device will be described using a direction in a case where the massage device is mounted on a chair. In the drawings, for simplification of illustration, hatching indicating a cross section of a metal material is used for a cross section of a member that is not a metal material.

[0017] <Configuration of Present Embodiment>

[0018] As illustrated in FIGS. **1** and **2**, a massage device **10** includes a base sheet **20**, a plurality of air bags **30**, a plurality of connection tubes **40**, a cover **50**, a drive unit **60**, and a remote controller **70**.

[0019] <Base Sheet **20**>

[0020] As illustrated in FIGS. **2** and **3**, the base sheet **20** has a rectangular shape with a width direction as a short direction and a height direction as a longitudinal direction. The base sheet **20** is a cloth such as a woven fabric or a nonwoven fabric, and has a sheet shape. The fibers constituting the base sheet **20** may be plant fibers, animal fibers, or chemical fibers. The thickness of the base sheet **20** depends on the elastic modulus of the base sheet **20**, and is preferably, for example, about 1 mm to 1 cm. In this respect, the base sheet **20** can be folded or rolled. As illustrated in FIG. **1**, the base sheet **20** is a portion along a backrest **101** of a chair **100** when the massage device **10** is mounted on the chair **100**. In other words, the base sheet **20** is a portion along the back of a user when the user uses the massage device **10**.

[0021] As illustrated in FIG. **3**, the base sheet **20** includes a plurality of support holes **21** (**211**, **212**) and a plurality of slits **22** (**221**, **222**). In addition, the base sheet **20** has an upper end portion **231** and a lower end portion **232** extending in the width direction, and a first side end portion **233** and a second side end portion **234** extending in the height direction.

[0022] The plurality of support holes **21** penetrate the base sheet **20** in a thickness direction. The support hole **21** is a round hole in plan view in the thickness direction. The support hole **21** may have another shape such as a square hole. The plurality of support holes **21** are arranged in the width direction and the height direction. In the present embodiment, two support holes **21** are arranged in the width direction, and five support holes **21** are arranged in the height direction.

[0023] Each of the plurality of slits **221** extends from the first side end portion **233** toward each of the plurality of support holes **211**, and each of the plurality of slits **222** extend from the second side end portion **234** toward each of the plurality of support holes **212**. The extending direction of the plurality of slits **22** is inclined with respect to the width direction. Specifically, the plurality of slits **221** extend upward from the plurality of support holes **211** toward the first side end portion **233**. Furthermore, the plurality of slits **222** extend upward from the plurality of support holes **212** toward the second side end portion **234**. The width of the slit **22** is smaller than the inner diameter of the support hole **21**.

[0024] The plurality of support holes **21** and the plurality of slits **22** may be formed by cutting using a cutting machine, or may be formed by punching.

[0025] <Air Bag **30**>

[0026] As illustrated in FIG. **4**, the air bag **30** includes a first bag **31**, a second bag **32**, and a joint portion **33**. FIG. **4** illustrates a state where the first bag **31** and the second bag **32** are slightly inflated for easy understanding.

[0027] The first bag **31** is formed by welding two films **311** and **312**. Similarly, the second bag **32** is formed by welding two films **321** and **322**. The material of the films **311**, **312**,

321, and 322 is preferably a resin material with moderate elasticity. In plan view in the thickness direction, the films 311, 312, 321, and 322 has a pentagonal shape. In plan view in the thickness direction, the films 311, 312, 321, and 322 may have another polygonal shape or may have a circular shape. In addition, the first bag 31 and the second bag 32 are equal in size. The first bag 31 may be formed to be larger than the second bag 32, or the first bag 31 may be formed to be smaller than the second bag 32. The first bag 31 and the second bag 32 are inflated with air intake. On the other hand, the first bag 31 and the second bag 32 are deflated with air exhaust.

[0028] The joint portion 33 is a portion in which the film 312 constituting the first bag 31 and the film 322 constituting the second bag 32 are joined. Specifically, the joint portion 33 is a portion formed by welding the film 312 and the film 322. The joint portion 33 has a disk shape. The joint portion 33 has a communication hole 331 through which the first bag 31 and the second bag 32 communicate with each other. As a result, the first bag 31 and the second bag 32 are similarly inflated and deflated.

[0029] As illustrated in FIGS. 2 and 3, the plurality of air bags 30 are supported by the base sheet Specifically, the plurality of air bags 30 are individually inserted into the plurality of support holes 21 of the base sheet 20. As a result, the plurality of air bags 30 are arranged in the width direction and the height direction of the base sheet 20. As illustrated in FIG. 4, under a situation in which the air bag 30 is supported by the base sheet 20, the first bag 31 of the air bag 30 is located on the front surface side of the base sheet 20, and the second bag 32 of the air bag 30 is located on the back surface side of the base sheet 20. That is, the base sheet 20 is sandwiched between the first bag 31 and the second bag 32 in the thickness direction. Here, the front surface of the base sheet 20 is one surface intersecting with the thickness direction of the base sheet 20, and the back surface of the base sheet 20 is the other surface opposite to the front surface and intersecting with the thickness direction of the base sheet 20. In this respect, the first bag 31 corresponds to "bag", and the second bag 32 corresponds to "sandwiching portion".

[0030] Under a situation in which the air bag 30 is supported by the base sheet 20, the joint portion 33 of the air bag 30 is located inside the support hole 21 of the base sheet 20. That is, it can be said that the joint portion 33 of the air bag 30 is smaller than the support hole 21 of the base sheet in plan view in the thickness direction. On the other hand, in plan view in the thickness direction, the size of the first bag 31 and the second bag 32 are larger than the size of the support hole 21 of the base sheet 20. That is, the first bag 31 and the second bag 32 have a size that cannot allow the first bag and the second bag to pass through the support hole 21 in the thickness direction.

[0031] <Connection Tube 40>

[0032] As illustrated in FIG. 2, the number of the plurality of connection tubes 40 is equal to the number of the air bags 30. The connection tube 40 is made of an elastomer such as rubber or resin. The connection tube 40 preferably has moderate elasticity. The first ends of the plurality of connection tubes 40 are individually connected to the plurality of air bags 30. On the other hand, the second ends of the plurality of connection tubes 40 are connected to the drive unit 60. The plurality of connection tubes 40 are supported by the base sheet 20 along the first side end portion 233 and the second side end portion 234 of the base sheet 20. The plurality of connection tubes 40 may be supported by the base sheet 20 by clips or the like, or may be supported by the base sheet by being inserted into holes provided in the base sheet 20.

[0033] <Cover 50>

[0034] As illustrated in FIG. 1, the cover 50 includes a first housing portion 51, a second housing portion 52, a third housing portion 53, a first belt 54, and a second belt 55.

[0035] The first housing portion 51, the second housing portion 52, and the third housing portion 53 have a bag shape. Under a situation in which the massage device 10 is mounted on the chair 100, the first housing portion 51 is a portion disposed along the backrest 101 of the chair 100, and the second housing portion 52 is a portion disposed along the seat surface of a seat portion 102 of the chair 100. Under the same situation, the third housing portion 53 is a portion extending downward from the front end of the seat surface of the seat portion 102 of the chair 100.

[0036] The first housing portion 51 houses the base sheet 20 that supports the plurality of air bags 30 and the plurality of connection tubes 40. The second housing portion 52 houses the plurality of connection tubes 40 extending from the first housing portion 51. The second housing portion 52 may house a configuration equivalent to the base sheet 20 that supports the plurality of air bags 30 and the plurality of connection tubes 40. As a result, the massage device 10 can massage the buttocks and the legs of the user seated on the chair 100. The third housing portion 53 houses the drive unit 60. It is preferable that the cover 50 has a fastener so that housed objects can be easily taken in and out of the first housing portion 51, the second housing portion 52, and the third housing portion 53.

[0037] The first belt 54 extends upward from the first housing portion 51. The first belt 54 has a loop shape. The first belt 54 is hooked on the headrest 103 to dispose the first housing portion 51 along the backrest 101. The second belt 55 extends laterally from the second housing portion 52. Similarly to the first belt 54, the second belt 55 has a loop shape. The second belt 55 tightens the boundary portion between the first housing portion 51 and the second housing portion 52 to the backrest 101 of the chair 100, thereby preventing the first housing portion 51 and the second housing portion 52 from being displaced from the chair 100. The circumferential length of the first belt 54 and the second belt 55 is preferably adjustable. The first belt 54 and the second belt 55 may be stretchable rubber belts.

[0038] <Other Configurations>

[0039] The drive unit 60 supplies air to the plurality of air bags 30 and discharges air from the plurality of air bags 30. The drive unit 60 includes, for example, a pump that delivers air, a valve unit that switches a connection destination of a specific air bag 30 among the plurality of air bags 30 to a pump or the atmosphere, and a control device that controls the pump and the valve unit. The drive unit 60 is connected to a power supply source such as a mobile battery or a battery of a vehicle. The remote controller 70 is operated by the user to transmit a signal based on the operation content to the drive unit 60. For example, it is preferable that the remote controller 70 has a power button of the massage device 10 and a button for selecting massage intensity.

[0040] <Operation of Present Embodiment>

[0041] Hereinafter, the method of assembling the massage device 10 will be described as an operation of the present

embodiment. In a case where the assembly of the massage device **10** starts, it is assumed that all the components of the massage device **10** are present.

[0042] The method of assembling the massage device **10** includes a supporting step, a connecting step, and a housing step.

[0043] The supporting step is a step of causing the base sheet **20** to support the plurality of air bags **30**. In the supporting step, the air bag **30** is inserted into the base sheet **20** through the slit **22**. At this time, the joint portion **33** of the air bag **30** is moved along the slit **22** until reaching the support hole **21** of the base sheet **20**. In a case where the joint portion **33** of the air bag **30** is moved along the slit **22**, the width of the slit **22** is temporarily made larger than the width illustrated in FIG. **3** by displacing the base sheet **20** in the thickness direction.

[0044] When the joint portion **33** of the air bag **30** reaches the support hole **21** of the base sheet the first bag **31** of the air bag **30** is disposed on the front surface side of the base sheet **20** and the second bag **32** of the air bag **30** is disposed on the back surface side of the base sheet **20** as illustrated in FIG. **4**. That is, the base sheet **20** is sandwiched between the first bag **31** and the second bag **32** in the thickness direction. In this way, the air bag **30** is supported by the base sheet **20**, The remaining air bags **30** are similarly supported by the base sheet **20**.

[0045] The connecting step is a step of individually connecting the plurality of connection tubes to the plurality of air bags **30**. In the connecting step, the plurality of connection tubes **40** are supported by the base sheet **20**.

[0046] The housing step is a step of housing the base sheet **20** supporting the plurality of air bags and the plurality of connection tubes **40** in the first housing portion **51** of the cover **50**. The housing step is also a step of housing the drive unit **60** in the third housing portion **53** of the cover After the base sheet **20** and the drive unit **60** are housed in the cover **50**, the base ends of the plurality of connection tubes **40** extending from the base sheet **20** are connected to the drive unit **60** in the cover **50**.

[0047] In this way, the assembly of the massage device **10** is completed. After the base sheet is housed in the cover **50**, the plurality of air bags **30** come into contact with the back surface of the cover **50**. Therefore, the state where the plurality of air bags **30** are supported by the support holes **21** of the base sheet **20** is easily maintained.

[0048] <Effects of Present Embodiment>

[0049] (1) A massage device including a base sheet with a sheet shape, and an air bag supported by the base sheet, wherein when one surface of the base sheet is a front surface and a surface opposite to the front surface is a back surface, the air bag includes a bag that is located on a side of the front surface of the base sheet, and that is inflated with air intake and deflated with air exhaust, and a sandwiching portion that is located on a side of the back surface of the base sheet and sandwiches the base sheet between the sandwiching portion and the bag in a thickness direction.

[0050] According to the above configuration, in the massage device, the air bag is supported by the base sheet by sandwiching the base sheet between the bag of the air bag and the sandwiching portion. Therefore, the work efficiency is improved when the air bag is supported by the base sheet.

[0051] In other words, in the massage device **10**, the air bag **30** is supported by the base sheet by sandwiching the base sheet **20** between the first bag **31** and the second bag **32** of the air bag That is, in the massage device **10**, the air bag **30** can be easily supported by the base sheet **20** in that the air bag **30** does not need to be sewn to the base sheet **20** or the air bag **30** does not need to be adhered to the base sheet **20**. As a result, the massage device **10** can improve the work efficiency when the air bag **30** is supported by the base sheet **20**.

[0052] (2) In the massage device, the base sheet includes a slit extending from an end of the base sheet.

[0053] According to the above configuration, the air bag can be inserted into the base sheet through the slit of the base sheet. Therefore, the degree of freedom of the arrangement of the air bags on the base sheet is increased.

[0054] In other words, the base sheet **20** has the slit **22** extending from the end of the base sheet **20**. As a result, the air bag **30** can be inserted into the base sheet **20** through the slit **22** of the base sheet **20**. Therefore, in the massage device **10**, the air bag **30** is easily disposed at any position in the base sheet **20**. For example, in the massage device **10**, the air bag **30** can be easily disposed not only at a position near the side end portions **233** and **234** of the base sheet **20** but also at a position near the central portion in the width direction of the base sheet **20**.

[0055] (3) In the massage device, the base sheet includes a support hole penetrating the base sheet in the thickness direction, the air bag includes a joint portion that joins the bag and the sandwiching portion, the slit extends from the end of the base sheet to the support hole, and in plan view in the thickness direction, the joint portion is smaller than the support hole, and the bag and the sandwiching portion are larger than the support hole.

[0056] According to the above configuration, the joint portion of the air bag can be disposed inside the support hole by inserting the air bag into the base sheet through the slit of the base sheet. Here, in plan view in the thickness direction, the bag and the sandwiching portion of the air bag are larger than the support hole of the base sheet. Therefore, the massage device can prevent the air bag from falling off the base sheet even when a load in the thickness direction acts on the air bag.

[0057] In other words, the joint portion **33** of the air bag **30** can be disposed inside the support hole **21** by inserting the air bag **30** into the base sheet **20** through the slit **22** of the base sheet **20**. Here, in plan view in the thickness direction, the first bag **31** and the second bag **32** of the air bag are larger than the support hole **21** of the base sheet **20**. Therefore, the massage device **10** can prevent the air bag **30** from falling off the base sheet **20** even when a load in the thickness direction acts on the air bag **30**.

[0058] (4) In the massage device, a width of the slit is smaller than an inner diameter of the support hole.

[0059] According to the above configuration, the massage device can prevent the air bag from falling off through the slit from the support hole of the base sheet.

[0060] In other words, in the base sheet **20**, the width of the slit **22** is smaller than the inner diameter of the support hole **21**. Therefore, the massage device **10** can prevent the air bag **30** from falling off through the slit **22** from the support hole **21** of the base sheet **20**.

[0061] (5) In the massage device, when the bag is a first bag, the sandwiching portion is a second bag that is inflated with air intake and deflated with air exhaust.

[0062] According to the above configuration, in the massage device, the air bag is supported by the base sheet by

sandwiching the base sheet between two bags of the air bag. Therefore, the massage device does not need to have a configuration only for sandwiching the base sheet in the air bag.

[0063] In other words, in the massage device **10**, the air bag **30** is supported by the base sheet by sandwiching the base sheet **20** between the two bags **31** and **32** of the air bag **30**. Therefore, the massage device **10** does not need to have a configuration only for sandwiching the base sheet in the air bag **30** in the thickness direction.

[0064] According to the above configuration, the air bag **30** includes the two bags **31** and **32**, that is, the first bag **31** and the second bag **32**. As a result, in the massage device **10**, the two bags **31**, **32** can be arranged in the thickness direction of the base sheet **20**. Therefore, the massage device can increase the amount of displacement of the air bag **30** in the thickness direction when the two bags **31** and **32** are inflated while suppressing the increase in size of the air bag **30**. That is, the massage device **10** can enhance a massage effect for the user.

[0065] (6) In the massage device, the base sheet includes a support hole penetrating the base sheet in the thickness direction, the air bag includes a joint portion that joins the bag and the sandwiching portion, and in plan view in the thickness direction, the joint portion is smaller than the support hole, and the bag and the sandwiching portion are larger than the support hole.

[0066] According to the above configuration, the massage device can cause the base sheet to support the air bag by passing the joint portion of the air bag through the support hole of the base sheet. Here, in plan view in the thickness direction, the bag and the sandwiching portion of the air bag are larger than the support hole of the base sheet. Therefore, the massage device can prevent the air bag from falling off the base sheet even when a load in the thickness direction acts on the air bag.

[0067] (7) Under a situation in which the massage device **10** is mounted on the chair **100**, the slit **22** is directed upward from the support hole **21** toward the side end portions **233** and **234** of the base sheet **20**. Therefore, under the same situation, the air bag **30** is less likely to move in the direction of falling off from the support hole **21** of the base sheet **20** even if its own weight acts.

[0068] The present embodiment can be modified and implemented as follows. The present embodiment and the following modifications can be implemented in combination with each other within a technically consistent range.

[0069] As illustrated in FIGS. **5** and **6**, a massage device **10**A according to a first modification includes a base sheet **20**A, an air bag **30**A, and the connection tube **40**. The base sheet **20**A has a slit **22**A extending in the width direction. The slit **22**A extends from the first side end portion **233** and the second side end portion **234** of the base sheet **20**A toward the center in the width direction of the base sheet. Unlike the above embodiment, the base sheet **20**A does not have the support hole **21**. The air bag **30**A includes two bags **31**A and a coupling member **34** that connects the two bags **31**A. The two bags **31**A have a configuration equivalent to that of the first bag **31** in the above embodiment. The coupling member **34** has a rod shape. The coupling member **34** couples the central portions of the two bags **31**A. In the following description, in the coupling member **34**, a portion connected to one bag **31**A is referred to as a first end portion, and a portion connected to the other bag **31**A is referred to as a second end portion.

[0070] In a case where the air bag **30**A is supported by the base sheet **20**A, the first end portion of the coupling member **34** of the air bag **30**A is passed through one slit **22**A of the base sheet **20**A, and the second end portion of the coupling member **34** of the air bag **30**A is passed through the other slit **22**A of the base sheet **20**A. Then, as illustrated in FIG. **6**, in the width direction, a portion between the two slits **22**A in the base sheet **20**A is located between the first end portion and the second end portion of the coupling member **34**. Furthermore, the two bags **31**A are located on the front surface side of the base sheet **20**A, and the coupling member **34** is located on the back surface side of the base sheet **20**A. That is, the base sheet **20**A is sandwiched between the two bags **31**A and the coupling member **34** in the thickness direction. In this way, the air bag **30**A is supported by the base sheet **20**A.

[0071] According to the first modification, it is possible to obtain effects equivalent to the effects (1) and (2) of the above embodiment. In the first modification, the coupling member **34** corresponds to "sandwiching portion".

[0072] As illustrated in FIGS. **7** and **8**, a massage device **10**B according to a second modification includes a base sheet **20**B and a plurality of air bags **30**B. The base sheet **20**B has a plurality of support holes **21**B penetrating the base sheet in the thickness direction. The support hole **21**B has an oval shape in plan view in the thickness direction. The base sheet **20**B does not have the slit **22** connected to the support hole **21**B. The air bag **30**B includes a bag **31**B with the equivalent configuration to the first bag **31**, a locking piece **35** with a disk shape, and a joint portion **33**B that joins the bag **31**B and the locking piece **35**. The locking piece **35** preferably has a size and a shape that do not fit in the support hole **21**B in plan view in the thickness direction. Unlike the locking piece the joint portion **33**B preferably has a size and a shape that fit in the support hole **21**B in plan view in the thickness direction.

[0073] In a case where the air bag **30**B is supported by the base sheet **20**B, the locking piece **35** of the air bag **30**B is passed through the support hole **21**B of the base sheet **20**B. Then, the bag **31**B is located on the front surface side of the base sheet **20**B, and the locking piece **35** is located on the back surface side of the base sheet **20**B. That is, the base sheet **20**B is sandwiched between the bag **31**B and the locking piece **35** in the thickness direction. In this way, the air bag **30**B is supported by the base sheet **20**B.

[0074] According to the second modification, it is possible to obtain effects equivalent to the effects (1) and (2) of the above embodiment. In plan view in the thickness direction, the bag **31**B and the locking piece **35** of the air bag **30**B are larger than the support hole **21**B of the base sheet Therefore, the massage device **10**B can prevent the air bag **30**B from falling off the base sheet even when a load in the thickness direction acts on the air bag **30**B. In the second modification, the locking piece **35** corresponds to "sandwiching portion".

[0075] The air bag **30** may include the first bag **31** and the sandwiching portion that sandwiches the base sheet **20** between the sandwiching portion and the first bag **31**. The sandwiching portion preferably forms a clip shape together with the first bag **31**. In this case, in the air bag **30**, the end portion of the base sheet **20** can be sandwiched between the first bag **31** and the sandwiching portion. That is, the air bag

30 can be supported by the base sheet **20** without providing the support hole **21** and the slit **22** in the base sheet **20**.

[0076] It is preferable that the shape of the massage device **10** is appropriately changed depending on the shape of the chair **100** on which the massage device **10** is mounted. For example, the shape of the base sheet **20** and the shape of the cover **50** are preferably changed, and the number of the air bags **30**, the arrangement of the air bags **30**, and the like are preferably changed.

[0077] The base sheet **20** that supports the plurality of air bags **30** and the plurality of connection tubes **40** may be incorporated in the seat back and the seat cushion of the vehicle seat. In this case, the massage device **10** may be undetachable from the vehicle seat.

[0078] In the base sheet **20**, the extending direction of the slit **22** can be changed as appropriate. For example, the slit **22** may be bent or curved between the end portion of the base sheet **20** and the support hole **21**. As a result, the air bag **30** is less likely to fall off from the support hole **21**.

[0079] The massage device **10** may be a massage device that massages parts other than the back of the user. For example, the massage device **10** may be disposed on the seat portion **102** of the chair **100** and massage the buttocks and the legs of the user. Furthermore, the massage device **10** may be arranged on a bed and massages the entire body of the user.

[0080] The principles, preferred embodiment and mode of operation of the present invention have been described in the foregoing specification. However, the invention which is intended to be protected is not to be construed as limited to the particular embodiments disclosed. Further, the embodiments described herein are to be regarded as illustrative rather than restrictive. Variations and changes may be made by others, and equivalents employed, without departing from the spirit of the present invention. Accordingly, it is expressly intended that all such variations, changes and equivalents which fall within the spirit and scope of the present invention as defined in the claims, be embraced thereby.

1. A massage device comprising:
a base sheet with a sheet shape; and
an air bag supported by the base sheet, wherein
when one surface of the base sheet is a front surface and a surface opposite to the front surface is a back surface,
the air bag includes a bag that is located on a side of the front surface of the base sheet, and that is inflated with air intake and deflated with air exhaust, and a sandwiching portion that is located on a side of the back surface of the base sheet and sandwiches the base sheet between the sandwiching portion and the bag in a thickness direction.

2. The massage device according to claim **1**, wherein the base sheet includes a slit extending from an end of the base sheet.

3. The massage device according to claim **2**, wherein
the base sheet includes a support hole penetrating the base sheet in the thickness direction,
the air bag includes a joint portion that joins the bag and the sandwiching portion,
the slit extends from the end of the base sheet to the support hole, and
in plan view in the thickness direction, the joint portion is smaller than the support hole, and the bag and the sandwiching portion are larger than the support hole.

4. The massage device according to claim **3**, wherein a width of the slit is smaller than an inner diameter of the support hole.

5. The massage device according to claim **1**, wherein
when the bag is a first bag,
the sandwiching portion is a second bag that is inflated with air intake and deflated with air exhaust.

6. The massage device according to claim **2**, wherein
when the bag is a first bag,
the sandwiching portion is a second bag that is inflated with air intake and deflated with air exhaust.

7. The massage device according to claim **3**, wherein
when the bag is a first bag,
the sandwiching portion is a second bag that is inflated with air intake and deflated with air exhaust.

8. The massage device according to claim **4**, wherein
when the bag is a first bag,
the sandwiching portion is a second bag that is inflated with air intake and deflated with air exhaust.

9. The massage device according to claim **1**, wherein
the base sheet includes a support hole penetrating the base sheet in the thickness direction,
the air bag includes a joint portion that joins the bag and the sandwiching portion, and
in plan view in the thickness direction, the joint portion is smaller than the support hole, and the bag and the sandwiching portion are larger than the support hole.

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