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(54) HOOD FOR CLOTHING AND HOODED GARMENT

(57) Provided is a hood (10) for clothing whose opening (20) and a temporal region may be easily fitted to a wearer with a simple operation. A hood (10) in one embodiment includes a hood body (12) having a drawstring channel (22). The drawstring channel (22) includes a first portion (22A) that extends in the substantially vertical direction along left and right peripheral edges respectively of an upper portion of an opening (20), and a second portion (22B) that is coupled to a lower end of the first portion (22A) and extends in a substantially front-rear direction on left and right sides of the hood (10). The hood (10) further includes a first string (14) that is threaded through the drawstring channel (22), and an adjuster (18) that is provided on a back side of the hood body (12) for adjusting a length of the first string (14) in accordance with operation of the adjuster (18) by a user. In the hood body (12), a hook catching portion (24) that has a through hole (24A) is provided in the drawstring channel (22). The first string (14) is threaded through the through hole (24A) of the hook catching portion (24). A hook portion (26) that is configured to be caught by the hook catching portion (24) is formed in the first string (14) at a position in the first portion (22A) before the hook catching portion (24).

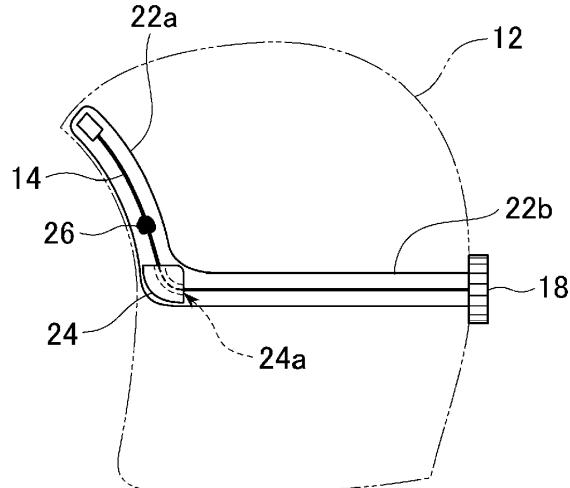


Fig. 4

Description**TECHNICAL FIELD**

5 [0001] The present invention relates to a hood for clothing and a hooded garment.

BACKGROUND

10 [0002] Some hooded garments such as raincoats and cold weather gears have drawstrings. A typical drawstring is positioned along a peripheral edge of a hood opening that accommodates the wearer's face. The size of the hood opening can be adjusted by pulling the drawstring. For instance, a wearer can pull the drawstring to draw the edge of the hood opening immediately adjacent to the wearer's face in order to prevent winds and rains from entering inside. A hood disclosed in Patent Literature 1 has a drawstring that extends along a peripheral edge of a hood opening and then turns up or down at its lower or upper end to extend on a temporal region of the hood toward the back side of the wearer's head. When the drawstring is pulled in such a hood, both the hood opening and the temporal region are cinched so that it is said that the hood can be adequately fitted to the wearer with such an easy operation.

RELEVANT REFERENCES**20 LIST OF RELEVANT PATENT LITERATURE**

[0003] Patent Literature 1: Japanese Utility Model Registration Publication No. 3189088

SUMMARY

25 [0004] However, the above-described cinching mechanism is formed by simply extending the drawstring that is positioned along the peripheral edge of the hood opening toward the back side of the head through the turnaround point on the temporal region. Therefore it is difficult to evenly tighten the hood opening portion and the temporal region of the hood. For instance, pulling the drawstring may mainly cinch the hood opening but cinch the temporal region insufficiently.

30 [0005] One object of the invention is to provide a hood for clothing in which a hood opening and a temporal region may be easily tighten and fitted to the wearer with a simple operation. Other objects of the embodiments of the present disclosure will be apparent with reference to the entire description in this specification.

35 [0006] A hood according to one embodiment of the invention is for clothing. The hood may include a hood body that has an opening and a drawstring channel. The drawstring channel includes a first portion that extends in a substantially vertical direction along left and right peripheral edges of an upper portion of the opening, and a second portion that is coupled to a lower end of the first portion and extends in a substantially front-rear direction on left and right sides of the hood respectively. The hood may further include a first string threaded through at least the first portion and the second portion of the drawstring channel, an adjusting member provided on a back side of the hood body and configured to adjust a length of the first string in accordance with an operation of the adjusting member performed by a user. A first hook catching portion that has a through hole is provided in the first portion or the second portion in the hood body. The first string is threaded through the through hole of the first hook catching portion and has a first hook portion that is configured to be caught by the first hook catching portion and situated in the first portion before the first hook catching portion.

40 [0007] A hood according to one embodiment of the invention is for clothing. The hood may include a hood body having an opening and a drawstring channel. The drawstring channel includes a first portion that extends in a substantially vertical direction along left and right peripheral edges of an upper portion of the opening, a second portion that extends in a substantially vertical direction along left and right peripheral edges respectively of a lower portion of the opening, and a third portion that is coupled to a lower end of the first portion and an upper end of the second portion and extends in a substantially front-rear direction on left and right sides respectively of the hood body. The hood may further include a first string threaded through at least the second portion of the drawstring channel and on which a guide with a through hole is provided on an upper end portion thereof, a second string threaded through at least the first portion and the third portion of the drawstring channel, threaded through the through hole of the guide, and having a hook portion that is configured to be caught by the guide in the first portion before the guide, and an adjusting member provided on a back side of the hood body and configured to adjust a length of the second string in accordance with operation by a user.

45 [0008] A garment according to one embodiment of the invention may include the above-described hood.

50 [0009] According to various embodiments of the invention, it is possible to provide a hood for clothing in which a hood opening and a temporal region may be easily tighten and fitted to the wearer with a simple operation.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010]

5 Fig. 1 is an external view of a garment 1 according to one embodiment.
 Fig. 2 is a front elevation view of a hood 10 according to one embodiment.
 Fig. 3 is a side elevation view of the hood 10 according to the embodiment.
 Fig. 4 is a side elevation view of the hood 10 according to the embodiment for illustrating its internal structure.
 Fig. 5 is a front elevation view of the hood 10 according to one embodiment.
 10 Fig. 6 is a side elevation view of the hood 10 according to the embodiment.
 Fig. 7 is a side elevation view of the hood 10 according to the embodiment for illustrating its internal structure.
 Fig. 8 is a side elevation view of the hood 10 according to one embodiment for illustrating its internal structure.
 Fig. 9 is a side elevation view of the hood 10 according to the embodiment for illustrating its internal structure.
 Fig. 10 is a side elevation view of the hood 10 according to another embodiment for illustrating its internal structure.
 15 Fig. 11 is a side elevation view of the hood 10 according to one embodiment for illustrating its internal structure.
 Fig. 12 is a side elevation view of the hood 10 according to the embodiment for illustrating its internal structure.
 Fig. 13 is a side elevation view of a hood 110 according to another embodiment for illustrating its internal structure.
 Fig. 14 is a side elevation view of the hood 110 according to the embodiment for illustrating its internal structure.
 Fig. 15 is a front elevation view of the hood 110 according to another embodiment.
 20 Fig. 16 is a side elevation view of the hood 110 according to the embodiment.
 Fig. 17 is a side elevation view of the hood 110 according to the embodiment for illustrating its internal structure.
 Fig. 18 is a side elevation view of the hood 110 according to the embodiment for illustrating its internal structure.
 Fig. 19 is a side elevation view of the hood 110 according to the embodiment for illustrating its internal structure.
 Fig. 20 is a side elevation view of the hood 110 according to another embodiment for illustrating its internal structure.
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DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0011] Various embodiments of the present invention will be hereunder described with reference to the accompanying drawings.

30 In the accompanying drawings, the same components may be labeled with the same reference numerals.

[0012] Fig. 1 is an external view of a garment 1 according to one embodiment.

[0013] The garment 1 in one embodiment may be used as, for example, a raincoat, a cold weather gear or the like and may include a hood 10 according to an embodiment of the invention. In one embodiment, the hood 10 may be configured to be detachable from a torso portion of the garment 1 or may be formed integrally with the torso portion of the garment 1.

[0014] Fig. 2 is a front elevation view of the hood 10 in one embodiment, Fig. 3 is a side elevation view of the hood 10, and Fig. 4 is a side elevation view of the hood 10 for illustrating its internal structure. As illustrated in the drawings, the hood 10 may include a hood body 12 that is configured to cover the head of a wearer, a first string that is threaded through an internal section of the hood body 12, and an adjuster 18 provided on the back side of the hood body 12.

[0015] The hood body 12 in one embodiment may have an opening 20 to expose a face of the wearer on its front side and may have a drawstring channel 22 through which the first string 14 is threaded on its inner side. The hood body 12 may be formed of, for example, a synthetic fabric such as nylon.

[0016] Referring to Fig. 4, the drawstring channel 22 may include a pair of first portions 22a that extend in a substantially vertical direction along left and right peripheral edges respectively of an upper portion (covering about a forehead of a wearer) of the opening of the hood 12. The drawstring channel 22 may further include a pair of second portions 22b that are coupled to lower ends of the first portions 22a and extend in a substantially front-rear direction on the left and right sides of the hood body 12 respectively. The drawstring channel 22 may be formed as a hemmed casing that includes more than one layer (for instance, a two layer structure of an outer fabric and a backing fabric) on the inner side of the hood body 12 and may serve as a channel through which the first string 14 is guided. In one embodiment, the left and right second portions 22b of the drawstring channel 22 may be coupled to each other on the back side of the hood body 12 to make the second portion 22b as a single component.

[0017] A hook catching portion 24 may be provided at the intersection of the first portion 22a and the second portion 22b of the drawstring channel 22 according to the embodiment. The hook catching portion 24 may have a substantially sector profile as viewed from the side of the hood 10 and may include openings on the upper side (the first portion 22a side) and the rear side (the second portion 22b side) and a through hole 24a that extends along the arc of the sector. The hook catching portion 24 may be sewn to the hood body 12 and fixed thereto.

[0018] The first string 14 in one embodiment may be threaded through the drawstring channel 22 (the first portion 22a and the second portion 22b) and extend in the substantially vertical direction along the upper peripheral edge of the

opening 20, bend at the lower end, and then extend toward the back side on the lateral side of the hood body 12. The first string 14 has a length which is the sum of the length of the first portion 22a and the length of the second portion 22b.

[0019] The first string 14 may be threaded through the through hole 24a of the hook catching portion 24 provided inside the drawstring channel 22. A hook portion 26 may be disposed in the first portion 22a above the hook catching portion 24 (on the upper portion side of the opening 20).

[0020] The hook portion 26 in one embodiment may be a knot in the first string 14 and an outer diameter of the knot may be larger than an inner diameter of the through hole 24a of the hook catching portion 24. Therefore the hook portion 26 is configured to be caught by the hook catching portion 24. Here, the hook portion 26 formed as the knot is merely an example. In embodiments of the invention, the hook portion 26 may be formed in any shape as long as it is configured to be caught by the hook catching portion 24.

For instance, the hook portion 26 may be a cord stopper through which a string 16 is able to be inserted. A typical cord stopper allows a string to be threaded and locked thereinside as disclosed in, for example, Japanese Patent Application Publications H.11-99008 and 2012-217540. When the hook portion 26 is the cord stopper, the hook portion 26 can be moved to any position on the string 16.

[0021] An upper end of a portion of the first string 14 that extends along the edge of the upper portion of the opening 20 (an upper end of the first portion 22a) may be fixed on the hood body 12, and a rear end of a portion of the first string 14 that extends toward the back side may be attached to the adjuster 18.

The first string 14 may be formed of any material and may have any shape such as a thread, a tape and the like. In one embodiment, the first string 14 may be formed as two components that are threaded through the first portion 22a and the second portion 22b on the left side and the right side respectively.

[0022] The adjuster 18 in one embodiment may be disposed on a rear edge of the hood body 12 (back of the wearer's head). The rear ends of the pair of first strings 14 that extend on the left and right sides of the hood body 12 in the substantially front-rear direction may be coupled to the adjuster 18. The adjuster 18 may be configured to wind the first strings 14 when the adjuster 18 is rotated by a user. The user may adjust the length of the first strings 14 by winding the first string 14 through the adjuster 18.

[0023] Fig. 5 is a front elevation view of the hood 10 according to one embodiment, Fig. 6 is a side elevation view of the hood 10, and Fig. 7 is a side elevation view of the hood 10 for illustrating its internal structure. As illustrated in the drawings, the hood 10 may include the hood body 12 that is configured to cover the head of a wearer, the first string 14 and a second string 16 that are threaded through an internal section of the hood body 12, and the adjuster 18 provided on the back side of the hood body 12.

[0024] The hood body 12 in one embodiment may have the opening 20 to expose a face of the wearer on its front side and may have the drawstring channel 22 through which the first string 14 and the second string 16 are threaded on its inner side. The hood body 12 may be formed of, for example, a synthetic fabric such as nylon.

[0025] Referring to Fig. 7, the drawstring channel 22 may include the pair of first portions 22a that extend in the substantially vertical direction along the left and right peripheral edges respectively of the upper portion (covering about the forehead of the wearer) of the opening 20 of the hood 12. The drawstring channel 22 may further include a pair of second portions 22b that extend in the substantially vertical direction along left and right peripheral edges of a lower portion (covering about the jaw of the wearer) of the opening 20. The drawstring channel 22 may further include a pair of third portions 22c that are coupled to lower ends of the first portions 22a and upper ends of the second portions 22b respectively and extend in the substantially front-rear direction on the left and right sides of the hood body 12 respectively. The drawstring channel 22 may be formed as a hemmed casing that includes more than one layer (for instance, a two layer structure of an outer fabric and a backing fabric) on the inner side of the hood body 12 and may serve as a channel through which the first string 14 and the second string 16 are guided.

[0026] Here, the drawstring channel 22 in one embodiment may be configured such that the first portion 22a and the second portion 22b are continuously aligned linearly in the substantially vertical direction. However, embodiments of the invention are not limited to this. For instance, the first portion 22a and the second portion 22b may not be continuously aligned but coupled to the third portion 22c at different positions. In one embodiment, the left and right third portions 22c of the drawstring channel 22 may be coupled to each other on the back side of the hood body 12 to make the third portion 22c as a single component.

[0027] The first string 14 in one embodiment may be threaded through the second portion 22b of the drawstring channel 22 and extend in the substantially vertical direction along the lower peripheral edge of the opening 20.

A guide 24 may be provided at the upper end of the first string 14, and the lower end of the first string 14 may be fixed on the hood body 12 (the lower end of the second portion 22b). The first string 14 may be formed of any material and may have any shape such as a thread, a tape and the like.

In one embodiment, the first string 14 may be formed as two components that are threaded through the right and left second portions 22b respectively.

[0028] The guide 24 in one embodiment may be a ring-shaped component that has a through hole 24a. Here, the first string 14 may have a length substantially identical to the length of the second portion 22b and therefore the guide 24 is

positioned at the upper end of the second portion 22b.

[0029] The second string 16 in one embodiment may be threaded through the first portion 22a and the third portion 22c of the drawstring channel 22 and extend in the substantially vertical direction along the upper peripheral edge of the opening 20, bend at the lower end, and then extend toward the back side on the lateral side of the hood body 12.

5 The second string 16 has a length which is the sum of the length of the first portion 22a and the length of the third portion 22c.

[0030] The second string 16 may be threaded through the through hole 24a of the guide 24 provided on the first string 14 inside the drawstring channel 22. The hook portion 26 may be provided in the first portion 22a above the guide 24 (on the upper portion side of the opening 20).

[0031] The hook portion 26 in one embodiment may be a knot in the second string 16 and an outer diameter of the

10 knot may be larger than an inner diameter of the through hole 24a of the guide 24. Therefore the hook portion 26 is configured to be caught by the guide 24. Here, the hook portion 26 formed as the knot is a merely example. In embodiments of the invention, the hook portion 26 may be formed in any shape as long as it is caught by the guide 24.

For instance, the hook portion 26 may be a cord stopper through which the string 16 is able to be inserted. A typical cord stopper allows a string to be threaded and locked thereinside as disclosed in, for example, Japanese Patent

15 Application Publications H.11-99008 and 2012-217540. When the hook portion 26 is the code stopper, the hook portion 26 can be moved to any position on the string 16.

[0032] An upper end of a portion of the second string 16 that extends along the edge of the upper portion of the opening 20 may be fixed on the hood body 12 (the upper end of the first portion 22a), and an rear end of a portion of the first string 14 that extends toward the rear side may be attached to the adjuster 18.

20 The second string 16 may be formed of any material and may have any shape such as a thread, a tape and the like. In one embodiment, the second string 16 may be formed as two components that are threaded through the first portion 22a and the third portion 22c on the left side and the right side respectively.

[0033] The adjuster 18 in one embodiment may be disposed on a rear edge of the hood body 12 (back of the wearer's head). The rear ends of the pair of second strings 16 that extend on the left and right sides of the hood body 12 in the substantially front-rear direction may be coupled to the adjuster 18. The adjuster 18 may be configured to wind the second strings 16 when the adjuster 18 is rotated by a user. The user may adjust the length of the second strings 16 by winding the first strings 16 through the adjuster 18.

[0034] Next, actions which a user/wearer performs to fit the hood 10 to the wearer in one embodiment will be now described. When the user rotates the adjuster 18 to wind the first string 14, the first string 14 is pulled backward in the second portion 22b and pulled down in the first portion 22a of the drawstring channel 22. As a result, the peripheral edge of the upper portion of the opening 20 on which the first string 14 is fixed is drawn downward and the upper portion of the opening 20 of the hood 12 is contracted (see Fig. 8).

[0035] When the hook portion 26 formed in the first string 14 that is wound reaches the position of the hook catching portion 24 provided in the drawstring channel 22 (at the intersection of the first portion 22a and the second portion 22b), the hook portion 26 is caught by the hook catching portion 24. Subsequently the hook catching portion 24 fixed on the hood 12 is pulled toward the back side as the first string 14 is further wound up. Consequently the lateral side (the temporal region) of the hood 12 is contracted toward the back side (see Fig. 9).

[0036] In this way, in the hood 10 according to the embodiment, when the adjuster 18 is operated, the upper portion (about the forehead area) of the opening 20 is firstly contracted (until the hook portion 26 is caught by the hook catching portion 24) and then the side portion of the hood 10 is contracted (after the hook portion 26 has been caught by the hook catching portion 24).

Therefore the user is able to cinch the portion of the hood covering about the forehead and then cinch the portion of the hood covering about the temporal region of the head in steps by operating the adjuster 18. When the hook portion 26 is the code stopper, the hook portion 26 can be moved to any position on the string 14. In this manner, it is possible to control a shrinkage of the opening 20.

45 For instance, the shrinkage of the opening 20 can be increased by displacing the hook portion 26 to an upper position of the string 14 (a position further from the hook catching portion 24). Whereas the shrinkage of the opening 20 can be decreased by displacing the hook portion 26 to a lower position of the string 14 (a position closer to the hook catching portion 24).

[0037] The shape, position and the like of the hook catching portion 24 described in the above embodiment are merely an example and can be changed as appropriate. The hook catching portion 24 is positioned at the intersection of the first portion 22a and the second portion 22b of the drawstring channel 22 in the above-described embodiment. Alternatively, the hook catching portion 24 may be positioned in any part of the drawstring channel 22. For instance, in another exemplary embodiment, instead of the hook catching portion 24, a hook catching portion 28 formed in a tubular shape with a through hole 28a may be provided on a lower portion of the first portion 22a (above the intersection of the first portion 22a and the second portion 22b) as illustrated in Fig. 10.

[0038] Next, actions which a user/wearer performs to fit the hood 10 to the wearer in another embodiment will be now described. When the user rotates the adjuster 18 to wind the second string 16, the second string 16 is pulled backward

in the third portion 22c and pulled down in the first portion 22a of the drawstring channel 22. As a result, the peripheral edge of the upper portion of the opening on which the second string 16 is fixed is drawn downward and the upper portion of the opening 20 of the hood 12 is contracted (see Fig. 11).

[0039] When the hook portion 26 of the second string 16 that is wound reaches the position of the guide 24 on the first string 14, the hook portion 26 is caught by the guide 24. Subsequently the first string 14 whose lower end is fixed on the lower edge of the opening 20 is also wound and pulled toward the back side together with the second string 16 whose upper end is fixed on the upper edge of the opening 20 (see Fig. 12). At this point, the upper end portion of the second portion 22b of the drawstring channel 22 is pulled toward the back side of the hood (a downward force acts on the upper end portion of the second portion 22b) as the first string 14 is wound, and the lower end portion of the first portion 22a of the drawstring channel 22 is pulled toward the back side of the hood (a downward force acts on the lower end portion of the first portion 22a) as the second string 16 is wound. In this manner, the opening 20 is contracted as a whole and the lateral side (the temporal region) of the hood 12 is also drawn to the back side.

[0040] In this way, in the hood 10 according to one embodiment, when the adjuster 18 is operated, the upper portion (covering about the forehead area) of the opening 20 is firstly contracted (until the hook portion 26 is caught by the guide 24) and then the whole of the opening 20 and the side portion of the hood 10 are contracted (after the hook portion 26 has been caught by the guide 24).

Therefore the user is able to cinch the portion of the hood covering about the forehead and then cinch the portion of the hood covering about the whole face and the temporal region of the head in steps by operating the adjuster 18.

When the hook portion 26 is the code stopper, the hook portion 26 can be moved to any position on the string 16. In this manner, it is possible to control a shrinkage of the opening 20. For instance, the shrinkage of the opening 20 can be increased by displacing the hook portion 26 to an upper position of the string 16 (a position further from the guide 24). Whereas the shrinkage of the opening 20 can be decreased by displacing the hook portion 26 to a lower position of the string 16 (a position closer to the guide 24).

[0041] Fig. 13 is a side elevation view of the hood 110 according to another embodiment for illustrating its internal structure. The hood 110 according to another embodiment may have the similar configuration as the hood 10 in the above-described embodiment and may further include a hook catching portion 128 in the third portion 22c of the drawstring channel 22.

[0042] In this embodiment, the hook catching portion 128 may be formed in a cylindrical shape and a portion of its outer periphery may be positioned forward from substantially the center of the third portion 22c in the front-rear direction. The second string 16 may be threaded through the cylindrical hook catching portion 128. The hook catching portion 128 may be configured to catch the guide 24 in which the hook portion 26 is engaged (for instance, an inner diameter of the hook catching portion 128 is smaller than the outer diameter of the guide 24).

When the second string 16 is wound by the rotational operation of the adjuster 18, the guide 24 that has been caught by the hook portion 26 is caught by the hook catching portion 128 and a portion of the drawstring channel where the hook catching portion 128 is fixed is drawn to the rear side. As described above, the hook catching portion 128 for catching the guide 24 in which the hook portion 26 is engaged is provided in the third portion 22c of the drawstring channel 22. Therefore it is possible to secure the temporal region of the head.

[0043] In the above-described embodiments, the adjuster 18 is configured to wind the second string 16 up in accordance with the rotational operation of the adjuster performed by a user. The embodiments of the invention are not limited to this and the adjuster 18 may have other mechanism to adjust the length of the second string 16.

[0044] The hood for clothing according to the various embodiments described above may include the hood body 12 that has the opening 20, the first string 14, the second string 16, and the adjuster (adjusting member) 18 that is provided on the back side of the hood 12 for adjusting the length of the second string 16 in accordance with a user's operation. The hood body 12 may include the drawstring channel 22 and the drawstring channel 12 may include the first portion 22a that extends in the substantially vertical direction along the left and right peripheral edges respectively of the upper portion of the opening 20, the second portion 22b that extends in the substantially vertical direction along left and right peripheral edges respectively of the lower portion of the opening 20, and the third portion 22c that is coupled to a lower end of the first portion 22a and an upper end of the second portion 22b and extends in the substantially front-rear direction on the left and right sides of the hood body 12 respectively. The guide 24 that has the through hole 24a may be provided on the upper end of the first string 14 and the first string 14 may be threaded through the second portion 22b of the drawstring channel 22. The second string 16 may be threaded through the first portion 22a and the third portion 22c of the drawstring channel 22 and be also threaded through the through hole 24a of the guide 24. The hook portion 26 that is configured to be caught by the guide 24 may be provided in the first portion 22a before the guide 24.

[0045] In the hood 10 configured as described above, when the adjuster 18 is operated to decrease the length of the second string 16, the upper portion of the opening 20 is firstly contracted until the hook portion 26 gets caught by the guide 24 and then the whole of the opening 20 and the side portion of the hood are contracted after the hook portion 26 has been caught by the guide 24. According to the embodiments as described above, it is possible to provide a hood for clothing in which the hood opening and the temporal region may be easily fitted to the wearer with a simple operation.

[0046] Embodiments of the present invention are not limited to the above embodiments but various modifications are possible within a spirit of the invention.

For example, the left first string 14 and the right first string 14 may be coupled to each other at a position about the jaw of a wearer and the first string may be configured as a single component. For example, the left second string 16 and the right second string 16 may be coupled to each other at the upper edge of the opening 20 and the second string may be configured as a single component.

Moreover, configurations and positions of the guide 24, the hook portion 26, and the hook catching portion 128 described in the above embodiments are merely examples and various modifications thereon are possible.

[0047] Next, the hood 110 according to another embodiment will be described.

[0048] Components similar to the ones of the hood 10 in the above-described embodiment will be hereunder labeled by the same reference numerals and those descriptions will be hereunder omitted. Fig. 15 is a front elevation view of the hood 110 according to another embodiment, Fig. 16 is a side elevation view of the hood 110, and Fig. 17 is a side elevation view of the hood 110 for illustrating its internal structure. As illustrated in the drawings, the hood 110 may include the hood body 12 that is configured to cover the head of a wearer, the first string 14 and a second string 16 that are threaded through an internal section of the hood body 12, and the adjuster 18 provided on the back side of the hood body 12.

[0049] Referring to Fig. 17, a drawstring channel 122 provided in the inner side of the hood body 12 may include a pair of first portions 122a that extend in the substantially vertical direction along the left and right peripheral edges respectively of the upper portion (covering about the forehead of a wearer) of the opening 20 of the hood 12. The drawstring channel 122 may further include a pair of third portions 122c that extend in the substantially vertical direction along the left and right peripheral edges of the lower portion (covering about the jaw of the wearer) of the opening 20. The drawstring channel 122 may further include a pair of second portions 122b that are coupled to lower ends of the first portions 122a and upper ends of the third portions 122c respectively and extend in the substantially

[0050] front-rear direction on the left and right lateral sides of the hood body 12 respectively. The drawstring channel 122 may be formed as a hemmed casing that includes more than one layer (for instance, a two layer structure of an outer fabric and a backing fabric) on the inner side of the hood body 12 and may serve as a channel through which the first string 14 and the second string 16 are guided.

In this embodiment, the left and right second portions 122b of the drawstring channel 122 may be coupled to each other on the rear side of the hood body 12 to make the second portion 122b as a single component.

[0051] The hook catching portion 124 may be provided at the intersection of the first portion 122a, the second portion 122b, and the third portion 122c of the drawstring channel 122 in the embodiment. The hook catching portion 124 may have a substantially plate-like shape and have through holes 124a in its upper side (a side facing the first portion 122a), in its lower side (a side facing the third portion 122c), and in its rear side (a side facing the second portion 122b). The hook catching portion 124 may be sewn to the hood body 12 and fixed thereto.

[0052] The first string 14 according to the embodiment may be threaded through the first portion 122a and the second portion 122b of the drawstring channel 122 and extend in the substantially vertical direction along the upper peripheral edge of the opening 20, bend at the lower end, and then extend toward the rear side on the lateral side of the hood body 12. The first string 14 has a length which is the sum of the length of the first portion 122a and the length of the second portion 122b.

[0053] The first string 14 may be threaded through the openings provided at the upper side and the rear side of the through hole 124a of the hook catching portion 124 inside the drawstring channel 122. The hook portion 26 may be disposed in the first portion 122a above the hook catching portion 124 (in the upper edge portion of the opening 20).

[0054] The hook portion 26 in the embodiment may be a knot in the first string 14 and an outer diameter of the knot may be larger than an inner diameter of the upper-side opening of the through hole 124a of the hook catching portion 124. Therefore the hook portion 26 is configured to be caught by the hook catching portion 124.

[0055] An upper end of a portion of the first string 14 that extends along the edge of the upper portion of the opening 20 may be fixed on the hood body 12 (the upper end of the first portion 122a), and an rear end of a portion of the first string 14 that extends toward the rear side may be attached to the adjuster 18.

[0056] The second string 16 according to the embodiment may be threaded through the third portion 122c and the second portion 122b of the drawstring channel 122 and extend in the substantially vertical direction along the lower peripheral edge of the opening 20, bend at the upper end, and then extend toward the rear side on the lateral side of the hood body 12. The second string 16 has a length which is the sum of the length of the third portion 122c and the length of the second portion 122b.

[0057] The second string 16 may be threaded through the openings provided at the lower side and the rear side of the through hole 124a of the hook catching portion 124 inside the drawstring channel 122. The hook portion 126 may be disposed in the third portion 122a below the hook catching portion 124 (on the lower edge portion of the opening 20).

[0058] The hook portion 126 in the embodiment may be a knot in the second string 16 and an outer diameter of the knot may be larger than an inner diameter of the lower-side opening of the through hole 124a of the hook catching portion

124. Therefore the hook portion 126 is configured to be caught by the hook catching portion 124.

[0059] A lower end of a portion of the second string 16 that extends along the edge of the lower portion of the opening 20 may be fixed on the hood body 12 (at the lower end of the third portion 122c), and an rear end of a portion of the second string 16 that extends toward the rear side may be attached to the adjuster 18.

[0060] In this embodiment, the first string 14 and the second string 16 may be formed integrally in a rear portion of the second portion 122b and the rear end of the integrated first and second strings 14, 16 may be coupled to the adjuster 18.

[0061] Moreover, in the embodiment, the positions of the hook portions 26, 126 are specified such that a length from the hook portion 26 of the first string 14 to the hook catching portion 124 is substantially same as a length from the hook portion 126 of the second string 16 to the hook catching portion 124.

[0062] Next, actions which a user/wearer performs to fit the hood 110 to the wearer in the embodiment will be now described. When the user rotates the adjuster 18 to wind the first string 14 and the second string 16, the first string 14 and the second string 16 are pulled backward in the second portion 122b of the drawstring channel 122, the first string 14 is pulled down in the first portion 122a, and the second string is pulled up in the third portion 122c. As a result, the peripheral edge of the upper portion of the opening 20 on which one end of the first string 14 is fixed is drawn downward and the peripheral edge of the lower portion of the opening 20 on which one end of the second string 16 is fixed is drawn upward. Consequently, the whole of the opening 20 of the hood 12 is contracted (see Fig. 18).

[0063] When the hook portion 26 formed in the first string 14 and the hook portion 126 formed in the second string 16 that are wound reach the positions of the hook catching portion 124 provided in the drawstring channel 122 (at the intersection of the first portion 122a, the second portion 122b, and the third portion 122c), the hook portion 26 and the hook portion 126 are caught by the hook catching portion 124. Subsequently the hook catching portion 124 fixed on the hood 12 is pulled toward the back side as the first string 14 and the second string 16 are further wound up. Consequently the lateral side (the temporal region) of the hood 12 is contracted toward the back side (see Fig. 19).

[0064] In this way, in the hood 110 according to the above-described embodiment, when the adjuster 18 is operated, the whole of the opening 20 is firstly contracted (until the hook portions 26, 126 are caught by the hook catching portion 124) and then the side portion of the hood 110 is contracted (after the hook portions 26, 126 have been caught by the hook catching portion 124).

Therefore the user is able to cinch the portion of the hood covering about the face and then cinch the portion of the hood covering about the temporal region of the head in steps by operating the adjuster 18.

[0065] The shape, position and the like of the hook catching portion 124 described in the above embodiment are merely an example and can be changed as appropriate. The hook catching portion 124 may be formed from two components. For instance, as another implementation example of the embodiment illustrated in Fig. 20, a first hook catching portion 128 that has a cylindrical shape may be provided in the first portion 122a of the drawstring channel 122, and a second hook catching portion 129 that has the similar shape may be provided in the third portion 122c of the drawstring channel 122.

[0066] In this case, the positions of the hook portions 26, 126 (and the positions of the first and second hook catching portions 128, 129) may be specified such that a length (L1) from the hook portion 26 of the first string 14 to the first hook catching portion 128 is different from a length (L2) from the hook portion 126 of the second string 16 to the second hook catching portion 129 as illustrated in Fig. 20.

For instance, in the example shown in Fig. 20, the length (L1) from the hook portion 26 to the first hook catching portion 128 in the first portion 122a is larger than the length (L2) from the hook portion 126 to the second hook catching portion 129 in the third portion 122c. Therefore when the first string 14 and the second string 16 are wound by operating the adjuster 18, the whole of the opening 20 is firstly contracted until the hook portion 126 is caught by the hook catching portion 129 and the upper portion (covering about the forehead of a wearer) of the opening 20 is then contracted and the side portion of the hood is drawn to the back side until the hook portion 26 is caught by the first hook catching portion 128. After the hook portion 26 has been caught by the first hook catching portion 128, the side portion of the hood is further contracted toward the back side.

[0067] In the above-described embodiments, the adjuster 18 is configured to wind the first string 14 (and the second string 16) up in accordance with the rotational operation of the adjuster performed by a user. The embodiments of the invention are not limited to this and the adjuster 18 may have other mechanism to adjust the length of the first string 14 (and the second string 16).

[0068] As described above, the hood for clothing according to various embodiments of the invention may include a hood body having a drawstring channel. The drawstring channel includes a first portion that extends in the substantially vertical direction along left and right peripheral edges of an upper portion of an opening, and a second portion that is coupled to a lower end of the first portion and extends in a substantially front-rear direction on left and right sides of the hood. The hood may further include a first string that is threaded through at least the first portion and the second portion of the drawstring channel, and an adjuster (adjusting member) that is provided on a back side of the hood body for adjusting a length of the first string in accordance with operation of the adjuster by a user. In the hood body, a hook catching portion (a first hook catching portion) that has a through hole may be provided in the drawstring channel. The

first string is threaded through the through hole of the hook catching portion. A hook portion that is configured to be caught by the hook catching portion is formed in the first string at a position above the hook catching portion in the first portion.

[0068] In the hood according to the embodiment as described above, when the adjuster is operated to decrease the length of the first string, the size of the opening is firstly contracted until the hook portion gets caught by the hook catching portion and then the lateral-side portion of the hood is contracted after the hook portion has been caught by the hook catching portion. According to the embodiments as described above, it is possible to provide a hood for clothing in which the hood opening and the temporal region may be easily fitted to the wearer with a simple operation.

[0069] Embodiments of the present invention are not limited to the above embodiments but various modifications are possible within a spirit of the invention.

For example, the left first string 14 and the right first string 14 may be coupled to each other at the upper edge of the opening 20 and the first string may be configured as a single component. For example, the left second string 16 and the right second string 16 may be coupled to each other at a position about the jaw of a wearer and the first string may be configured as a single component.

Moreover, configurations and positions of the hook portion, the hook catching portion described in the above embodiments are merely examples and various modifications thereon are possible.

LIST OF REFERENCE NUMBERS

[0070]

1	garment
10, 110	hood
12	hood body
25 14	first string
16	second string
18	adjuster
20	opening
22, 122	drawstring channel
30 22a, 122a	first portion
22b, 122b	second portion
22c, 122c	third portion
28, 124, 128, 129	hook catching portion
24a, 28a, 124a	through hole
35 26, 126	hook portion

Claims

40 1. A hood for clothing, comprising:

a hood body having an opening and a drawstring channel, the drawstring channel including a first portion that extends in a substantially vertical direction along left and right peripheral edges of an upper portion of the opening, and a second portion that is coupled to a lower end of the first portion and extends in a substantially front-rear direction on left and right sides of the hood respectively;

a first string threaded through at least the first portion and the second portion of the drawstring channel; and an adjusting member provided on a back side of the hood body and configured to adjust a length of the first string in accordance with an operation of the adjusting member performed by a user,

wherein a first hook catching portion that has a through hole is provided in the first portion or the second portion in the hood body, and

the first string is threaded through the through hole of the first hook catching portion and has a first hook portion that is configured to be caught by the first hook catching portion and situated in the first portion before the first hook catching portion.

55 2. The hood of claim 1, the first hook catching portion is disposed at an intersection of the first portion and the second portion.

3. The hood of claim 1 or 2, wherein one end of the first string is fixed on the hood body in an upper end portion of the

first portion.

4. The hood of any one of claims 1 to 3, wherein
 5 the drawstring channel further include a third portion that extends in a substantially vertical direction along left and right peripheral edges respectively of a lower portion of the opening, besides the first portion and the second portion, the second portion is coupled to an upper end of the third portion, the hood further includes a second string that is threaded through at least the second portion and the third portion, and the adjusting member adjusts a length of the second string besides the length of the first string.

10 5. The hood of claim 4, wherein at least rear ends of portions of the first string and the second string that are threaded in the second portion of the drawstring channel are integrated.

15 6. The hood of claim 4 or 5, wherein
 15 a second hook catching portion that has a through hole is provided in the third portion or the second portion in the hood body, and
 the second string is threaded through the through hole of the second hook catching portion and has a second hook portion that is configured to be caught by the second hook catching portion and situated in the third portion before the second hook catching portion.

20 7. The hood of claim 6, wherein a length of the first string from the first hook portion to the first hook catching portion is different from a length of the second string from the second hook portion to the second hook catching portion.

8. The hood of claim 6 or 7, wherein the first hook catching portion and the second hook catching portion are formed as a single body.

25 9. A hood for clothing, comprising:
 30 a hood body having an opening and a drawstring channel, the drawstring channel including a first portion that extends in a substantially vertical direction along left and right peripheral edges of an upper portion of the opening, a second portion that extends in a substantially vertical direction along left and right peripheral edges respectively of a lower portion of the opening, and a third portion that is coupled to a lower end of the first portion and an upper end of the second portion and extends in a substantially front-rear direction on left and right sides respectively of the hood body;
 35 a first string threaded through at least the second portion of the drawstring channel and on which a guide with a through hole is provided on an upper end portion thereof;
 a second string threaded through at least the first portion and the third portion of the drawstring channel, threaded through the through hole of the guide, and having a hook portion that is configured to be caught by the guide in the first portion before the guide; and
 40 an adjusting member provided on a back side of the hood body and configured to adjust a length of the second string in accordance with operation by a user.

10. The hood of claim 9, wherein a hook catching portion is provided in the third portion of the drawstring channel of the hood body, and
 the guide in which the hook portion is caught is configured to be caught by the hook catching portion.

45 11. The hood of claim 9 or 10, wherein one end of the first string is fixed on the hood body in a lower end portion of the second portion.

50 12. The hood of any one of claims 9 to 11, wherein one end of the second string is fixed on the hood body in an upper end portion of the first portion.

13. The hood of any one of claims 9 to 12, wherein the adjusting member is configured to adjust a length of the second string by winding the second string therearound in accordance with rotational operation by a user.

55 14. A garment comprising the hood of any one of claims 1 to 13.

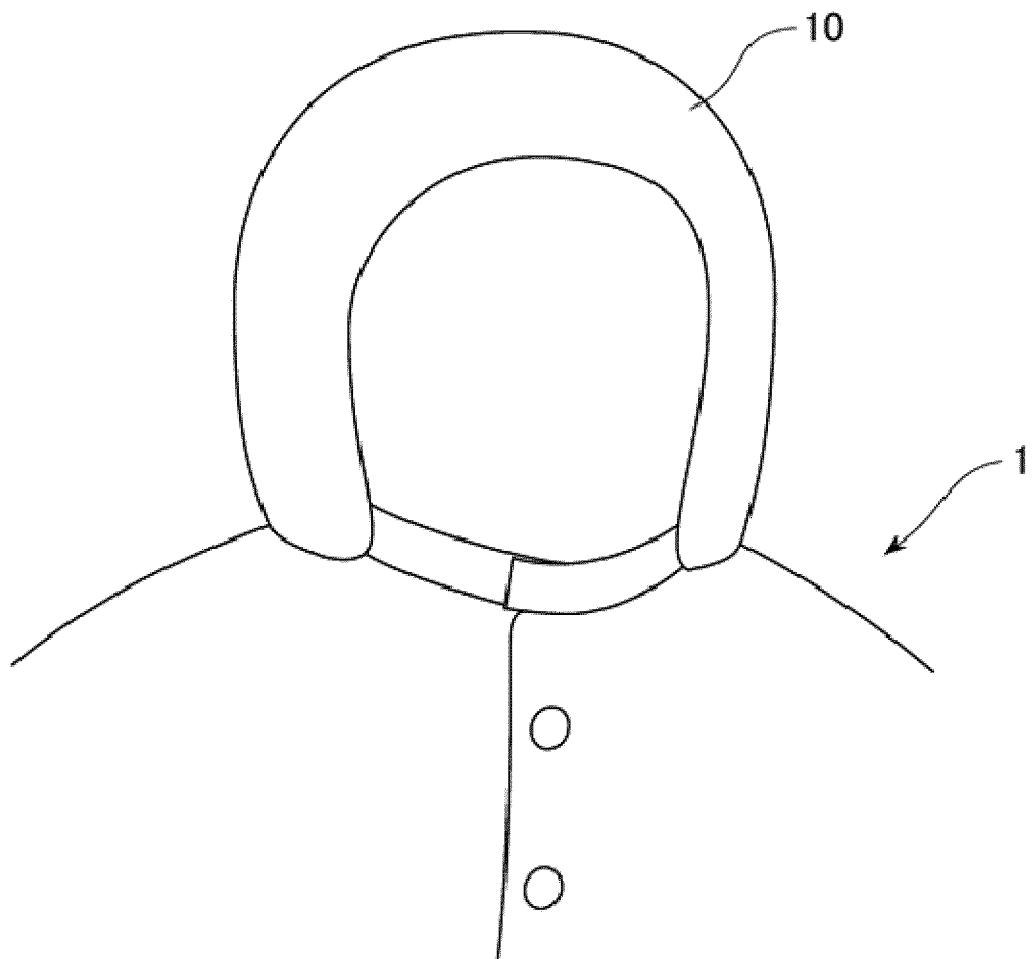


Fig. 1

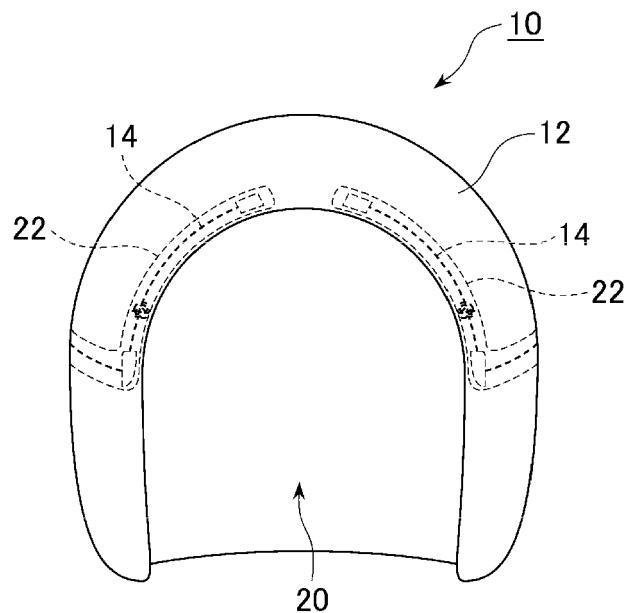


Fig. 2

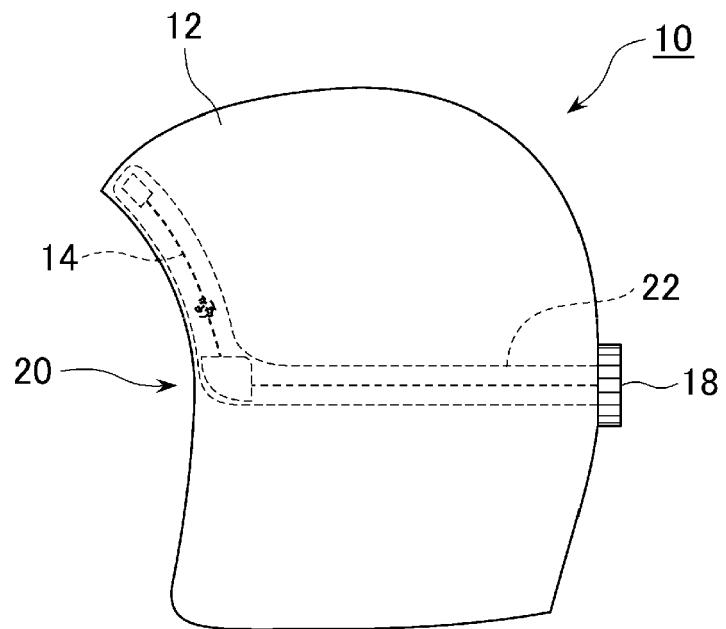


Fig. 3

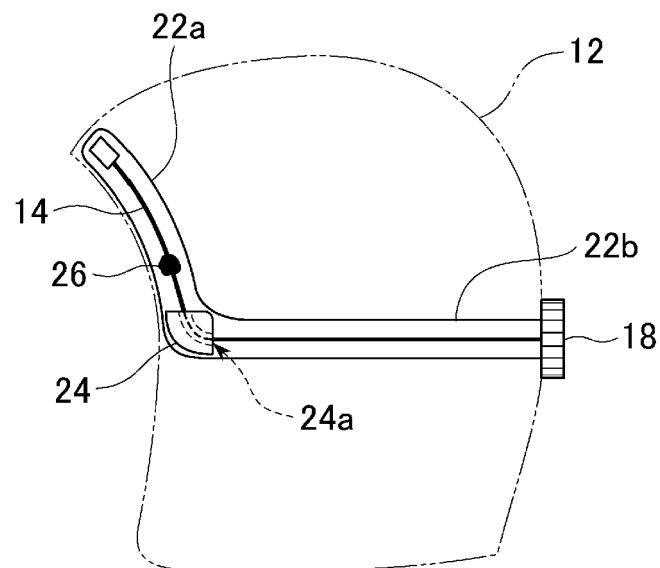


Fig. 4

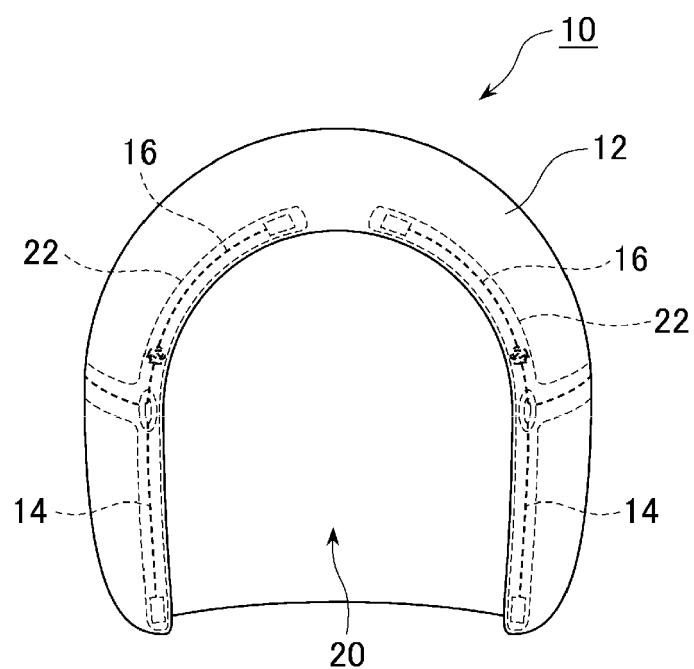


Fig. 5

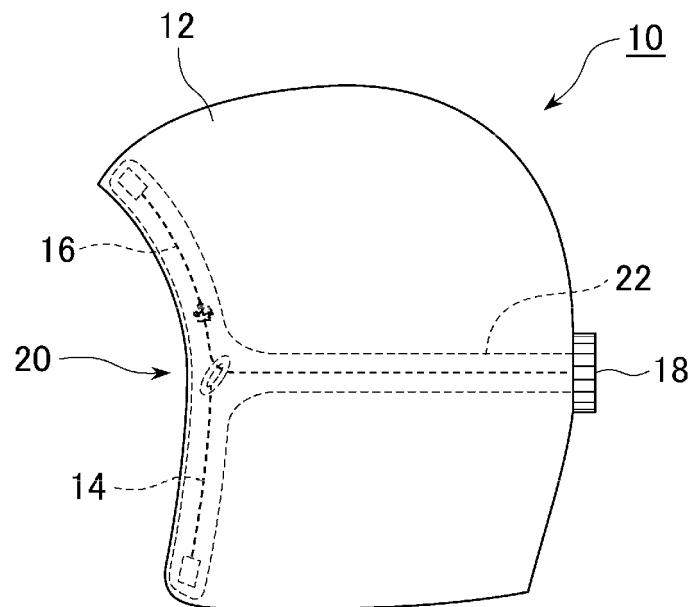


Fig. 6

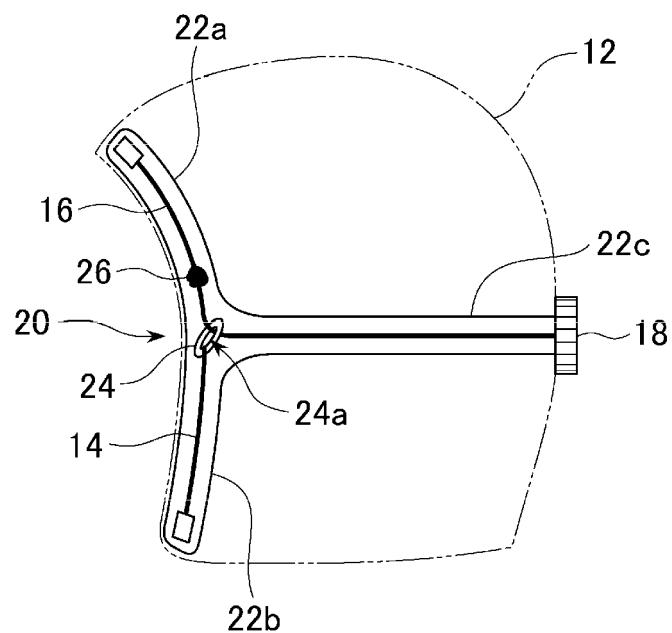


Fig. 7

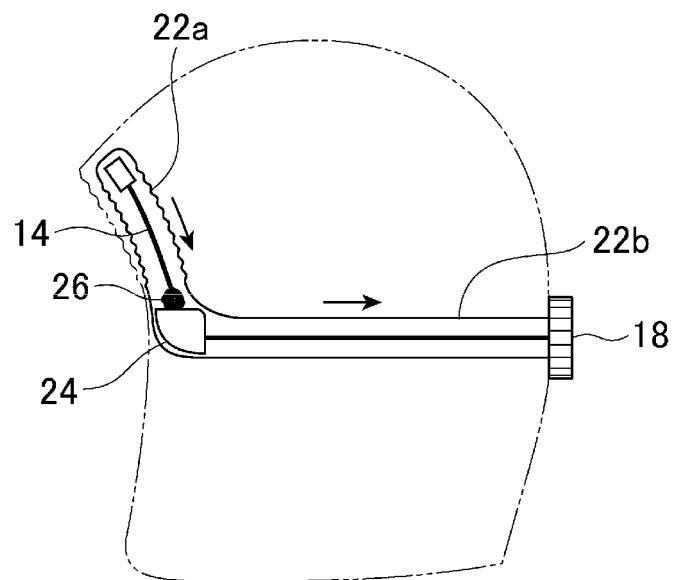


Fig. 8

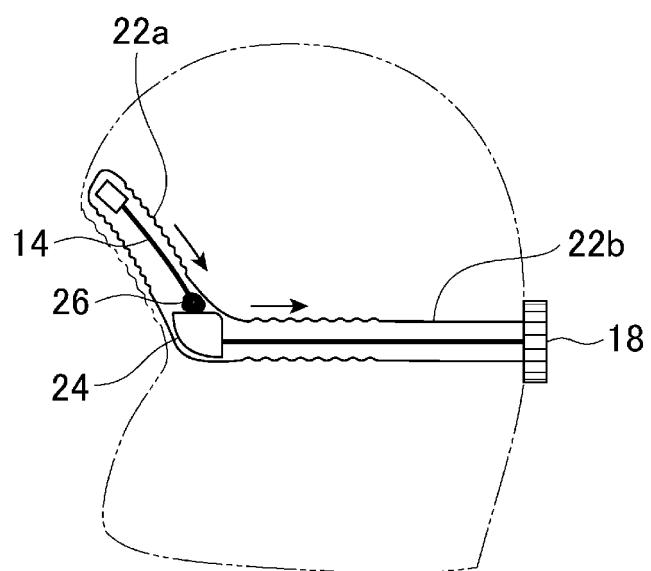


Fig. 9

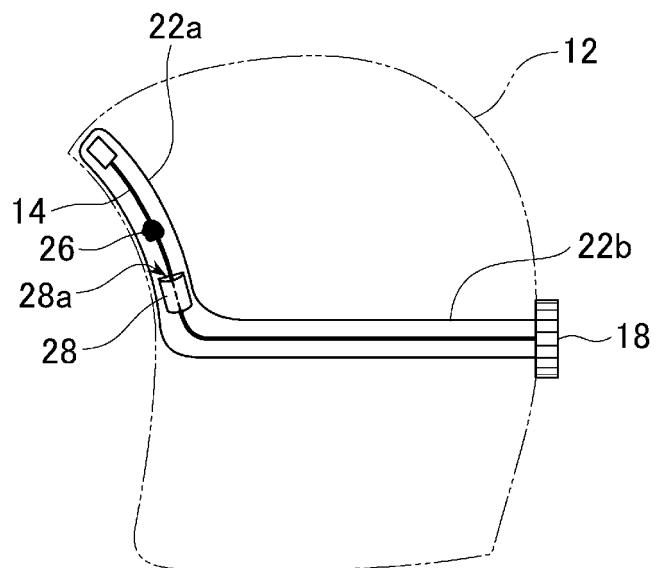


Fig. 10

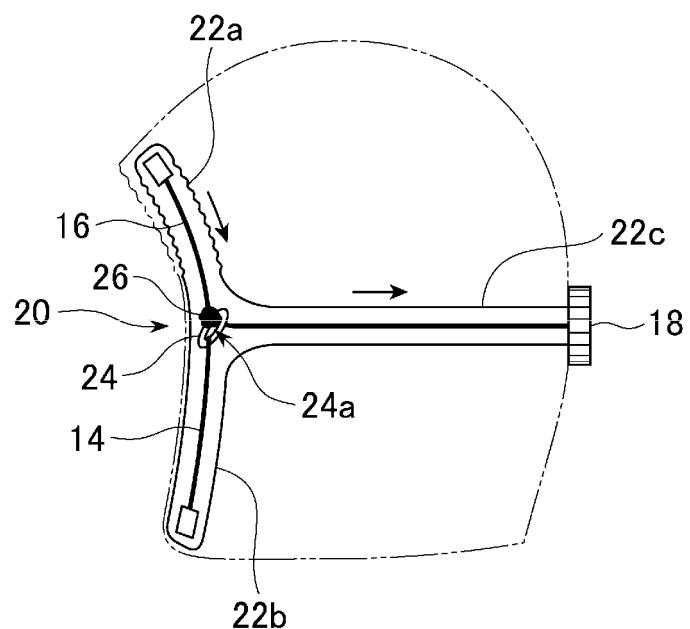


Fig. 11

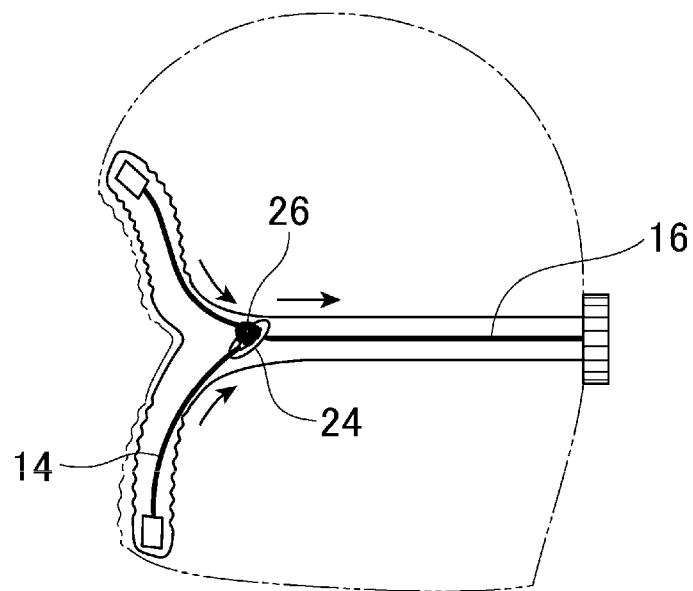


Fig. 12

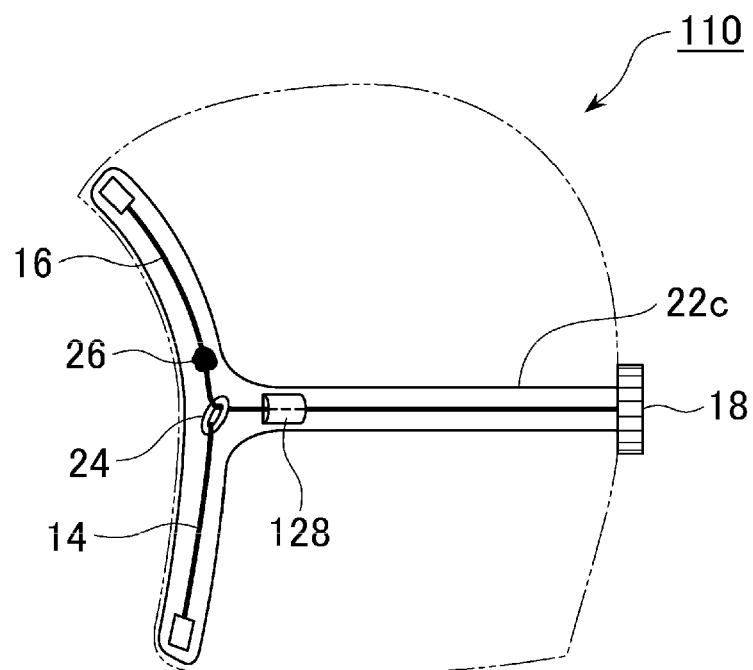


Fig. 13

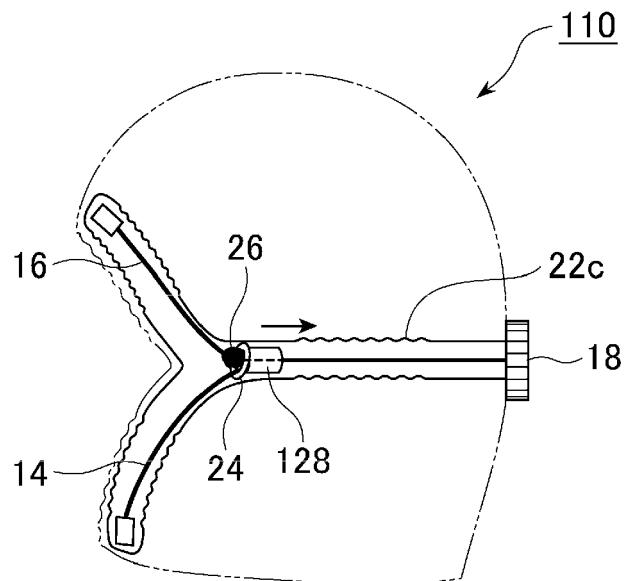


Fig. 14

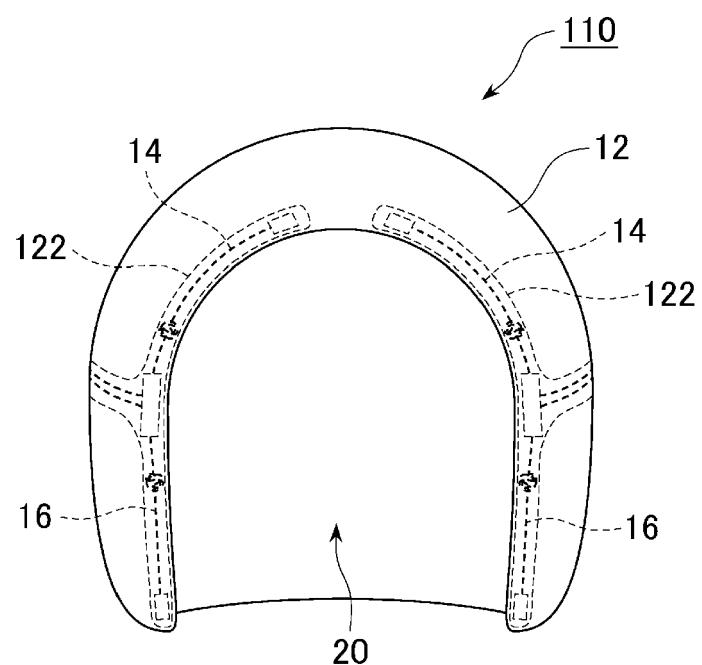


Fig. 15

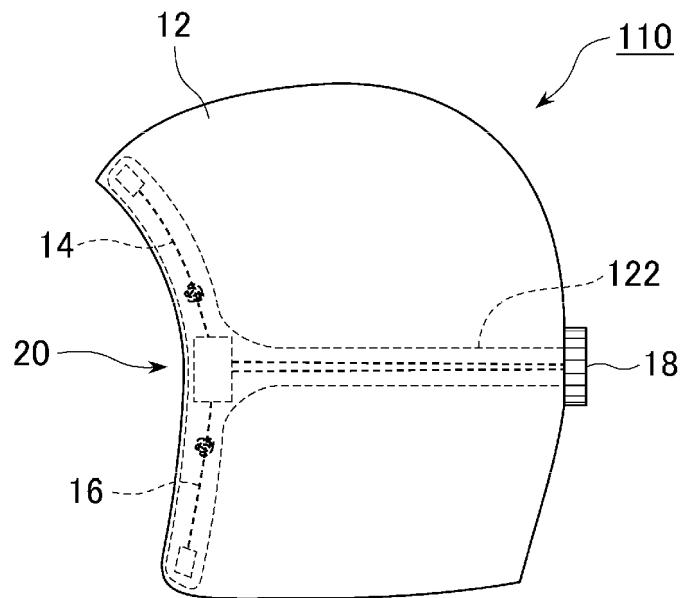


Fig. 16

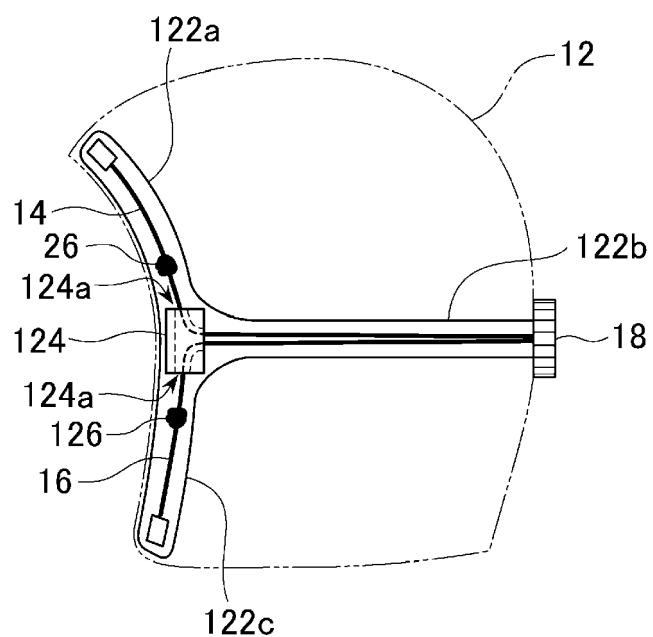


Fig. 17

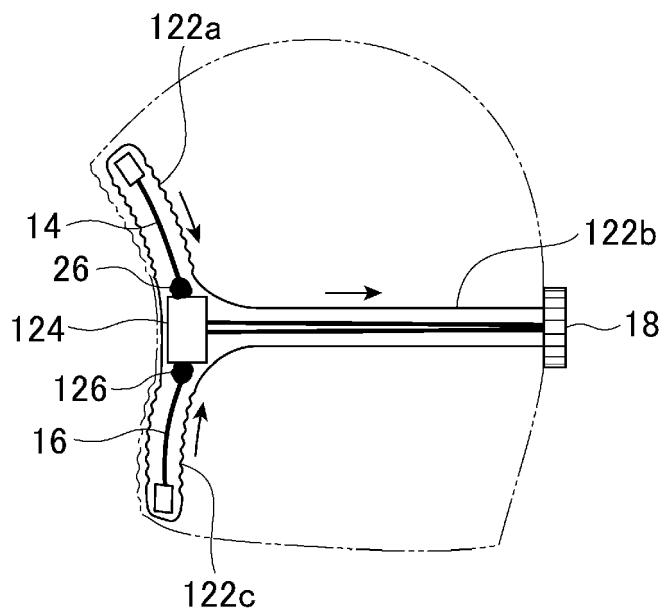


Fig. 18

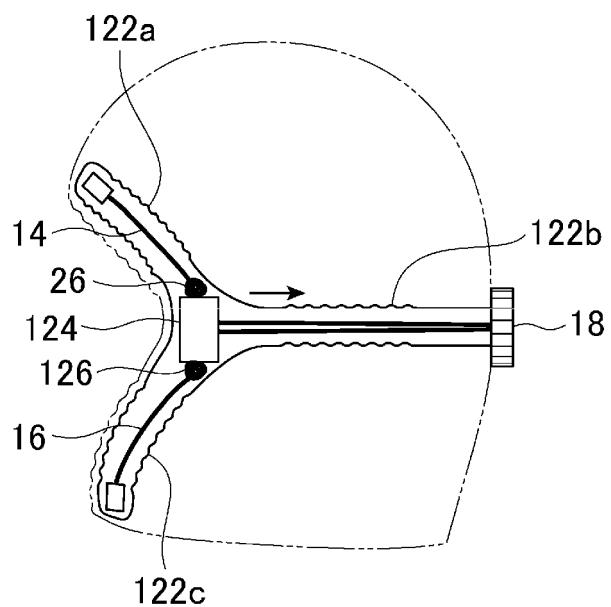


Fig. 19

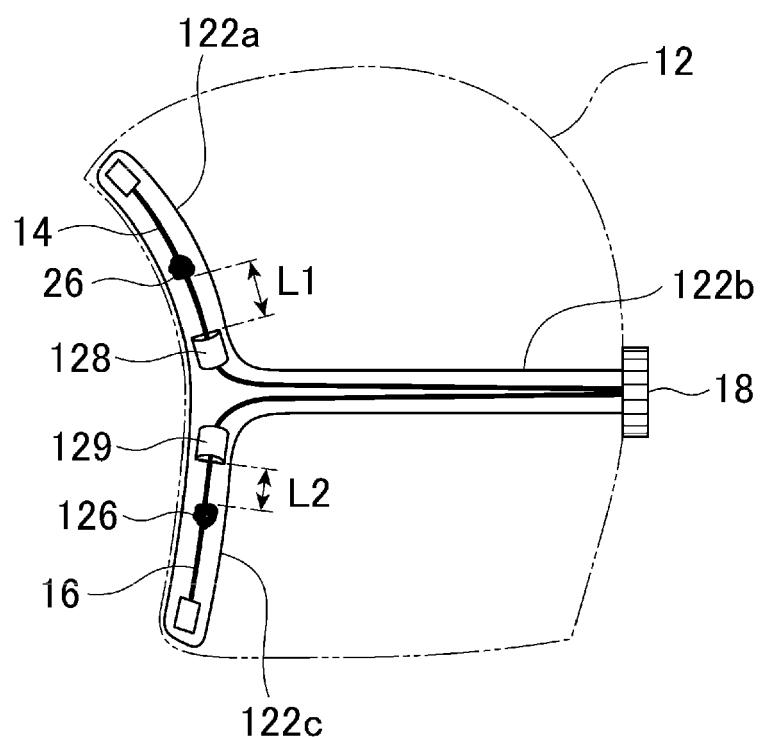


Fig. 20



EUROPEAN SEARCH REPORT

Application Number

EP 16 15 9696

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim			
X	EP 1 262 113 A1 (EIDER [FR]) 4 December 2002 (2002-12-04)	1-8, 10-14	INV. A41D3/00		
Y	* figures 1,2 *	9	A42B1/04		
Y,D	-----				
Y,D	JP 3 189088 U (NN) 20 February 2014 (2014-02-20)	9			
A	* figures 2,5 *	1-8, 10-14			
A	-----				
A	US 2014/317829 A1 (ROLFE SIRENA [US]) 30 October 2014 (2014-10-30) * figure 2 *	1-14			
A	-----				
A	WO 02/058495 A1 (ARC TERYX EQUIPMENT INC [CA]; FAYLE THOMAS WALKER CLARKE [CA]; ROUTH T) 1 August 2002 (2002-08-01) * figure 13 *	1-14			
A	-----				
			TECHNICAL FIELDS SEARCHED (IPC)		
			A41D A42B		
The present search report has been drawn up for all claims					
Place of search	Date of completion of the search	Examiner			
The Hague	3 March 2017	van Voorst, Frank			
CATEGORY OF CITED DOCUMENTS					
X : particularly relevant if taken alone	T : theory or principle underlying the invention				
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date				
A : technological background	D : document cited in the application				
O : non-written disclosure	L : document cited for other reasons				
P : intermediate document	I : member of the same patent family, corresponding document				

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 16 15 9696

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-03-2017

10	Patent document cited in search report	Publication date		Patent family member(s)	Publication date
15	EP 1262113 A1	04-12-2002	AT DE EP FR	299654 T 60205063 D1 1262113 A1 2825238 A1	15-08-2005 25-08-2005 04-12-2002 06-12-2002
20	JP 3189088 U US 2014317829 A1	20-02-2014 30-10-2014	----- US US	2014317829 A1 2016278465 A1	30-10-2014 29-09-2016
25	WO 02058495 A1	01-08-2002	DE EP US WO	02709944 T1 1357814 A1 2004055069 A1 02058495 A1	19-05-2004 05-11-2003 25-03-2004 01-08-2002
30					
35					
40					
45					
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 3189088 B [0003]
- JP H1199008 B [0020] [0031]
- JP 2012217540 A [0020] [0031]