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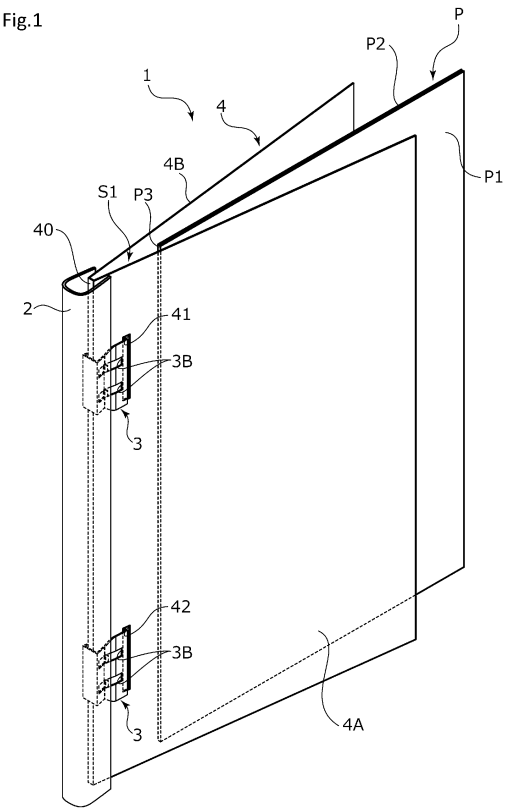
(54) **CLAMPING TOOL**

(57) To provide a binder capable of smoothly adding or removing paper bound in a booklet shape regardless of the material of a cover.

A binder 1 forming a booklet by bundling end portions of a plurality of sheets of paper such that paper addition or removal is possible includes a spread-shaped cover 4 configured for sandwiching the bundle of a plurality of sheets of paper, a long cover member 2 having an opening portion along a spine portion 40 of the cover 4, and a plurality of clips 3 arranged so as to be configured for moving forward and backward in the opening portion of the cover member 2 and having a pair of holding pieces 31 and 32 and claw portions 3A respectively extending inward from tips of the holding pieces 31 and 32. Through holes 41 and 42 through which the claw portions 3A of the plurality of clips 3 are respectively inserted are formed in each of a front cover member 4A and a back cover member 4B of the cover 4.

Fig.1



EP 4 137 329 A1

Description

TECHNICAL FIELD

[0001] The present invention relates to a binder used to form a booklet by bundling end portions of a plurality of sheets of paper.

BACKGROUND ART

[0002] A booklet such as a notebook and a book is formed by end portions of a plurality of sheets of paper being bound by means of glue, a thread, or the like. In addition, a user may form a booklet by binding a plurality of sheets of paper in order to classify and organize documents or the like as needed. In the related art, so-called ring files and the like have been often used in such a case. For example, a ring file is provided with a front cover folded in half and an annular fastening tool as holding means for holding a plurality of sheets of paper on the back surface of the front cover, a through hole in a document is formed by means of a punch or the like, the annular fastening tool is inserted through the through hole, and then paper can be added or removed as needed.

[0003] In addition, a binder that is illustrated in Patent Literature 1 includes a long cover member disposed along the spine portion of a front cover and the cover member is provided with a clip as holding means. This clip is a technique known in the related art as illustrated in Patent Literature 2. The clip of Patent Literature 2 is formed by an elastic and metallic thin plate being folded and is formed in a substantially U shape in side view and so as to open in the front cover direction with a pair of facing holding pieces extending from the short-direction end portion of a base portion. The pair of holding pieces are formed so as to spread ahead in the opening direction. At the tips of the holding pieces, pressing claws facing each other are respectively formed so as to be folded inward to the base portion side. In binding paper, the bundle of a plurality of sheets of paper is slid and pushed into a pressing member having a U shape in side view with the bundle of a plurality of sheets of paper inserted between the pair of holding pieces of the clip. As a result, the pair of holding pieces are pinched in the pressing member and the sheet bundle can be strongly pressed by the return elastic force of the pair of pressing claws compressed between the holding piece and the sheet bundle. By means of such a clip, a document can be bound in a booklet shape without through hole formation in the document.

[0004] In addition, in releasing the holding by means of the clip, the sheet bundle and the pressing member may be respectively grasped and pulled in a direction of separation. In the initial stage of pulling the sheet bundle and the pressing cover portion in the direction of separation, the pressing claws of the clip are respectively pressed against the front surface of the paper on the uppermost surface and the back surface of the paper on the lowermost surface against which the pressing claws of the clip directly abut. Then, the frictional force that acts on the point of mutual abutment prevents the front and back surfaces of the sheet bundle from moving relative to each other. Accordingly, the sliding of the opening inner surface of the pressing member and the surface of the holding piece of the clip causes the pressing member and the clip to operate so as to be relatively separated from each other, the pinching pressure of the holding piece of the clip is attenuated with the separation, and the clip-based holding can be released through a simple operation.

[0005] Returning to Patent Literature 1, in this binder, three separate clips are arranged in the longitudinal direction of the long cover member. In addition, in Patent Literature 1, a spread-shaped cover is provided for the purpose of paper protection and appearance improvement. In this configuration, a bundle of a plurality of sheets of paper is held and bound by the three clips and over the cover in a state where the bundle of a plurality of sheets of paper is sandwiched between the covers.

CITATION LIST

PATENT LITERATURE

[0006]

PATENT LITERATURE 1: JP 2004-330437 A (Page. 1 and FIG. 1)
PATENT LITERATURE 2: JP H09-150593 A (Page. 3 and FIG. 1)

SUMMARY OF INVENTION

TECHNICAL PROBLEM

[0007] In releasing the clip-based holding in the clip file of Patent Literature 1, the sheet bundle is grasped with one hand from above the cover, the cover member is grasped with the other hand, and pulling is performed in a direction of separation. In a case where the cover is formed of a synthetic resin or the like and the coefficient of friction of the surface thereof is low at this time, the pressing claw of the clip slides on the surface of the cover and the clip is separated from the cover and the sheet bundle without the clip and the cover member being relatively separated from each other. Accordingly, the clip is forcibly removed from the cover and the sheet bundle with the force of holding by the holding piece unattenuated. Then, the sheet bundle may collapse. In addition, the clip removed from the cover and the sheet bundle remains stored in the cover member, and thus the clip portion that is stored needs to be pulled out once to the front side during sheet bundle re-binding, which has resulted in an increase in the complexity of paper addition or removal.

[0008] The present invention has been made in view of such a problem, and an object of the present invention is to provide a binder capable of smoothly adding or removing paper bound in a booklet shape regardless of the material of a cover.

SOLUTION TO PROBLEM

[0009] In order to solve the above problem, the binder according to the present invention, which is a binder forming a booklet by bundling end portions of a plurality of sheets of paper such that paper addition or removal is possible, includes: a spread-shaped cover configured for sandwiching the bundle of a plurality of sheets of paper; a long cover member having an opening portion along a spine portion of the cover; and a plurality of clips arranged so as to be configured for moving forward and backward in the opening portion of the cover member and having a pair of holding pieces and claw portions respectively extending inward from tips of the holding pieces, wherein through holes through which the claw portions of the plurality of clips are respectively inserted are formed in each of a front cover member and a back cover member of the cover. According to the aforesaid feature of the present invention, the claw portions of the plurality of clips are inserted through the through holes formed in the cover and directly abut against the front surface of the paper on the uppermost surface and the back surface of the paper on the lowermost surface, respectively. Accordingly, when the bundle of a plurality of sheets of paper is grasped from above the front cover and the sheet bundle and the cover member are pulled so as to be separated from each other, the frictional force that acts on the point where the claw portion and the sheet bundle abut against each other causes the cover member and the plurality of clips to operate so as to be relatively separated from each other without the clip and the sheet bundle moving relative to each other. Then, the pinching pressure of the holding pieces of the plurality of clips is attenuated during one operation with the separation. In addition, the plurality of clips are pulled out of the opening portion of the cover member and the holding force is attenuated, and thus paper can be easily re-inserted into the internal space of the clip. In this manner, the work of adding or removing paper bound in a booklet shape can be smoothly performed regardless of the material of the cover.

[0010] It may be preferable that the number of the plurality of clips is two and the clips are arranged near a longitudinal middle of the cover member. According to this preferable configuration, the clips are arranged near the middle of the long cover member. Accordingly, in a case where a bundle of a plurality of sheets of paper and the cover member are inclined and pulled so as to be separated from each other, the clip positioned on one longitudinal side away from the tilting fulcrum is moved so as to be separated to a large extent from the cover member. The clip positioned on the other longitudinal side near the tilting fulcrum is also moved in the direction of separation by following the clip on one side and the holding force of both clips can be attenuated by one operation.

[0011] It may be preferable that a dimension from the tip to a rear end of the holding piece of the clip and a dimension from the spine portion of the cover to a spine portion-side edge portion of the through hole are substantially equal to each other. According to this preferable configuration, when the cover member and the cover are moved in a direction of separation, the inner corner portion that is the boundary between the holding piece and the claw portion and the spine portion-side edge portion of the through hole abut against each other, the clip moves together with the cover, and the clip can be reliably pulled out of the opening portion of the cover member.

[0012] It may be preferable that a decorative member externally fittable to the cover member is detachably arranged on the cover member. According to this preferable configuration, the booklet bound to the binder is easily identified by means of the decorative member externally fitted to the cover member.

[0013] It may be preferable that a front-rear dimension of the through hole is smaller than a front-rear dimension of the claw portion. According to this preferable configuration, the claw portion inserted through the through hole is unlikely to escape from the through hole and excellent operability is achieved.

BRIEF DESCRIPTION OF DRAWINGS

[0014]

FIG. 1 is a perspective view illustrating the binder and the biding object according to an embodiment of the present invention.

FIG. 2 is a perspective view illustrating an aspect in which the biding object is held by means of the binder.

FIG. 3 is an upper view illustrating an aspect in which the cover is unfolded.

FIG. 4A is a view illustrating a storage release state where the clip is completely pulled out of a cover member.

FIG. 4B is a view illustrating an aspect in which the biding object is inserted in the internal space of the clip and an end portion of the biding object abuts against the back end portion of the clip.

FIG. 4C is a view illustrating the clip that is stored in the cover member.

FIG. 5A is a view illustrating a state where the clip protrudes from the cover member to weaken the holding state of a claw portion.

FIG. 5B is a view illustrating an aspect in which the spine portion-side edge portion of the through hole of the cover abuts against the inner corner portion of the clip.

FIG. 5C is a view illustrating the storage release state where the clip is completely pulled out of the cover

member.

FIG. 6 is a view in which the cover member and a front cover portion are relatively moved in a direction in which the cover member and the cover are mutually inclined and separated from each other.

FIG. 7 illustrates the cover member and the clip according to the example and the cover according to a modification example.

FIG. 8 is a view in which the cover according to the modification example is arranged on the clip.

FIG. 9A illustrates a modification example 1 of the cover member.

FIG. 9B illustrates another modification example 2 of the cover member.

DESCRIPTION OF EMBODIMENTS

[0015] Modes for carrying out the binder according to the present invention will be described below based on embodiments.

[Embodiment]

[0016] The binder according to an embodiment of the present invention will be described with reference to FIGS. 1 to 7. In the following description, the upper right side of the plane of FIG. 1 and the right side of the paper of FIG. 4 will be referred to as the front side, and the description will be provided with reference to the up-down, left-right, front-rear directions when viewed from the front side.

[0017] As illustrated in FIGS. 1 and 2, a binder 1 according to the embodiment of the present invention is a filing tool for removably holding a biding object P inserted in an internal space S1 of the binder 1 and binding it in a booklet shape. The binder 1 is long and extends in the up-down direction. The binder 1 includes a cover member 2 having a substantially U-shaped cross section with its front surface (upper right in FIG. 1) open in the longitudinal direction, two clips 3 and 3 built in the cover member 2 in an engagement state and arranged apart from each other in the longitudinal direction, and a spread-shaped cover 4 covering the biding object P.

[0018] The biding object P that can be bound by the binder 1 is a paper leaf such as a letter and a memo, another sheet, a booklet, a document, or the like. In this example, the biding object P is a bundle of A4 copy paper.

[0019] As illustrated in FIGS. 3, the cover 4 is configured as a deformable sheet made of, for example, polypropylene, polyethylene terephthalate, another elastic resin, paper, or the like. Fold portions 43 and 43 parallel to each other are formed so as to extend in the up-down direction in the substantially center of the unfolded cover 4 in the left-right direction. Partitioned by the fold portions 43 and 43, a spine portion 40 having a lateral width is formed between the fold portions 43 and 43. A front cover member 4A and a back cover member 4B are formed on the left and right sides of the spine portion 40.

[0020] Through holes 41 and 42 having the same rectangular shape are formed on each of the front cover member 4A and the back cover member 4B of the cover 4. The through holes 41 and 42 are formed near the center of the cover member 4 in the up-down direction. Further, the through holes 41 and 42 of the front cover member 4A and the through holes 41 and 42 of the back cover member 4B are formed close to the spine portion 40 in the left-right direction. Further, the through holes 41 and 41 and the through holes 42 and 42 is respectively formed symmetrically with respect to the spine portion 40. When the fold portions 43 and 43 are folded in the same direction, the through holes 41 and 41 and the through holes 42 and 42 are opposed to each other (see FIG. 4). Furthermore, fold portions 44 and 44 are formed in the up-down direction of the cover 4 so as to extend along spine portion-side edge portions 41a, 41a, 42a, 42a on the side of the spine portion 40 of the through holes 41 and 41 and the through holes 42 and 42, respectively. Accordingly, the cover 4 can be easily folded with the opening operation of the front cover member 4A.

[0021] Further, the opening width of the through holes 41 and 42 in the front-rear direction from the spine portion-side edge portions 41a, 41a, 42a, 42a to end portion side edge portions 41b, 41b, 42b, 42b is formed so as to be smaller than the front-rear dimension of claw portions 3A, 3A described later. Accordingly, the claw portions 3A, 3A inserting through the through holes 41 and 42 are not likely to come off from the through holes 41 and 42 and excellent operability is achieved.

[0022] Next, the structures of the clip 3 and the cover member 2 will be described with reference to FIG. 7. The clip 3 is a fastener formed so as to be elastically deformable, is made mainly of metal, hard synthetic resin, or the like, is formed into a substantially U shape in cross section, and is composed of a base portion 33, holding pieces 31 and 32, and the claw portions 3A and 3A. Specifically, the base portion 33 having a base portion width X1 is formed by folding from the vicinity of the center of the base portion 33, and the holding pieces 31 and 32 are formed to be continuous and spread out from the opposite ends of the base portion 33. Additionally, at the tips of the holding pieces 31 and 32, the pair of claw portions 3A and 3A extending inward toward the base portion 33 is formed so as to face each other.

[0023] The cover member 2 is formed of a metal, a hard synthetic resin, or the like so as to be less deformable than the clip 3 and a pair of pressing pieces 21 and 22 are formed on the tip side thereof with a substantially U-shaped cross section and across a base portion 23. The outer surface side of the base portion 23 functions as a back cover and a seal or the like is stickable. In addition, the insertion width Y1 that is formed between the tips of the pair of pressing pieces 21 and 22 is smaller than the width X1 of the base portion 33 of the clip 3. In addition, the insertion width Y1 in the natural state is narrower than the width Y2 of the base portion 23 of a pressing cover 5.

[0024] In addition, engagement protrusions 21a and 22a are formed so as to protrude on the inside surfaces of the pressing pieces 21 and 22 of the cover member 2 and engagement recesses 3B and 3B (see FIGS. 1 and 2), which are slits, are formed in the holding pieces 31 and 32 of the clip 3. The engagement protrusions 21a and 22a of the pressing pieces 21 and 22 and the engagement recesses 3B and 3B of the holding pieces 31 and 32 are fitted loosely, and the cover member 2 and the clips 3 and 3 are slidable and retained. The cover member 2 is attached to the clip 3 such that the inside surfaces of the pressing pieces 21 and 22 are slidable and relatively movable in the insertion (proximity) and removal (separation) directions of the biding object P along the outer surfaces of the holding pieces 31 and 32 of the clip 3.

[0025] Next, an aspect in which the biding object P is held by the binder 1 will be described with reference to FIGS. 4A to 4C. First, as illustrated in FIG. 4A, the biding object P as a bundle of a plurality of stacked sheets of paper is grasped and inserted into the internal space S1 formed by the front cover member 4A and the back cover member 4B facing each other in the cover 4. Specifically, a binding end portion P3 of the biding object P is inserted until it abuts against the spine portion 40 of the cover 4. In the process of this insertion, the tips of the pair of claw portions 3A and 3A of the clip 3 inserted through the through holes 41 and 42 of the cover 4 and disposed so as to protrude in the internal space S1 abut against a front surface P1 and a back surface P2 of the biding object P, respectively.

[0026] Next, as illustrated in FIG. 4B, the spine portion 40 of the cover 4 abuts against the base portion 33 of the clip 3 when the biding object P is further pushed in with the binding end portion P3 of the biding object P abutting against the spine portion 40 of the cover 4. In the event of a further push, the clip 3 is pushed in toward the base portion 23 side of the cover member 2 by the spine portion 40 of the cover 4.

[0027] The holding pieces 31 and 32 of the clip 3 are formed so as to be wider than the insertion width Y1 of the cover member 2. Accordingly, the holding pieces 31 and 32 of the clip 3 are gradually stored into the cover member 2 while being elastically deformed by being compressed from the up-down direction by the pressing pieces 21 and 22 of the cover member 2. The claw portions 3A and 3A are compressed from the up-down direction by the pressing pieces 21 and 22, and thus an increase in elastic force occurs as the clip 3 is gradually stored into the cover member 2 and the biding object P is strongly held.

[0028] As illustrated in FIG. 4C, the clip 3 can be inserted until the base portion 33 abuts against the base portion 23 of the cover member 2. The state where the base portion 33 of the clip 3 abuts against the base portion 23 of the cover member 2 is a state where the clip 3 is completely stored. The force of holding by the pair of claw portions 3A and 3A is maximum in this state where the binding of the biding object P by means of the binder 1 is completed. It should be noted that an aspect in which the biding object P is grasped and pushed in toward the cover member 2 side during binding has been described and yet the present invention is not limited thereto and similar binding can be performed by grasping from above the cover 4 that covers the biding object P.

[0029] Next, an aspect in which the holding state of the binder 1 and the biding object P is released will be described with reference to FIGS. 5A to 5C.

[0030] In removing the biding object P from the binder 1, the biding object P is grasped from above the cover 4 along with the vicinity of the longitudinal middle portion of the cover member 2 and a relative movement is performed in a direction of mutual separation. As a result of the relative movement in the direction of mutual separation, the frictional force caused by the tips of the pair of claw portions 3A and the front surface P1 and the back surface P2 of the biding object P causes the clip 3 to act so as to stay on the cover 4 side. Accordingly, the base portion 23 of the cover member 2 and the base portion 33 of the clip 3 are separated from each other and the clip 3 protrudes from the cover member 2. As a result, the claw portions 3A and 3A are put into the state that is illustrated in FIG. 5A as the compressive force received from the up-down direction of the pressing pieces 21 and 22 decreases, the elastic force is attenuated as the clip 3 is gradually pulled out of the cover member 2, and the holding force on the biding object P decreases.

[0031] Further, when the biding object P is grasped from above the cover 4 and the cover member 2 and the biding object P are moved relative to each other in the direction of separation, the cover 4 is moved toward the front side on the biding object P. Accordingly, inner corner portions 34 formed at the boundaries of the claw portions 3A, 3A abut against the spine portion-side edge portions 41a, 42a of the through holes 41 and 42, so that the state illustrated in FIG. 5B is reached.

[0032] When the cover member 2 and the cover 4 are further moved relative to each other in the direction of mutual separation with the state illustrated in FIG. 5B, the spine portion-side edge portions 41a, 42a of the cover 4 abut against the inner corner portions 34, 34 of the clip 3, and thus the cover 4 acts so as to pull the clip 3 out of the cover member 2. The holding force of the claw portions 3A and 3A decreases as the cover 4 is pulled out by the inner corner portion 34, and thus the amount of the cover 4 pulling the clip 3 out of the cover member 2 increases as a result of the relative movement in the direction of separation. This leads to the storage release state illustrated in FIG. 5C, where the clip 3 is completely pulled out of the cover member 2. The holding force of the claw portions 3A and 3A is minimum at this time.

[0033] In removing the biding object P from the binder 1, the vicinity of the longitudinal upper end portion of the cover member 2 and the vicinity of the lower end portion of the cover 4 may be, for example, grasped and unintentionally moved relative to each other in a direction of

mutual inclination and separation. In such a case, the clip 3 (upper side of the paper surface) positioned on one longitudinal side away from the tilting fulcrum is moved in a direction in which the cover member 2 is separated to a large extent from the clip 3 due to friction with the biding object P, the holding force of the claw portion 3A decreases, and the clip 3 protrudes. Also, in the case of the cover member 2 and the clip 3 (lower side of the paper surface) positioned on the other longitudinal side near the tilting fulcrum, the cover member 2 is formed so as to extend in the up-down direction and the clips 3 and 3 are arranged closer to the middle side than the end portion of the cover member 2. Accordingly, the clip 3 positioned on the other side is also moved in the direction of separation by following the clip 3 on one side, the holding force of the claw portion 3A decreases, and the clips 3 and 3 protrude as illustrated in FIG. 6. As a result, the biding object P can be replaced smoothly.

[0034] A cover illustrated in FIG. 7 is a modification example in which the positions of the pair of through holes 41 and 42 described above are changed. As for a pair of through holes 410 and 420 of a cover 400 illustrated in the modification example, the distance from the outside surface of the spine portion 40 of the cover to the spine portion-side edge portion of the through hole is changed. Specifically, in this modification example, a distance b from the outside surface of the spine portion 40 of the cover 400 to spine portion-side edge portions 410a and 420a of the through holes 410 and 420 is substantially equal to a distance a from the inside surface of the base portion 33 of the clip 3 to the inner corner portion 34 folded back toward the inside surface of the claw portion 3A.

[0035] In attaching the cover 400 to the clip 3, the storage release state where the clip 3 is slid forward from the cover member 2 is reached, the claw portion 3A on one side of the clip 3 is inserted into the through hole 410 on one side formed in the cover 400, and the inner corner portion 34 of the claw portion 3A and the spine portion-side edge portion 410a of the through hole 410 are caused to respectively abut. As a result, the claw portion 3A on one side of the clip 3 is engaged with the through hole 410 on one side. The cover 400 is formed in a deformable sheet shape. Accordingly, in engaging the claw portion 3A on the other side with the through hole 410 on the other side, it is possible to insert the claw portion 3A on the other side of the clip 3 into the through hole 410 on the other side formed in the cover 400 and cause the inner corner portion 34 of the claw portion 3A and the spine portion-side edge portion 410a of the through hole 410 to respectively abut by bending the cover 400 on the inner side of the clip 3 as illustrated in FIG. 8.

[0036] A modification example 1 of the cover member described above is illustrated in FIG. 9A. As for a cover member 20 of Modification Example 1, protruding portions 2b, 2c, and 2c extending in the up-down direction are formed on the rear end portion and both side portions of an outer surface 2a of the cover member 20. A decorative member 6 that can be externally fitted to the cover member 20 is detachably arranged on the cover member 20. The decorative member 6 has a substantially U-shaped cross section, extends in the up-down direction, and is formed so as to be one size larger than the cover member 20. The decorative member 6 is substantially equal in up-down-direction dimension to the cover member 20. In addition, recesses 6b, 6c, and 6c extending in the up-down direction are formed in the rear end portion and both side portions of an inner surface 6a of the decorative member 6. By the lower end portion of the decorative member 6 being caused to abut against the upper end portion of the cover member 20 and slid, the protruding portions 2b, 2c, and 2c and the recesses 6b, 6c, and 6c are engaged with each other and the decorative member 6 is externally fitted to the entire outer surface 2a of the cover member 20.

[0037] The decorative member 6 is formed of a synthetic resin or the like. The strength of the cover member 20 is improved by the decorative member 6 being externally fitted to the cover member 20. Further, the biding object P bound to the binder 1 is easily identified by the color or texture of the decorative member 6 being individually changed. In addition, aesthetic improvement is achieved for the binder 1 by a transparent material being used for the decorative member 6. In addition, the decorative member 6 has a display portion 6A provided by outer surface coating, seal attachment, or the like and it is possible to identify the content of the biding object P bound to the binder by describing, for example, the title and content of the biding object P in the display portion 6A. In addition, the display portion 6A of the decorative member 6 forms a flat display surface on its surface outside the outer surface of the base portion of the cover member. Accordingly, a character or the like can be easily written in the display portion 6A and identification is facilitated.

[0038] A modification example 2 of the cover member described above is illustrated in FIG. 9B. As for a cover member 12 of Modification Example 2, protruding portions 12b and 12b extending in the up-down direction are formed on the rear end sides of both side portions of an outer peripheral surface 12a of the cover member 12. A decorative member 60 that can be externally fitted to the rear end portion of the outer peripheral surface 12a is detachably arranged on the cover member 12. The decorative member 60 has a substantially U-shaped cross section, extends in the up-down direction, and is formed so as to be shorter in both side portions than the decorative member 6 of Modification Example 1. The decorative member 60 is substantially equal in up-down-direction dimension to the cover member 12. In addition, recesses 60b and 60b extending in the up-down direction are formed in the rear end portion and both side portions of the inner surface 6a of the decorative member 60. By the lower end portion of the decorative member 60 being caused to abut against the upper end portion of the cover member 12 and slid, the protruding portions 12b and 12b

and the recesses 60b and 60b are engaged with each other and the decorative member 60 is externally fitted to the entire outer surface 2a of the cover member 20. In addition, since the decorative member 60 is formed so as to be shorter in both side portions than the decorative member 6, it is lightweight, easy to process, and conveniently attached to the cover member.

[0039] As described above, in the binder 1 forming a booklet by bundling the end portions of a plurality of sheets of paper such that paper addition or removal is possible, the binder 1 includes the plurality of clips 3 and the through holes 41 and 42 through which the claw portions 3A of the plurality of clips 3 inserted, respectively, are formed in each of the front cover member 4A and the back cover member 4B of the cover member 4Accordingly, the claw portions 3A of the plurality of clips 3 are inserted through the through holes 41 and 42 formed in the cover 4 and directly abut against the front surface P1 of the paper on the uppermost surface and the back surface P2 of the paper on the lowermost surface, respectively. Accordingly, when the bundle of a plurality of sheets of paper is grasped from above the front cover and the sheet bundle and the cover member 2 are pulled so as to be separated from each other, the frictional force that acts on the point where the claw portion 3A and the biding object P abut against each other causes the cover member 2 and the plurality of clips 3 to operate so as to be relatively separated from each other without the clip 3 and the biding object P moving relative to each other. Then, the pinching pressure of the holding pieces 31 and 32 of the plurality of clips 3 is attenuated during one operation with the separation, and thus the cover member 2 and the clip 3 can be easily moved relative to each other. In addition, the plurality of clips 3 are pulled out of the opening portion of the cover member 2 and the holding force is attenuated, and thus paper can be easily re-inserted into the internal space of the clip 3. In this manner, the work of adding or removing paper bound in a booklet shape can be smoothly performed, regardless of the material of the cover 4, during removal and insertion alike. In addition, in the case of new use, the clip 3 acts so as to be pulled out of the cover member 2 when the spine portion-side edge portions 41a, 42a of the cover 4 abut against the inner corner portions 34 and 34 of the clip 3 and the cover member 2 and the cover 4 are relatively moved in a direction away from each other. As a result, the storage release state can be reached conveniently.

[0040] In addition, the two clips 3 are arranged near the longitudinal middle of the cover member 2 and the clip 3 is arranged near the middle of the long cover member 2. Accordingly, in a case where a bundle of a plurality of sheets of paper and the cover member 2 are inclined and pulled so as to be separated from each other, the clip 3 positioned on one longitudinal side away from the tilting fulcrum is moved so as to be separated to a large extent from the cover member 2. The clip 3 positioned on the other longitudinal side near the tilting fulcrum is also moved in the direction of separation by following the clip 3 on one side and the holding force of both clips 3 can be attenuated by one operation.

[0041] Further, the clip 3 includes the inner corner portions 34 folded back toward the internal space from the front ends of the holding pieces 31 and 32. The dimension from the rear end of the clip 3 to the inner corner portions 34 and the dimension from the spine portion 40 of the cover 4 to the spine side edges 41a and 42a of the through holes 41 and 42 are formed to be substantially the same. Accordingly, when the cover member 2 is moved in the direction away from the biding object P, the inner corner portions 34 and the spine side edges 41a and 42a of the through holes 41 and 42 abut against each other, and the clips 3 move together with the cover 4, so that the clips 3 can be reliably pulled out of the opening of the cover member 2.

[0042] As described above, the decorative member 6 that can be externally fitted to the cover member 2 is detachably arranged on the cover member 2. Accordingly, the biding object P bound to the binder is easily identified by the decorative member 6 being attached to the cover member 2.

[0043] In addition, the opening width of the through holes 41 and 42 in the front-rear direction is smaller than the front-rear-direction dimension of the claw portions 3A, and thus the claw portions 3A inserted through the through holes 41 and 42 are unlikely to escape from the through holes 41 and 42.

[0044] Although examples and modification examples of the present invention have been described above with reference to the drawings, the specific configuration is not limited to the examples. Any changes or additions within the scope of the present invention are included in the present invention.

REFERENCE SIGNS LIST

[0045]

1: binder
2: cover member
3,3: clip

- 3A: claw portion
- 3B: engagement recess

4: cover

- 4A: front cover member
- 4B: back cover member

6: decorative member
12: cover member
20: cover member
21,22: pressing piece
21a,22a: engagement protrusion
23: base portion

31,32: holding piece
33: base portion
34: inner corner portion
40: spine portion
41,42: through hole
41a,42a: spine portion-side edge portion
60: decorative member
P: biding object (sheet bundle)

Claims

1. A binder forming a booklet by bundling end portions of a plurality of sheets of paper such that paper addition or removal is possible, the binder comprising:

   a spread-shaped cover configured for sandwiching the bundle of a plurality of sheets of paper;
   a long cover member having an opening portion along a spine portion of the cover; and
   a plurality of clips arranged so as to be configured for moving forward and backward in the opening portion of the cover member and having a pair of holding pieces and claw portions respectively extending inward from tips of the holding pieces,
   wherein through holes through which the claw portions of the plurality of clips are respectively inserted are formed in each of a front cover member and a back cover member of the cover.

2. The binder according to claim 1, wherein the number of the plurality of clips is two and the clips are arranged near a longitudinal middle of the cover member.

3. The binder according to claim 1 or 2, wherein a dimension from the tip to a rear end of the holding piece of the clip and a dimension from the spine portion of the cover to an edge portion of the through hole on the spine portion side are substantially equal to each other.

4. The binder according to any one of claims 1 to 3, wherein a decorative member externally fittable to the cover member is detachably arranged on the cover member.

5. The binder according to any one of claims 1 to 4, wherein a front-rear dimension of the through hole is smaller than a front-rear dimension of the claw portion.

Fig.1

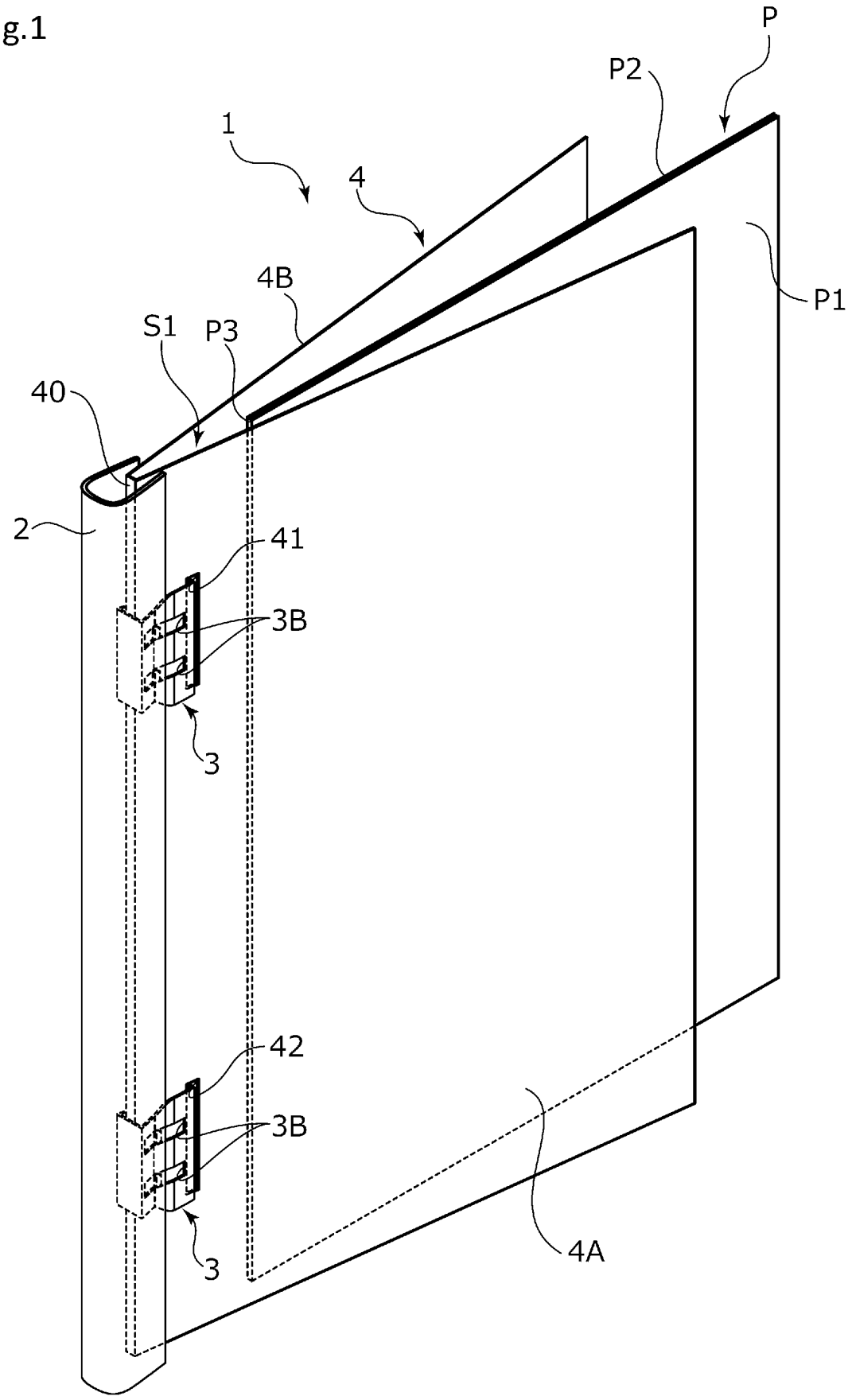


Fig.2

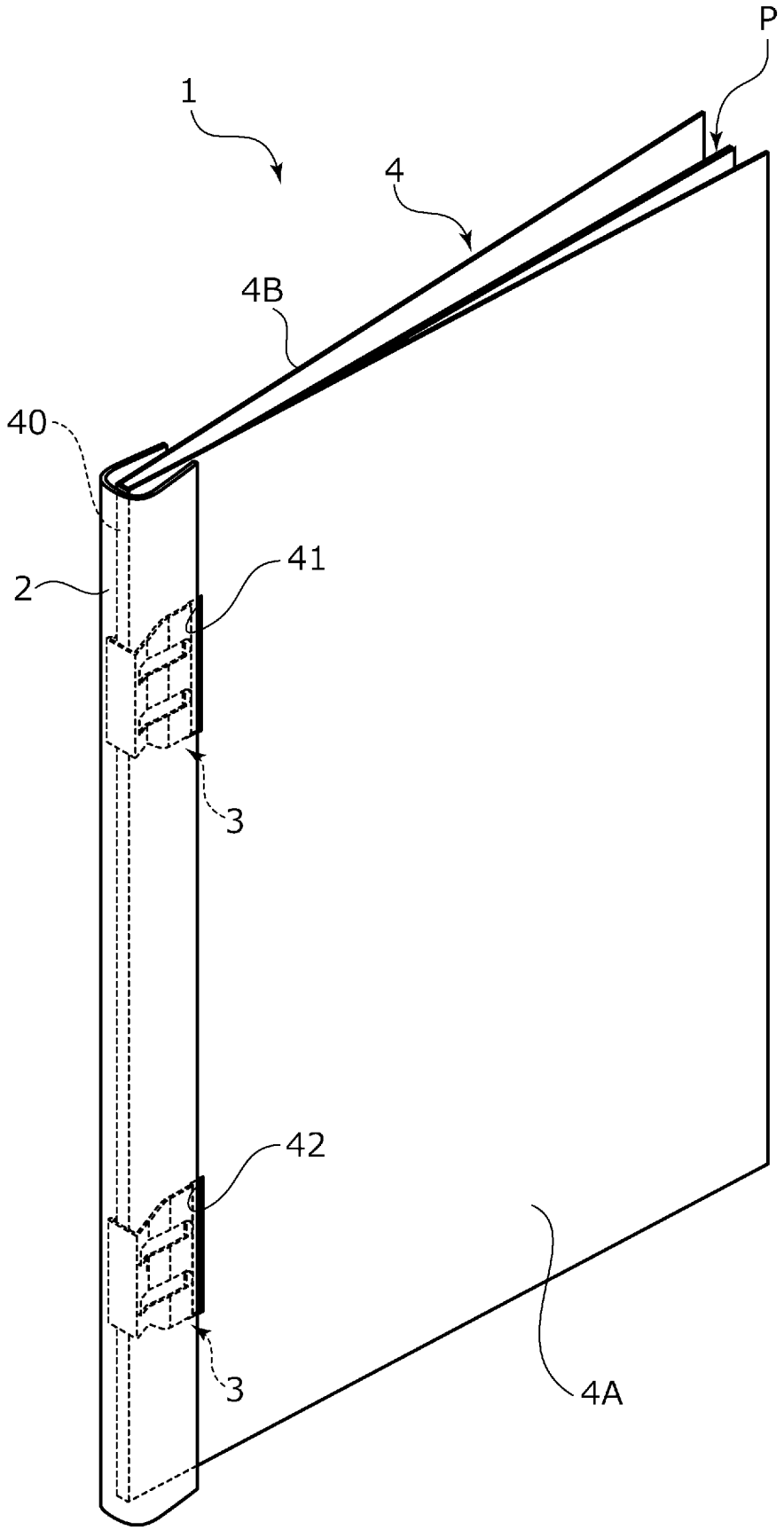


Fig.3

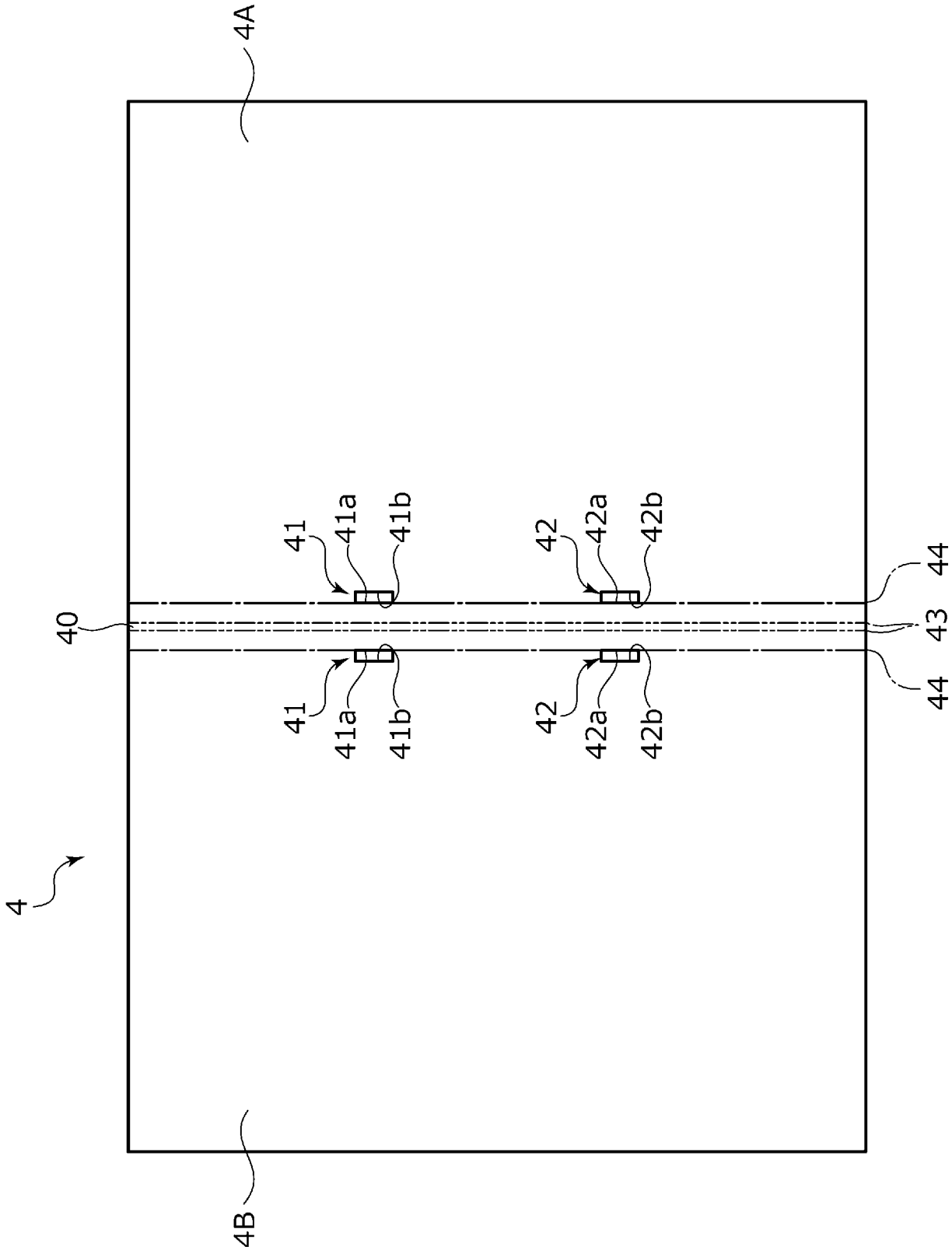


Fig.4

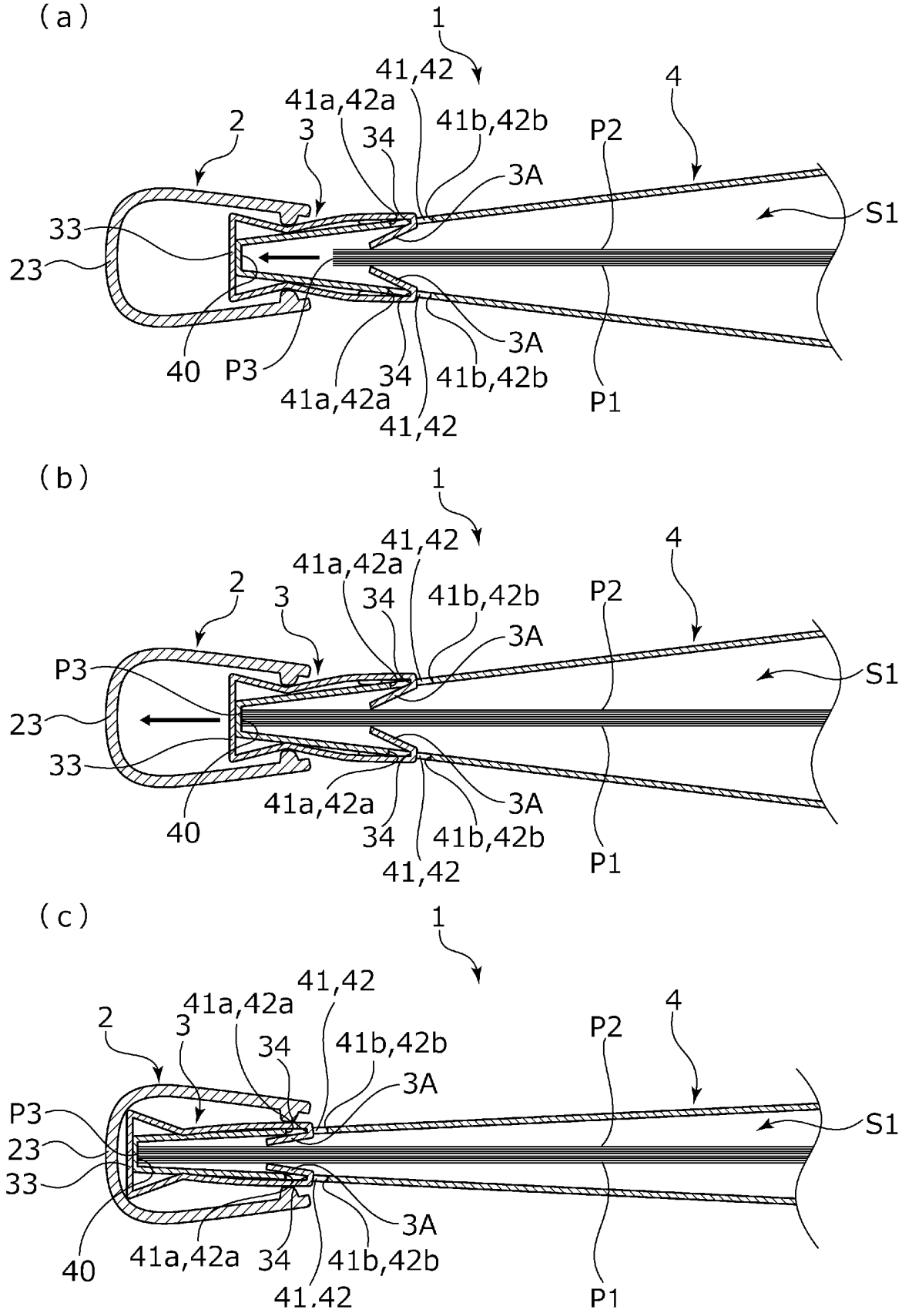

(a)
1
41,42
41a,42a
2
3
34
41b,42b
P2
4
3A
S1
33
23
40
P3
41a,42a
34
41b,42b
41,42
3A
P1
(b)
1
41,42
41a,42a
4
2
3
34
41b,42b
P2
3A
P3
S1
23
33
40
41a,42a
34
41b,42b
41,42
3A
P1
(c)
1
41,42
41a,42a
4
2
3
34
41b,42b
P2
3A
P3
S1
23
33
40
41a,42a
34
41b,42b
41.42
3A
P1

Fig.5

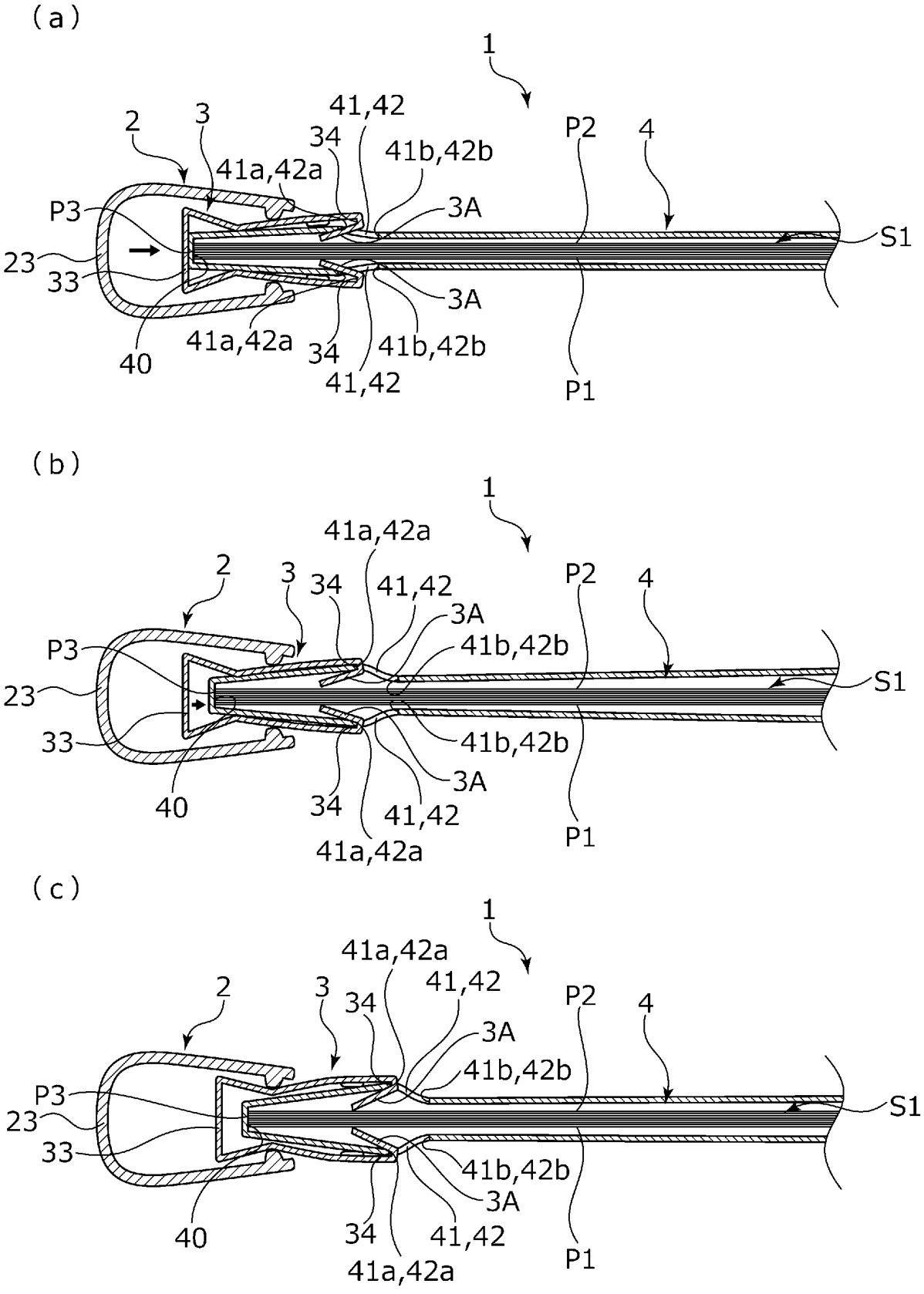

(a)
1
2
3
41,42
34
41b,42b
P2
4
41a,42a
3A
P3
S1
23
33
3A
40
41a,42a
34
41b,42b
41,42
P1
(b)
1
41a,42a
2
3
34
41,42
P2
4
3A
P3
41b,42b
S1
23
41b,42b
33
3A
40
34
41,42
41a,42a
P1
(c)
1
41a,42a
2
3
34
41,42
P2
4
3A
41b,42b
P3
S1
23
33
41b,42b
3A
40
34
41,42
41a,42a
P1

Fig.6

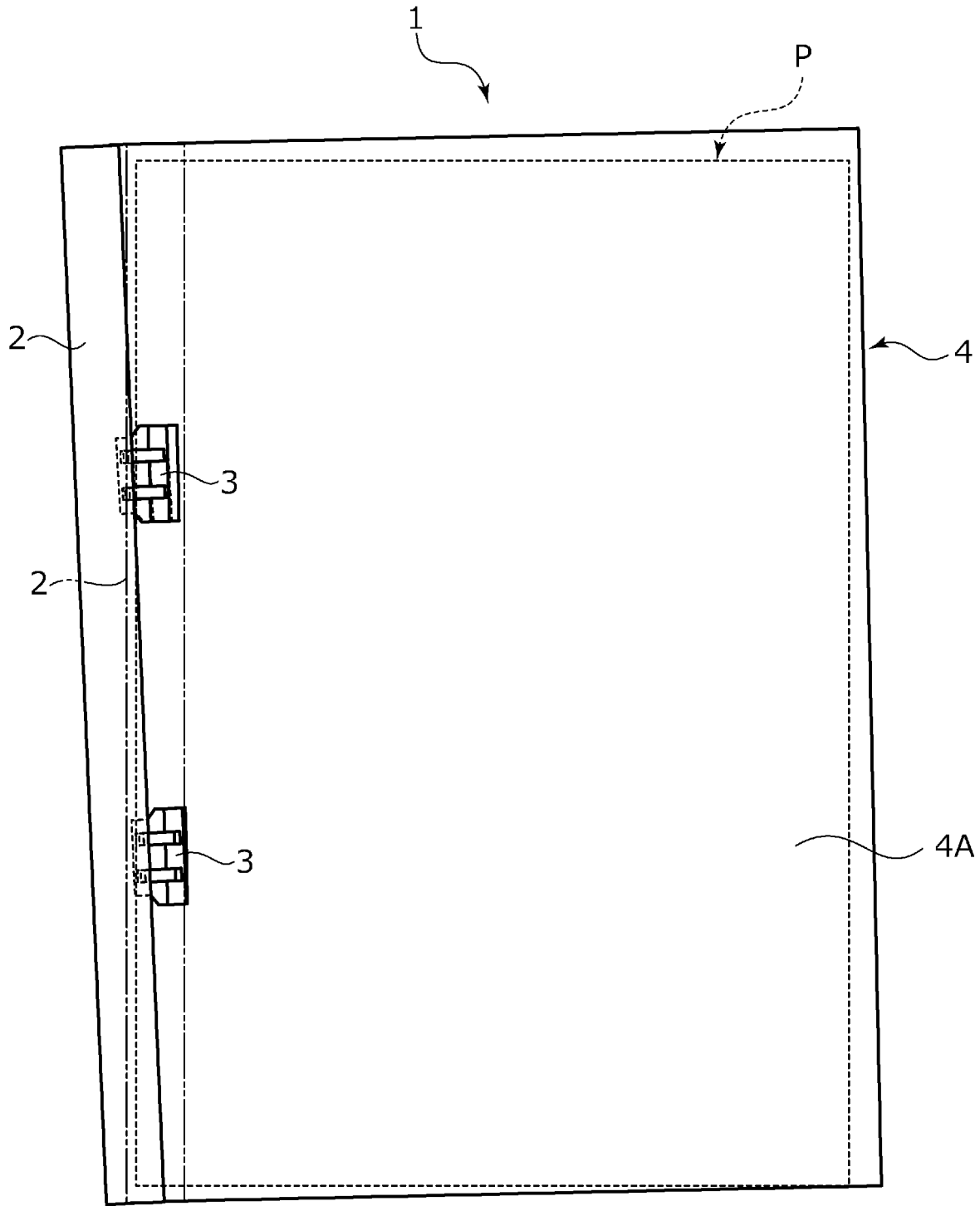


Fig.7

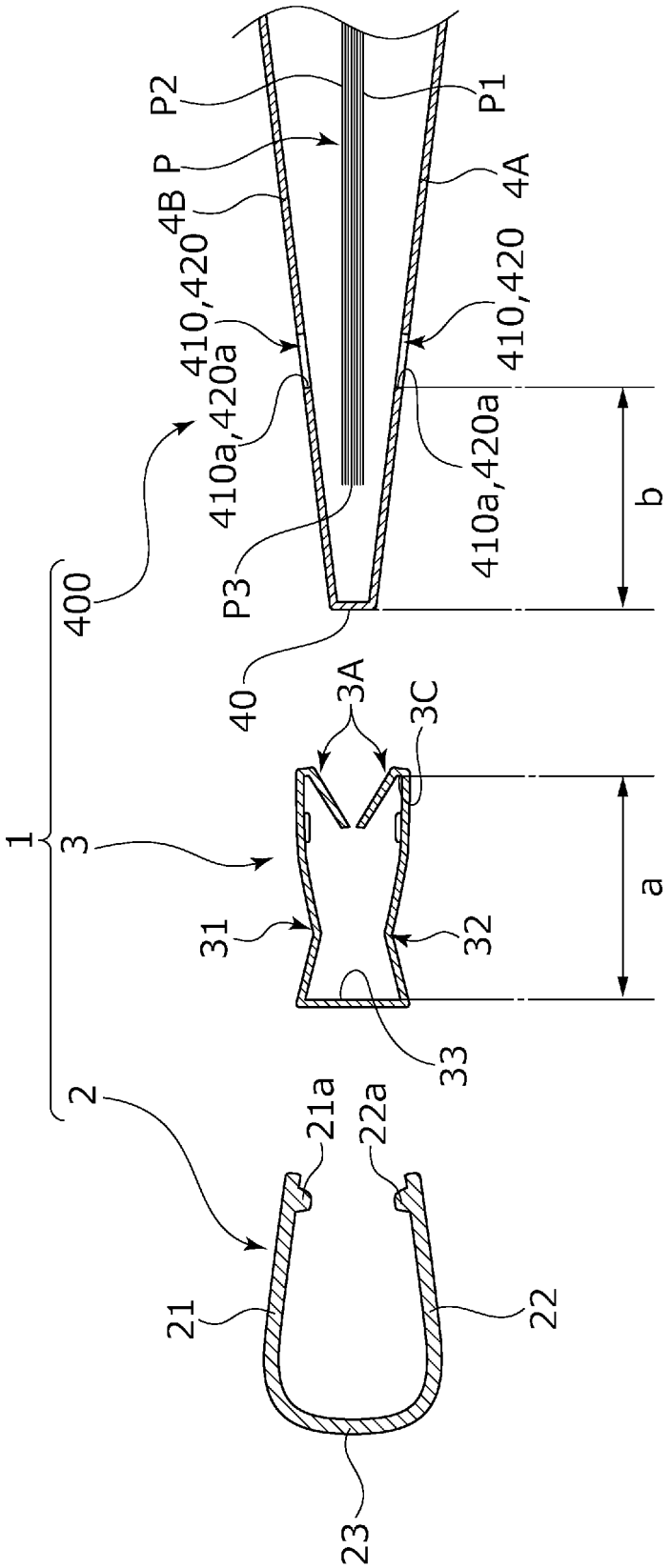

P2
P1
P
4B
4A
410,420
410,420
410a,420a
410a,420a
400
P3
b
40
3A
3C
1
3
a
31
32
33
2
21a
22a
21
22
23

Fig.8

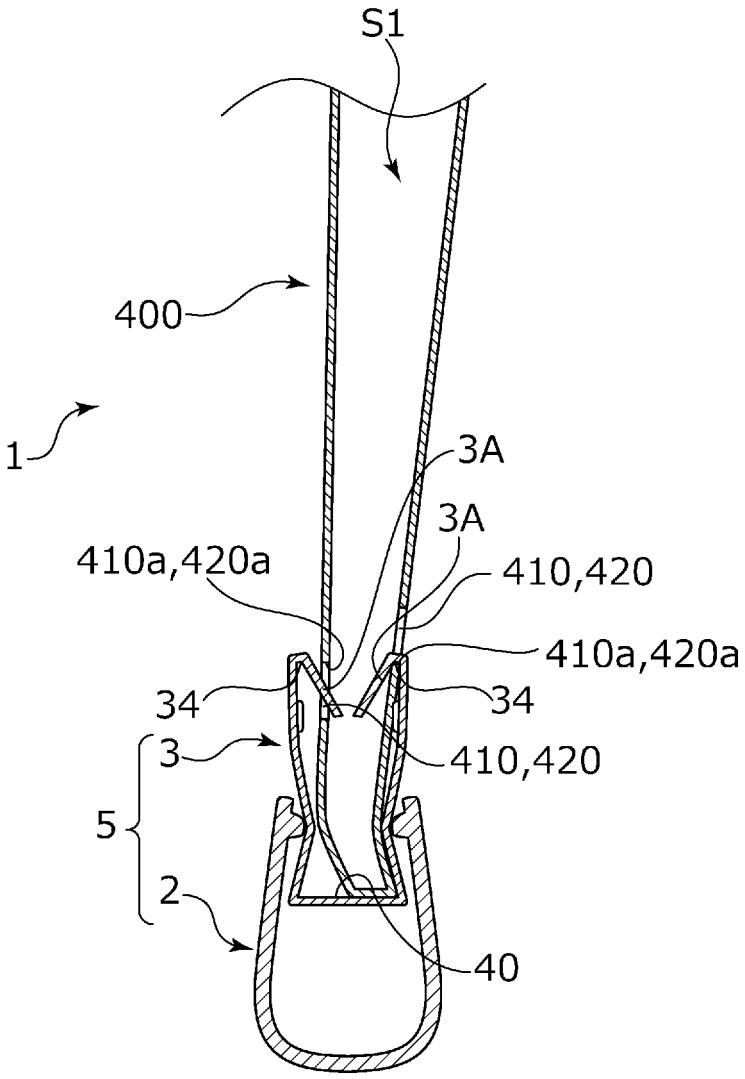
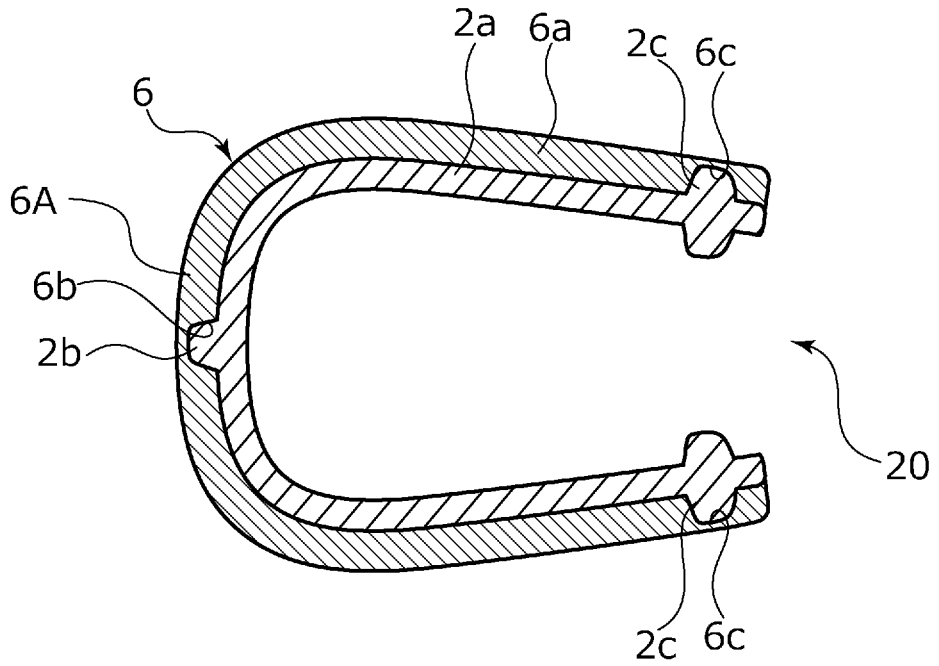
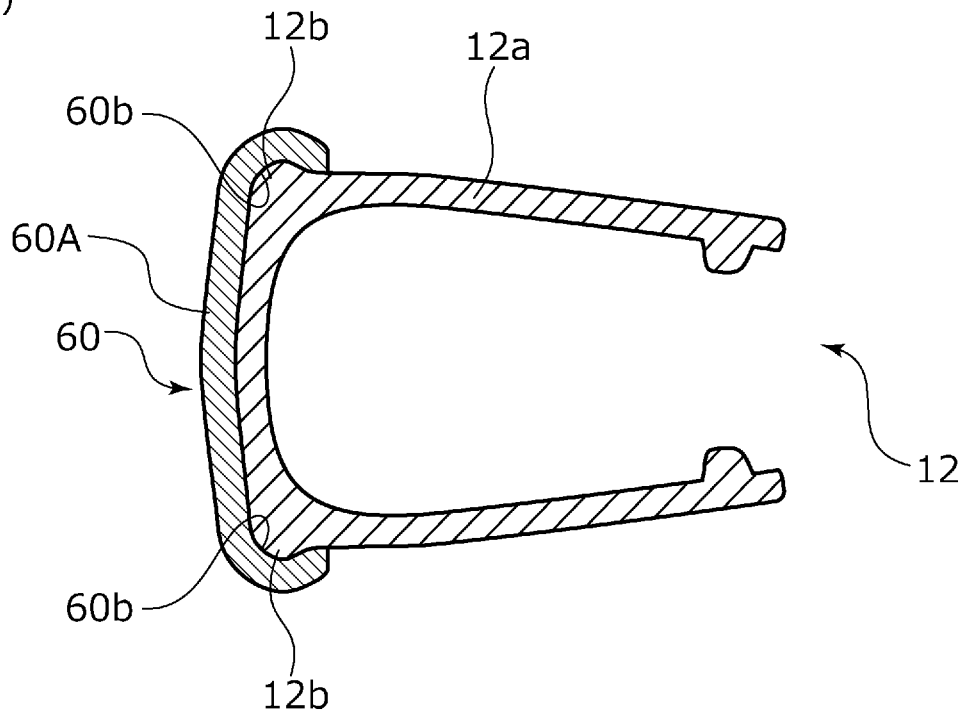


Fig.9

(a)



(b)



INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2021/014360

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl. B42F9/00(2006.01)i, B42F1/02(2006.01)i
FI: B42F9/00C, B42F1/02B

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl. B42F9/00, B42F1/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan	1922-1996
Published unexamined utility model applications of Japan	1971-2021
Registered utility model specifications of Japan	1996-2021
Published registered utility model applications of Japan	1994-2021

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2017-105099 A (TOKYO KINZOKU KOGYO KK) 15 June 2017 (2017-06-15), paragraphs [0007]-[0020], fig. 1-4	1-3, 5 4
Y	JP 2004-330437 A (KOKUYO CO., LTD.) 25 November 2004 (2004-11-25), paragraphs [0032]-[0048], fig. 1-5	1-3, 5
A	US 5944353 A (SATOU, Hisao) 31 August 1999 (1999-08-31), column 3, line 20 to column 4, line 55, fig. 1-3	1-5

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
04 June 2021	15 June 2021

Name and mailing address of the ISA/	Authorized officer
Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Telephone No.

Form PCT/ISA/210 (second sheet) (January 2015)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/JP2021/014360

JP 2017-105099 A	15 June 2017	(Family: none)
JP 2004-330437 A	25 November 2004	(Family: none)
US 5944353 A	31 August 1999	(Family: none)

Form PCT/ISA/210 (patent family annex) (January 2015)

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Patent documents cited in the description

- JP 2004330437 A **[0006]**
- JP H09150593 A **[0006]**