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## (54) Button Cover

(57) A button cover is disclosed which comprises a button covering member (10) having a cover portion (12) with an ornamental outer face (12b) and an inner face (12a) opposite to the ornamental outer face. A holding member (20) is connectable to the button covering member (10), preferably by a press fit. The holding member (20) comprises a support (21, 24) arranged in a perimeter region of the holding member and a plurality of elastic protrusions (22), preferably in the shape of bristles, ex-

tending inwardly from the support. The protrusions are elastically deformable towards and away from the inner face (12a) of the cover portion (12). Such a button cover may be easily mounted on a button by simply pushing the holding member over the button while the elastic protrusions will give way for the button. After the button has been moved past the protrusions, the protrusions hold the button cover in place while being disposed in the space between the button and the garment.

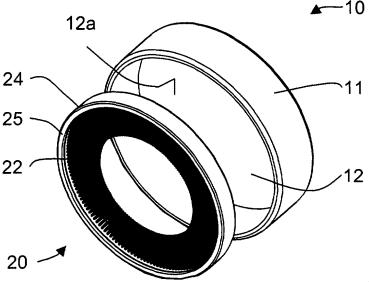


FIG. 3

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#### **Background of the invention**

**[0001]** Button covers are known from a number of documents in the art. Such button covers comprise a covering member having an ornamental face for covering the face of the button. Often, a holding member is connected in an articulated manner to the covering member, the holding member being designed for taking up the threads with which the button is sewn to the garment. Such a button cover is disclosed, e.g., in U.S. Patent No. 3,777,336. Such button covers are relatively complex in their manufacture, and the articulation may break in the course of frequent use. In addition, such button covers often do not have an entirely satisfactory aesthetic appearance due to the presence of visible mechanical features such as slits.

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**[0002]** U.S. Patent No. 5'033,168 discloses a button cover whose covering member has an ornamental face, a circular edge extending away from the face, and a semiannular projection inwardly extending from said edge. An annular holding member is coaxially connected to the edge for sliding in a circumferential direction, the holding member having a second semiannular projection. By sliding the holding member relative to the covering member in the circumferential direction, the button cover may be brought from an open configuration for inserting a button into a closed configuration in which the button is locked within the cover. Handling of such a button cover when fixing the button cover to a button on a garment can be difficult.

#### Summary of the invention

**[0003]** It is therefore an object of the present invention to provide a button cover which can be manufactured economically, which is aesthetically pleasing and which may be fastened to a button sewn onto a piece of garment without difficulty.

**[0004]** This object is achieved by a button cover according to claim 1.

[0005] In particular, a button cover according to the present invention comprises a button covering member having a cover portion with an ornamental outer face and an inner face opposite to (i.e., on the other side than) the ornamental outer face. The button cover further comprises a plurality of elastic protrusions (preferably at least three) extending inwardly from a perimeter region of said button cover. These elastic protrusions are elastically deformable towards and away from the inner face of the cover portion. In particular, they are disposed in a region adjacent to the inner face. Such a button cover may be easily mounted on a button by simply pushing the button cover onto the button, while the elastic protrusions will first give way for the button and then, after the protrusions have been moved past the button, hold the button cover in place while the button is disposed in the space between

the protrusions and the inner face.

**[0006]** In an advantageous embodiment, the protrusions have the shape of bristles, i.e., an elongated, essentially cylindrical shape with a diameter which is much smaller than the length. Such a button cover is easily manufactured. Even if a few of the bristles break, several other bristles will still be present to hold the button. Requirements on tenacity and elastic properties of the material used will be relatively low because the force acting on a single bristle will be relatively small. The protrusions may alternatively have other shapes, such as the shape of thin, elastic leaves or vanes.

[0007] The button cover may be manufactured in one piece. Advantageously, however, the button cover comprises a separate holding member which is connected or connectable to the button covering member. The holding member comprises the elastic protrusions and support means for these protrusions which are arranged in a perimeter region of the holding member. The elastic protrusions extend inwardly from these support means. Preferably, the holding member is releasably connectable to the button covering member, enabling a simple mounting of the button cover by first pushing only the holding element over the button and only then mounting the covering member on the holding member.

[0008] Preferably, the elastic protrusions are formed in one piece with a carrier element. The carrier element is then preferably attached to a reinforcement element for increasing the stability of the holding member. The above-mentioned support means thus comprise both the carrier element and the reinforcement element. In an advantageous embodiment, the carrier element is essentially ring-shaped, and the reinforcement element radially surrounds the carrier element, i.e., it is disposed around the perimeter of the carrier element. In particular, it may be essentially ring-shaped. The reinforcement element may be connected to the carrier element, e.g., by being clamped by flanges extending inwardly from the perimeter of the reinforcement element on both sides of the carrier element, or by gluing.

**[0009]** The connection between the button covering member and the holding member may be simply established by a press fit. To this end, the button covering member may comprise at least one sidewall portion extending preferably at a right angle from the cover portion and defining an inner sidewall, and the holding member may have an outer shape essentially corresponding to the shape delimited by this inner sidewall of the button covering member. The holding member may then be removably fastened to the button covering member by pressing the holding member into the region delimited by the inner sidewall of the button covering member. In addition or instead, the inner sidewall may have engagement means such as noses for a releasable snap-in connection with the holding member.

**[0010]** In an advantageous embodiment, the protrusions are arranged in a plurality of rows on the support means. This is especially preferable if the protrusions

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have the shape of bristles. Preferably, the protrusions extend in a direction essentially parallel to the inner face of the cover portion when they are in their relaxed, normal state, thereby defining a hollow space in the button cover for taking up the button.

**[0011]** The invention further relates to an adapter for use with a button cover according to the present invention, which serves to extend the range of possible uses of the button cover and transforms the button cover into a multifunctional jewelry item. The adapter comprises an insert section adapted in shape and size for being received within the button cover, in particular between the inner face of the cover portion and the elastic protrusions of the button cover. The insert section may be buttonshaped. Connection means are provided which are adapted for releasably connecting the adapter to a garment, to a body part or to a jewelry item. In particular, the connection means may comprise a pin (preferably a safety pin), an ear pin, an ear clip, or a hanger for a necklace. The connection means may also comprise a second insert section for being inserted into a second button cover, for forming a cuff link. In an advantageous embodiment, the connection means are connected to the insert section via a stem section adapted for passing through a region left free by the elastic protrusions of the button cover.

#### Brief description of the drawings

**[0012]** The invention will be described in more detail in connection with an exemplary embodiment illustrated in the drawings, in which

- Fig. 1 shows a perspective view of a button cover according to a first embodiment;
- Fig. 2 shows a detail view of the button cover of Fig. 1;
- Fig. 3 shows a perspective view of the button cover of Fig. 1 in an opened configuration;
- Fig. 4 shows another perspective view of the button cover of Fig. 3;
- Fig. 5 shows a plan view of a holding member according to a second embodiment;
- Fig. 6 shows a plan view of a holding member according to a third embodiment; and
- Fig. 7 shows a schematic side view of an adapter

## Detailed description of the invention

**[0013]** Figs. 1 to 4 show different views of a button cover 1 according to a first embodiment of the present invention. In particular, Fig. 2 shows a detail view of the region marked "A" in Fig. 1. The button cover 1 comprises two main members, a covering member 10 and a holding member 20. The covering member 10 has the shape of a hollow cap, i.e., it comprises a flat cover portion 12 and a circumferential, cylindrical sidewall portion 11 extending away from the inner face 12a of the flat cover portion 12 at essentially a right angle. The length of the sidewall

portion 11 is larger than the thickness of the button. In particular, this length is larger than the sum of the thickness of the button and the thickness of the holding member 20 described below. The cover portion 12 further has an ornamental outer face 12b which may be faceted or may carry precious stones or other ornaments in order to give it a pleasing appearance. The covering member 10 may be manufactured from any sufficiently rigid and tenacious material, such as a plastics material or a metal or metal alloy such as stainless steel, bronze, brass, silver or gold. If made from a plastics material, it may advantageously be manufactured by injection molding.

[0014] The holding member 20 comprises a circular, ring-shaped carrier 21, a large number of bristles 22 extending inwardly from the carrier 21, and a reinforcement element 24. The bristles 22 are arranged on the carrier 21 in a plurality of parallel rows, in this particular example four rows, each row extending along the circumferential direction of the carrier 21. The free ends of the bristles 22 define a central circular opening 23. The bristles 22 are elastically deformable, in particular, bendable inwardly and outwardly away from the plane defined by the support 21. They are preferably manufactured from a tenacious, yet elastic material such as silicone rubber or other elastic synthetic materials. The bristles are formed in one piece with the ring-shaped carrier 21 made from the same material. This one-piece combination of a ringshaped carrier and bristles may be called a "brush ring". The brush ring in itself is relatively flexible and is thus not sufficiently rigid to be used as a holding member as it is. Therefore, in order to improve stability of the holding member, the carrier 21 is surrounded by the ring-shaped reinforcement element 24 radially surrounding the carrier 21 and having inwardly extending flanges 25 on both sides of the carrier 21 for securing the carrier 21 to the reinforcement element 24. In other words, the reinforcement element 24 has the shape of a hollow ring which is inwardly open, similar in shape to a car tire, where the hollow inner region partially takes up the carrier 21. The reinforcement element 24 is manufactured from a more rigid material than the brush ring, e.g., from the same material as the covering member, in particular, a plastics material or a (sheet) metal or metal alloy. The carrier 21 is held in the reinforcement element 24, e.g., by clamping or by gluing. Together, the carrier 21 and the reinforcement element 24 may be regarded as serving as the support means for the bristles 22.

**[0015]** For mounting the button cover 1 on a button sewn to a garment by a thread, the holding member 20 is pushed over the button such that the central opening 23 encloses the thread. In order for the holding member to be held on the button, the diameter of the central opening 23 should be smaller than the diameter of the button. When pushing the holding member over the button, the bristles 22 will be bent away from the button for making space for the button until the button has passed the region of the bristles 22, whereby the bristles 22 will move back into their normal position by their elasticity and will now

remain in the region between the button and the garment. The covering member 10 is then pushed over the holding member 20 until a sufficiently strong press fit between the covering member 10 and the holding member 20 is reached. For removing the button cover 1 from the button on which it is mounted, the cover is simply pulled away from the button against the elastic force of the bristles 22. The entire holding member 20 may then be pulled out of the button covering member 10.

[0016] Various modifications to the above-described embodiment are possible. Instead of being arranged in several regular rows, the bristles 22 may be arranged in an irregular manner on the inside of the support 21. While a plurality of rows of bristles is preferred, a single row of sufficiently strong bristles may be provided. The bristles need not be arranged continuously all the way around the circumference, e.g., at least three individual groups of bristles may be provided in different places around the circumference of the inside of the support 21. This is illustrated in Fig. 5, where a holding member 20' is shown which has three groups of bristles 22 arranged at regularly spaced positions along the circumference of the carrier 21, the spacing between the centers of the groups being 120 degrees.

[0017] Instead of bristles, other shapes of elastic protrusions extending inwardly from the perimeter region of the holding element may be used. Possible shapes include, but are not limited to, elongated flat leaves or vanes. This is illustrated in Fig. 6, where a holding member 20" is shown which comprises a reinforcement element 24' and, clamped into the reinforcement element, a flat, thin plate or leaf 26 made from an elastic material such as spring steel or plastics. The plate 26 has an irregularly shaped opening 27. The shape of this opening 27 defines three vanes 28 protruding from the perimeter region of the holding member 20" inwardly towards its center. Of course, other numbers and shapes of the vanes are possible.

[0018] While in the above embodiments the bristles or, in more general terms, the protrusions, when in their normal position, extend essentially in a common plane parallel to the plane defined by the support 21 (and therefore in parallel to the inner face 12a of the covering member 10), it is also possible, e.g., that the protrusions are tilted towards the inner face 12a of the cover portion 12, the protrusions together forming an inwardly tapered configuration. It may be advantageous to "bias" the protrusions in this manner in order to increase the required force for removal of the button cover from the button. This "bias" tilt of the protrusions may be so strong that the free ends of the protrusions touch the inner face 12a of the cover portion 12 when the holding element is mounted in the covering element, if no button is present in the cover, such that a button which is held within the button cover will be permanently pressed towards the inner face 12a by the protrusions.

**[0019]** In a simplified embodiment, the entire holding element may be made in one piece from the same ma-

terial, without the use of a reinforcement element 24. To this end, the material of the holding element should be selected to be sufficiently rigid and strong in the peripheral region while still being sufficiently elastic to ensure that the protrusions are sufficiently bendable. By the way of example, the entire holding element may be manufactured from spring steel or from an elastic synthetic material like polyethylene.

[0020] In the above-described example, the sidewall 11 of the covering member 10 extends along the full circumference of the cover portion 12. While this yields a pleasing aesthetic appearance, it is also possible to have, e.g., several separate sidewall portions along the circumference of the cover portion separated by slits. This may be advantageous for improving the (in its nature elastic) press fit between the covering member 10 and the holding member 20. Likewise, the ring-shaped support 21 of the holding member 20 may be interrupted by a small gap making the holding member slightly elastically compressible radially.

**[0021]** Instead of being held in place within the covering member 10 by a press fit, the holding member 20 may be connected to the covering member 10 by other means, e.g., by a snap-in connection well known in the art or by a screw-in type connection. While it is preferred that the holding member 20 is releasable from the covering member 10 for easy mounting, a permanent connection between these members is possible, and whole button cover may even be formed in one piece.

[0022] While in the above-described examples the button cover has a circular shape, various shapes of the button cover are possible, e.g., quadratic, hexagonal, octagonal, regularly or irregularly polygonal, triangular, cross-shaped, heart-shaped etc. The shape of the cover portion 12 of the covering member 10 may be entirely independent of the shape of the sidewall 11 and the thus-defined shape of the holding element 20.

[0023] The button cover of the present invention may be used as part of a multifunctional, modular jewelry system. To this end, an adapter for the button cover may be provided. An example for such an adapter is shown in Fig. 7. The adapter 3 has a button-shaped insert section 31. This insert section 31 is adapted for being received within a button cover according to the present invention, i.e., it preferably matches in size and shape the inside proportions of the button cover. A short, reduced-diameter stem section 32 is centrally connected to the insert section. This stem section 32 is adapted for being passed through the central opening of the holding member of the button cover which is left free by the protrusions. A safety pin 33 is connected to the stem section.

**[0024]** The adapter 3 may be inserted into the button cover in the same manner as a button sewn to a garment, i.e., the insert section 31 replaces the button, and the stem section 32 replaces the thread. The button cover may thus be used as a brooch.

**[0025]** Instead of a safety pin 33, the adapter 3 may comprise other kinds of connection means, e.g., an ear

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pin, an ear clip, a hanger for a necklace, etc. In this way, the button cover may be used as a multi-purpose jewelry item, which vastly extends the range of possible uses of the button cover.

**[0026]** The insert section need not be button-shaped. It is sufficient that the insert section has lateral dimensions larger than the diameter of the central opening left free by the elastic protrusions of the button cover.

[0027] In another application, two button covers may be connected to form a cuff link. To this end, the adapter may comprise two (preferably button-shaped) insert sections connected by a stem section. The insert sections may also be, e.g., approximately ball-shaped, such that the overall appearance of the adapter would be bone-shaped. The stem may be straight or bent. For forming a cuff link, each insert section is received in a button cover.

**[0028]** The button cover according to the present invention and one or several adapters may be sold together as a multifunctional jewelry system.

### List of reference signs

#### [0029]

Α	Region of detail view of Fig. 2
1	Button cover
10	Covering member
11	Sidewall
12	Cover portion
12a	Inner face
12b	Outer face
20, 20', 20"	Holding member
21	Carrier ring
22	Bristles
23	Central Opening
24, 24'	Reinforcement element
25	Flange
26	Plate
27	Opening
28	Vane
3	Brooch adapter
31	Insert section
32	Stem section
33	Safety pin

# Claims

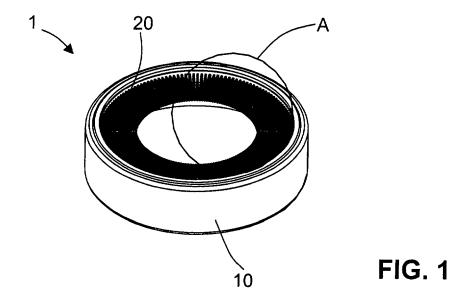
1. A button cover (1) comprising a button covering member (10) having a cover portion (12) with an ornamental outer face (12b) and an inner face (12a) opposite to said ornamental outer face (12a), characterized in that said button cover comprises a plurality of elastic protrusions (22; 28) extending inwardly from a perimeter region of said button cover (1) and being elastically deformable towards and away from said inner face (12a) of said cover portion (12).

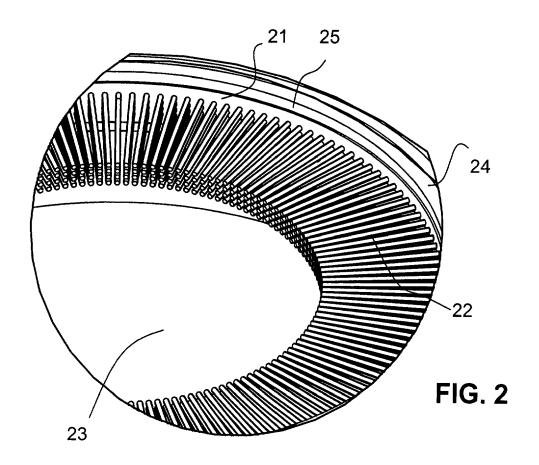
- 2. The button cover of claim 1, characterized in that said elastic protrusions (22) have the shape of bristles.
- The button cover of claim 1 or 2, characterized in that said button cover (1) comprises a holding member (20), said holding member (20) comprising said plurality of elastic protrusions (22; 28) and support means (21, 24) arranged in a perimeter region of said holding member (20), wherein said plurality of elastic protrusions (22; 28) extend inwardly from said support means (21, 24).
  - **4.** The button cover of claim 3, **characterized in that** said holding member (20) is releasably connectable to said button covering member (10).
- 5. The button cover of claim 3 or 4, characterized in that said elastic protrusions (22; 28) are formed in one piece with a carrier element (21), and that said support means (21, 24) comprise said carrier element (21) and a reinforcement element (24) attached to said carrier element (21).
- 25 6. The button cover of claim 5, characterized in that said carrier element (21) is essentially ring-shaped, and that said reinforcement element (24) is disposed around the perimeter of said carrier element (21).
- The button cover of one of claims 3 to 6, characterized in that said button covering member (10) comprises a sidewall portion (11) extending from said cover portion (12) and defining an inner sidewall (11a), and that said holding member (20) is removably fastened to said inner sidewall (11 a) by a press fit.
  - **8.** The button cover of one of the preceding claims, characterized in that said elastic protrusions (22; 28) are arranged in a plurality of rows.
  - The button cover of one of the preceding claims, characterized in that said elastic protrusions (22; 28) extend in a direction essentially parallel to said inner face (12a) of said cover portion (12).
  - 10. An adapter (3) for use with a button cover (1) according to one of the preceding claims, said adapter (3) comprising an insert section (31) adapted in shape and size for being received between the inner face (12a) of the cover portion (12) and the elastic protrusions (22; 28) of the button cover, and connection means (33) adapted for releasably connecting said adapter (3) to a garment, to a body part or to a jewelry item.

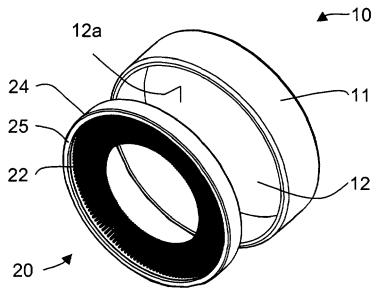
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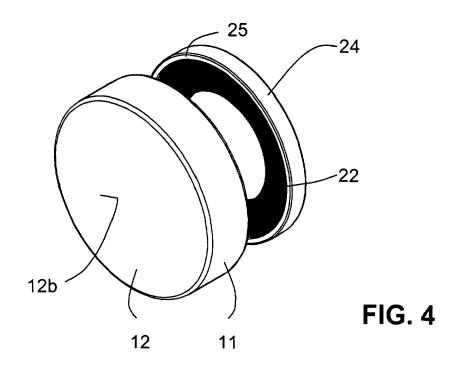
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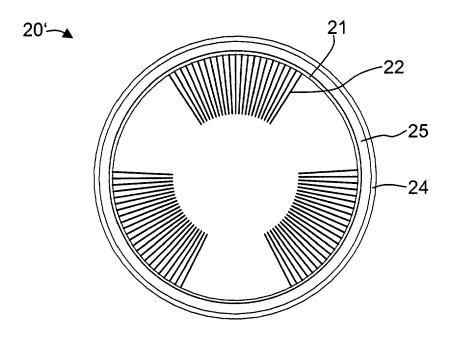
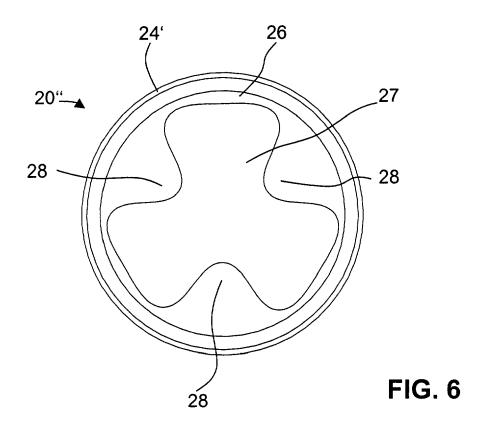


FIG. 5



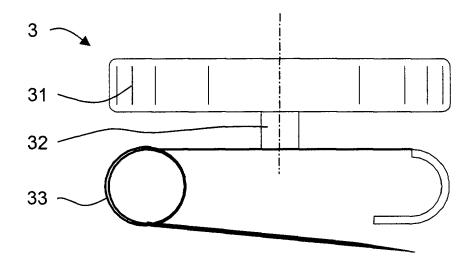


FIG. 7



# **EUROPEAN SEARCH REPORT**

Application Number EP 05 40 5404

Category	Citation of document with in	ndication, where appropriate,	Relevant	CLASSIFICATION OF THE
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4	US 2 189 467 A (JAC 6 February 1940 (19 * claim 1; figures	40-02-06)	1,3-6,10	A44B1/14
4	CH 250 979 A (BUERG 30 September 1947 ( * page 1, line 37 -	IN & CIE. GMBH) 1947-09-30) line 49; figures 1-4	1-10	
P	FR 2 582 919 A (TRC 12 December 1986 (1 * abstract; figure	.986-12-12)	1-10	
				TECHNICAL FIELDS SEARCHED (IPC)
	The present search report has b	peen drawn up for all claims		
	Place of search	Date of completion of the search	1	Examiner
	Munich	5 December 200		termayer, W
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anoth ment of the same category nological background written disclosure	T : theory or prin E : earlier paten after the filing D : document oi L : document oi	 nciple underlying the in t document, but publis	nvention shed on, or

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

EP 05 40 5404

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.

05-12-2005

cited	ent document in search report		Publication date		Patent family member(s)	Publicatio date
US 2	189467	Α	06-02-1940	NONE		
CH 2	50979	Α	30-09-1947	NONE		
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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#### REFERENCES CITED IN THE DESCRIPTION

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