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(54) **Knife cover**

Messerabdeckung

Couvercle de couteau

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(56) References cited:
US-A- 2 876 539 **US-A- 4 587 735**

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Description

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

[0001] This invention relates to a knife cover for protecting the blade of a knife.

DESCRIPTION OF PRIOR ART

[0002] Previously there is known a knife cover shaped generally as a pocket into which the blade of a knife may be pushed in its longitudinal direction, in other words with the sharp point ahead. The width of the pocket is dimensioned to match the size of the blade such that the blade is supported substantially over its entire side surfaces by the side walls of the knife cover. In this way the knife cover encloses the blade and prevents a user handling the knife from accidentally touching the cutting edge of the knife. A problem with the above-mentioned knife cover is that the blade of the knife needs to be removed from the knife cover on certain occasions, such as when the knife is washed. Therefore, on certain occasions the knife cover needs to be removed, though the knife is not used for cutting.

[0003] Previously there is also known from US - A - 4 587 735 a knife guard with a plurality of elongated members which are hinged together and biased toward a blade protective position. The blade of the knife is revealed without detaching the knife guard by pivoting the elongated members into a position where the blade protrudes out of the knife guard through a slit in the knife guard. It is, however, not practical in all situations to have the knife guard hanging from the knife during use of the knife.

SUMMARY OF THE INVENTION

[0004] An object of the present invention is to solve the above mentioned drawback and to provide a knife cover which can be used on a blade of a knife practically always when the knife is not in use. This object is achieved with a knife cover according to independent claim 1.

[0005] The knife cover according to independent claim 1 makes it possible to support the knife in the frame while simultaneously substantially the entire surface area of the blade of the knife is accessible both from the first side of the knife cover and the second side of the knife cover. In this way, the knife can be kept in the knife cover practically always when the knife is not used for cutting, also while the knife is being washed. Therefore the sharp edge of the knife can be efficiently prevented from coming into contact with metallic objects that might otherwise make the knife dull during storage or washing, for instance. Additionally, also the user of the knife can be even more efficiently protected from cutting wounds, as the time periods during which the knife cannot be kept in the knife cover are minimized.

[0006] Preferred embodiments of the invention are disclosed in the dependent claims.

BRIEF DESCRIPTION OF DRAWINGS

[0007] In the following the present invention will be described in closer detail by way of example and with reference to the attached drawings, in which

Figures 1 to 4 illustrate a first embodiment of a knife cover,
Figures 5 and 6 illustrate a second embodiment of a knife cover, and
Figure 7 illustrates a third embodiment of a knife cover.

DESCRIPTION OF AT LEAST ONE EMBODIMENT

[0008] Figures 1 to 4 illustrate a first embodiment of a knife cover 1. Figure 1 illustrates a knife cover 1 with a knife 2 in the knife cover. Figure 2 is a side view from a first side of the knife cover 1, Figure 3 is a bottom view of the knife cover 3, and Figure 4 is a side view of a second side of the knife cover 1.

[0009] The illustrated knife cover comprises a frame 3 shaped as a closed loop defining on an inside a hole 4 for receiving a blade 5 of a knife 2. The hole extends from a first side surface 6 of the frame 3 to an opposite second side surface 7 of the frame 3. The blade 5 is received in a position where the edges of the blade 5 are directed towards the frame 3 surrounding the blade, as illustrated in Figure 1. The blade 5 is thereby completely received in a space limited by a plane along the first side surface 6 of the frame, by a plane along the second side surface 7 of the frame 3 and by the frame 3 itself. The shape of the frame matches the shape of the edges of the blade such that the frame 3 extends all the way along the edges of the blade 5, but at a distance from the edges of the blade 5 such that a small gap is located between the frame 3 and the edges of the blade 5 practically all the way around the blade.

[0010] A first end of the knife cover 1 is provided with a lock 8 having a recess 9 in the first side surface 6 of the frame 1. This recess receives a handle 10 of the knife 2 such that the handle 10 can be detachably and reattachably attached to the frame 3. In this context "detachably and reattachably attached" refers to a locking solution which makes it possible to release the handle from the frame and, after this, to attach the handle again to the frame by means of the lock 8. Consequently, no part of the lock needs to be destroyed or broken in order to remove the knife from the knife cover, and therefore the same lock parts may be utilized several times to attach the handle to the frame.

[0011] The lock 8 may be implemented in different ways. In the illustrated embodiment, the handle 10 of the knife 2 partly protrudes into the loop defined by the frame

3. A part of the handle 10 is therefore located in the recess 9. In the illustrated embodiment, the lock 8 comprises a latch 11 which is attached to the frame 3 in the vicinity of the recess. The latch is movable between a locking position, where the latch 11 overlaps and contacts the knife 2 received in the knife cover 1 and presses the handle 10 of the knife 2 towards the recess 9 in the first side surface 6 of frame 3, and a releasing position where the latch 11 does not overlap or contact the knife. In the illustrated embodiment, the latch 11 is rotatably attached to the first side surface 6 of the frame 3 via a pivot 12, which allows the latch to be moved by rotating it between the locking position and the releasing position. However, as an alternative to rotation, it is also possible to utilize a latch that is linearly moved along a rail, for instance, and consequently not rotated between the locking position and the releasing position.

[0012] The knife cover 3 is provided at a second end 15 with side supports 13 and 14 protruding from the frame 3 in a direction where they partly cover the hole 4 defined by the frame for supporting opposite side surfaces of the knife blade 5 arranged in the hole 4 defined by the frame 3. In the illustrated example these side supports protrude across the hole 4 from the lower part of the frame 3 in Figure 2 to the upper part of the frame in Figure 2. This is, however, not necessary in all embodiments, as in some implementations sufficient support for the blade may be accomplished by one or more side supports that do not extend all the way across the hole 4.

[0013] Preferably, the knife cover comprises only one side support 13 and 14 on each side of the knife blade. However, in case more than one side support is utilized on each side of the knife blade, attention should be drawn to designing the side supports in such a way that substantially the entire surface area of the blade will be accessible from both sides of the knife cover to ensure easy and efficient cleaning of the knife blade.

[0014] In the illustrated embodiment only two side supports are utilized, and these are arranged such that the side support 13 closer to the first side surface 6 is located further away from the lock 8 than the side support 14 arranged closer to the second side surface 7. In this way the knife may easily be arranged in the knife cover by first pushing the sharp tip of the blade 5 lengthwise between the side supports 13 and 14 from the side of the first side surface 6, and then by pushing the handle 10 sideways toward the recess 9. In case more than one side support is arranged on either side of the blade 5, then preferably they should all be arranged such that the one or more side supports 13 arranged closer to the first side surface 6 are all located further away from the lock 8 than the one or more side supports 14 arranged closer to the second side surface 7. In the illustrated embodiment the side support 14 provided closer to the second surface 7 is provided with a relatively large plane element, which is provided with an arrow illustrating where the user should pass the sharp tip of the blade between the side supports while arranging a knife in the knife cover. Such a large plane element with an arrow is not necessary in all embodiments.

[0015] Due to the combination of the lock 8 and the side supports 13 and 14, the blade 5 remains securely within the frame 3 such that a user cannot accidentally come into contact with the sharp cutting edge of the blade. The attachment becomes even more secure in case the frame 3 comprises, on both sides of the recess 9, handle support sections 16 on an inner surface of the frame 3, which inner surface extends between the first 6 and the second side surfaces 7. These handle support sections 16 face and support the handle 10 of the knife 1 arranged in the knife cover 1. In the illustrated embodiment the handle support sections 16 are shaped to match as exactly as possible the shape of the corresponding part of the handle 10 that they contact, and the mutual distance between the handle support sections 16 facing each other is equal to or slightly smaller than the corresponding distance between the parts of the handle 10 that the handle support sections 16 contact. Therefore the handle 10 is practically clamped between the handle support sections 16 that are facing each other on the opposite sides of the handle 10.

[0016] Except of the side supports 13 and 14 the knife cover is substantially free of obstacles preventing access to the hole 4, and therefore substantially the entire surface of the blade 5 of the knife 1 is accessible from both the first side of the knife cover and the second side of the knife cover. As is clear from the drawings, only the side supports 13 and 14 cover parts of the knife blade 5 when the knife cover is viewed from the side, as in Figure 1. However, the distance between the side supports 13 and 14 may be larger than the thickness of the knife blade 5. Therefore also the parts of the knife blade covered by the side supports as seen in a side view are accessible by a washing liquid, for instance, while the knife and the knife cover are washed.

[0017] As is clear from the above explanation, the knife cover of Figures 1 to 4 may be used on a knife practically all the time that the knife in question is not used for cutting. This includes during washing of the knife, such as in a washing machine, during drying of the knife and during storing of the knife.

[0018] Figures 5 and 6 illustrate a second embodiment of a knife cover. The embodiment of Figures 5 and 6 is very similar to the one explained in connection with Figures 1 to 4, and therefore the embodiment of Figures 5 and 6 will mainly be explained by pointing out the differences between these embodiments.

[0019] Figure 5 illustrates a side view of a knife cover 1', and Figure 6 illustrates a cross section of the knife cover 1' along line A - A in Figure 5 as well as of a knife handle.

[0020] In Figures 5 and 6 the lock 8' does not comprise a latch. Instead the width W of the recess 9' is equal to or smaller than the width of the handle 10 of a knife that is arranged in the knife cover similarly to Figure 1. Friction between the sides of the recess 9' and the handle 10

therefore attaches the handle to the frame 3' of the knife cover. Additionally, if the handle 10 has an elastic surface layer, the surface layer may be slightly compressed when the handle is pushed into the recess. Such compression increases the frictional forces attaching the handle to the knife cover.

[0021] Figure 7 illustrates a third embodiment of a knife cover. The embodiment of Figure 7 is very similar to the one explained in connection with Figures 5 and 6, and therefore the embodiment of Figure 7 will mainly be explained by pointing out the differences between these embodiments.

[0022] Figure 7 illustrates in cross section the frame 3" at the recess 9" and a handle 10 arranged in the recess 9". In this embodiment the recess comprises a section in the vicinity of the first surface 6" where the width W1 of the recess 9" is smaller than the width W2 in a section closer to the second side surface 7". In this way the handle 10 of a knife may be attached to the frame 3" with a snap attachment, as the material of the handle and/or frame is slightly compressed where the width is smaller, and after this the material is allowed to return to its original dimension. At that state the section with the smaller width W1 keeps the handle 10 firmly in the recess 9".

[0023] It is to be understood that the above description and the accompanying figures are only intended to illustrate the present invention. It will be obvious to a person skilled in the art that the invention can be varied and modified without departing from the scope of the invention.

Claims

1. A knife cover (1, 1'), wherein
the knife cover (1, 1') comprises a frame (3, 3', 3") shaped as a closed loop, which defines on an inside a hole (4) for receiving a blade (5) of a knife (2) in a position where edges of the blade (5) are directed towards the frame (3, 3', 3") surrounding the blade, the hole (4) extending completely through the frame (3, 3', 3") from a first side surface (6, 6") of the frame to a second side surface (7, 7") of the frame (3, 3', 3"), and
the knife cover (1, 1') is substantially free of obstacles preventing access to the hole (4) such that substantially the entire surface of the blade (5) of a knife that can be received in the knife cover (1, 1') is accessible from both a side of the first side surface (6, 6") and from a side of the second side surface (7, 7") of the knife cover, **characterized in**
that a first end of the knife cover (1, 1') is provided with a lock (8, 8', 8") having a recess (9, 9', 9") in the first side surface (6, 6') of the frame (3, 3', 3") for receiving a handle (10) of the knife, and for detachably and reattachably attaching the handle (10) to the frame (3, 3', 3"), and
that the knife cover (3, 3', 3") is provided with side supports (13, 14) protruding from the frame (3, 3', 3") for supporting opposite side surfaces of the blade (5) of the knife that can be received in the knife cover.

2. A knife cover (1, 1') according to claim 1, **characterized in that** the one or more side supports (13) arranged closer to the first side surface (6, 6') are all located further away from the lock (8, 8', 8") than the one or more side supports (14) arranged closer to the second side surface (7, 7').

3. A knife cover according to claim 1 or 2, **characterized in that** the lock (8) comprises a latch (11) attached to the frame (3), the latch (11) being movable between a locking position where the latch overlaps and contacts the knife (2) that can be received in the knife cover (1) and presses the handle (10) towards the recess (9) in the frame (3), and a releasing position where the latch (11) does not overlap or contact the knife (2).

4. A knife cover according to claim 3, **characterized in that** the latch (11) is rotatably attached to the first side surface (6) of the frame via a pivot (12) allowing the latch (11) to be rotated between the locking position and the releasing position.

5. A knife cover according to claim 1 to 2, **characterized in that** the width (W) of the recess (9') is equal to or smaller than the width of the handle (10) for attaching the handle (10) to the frame (3') by friction.

6. A knife cover according to claim 1 to 2, **characterized in that** the recess (9") comprises a section in the vicinity of the first side surface (6") where the width (W1) of the recess (9") is smaller than the width (W2) in a section closer to the second side surface (7").

7. A knife cover according to one of claims 1 to 6, **characterized in that** the frame (3, 3', 3") comprises, on both sides of the recess (9, 9', 9"), handle support sections (16) on an inner surface of the frame (3, 3', 3") extending between the first and the second side surfaces (6, 6", 7, 7"), the handle support sections (16) contacting and supporting the handle of a knife that can be arranged in the knife cover, the mutual distance between the handle support sections (16) being equal to or slightly smaller than a corresponding distance between the parts of the handle (10) that the handle support sections (16) contact.

8. A knife cover according to claim 7, **characterized in that** the handle support sections (16) have a shape corresponding to a shape of the part of the handle (10) that the handle support sections (16) contact.

9. A knife cover according to claim **1, c h a r a c t e r i**

z e d in that the shape of the frame (3, 3', 3") matches the shape of the edges of the blade (5) such that a small gap is located between the frame (3, 3', 3") and the edges of the blade (5) practically all the way around the blade.

Patentansprüche

1. Messerhülle (1, 1'), wobei
die Messerhülle (1, 1') einen zu einer geschlossenen Schleife gebildeten Rahmen (3, 3', 3") aufweist, der auf der Innenseite ein Loch (4) definiert, das eine Klinge (5) eines Messers (2) in einer Position aufnimmt, in der Kanten der Klinge (5) auf den die Klinge umschließenden Rahmen (3, 3', 3") gerichtet sind, welches Loch (4) sich vollkommen durch den Rahmen (3, 3', 3") von einer ersten Seitenfläche (6, 6") des Rahmens zu einer zweiten Seitenfläche (7, 7") des Rahmens (3, 3', 3") erstreckt, und
die Messerhülle (1, 1') wesentlich frei von den Zugang zum Loch (4) verhindernden Hindernissen ist, so dass wesentlich die ganze Fläche der Klinge (5) eines Messers, die in der Messerhülle (1, 1') aufgenommen werden kann, sowohl aus einer Seite der ersten Seitenfläche (6, 6") als auch aus einer Seite der zweiten Seitenfläche (7, 7') der Messerhülle zugänglich ist, **dadurch gekennzeichnet,**
dass ein erstes Ende der Messerhülle (1, 1') mit einem Schloss (8, 8', 8") versehen ist, das eine Vertiefung (9, 9', 9") in der ersten Seitenfläche (6, 6') des Rahmens (3, 3', 3") zum Aufnehmen eines Griffs (10) des Messers und zur lösbaren und wiederbefestigbaren Befestigung des Griffs (10) am Rahmen (3, 3', 3") hat, und
dass die Messerhülle (3, 3', 3") mit Seitenstützen (13, 14) versehen ist, die aus dem Rahmen (3, 3', 3") herausragen, um gegenüberliegende Seitenflächen der Klinge (5) des Messers zu stützen, die in der Messerhülle aufgenommen werden kann.

2. Messerhülle (1, 1') nach Patentanspruch 1, **dadurch gekennzeichnet, dass** sich die eine oder mehreren näher an der ersten Seitenfläche (6, 6') angeordneten Seitenstützen (13) alle weiter entfernt von dem Schloss (8, 8', 8") befinden, als die eine oder mehreren Seitenstützen (14), die näher an der zweiten Seitenfläche (7, 7') angeordnet sind.

3. Messerhülle nach Patentanspruch 1 oder 2, **dadurch gekennzeichnet, dass** das Schloss (8) einen am Rahmen (3) befestigten Riegel (11) aufweist, welcher Riegel (11) zwischen einer Schließposition, in der der Riegel den in der Messerhülle (1) aufnehmbaren Messer (2) überlappt und berührt und den Griff (10) gegen die Vertiefung (9) im Rahmen (3) drückt, und einer Freigabeposition beweglich ist, in der der Riegel (11) den Messer (2) nicht überlappt oder berührt.

4. Messerhülle nach Patentanspruch 3, **dadurch gekennzeichnet, dass** der Riegel (11) an der ersten Seitenfläche (6) des Rahmens über ein Gelenk (12) drehbar befestigt wird, was das Drehen des Riegels (11) zwischen der Schließposition und der Freigabeposition ermöglicht.

5. Messerhülle nach Patentanspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Breite (W) der Vertiefung (9') gleich oder kleiner als die Breite des Griffs (10) ist, um den Griff (10) durch Reibung am Rahmen (3') zu befestigen.

6. Messerhülle nach Patentanspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Vertiefung (9") einen Abschnitt in der Nähe der ersten Seitenfläche (6") aufweist, wo die Breite (W1) der Vertiefung (9") kleiner als die Breite (W2) in einem Abschnitt ist, der näher an der zweiten Seitenfläche (7") ist.

7. Messerhülle nach einem der Patentansprüche 1 bis 6, **dadurch gekennzeichnet, dass** der Rahmen (3, 3', 3") auf beiden Seiten der Vertiefung (9, 9', 9") Griffstützenteile (16) auf einer Innenfläche des Rahmens (3, 3', 3") aufweist, die sich zwischen den ersten und den zweiten Seitenflächen (6, 6", 7, 7") erstrecken, wobei die Griffstützenteile den Griff eines in der Messerhülle anordnenbaren Messers berühren und stützen, wobei der gegenseitige Abstand zwischen den Griffstützenteilen (16) gleich oder ein wenig kleiner ist als ein entsprechender Abstand zwischen den Teilen des Griffs (10), die die Griffstützenteile (16) berühren.

8. Messerhülle nach Patentanspruch 7, **dadurch gekennzeichnet, dass** die Griffstützenteile (16) eine Form aufweisen, die einer Form des Teils des Griffs (10) entspricht, den die Griffstützenteile (16) berühren.

9. Messerhülle nach Patentanspruch 1, **dadurch gekennzeichnet, dass** die Form des Rahmens (3, 3', 3") der Form der Kanten der Klinge (5) anpasst, so dass sich ein kleiner Spalt zwischen dem Rahmen (3, 3', 3") und den Kanten der Klinge (5) praktisch um die ganze Klinge befindet.

Revendications

1. Etui à couteau (1, 1'), dans lequel
l'étui à couteau (1, 1') comprend un cadre (3, 3', 3") en forme de boucle fermée, qui définit sur un intérieur un orifice (4) pour recevoir une lame (5) d'un couteau (2) dans une position où des bords de la lame (5) sont dirigés vers le cadre (3, 3', 3") entourant la lame,

l'orifice (4) se prolongeant complètement à travers le cadre (3, 3', 3") à partir d'une première surface latérale (6, 6") du cadre vers une deuxième surface latérale (7, 7") du cadre (3, 3', 3"), et
l'étui à couteau (1, 1') est sensiblement exempt d'obstacles empêchant l'accès à l'orifice (4) de sorte que sensiblement toute la surface de la lame (5) d'un couteau qui peut être reçue dans l'étui à couteau (1, 1') est accessible depuis un côté de la première surface latérale (6, 6") et depuis un côté de la deuxième surface latérale (7, 7") de l'étui à couteau, **caractérisé en ce**
qu'une première extrémité de l'étui à couteau (1, 1') est munie d'un verrou (8, 8', 8") ayant un évidement (9, 9', 9") dans la première surface latérale (6, 6') du cadre (3, 3', 3") pour recevoir une poignée (10) du couteau, et pour détacher et rattacher la poignée (10) au cadre (3, 3', 3"), et
que l'étui à couteau (3, 3', 3") est muni de supports latéraux (13, 14) faisant saillie à partir du cadre (3, 3', 3") pour supporter des surfaces latérales opposées de la lame (5) du couteau qui peut être reçu dans l'étui à couteau.

2. Etui à couteau (1, 1') selon la revendication 1, **caractérisé en ce que** un ou plusieurs supports latéraux (13) disposés plus près de la première surface latérale (6, 6') sont tous situés plus loin du verrou (8, 8', 8") que le ou les supports latéraux (14) disposés plus près de la deuxième surface latérale (7, 7').

3. Etui à couteau selon la revendication 1 ou la revendication 2, **caractérisé en ce que** le verrou (8) comprend un loquet (11) fixé au cadre (3), le loquet (11) étant mobile entre une position de verrouillage où le loquet chevauche et contacte le couteau (2) qui peut être reçu dans l'étui à couteau (1) et appuie sur la poignée (10) en direction de l'évidement (9) dans le cadre (3), et une position de libération où le loquet (11) ne chevauche pas ou ne contacte pas le couteau (2).

4. Etui à couteau selon la revendication 3, **caractérisé en ce que** le loquet (11) est fixé de manière rotative à la première surface latérale (6) du cadre par l'intermédiaire d'un pivot (12) permettant au loquet (11) d'être entraîné en rotation entre la position de verrouillage et la position de libération.

5. Etui à couteau selon la revendication 1 ou la revendication 2, **caractérisé en ce que** la largeur (W) de l'évidement (9') est égale à ou inférieure à la largeur de la poignée (10) pour fixer la poignée (10) au cadre (3') par friction.

6. Etui à couteau selon la revendication 1 ou la revendication 2, **caractérisé en ce que** l'évidement (9") comprend une section au voisinage de la première surface latérale (6") où la largeur (W1) de l'évidement (9") est inférieure à la largeur (W2) dans une section plus proche de la deuxième surface latérale (7").

7. Etui à couteau selon l'une quelconque des revendications 1 à 6, **caractérisé en ce que** le cadre (3, 3', 3") comprend, des deux côtés de l'évidement (9, 9', 9"), des sections de support de poignée (16) sur une surface intérieure du cadre (3, 3', 3") se prolongeant entre les première et deuxième surfaces latérales (6, 6", 7, 7"), les sections de support de poignée (16) contactant et soutenant la poignée d'un couteau qui peut être agencé dans l'étui à couteau, la distance mutuelle entre les sections de support de poignée (16) étant égale à ou légèrement inférieure à la distance correspondante entre les parties de la poignée (10) que les sections de support de poignée (16) contactent.

8. Etui à couteau selon la revendication 7, **caractérisé en ce que** les sections de support de poignée (16) ont une forme correspondant à une forme de la partie de la poignée (10) que les sections de support de poignée (16) contactent.

9. Etui à couteau selon la revendication 1, **caractérisé en ce que** la forme du cadre (3, 3', 3") correspond à la forme des bords de la lame (5) de telle sorte qu'un petit espace est situé entre le cadre (3, 3', 3") et les bords de la lame (5) pratiquement tout autour de la lame.

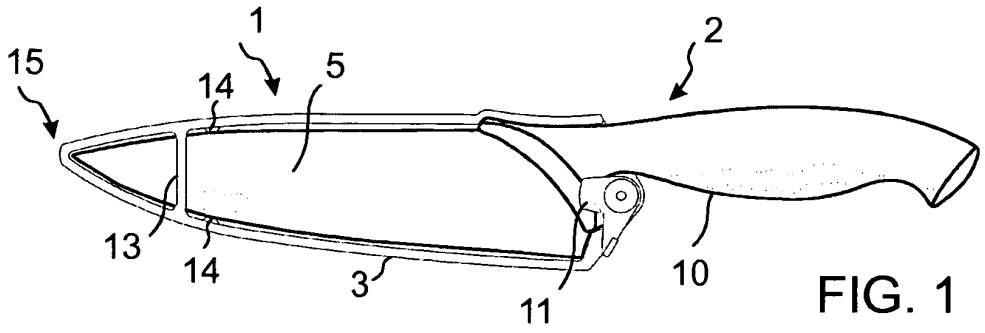


FIG. 1

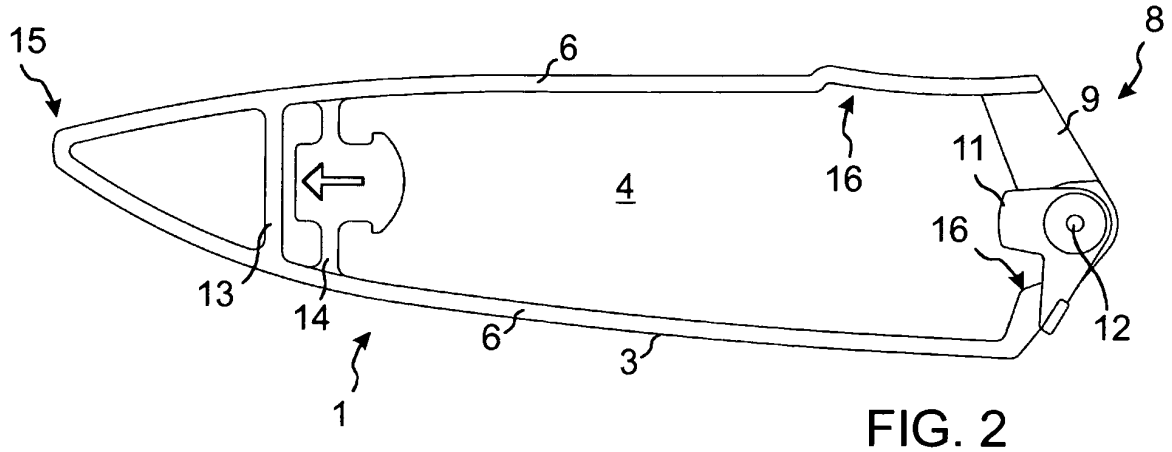


FIG. 2

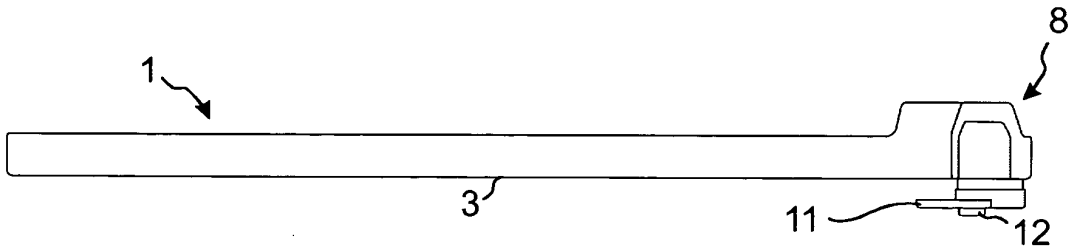


FIG. 3

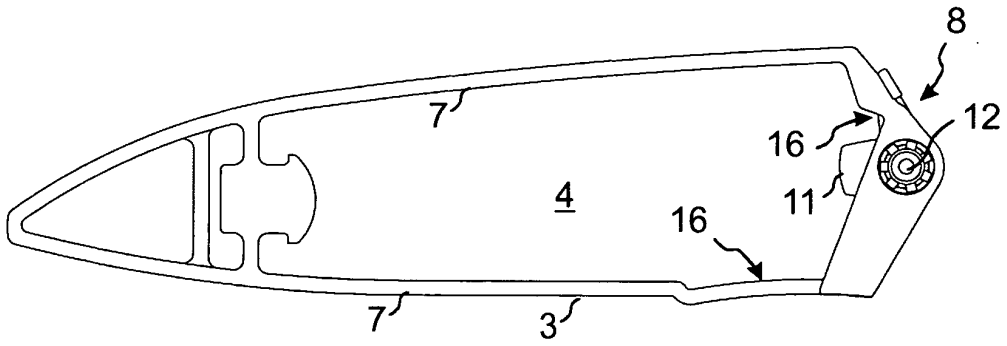


FIG. 4

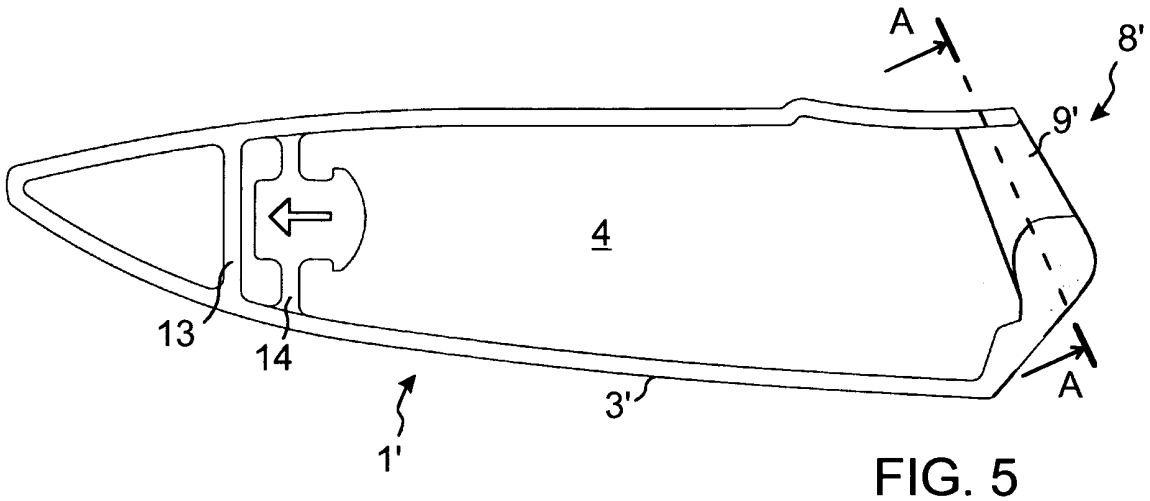


FIG. 5

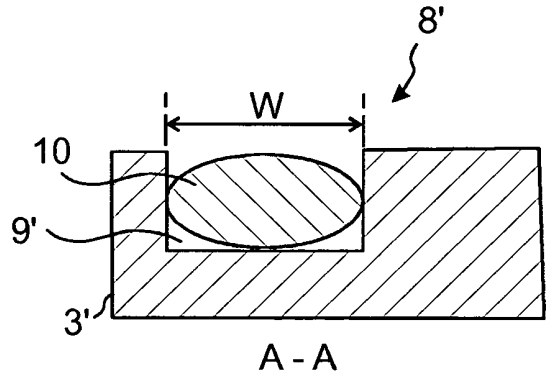


FIG. 6

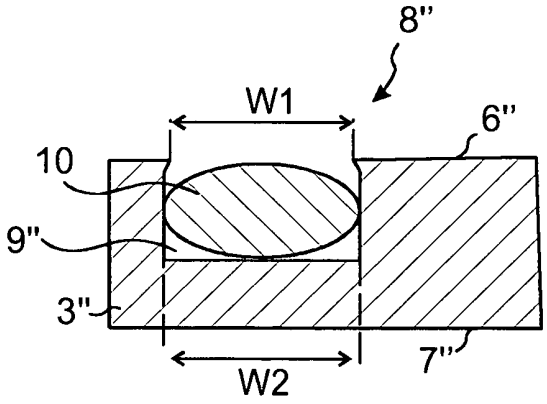


FIG. 7

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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