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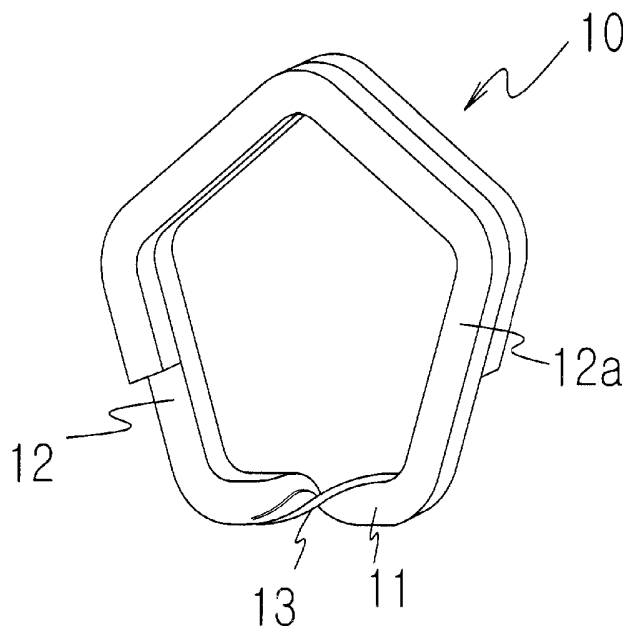
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ning of each regular issue of the PCT Gazette.

(54) Title: KEY HOLDER



(57) Abstract: The present invention relates to a key holder, and in particular to a key holder capable of having a certain shape that a user wants to have wherein the shape is capable of holding keys. The key comprises a processed object that includes a reference piece having a certain length and width, and a pair of first and second engaging elements extended from both ends of the reference piece and having the same shape, wherein the parts of the first and second engaging elements are overlapped in such a manner that the processed object and the reference piece are distorted in the opposite direction.

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Description

KEY HOLDER

Technical Field

- [1] The present invention relates to a key holder, and in particular to a key holder capable of having a certain shape that a user wants to have wherein the shape is capable of holding keys.

Background Art

- [2] Generally, a key holder is designed to hold various kinds of keys for thereby conveniently carrying and storing a plurality of keys.
- [3] People generally have at least two or three key holders.
- [4] Namely, people carry and store a door key, an auto key, an office key, a private box key, etc. The above keys are separately fabricated. In this case, in order to conveniently carry and store a plurality of keys, a key holder has been generally used for binding a plurality of keys as one group and inserting the keys into a key holder.
- [5] As shown in Figure 1, the both ends of the key holder 1 are overlapped using a circular steel core 1a having a certain tensional force for thereby forming a circular shape of the key holder 1.
- [6] In the conventional key holder having a circular, a circular steel core having a certain tensional force is provided, and the both ends of the same are overlapped for thereby fabricating a lot of the key holders during a short time period. Therefore, it is possible to decrease the fabrication cost, but the key holders have a simple circular shape, so that it is impossible to achieve a diversity of products. Recently, the customer does not want a simple key holder, but wants to have a key holder having an accessory function.
- [7] However, the conventional key holder is simply fabricated by rolling a circular steel core having a certain tensional force in a circular shape with a certain size. Therefore, the key holders having various shapes are not fabricated, so that it is impossible to satisfy the customer's demand for thereby causing many problems.

Disclosure of Invention

Technical Problem

- [8] Accordingly, it is an object of the present invention to provide a key holder in which a user can freely select a desired key holder having a certain shape based on his trend in such a manner that a key holder capable of holding a plurality of keys is fabricated in various shapes that a user wants to have, except for a circular shape, and the key holders have accessory functions.

Technical Solution

- [9] To achieve the above objects, there is provided a key holder, comprising a processed object that includes a reference piece having a certain length and width, and a pair of first and second engaging elements extended from both ends of the reference piece and having the same shape, wherein the parts of the first and second engaging elements are overlapped in such a manner that the processed object and the reference piece are distorted in the opposite direction.
- [10] The key holder is formed in a polygonal shape such as a triangle shape, a rectangular shape or a pentagonal shape.
- [11] The key holder is formed in a curved shape such as a heart shape, a butterfly shape, etc.
- [12] There is further provided an engaging hole formed at the reference piece and the first and second engaging elements, so that a hook connected with a decoration item is engaged.
- [13] There is further provided a decoration item such as jewelry formed at the reference piece and the first and second engaging elements.

Brief Description of the Drawings

- [14] The preferred embodiments of the present invention will be described with reference to the accompanying drawings.
- [15] Figure 1 is a front view illustrating the construction of a conventional key holder;
- [16] Figure 2 is a perspective view illustrating a key holder according to the present invention;
- [17] Figure 3 is a view illustrating a fabrication process of the present invention and a cutting state of a processed object having a certain shape for fabricating a key holder;
- [18] Figure 4 is a front view illustrating a fabrication process of the present invention and a processed cut object;
- [19] Figure 5 is a view illustrating a fabrication process of the present invention and a state that first and second hanging elements are distorted;
- [20] Figures 6 through 8 are views illustrating key holders having different shapes fabricated according to the present invention;
- [21] Figure 9 is a front view illustrating the construction of a first embodiment of the present invention; and
- [22] Figure 10 is a front view illustrating the construction of a second embodiment of the present invention.

Best Mode for Carrying Out the Invention

- [23] The construction and fabrication method of the present invention will be described with reference to the accompanying drawings.
- [24] Figure 2 is a perspective view illustrating the construction of a key holder according

to the present invention. A key holder 10 has a reference piece 11 having a certain length and width. There is provided a processed object 21 having a pair of first and second engaging elements 12 and 12a extended from both ends of the reference piece and having certain shapes. The first and second engaging elements 12 and 12a are overlapped by a distorting element 13 in such a manner that the reference piece 11 of the processed object 21 is distorted in the opposite direction from each other.

[25] In the key holder 10, the first and second elements 12 and 12a maintain an overlapped state of the first and second engaging elements by an angle (about 90° of the distorting element 13. At this time, the distorting angle of the reference piece 11 is over 90° the surfaces of the overlapped first and second engaging elements 12 and 12a maintain a tight engaging force by the distorting angle of the distorting element 13, so that the key held by the key holder 10 does not escape to the outside.

[26] The fabrication of the key holder 10 having the above construction will be described by the process.

[27] As shown in Figure 3, in order to fabricate the key holder 10, the processed object 21 is cut to fabricate the first and second engaging elements 12 and 12a extended from both sides of the key holder, namely, the reference piece 11 using the plate piece 20 having a certain thickness.

[28] The cutting process is performed based on a cutting process using press or other known methods. Therefore, the processed object 21 is finished as shown in Figure 4.

[29] When the both ends of the reference piece 11 of the processed object 21 having a certain shape are distorted in the opposite direction, as shown in Figure 5, the first and second engaging elements 12 and 12a extended from both ends of the reference piece 11 are overlapped with respect to the distorting element 13 that is formed as it is distorted at an intermediate portion of the reference piece 11.

[30] In a state that the first and second engaging elements 12 and 12a are overlapped, the both ends of the first and second engaging elements 11 are further distorted, so that the first and second engaging elements 12 and 12a overlapped based on the distorting angle of the reference piece 11 maintain closer contacting states by the tensional force itself. Even when the first and second engaging elements 12 and 12a are widened and the keys are inserted, the first and second engaging elements maintain closer contacting states by the tensional force itself and the distorting force of the distorting element 13, so that the keys inserted into the key holder 10 does not escape during the use of the same.

[31] In addition, When the key inserted into the key holder 10 is positioned at the distorting element 13 of the reference piece 11, the key maintains slanted based on the slanted groove of the distorting element distorted in one direction.

[32] The key holder 10 according to the present invention may have various shapes and

may preferably have a pentagonal shape. The key holder 10 may have a rectangular shape or a triangle shape except for the pentagonal shape as shown in Figures 6 and 7.

[33] As shown in Figure 8, the key holder may be formed in a polygonal shape or may be symmetrically formed in a heart shape or a butterfly shape or a flower shape. Namely, it may be formed in a certain shape. Therefore, in the present invention, it is possible to satisfy customer's various desires.

[34] In another embodiment of the present invention, as shown in Figure 9, an engaging hole 14 may be formed at a reference piece 11 or first and second engaging elements 12 and 12a of the key holder 10 for thereby holding various decoration items. As shown in Figure 10, the decoration member 30 having various patterns may be inserted into the reference piece 11 and the first and second engaging elements 12 and 12a.

[35] As shown in Figure 9, various decoration items such as a character or image may be inserted into the engaging hole 14 provided at the reference piece 11 and the first and second engaging elements 12 and 12a for thereby hanging a connection strap or a connection ring. As shown in Figure 10, the decoration items 30 having various patterns like jewelry may be inserted into the first and second engaging elements 12 and 12a.

Industrial Applicability

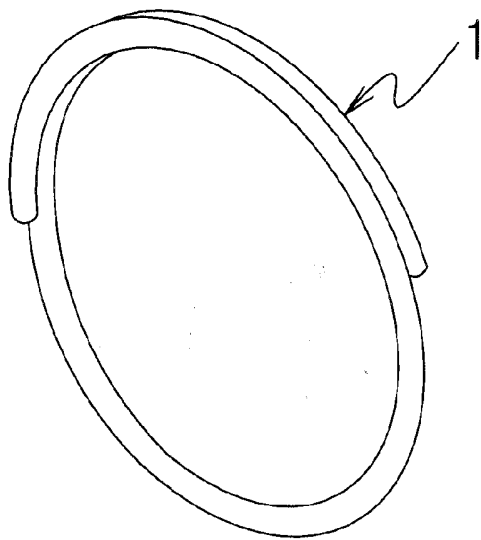
[36] As described above, in a state that a pair of first and second engaging elements having corresponding shapes are integrally provided at the both ends of the reference piece, both sides are distorted with respect to the intermediate portion of the reference piece, so that the first and second engaging elements extended from both ends get closer by the distorting elements of the center for thereby fabricating the key holder. Therefore, in the present invention, the key holders having various shapes such as a polygonal shape like a triangle shape, a rectangular shape, etc. and a curved shape like a heart shape, a butterfly shape, a certain bug shape, etc. can be fabricated for thereby satisfying the customer's demand. In addition, the key holder according to the present invention may be used for the purpose of various decoration items except for the simple function of holding the keys.

[37] As the present invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described examples are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the meets and bounds of the claims, or equivalences of such meets and bounds are therefore intended to be embraced by the appended claims.

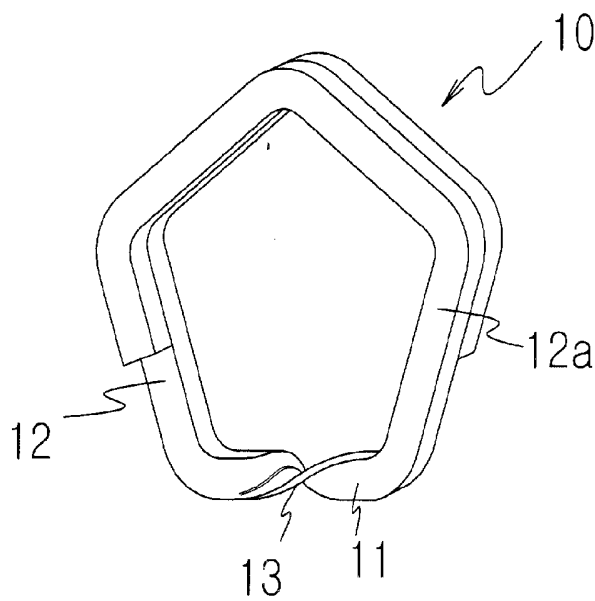
Claims

- [1] A key holder, comprising:
a processed object that includes a reference piece having a certain length and width, and a pair of first and second engaging elements extended from both ends of the reference piece and having the same shape,
wherein the parts of the first and second engaging elements are overlapped in such a manner that the processed object and the reference piece are distorted in the opposite direction.
- [2] The holder of claim 1, wherein said key holder is formed in a polygonal shape such as a triangle shape, a rectangular shape or a pentagonal shape.
- [3] The holder of claim 1, wherein said key holder is formed in a curved shape such as a heart shape, a butterfly shape, etc.
- [4] The holder of claim 1, further comprising an engaging hole formed at the reference piece and the first and second engaging elements, so that a hook connected with a decoration item is engaged.
- [5] The holder of claim 1, further comprising a decoration item such as jewelry formed at the reference piece and the first and second engaging elements.

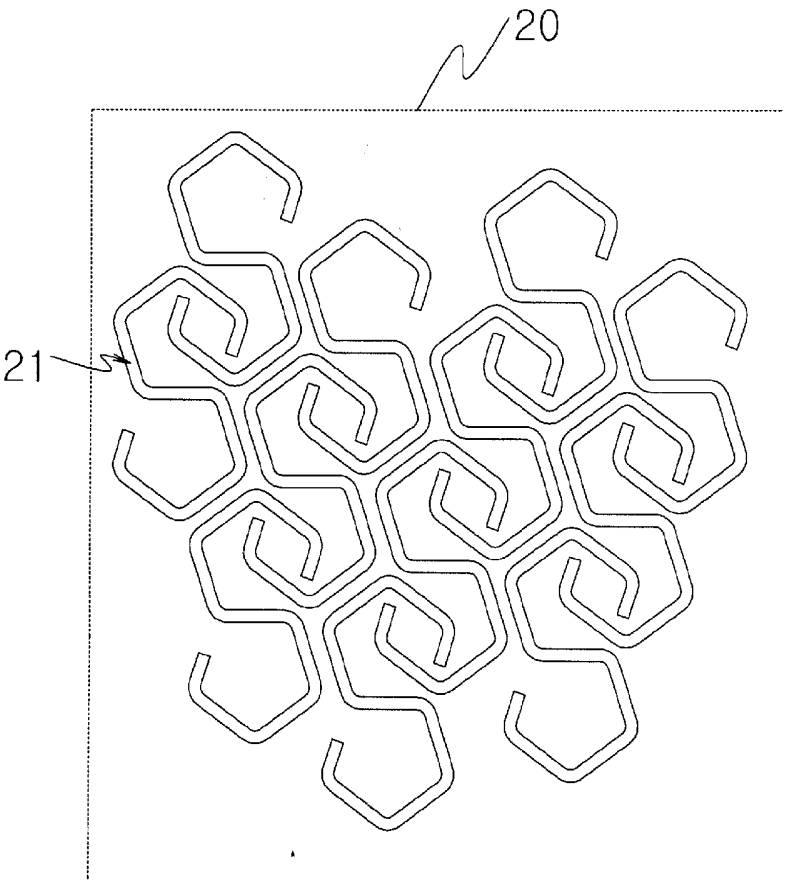
[Fig. 1]



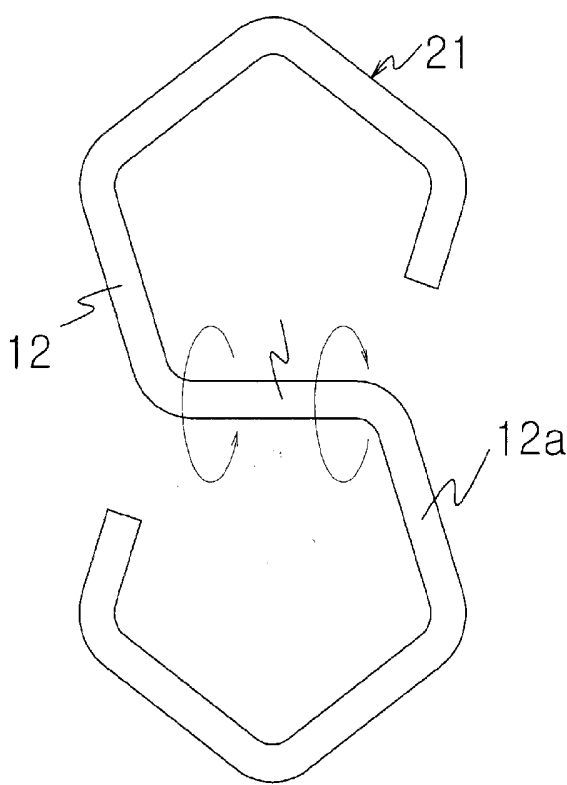
[Fig. 2]



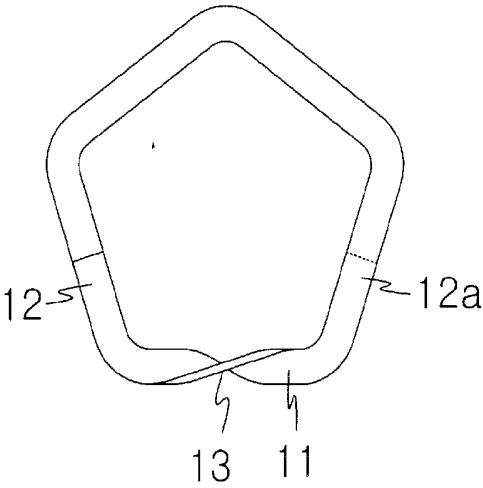
[Fig. 3]



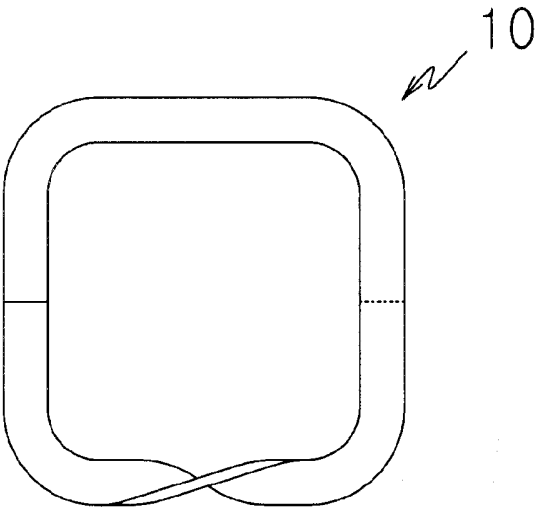
[Fig. 4]



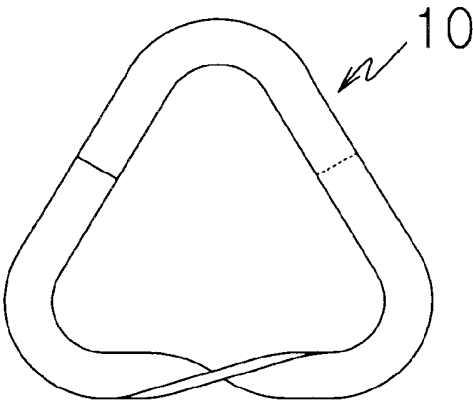
[Fig. 5]



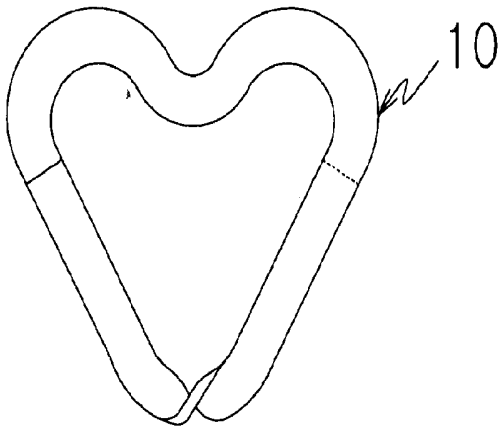
[Fig. 6]



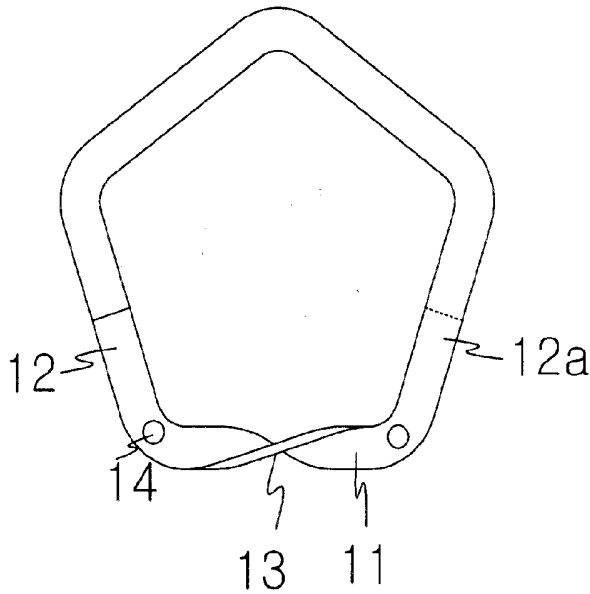
[Fig. 7]



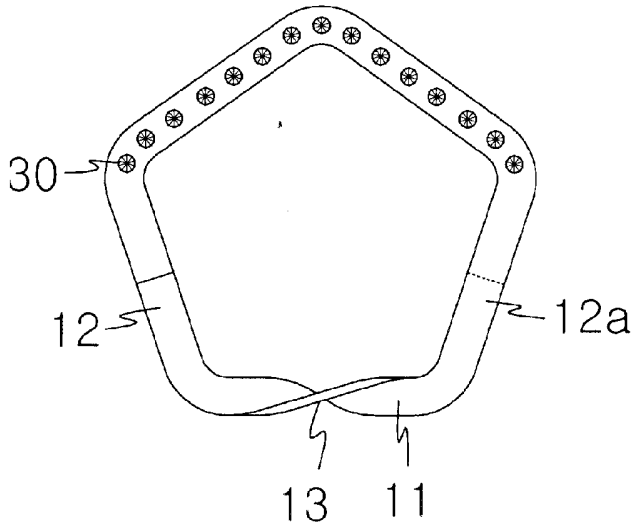
[Fig. 8]



[Fig. 9]



[Fig. 10]



INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC7 A44B 15/00

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)

IPC7 A44B, A47G

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

KR : IPC as above

JP (utility models) : IPC as above

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.
A	JP 1-169109 U (HURUYA HIROYOSHI) 29 NOVEMBER 1989 See the whole document	1-5
A	JP 57-68684 U (MASHO SHIGEO) 24 APRIL 1982 See the whole document	1-5
A	US 4,951,361 A (STEPHENS, ALBERT L. JR.) 28 AUGUST 1990 See the whole document	1-5
A	JP 8-173302 A (YOHENA KATSU) 09 JULY 1996 See the whole document	1-5
A	KR 0309317 Y1 (KANG, TAE KU) 31 MARCH 2003 See the whole document	1-5

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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