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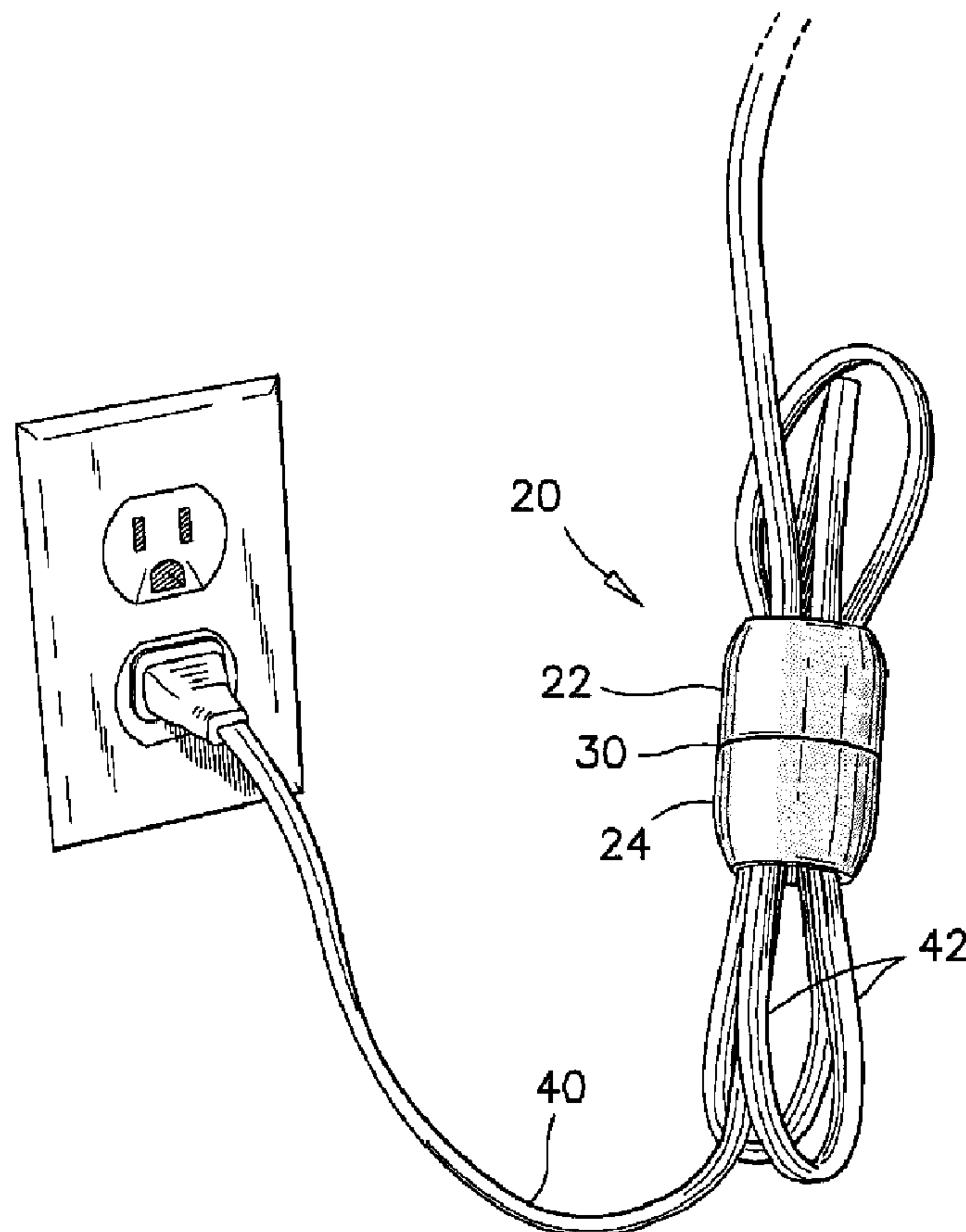
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(54) Titre : MANCHON DE GESTION DE CORDON

(54) Title: CORD MANAGEMENT SLEEVE



(57) Abrégé/Abstract:

The cord management sleeve is used to retain an electric cord that is bent in several segments in a bow-tie-like arrangement. The cord management sleeve has a first and second halves, each having a cylindrical shape. The first half is coaxially engaged into the

(57) **Abrégé(suite)/Abstract(continued):**

second half, for rotation into the second half. The first half has a circumferential ridge on an end thereof. The second half has a circumferential groove on an end thereof. The circumferential ridge is engaged into the circumferential groove with a sliding fit. Each of the halves has a longitudinal slot therein, and these longitudinal slots are movable relative to each other by rotation of the halves relative to each other, for selectively aligning the slots or setting off an alignment of the slots. The segments of a cord are inserted through the slots and kept in the sleeve by setting off the alignment of the slots.

ABSTRACT OF THE DISCLOSURE

The cord management sleeve is used to retain an electric cord that is bent in several segments in a bow-tie-like arrangement. The cord management sleeve has a first and second halves, each having a cylindrical shape. The first half is coaxially engaged into the second half, for rotation into the second half. The first half has a circumferential ridge on an end thereof. The second half has a circumferential groove on an end thereof. The circumferential ridge is engaged into the circumferential groove with a sliding fit. Each of the halves has a longitudinal slot therein, and these longitudinal slots are movable relative to each other by rotation of the halves relative to each other, for selectively aligning the slots or setting off an alignment of the slots. The segments of a cord are inserted through the slots and kept in the sleeve by setting off the alignment of the slots.

TITLE: CORD MANAGEMENT SLEEVE**FIELD OF THE INVENTION**

5 This invention pertains to cord management devices, and more particularly it pertains to devices for use on electric extension cords, computer cables, and cords on appliances and tools, for retaining these cords in a compact and organized arrangement.

10 **BACKGROUND OF THE INVENTION**

The disorderly layout of computer cables for example is a sore sight for many people. Stereo and television systems are also encumbered with intertwined cords wherein it is difficult to find out which cord belongs to
15 which module. The same can be said for battery chargers of laptop computers, portable telephones and personal sound systems; for cords of earphones, UBS ports, and for cords of tools and toys of all kind.

Numerous efforts have been made in the past to develop cord management
20 devices. An exceptionally large quantity of cord management devices has been found in the prior art. These devices are illustrated and described in the following documents.

US Patent 1,673,704 issued to J.A.Palmer et al., on June 12, 1928;
US Patent 2,160,961 issued to G. Dorman on June 6, 1939;
25 US Patent 2,167,541 issued to W.R. Young on July 25, 1939;
US Patent 2,253,974 issued to T.P. Guild on August 26, 1941;
US Patent 2,351,379 issued to H.H. Wehringer on June 13, 1944;
US Patent 2,533,341 issued to G. Alfano on December 12, 1950;
US Patent 2,746,112 issued to P.J. Simon on May 22, 1956;

US Patent 3,068,316 issued to G. Witt on December 11, 1962;
 US Patent 3,089,210 issued to C.E. Ritter on May 14, 1963;
 US Patent 3,197,830 issued to R.B. Hoadley on August 3, 1965;
 US Patent 3,310,623 issued to M.E. Vaughan on March 21, 1967;
 5 US Patent 3,796,304 issued to M.E. Blais on March 12, 1974;
 US Patent 3,924,819 issued to E.L. Lapinskas on December 9, 1975;
 US Patent 4,067,526 issued to C.K. Storer on January 10, 1978;
 US Patent 4,229,924 issued to D.O. Teachout, Sr., on October 28, 1980;
 US Patent 4,285,486 issued to J.V. Osten on August 25, 1981;
 10 US Design D264,045 issued to J.M. Elliot et al., on April 27, 1982;
 US Design D275,174 issued to E. Rolli on August 21, 1984;
 US Patent 4,721,268 issued to L. Lerner et al., on January 26, 1988;
 US Patent 4,815,172 issued to C.G. Ward on March 28, 1989;
 US Patent 4,979,614 issued to R.C. Ruhaut on December 25, 1990;
 15 US Design D372,420 issued to S. Mendez on August 6, 1996;
 US Design D374,174 issued to M.P. MacClellan on October 1, 1996;
 US Design D386,670 issued to R.J. Phillips on November 25, 1997;
 US Patent 5,729,872 issued to M.H. Ginocchio on March 24, 1998;
 US Patent 5,802,676 issued to N.J. Tolan on September 8, 1998;
 20 US Patent 6,101,684 issued to M.H. Ginocchio on August 15, 2000;
 US Patent 6,206,318 issued to B.A. Glass on March 27, 2001;
 US Patent 6,301,752 issued to S. Koppang on October 16, 2001;
 US Patent 6,425,165 issued to S. Koppang on July 30, 2002;
 US Design D464,875 issued to S. Koppang on October 29, 2002;
 25 US Patent 6,503,097 issued to F. Archanbault on January 7, 2003;
 US Patent 6,523,229 issued to T.L. Severson on February 25, 2003;
 US Patent 6,634,063 issued to J.M. Joseph on October 21, 2003;
 US Design D488,372 issued to M.G. Gambrell on April 13, 2004;
 US Patent 6,793,523 issued to J. Wei on September 21, 2004;

US Patent 7,004,786 issued to S.A. Bloom et al., on February 28, 2006;
 US Patent 7,214,092 issued to G.I. Platt on May 8, 2007;
 US Design D544,338 issued to M.N. Christensen et al., on June 12, 2007;
 US Patent 7,247,799 issued to K. Mori et al., on July 24, 2007;
 5 US Patent 7,230,181 issued to J.W. Simmons et al., on June 12, 2007;
 US Patent 7,318,567 issued to K. Mori et al., on January 15, 2008;
 US Design D575,632 issued to J.M. Morelock et al., on August 26, 2008;
 US Design D592,039 issued to H. Okuda on May 12, 2009;
 US Design D596,013 issued to M.L. Simmons on July 14, 2009;
 10 US Design D599,196 issued to C. Ruffin et al., on September 1, 2009;
 US Patent 7,610,661 issued to B. Sween et al., on November 3, 2009;
 US Design D604,589 issued to B. Johansson on November 24, 2009;
 US Design D608,628 issued to O. Knuuttila on January 26, 2010;
 US Design D625,582 issued to R.L. Cleghorn et al., on October 19, 2010;
 15 US Design D629,671 issued to T. Ohori et al., on December 28, 2010;
 US Patent 7,868,250 issued to P. Kolada on January 11, 2011;
 US Patent 7,882,600 issued to B.T. Judd on February 8, 2011;
 USDesign D652,710 issued to K. Yokota et al., on January 24, 2012;
 US Design D657,054 issued to G.S. Bacon on April 3, 2012;
 20 US Patent 8,203,077 issued to J. Honeycutt et al., on June 19, 2012;
 US Patent 8,209,820 issued to J. Aparbal on July 3, 2012;
 US Patent Application US2010/0192330 filed by E.L. Walker, and
 published on August 5, 2010.

25 It is believed that a large portion of the cord management devices found in
 the prior art did not enjoy a lasting commercial success. Such a low market
 response to these devices can be attributed to several factors, including
 complexity, adaptability, appearance and the level of skill required to use
 them.

It is believed that there is a market need for a cord management device that has a simple construction, that can be understood at a first glance, and that can be used with minimum instruction.

5 SUMMARY OF THE INVENTION

10 In the present invention, there is provided a cord management sleeve that is made of two parts with a slot in each part. The slots are aligned with each other to insert segments of a cord in the sleeve. The alignment of the slots is set off for holding the segments of the cord inside the sleeve, so that the cord is held in a compact and orderly manner, in a bow-tie-like arrangement. The segments can then be aligned and pulled along to form loops of equal length so that the bundled cord has a neat and organized appearance.

15 In a first aspect of the present invention, there is provided a cord management sleeve that has a first and second halves, each having a hollow cylindrical shape. The first half is coaxially engaged into the second half, for rotation into the second half about a common axis. The first half has a circumferential ridge on an end thereof. The second half has a circumferential groove on an end thereof. The circumferential ridge is engaged into the circumferential groove with a sliding fit so that both halves are held to each other end-to-end. Each of the halves has a longitudinal slot therein, and these longitudinal slots are movable relative to each other by rotation of one half relative to the other, for selectively aligning the slots or setting off an alignment of the slots.

This cord management sleeve is easy to understand at a glance so that commercialization can be made with minimum instruction. This cord

management sleeve is also easy to use for retaining cords of all sizes and types.

5 In another aspect of the present invention, there is provided a cord management sleeve wherein the first half is coaxially engaged into the second half without interlocking joint, for rotation into the second half. Each half has a longitudinal slot therein, as in the aforesaid embodiment. This cord management sleeve is easier to manufacture than the first-mentioned embodiment.

10

This brief summary has been provided so that the nature of the invention may be understood quickly. A more complete understanding of the invention can be obtained by reference to the following detailed description of the preferred embodiments thereof in connection with the attached
15 drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Four preferred embodiments of the present invention and variants thereof
20 are illustrated in the accompanying drawings, in which like numerals denote like parts throughout the several views, and in which:

FIG. 1 is a perspective, exploded view of a first preferred embodiment of a cord management sleeve;

25

FIG. 2 is a perspective view of the first preferred embodiment of the cord management sleeve in use on an appliance cord;

FIG. 3 is a perspective view of the first preferred embodiment of the present invention with the slots in both halves aligning with each other;

5 **FIG. 4** is a cross-section view of the first preferred embodiment of the cord management sleeve, showing a variant in the shape of the opening along the core of the sleeve;

FIG. 5 is a side view of a second preferred embodiment of the cord
10 management sleeve;

FIG. 6 is a side view of the second preferred embodiment of the cord management sleeve showing a variant in the shape of the slots therein;

15 **FIG. 7** is a side view of a third preferred embodiment of the cord management sleeve;

FIG. 8 is a side view of a fourth preferred embodiment of the cord
20 management sleeve;

FIG. 9 shows a variant of the fourth preferred embodiment.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

25 Referring to the drawings in **FIGS. 1, 2 and 3**, the first preferred embodiment of the present invention will be described. The first preferred embodiment of the cord management sleeve **20** is comprised of two hollow cylindrical halves **22, 24** having a same inside diameter. The first half **22**

and a circumferential ridge **26** on the end thereof. The other half **24** has a circumferential groove **28** in one end thereof, and the groove **28** has location and dimensions to receive the ridge **26** therein in such a way as to retain both halves **22, 24** together while allowing a rotational movement of each half relative to the other. The groove **28** has shape and dimensions to receive the circumferential ridge **26** therein with a free sliding fit.

The location and dimensions of the ridge **26** and groove **28** are such that when both halves **22, 24** are interlocked with each other, the joint between the halves forms a single circumferential line **30** on the outside surface of the sleeve **20**, as shown in **FIG. 2** and **3**.

Both halves **22, 24** have a respective longitudinal slot therein. These slots are labelled **32** and **34** respectively. As can be understood, these slots **32, 34** extend throughout the shell of the sleeve **20**. These slots **32, 34** have a width to accommodate the thickness of a cord to be inserted in the sleeve **20**. When both slots **32, 34** are aligned with each other such as shown in **FIG. 3**, an electric cord can be inserted in the sleeve **20** one or several segments at the time.

20

The first preferred cord management sleeve **20** can be made of wood, plastic or metal, according to the choice of the designer and the intended application. A sleeve made of wood for example, can be stained to match the furniture in the room where the sleeve will be used, to enhance the decor of the room.

25

The exterior appearance of the sleeve according to the first preferred embodiment is a fat look, with a slightly convex side and rounded ends. It is believed that this shape has better visual appeal than the straight tubing

shape in the other preferred embodiments presented herein. Other shapes may also be used according to the choice of the designer.

5 The preferred sleeve **20** is made of a material that has resilience, such that the half **22** with the ridge **26** can be squeezed slightly and inserted in the groove **28** in the other half **24** wherein it expands and remains locked to the other half **24**.

10 Referring now to **FIG. 2**, the cord **40** is preferably bent in equal segments **42** and inserted one segment at the time into the sleeve **20**. The halves **22**, **24** are then rotated to set off the alignment of the slots **32**, **34** to keep the cord segments **42** captive inside the sleeve, and to maintain the cord **40** in a neat and tidy configuration, as shown in **FIG. 2**. The segments **42** can be pulled along the axis of the sleeve **20** to form loops of a same length.

15 Different sleeve sizes are used for different cord sizes and lengths. For example, a first embodiment of the preferred sleeve **20** with a one inch inside diameter can hold 12 strands of a 16-2 AWG extension cord. Similarly, a half-inch inside diameter sleeve can hold 12 strands of a 22-2
20 AWG cord, such as the cord of a battery charger for a cell phone for example.

When the cord is needed, the slots **32**, **34** are realigned and one or more segments **42** are taken out of the sleeve **20** to make up for the length of cord
25 needed. The slots **32**, **34** are set off alignment again to hold the remaining segments inside the sleeve **20**.

Referring to **FIG. 4**, the inside diameter of the preferred sleeve **20** needs not be a perfect circle. The inside openings in the halves **22**, **24** can be oval

for example as shown at label **50**, with the longer axis of the ellipses aligning with its respective slots **32, 34**. When the two halves **22, 24** are rotated relative to each other, the inside opening **52** of the combined halves of the sleeve **20** is much smaller than the ellipse **50**, providing a tightening
5 action on the remaining segments inside the sleeve **20**.

The elliptical shape of the openings **50** through the sleeve **20** is optional. It has been found that the first preferred cord management sleeve **20** with a circular opening works just as good with 4 strands therein as it does with
10 12 strands. An electrical cord has a certain degree of resilience, and when the cord **40** is bent and inserted in the sleeve, the resiliency of the cord keeps the segments **42** in frictional contact with the inside surface of the sleeve **20**. In fact, the preferred sleeve **20** needs not to be packed full to work as expected.

15 Referring now to **FIG. 5**, the second preferred embodiment of the cord management sleeve according to the present invention will be explained. In this second embodiment, the sleeve **60** can be made of metal tubing and the joint **62** between the halves **64, 66** can be a preformed joint made by
20 common tube expander tools, such as those used for flaring tube ends.

The overlap "**A**" between the halves **64, 66** can be any length, as long as both halves are accessible for rotation by finger-grip strength. When this overlap "**A**" is sufficiently long, such as half the length of one of the halves
25 **64, 66**, there is no need for the preformed joint **62**. In that context, the third and fourth embodiments **80, 82** illustrated in **FIGS. 7** and **8** respectively, with one half partially or entirely overlapping the other, are satisfactorily for obtaining the desired results with smaller sizes of electrical cords, for example.

Coming back to **FIG. 6**, the slots **68, 70** in the cord management sleeve **60'** can be straight or curved such as in a helix-like form for example. Although a sleeve **60** with helix-like slots might be better to retain all the segments of a cord therein, this type of slot might be more difficult to understand by the general public.

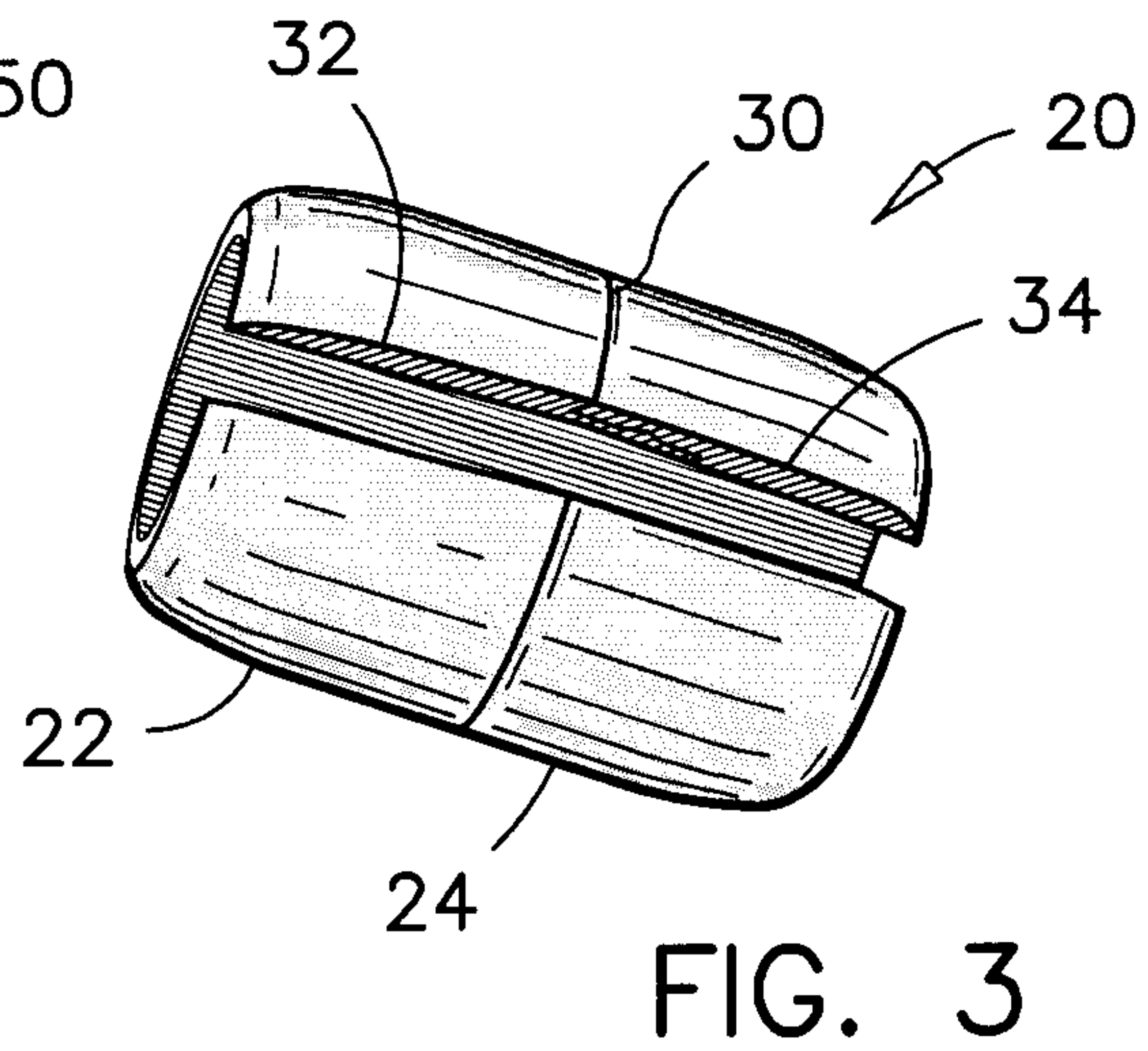
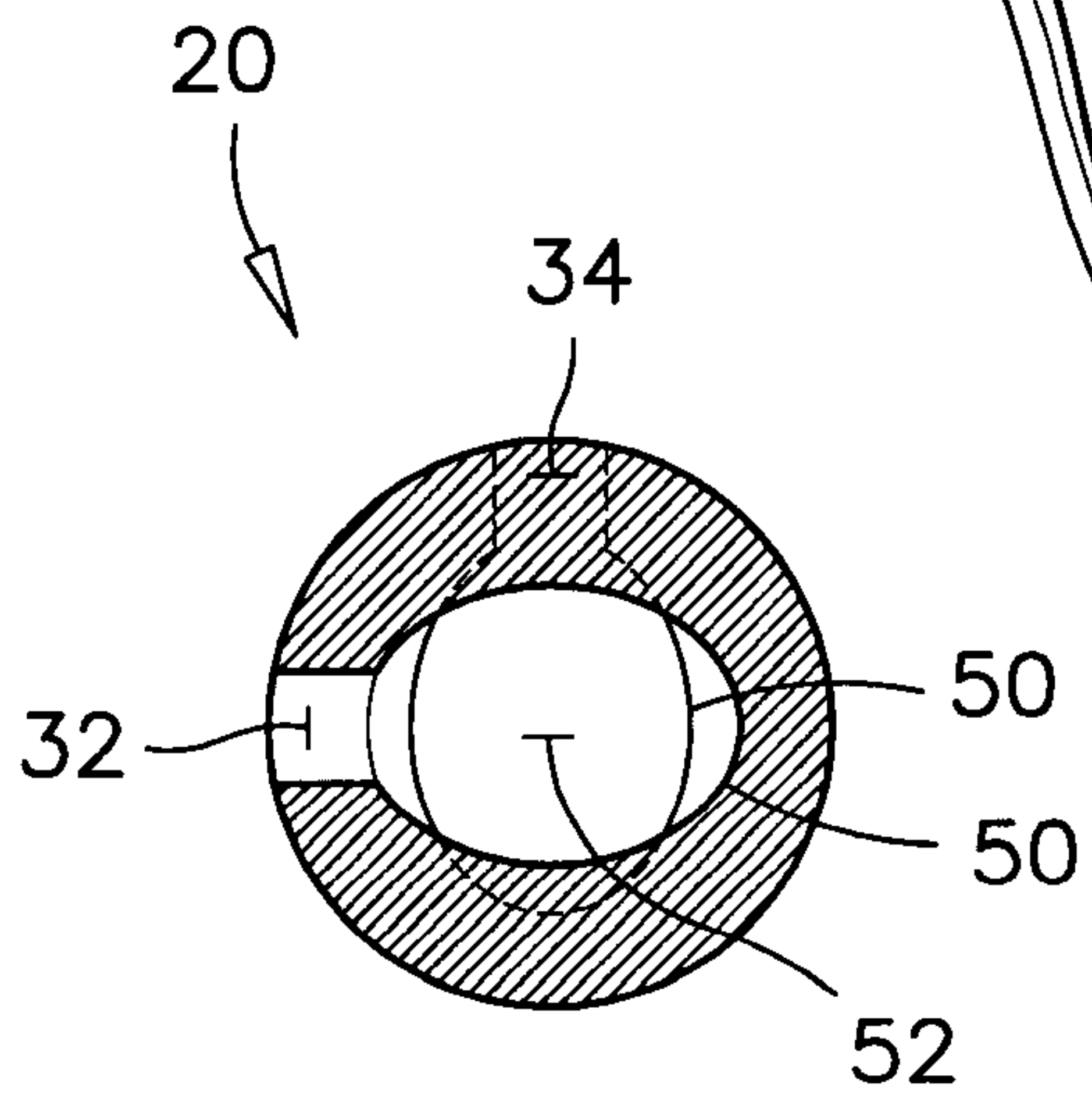
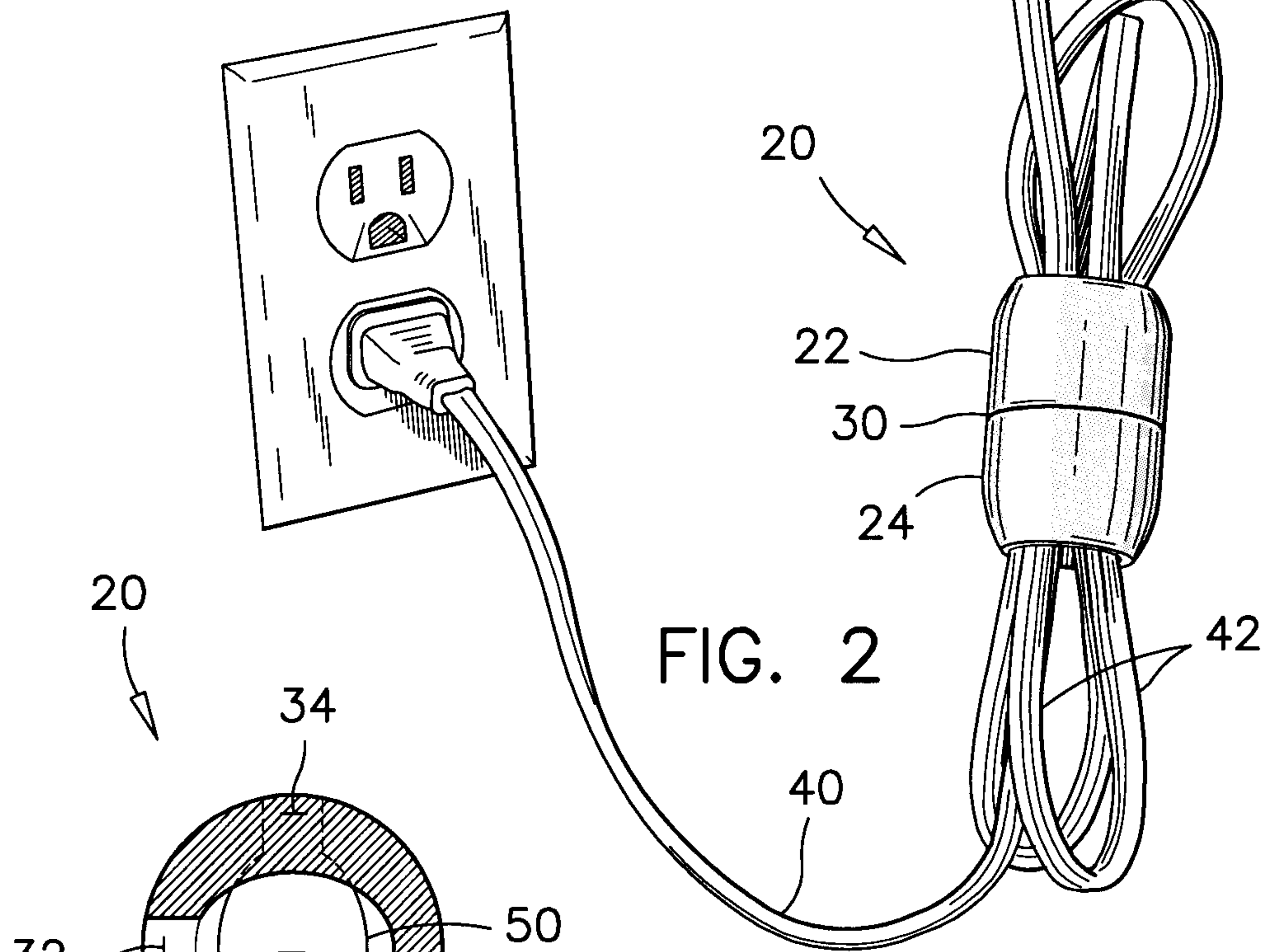
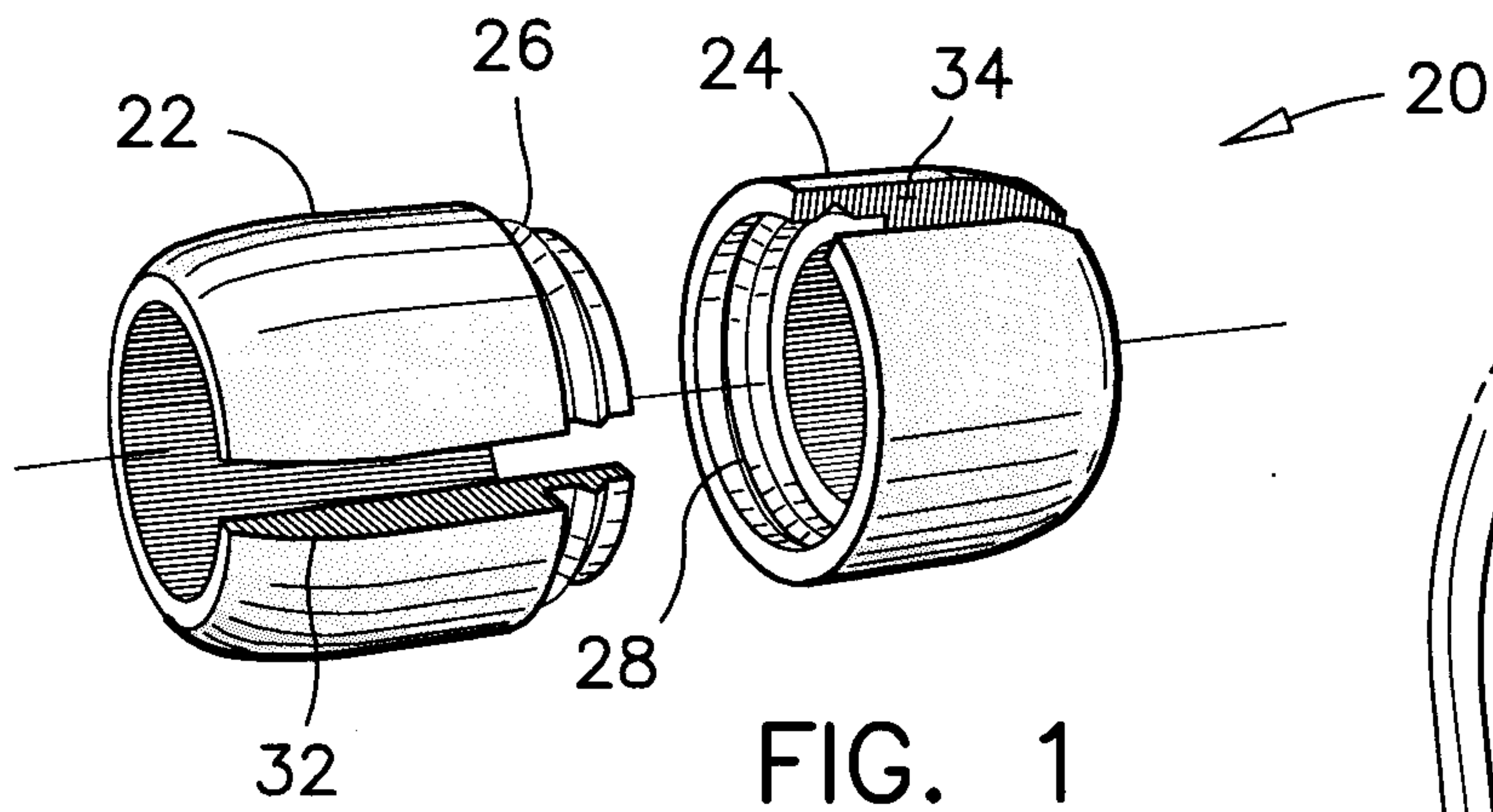
FIG. 9 shows a variant **84** of the fourth preferred embodiment **82**, wherein the outer half **86** is held centred over the inner half **88** by a pair of raised shoulders **90** on the surface of the inner half **88**.

As to further construction details, and other method of use of the cord management sleeve according to the preferred embodiments of the present invention, these details should be apparent to those skilled in the art, and accordingly, further description relative to these aspects is deemed unnecessary.

CLAIMS

What is claimed is;

1. A cord management sleeve, comprising;
a first and second hollow tubular shells;
said first hollow tubular shell being longer than said second hollow tubular shell;
said second hollow tubular shell being coaxially and movably mounted over a central segment of said first hollow tubular shell;
each of said first and second hollow tubular shells having a C-shaped cross-section along a full length thereof; said C-shaped cross-section defining a slot extending there through, along a full length thereof, and
said slots being movable relative to each other by rotation of said first and second hollow tubular shells relative to each other, for selectively aligning said slots or setting off an alignment of said slots.
2. The cord management sleeve as claimed in **claim 1**, wherein said said first hollow tubular shell has a raised shoulder relative to an outside surface thereof, on each end thereof; and said second hollow tubular shell being coaxially and movably mounted over a central segment of said first hollow tubular shell between said raised shoulders.



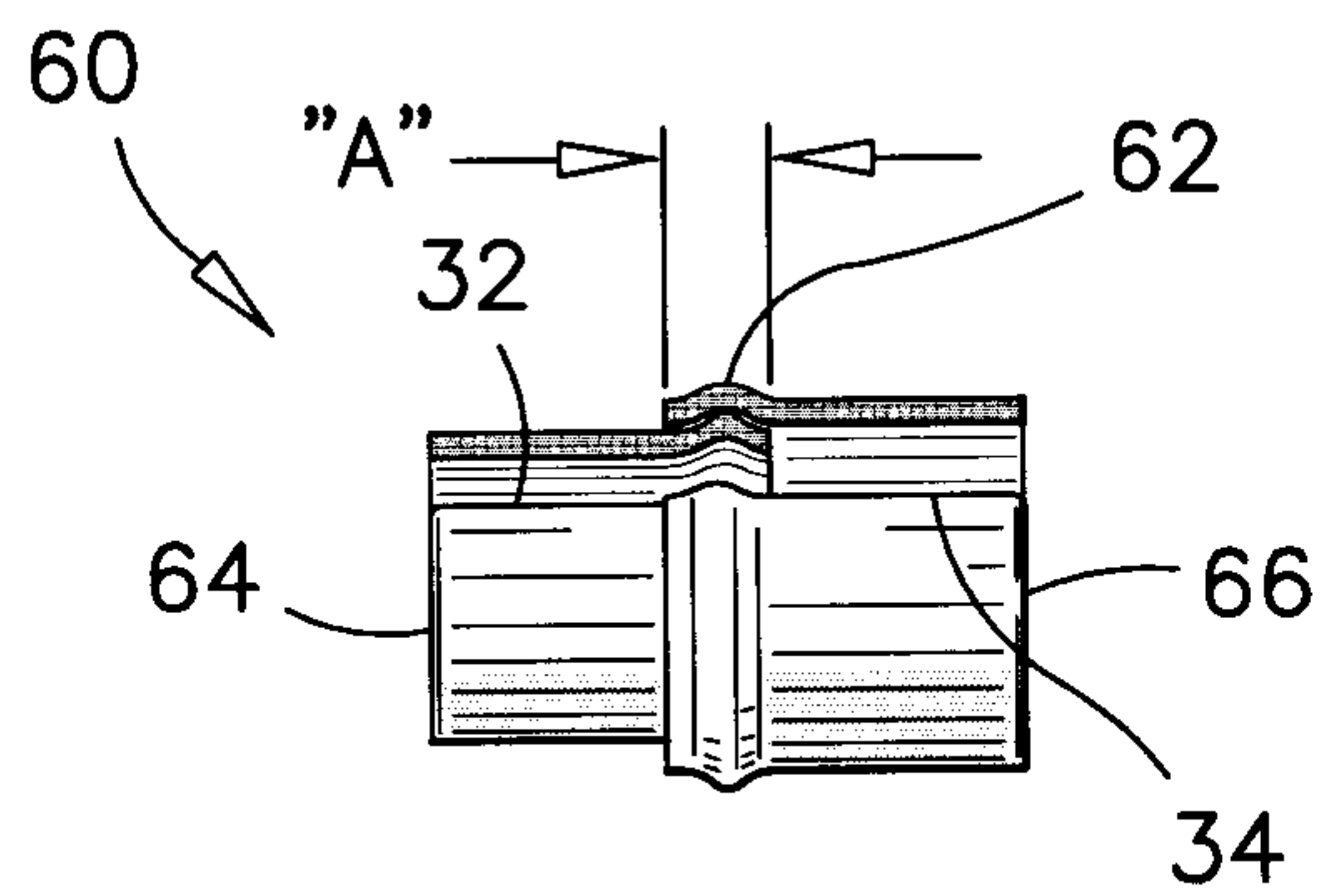


FIG. 5

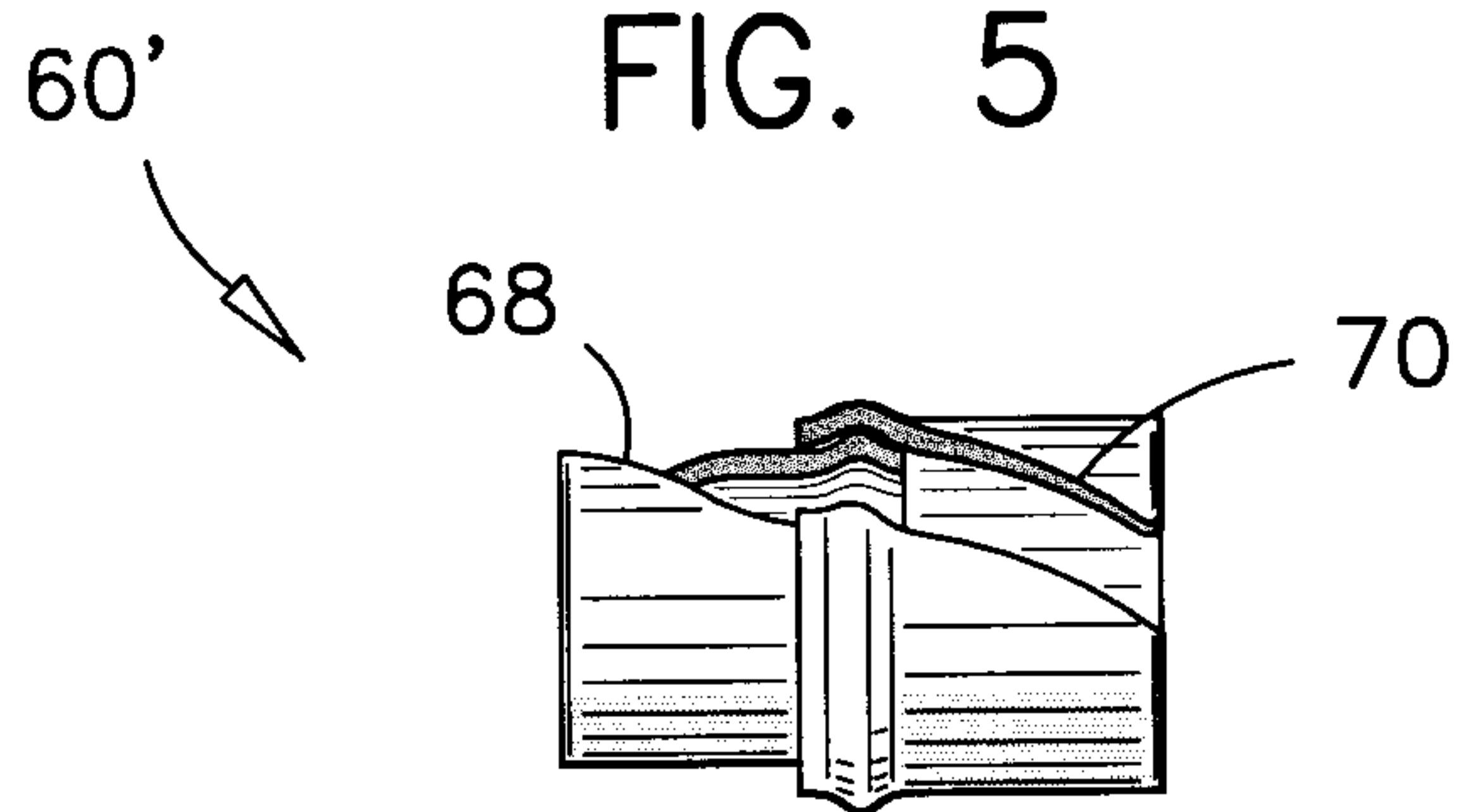


FIG. 6

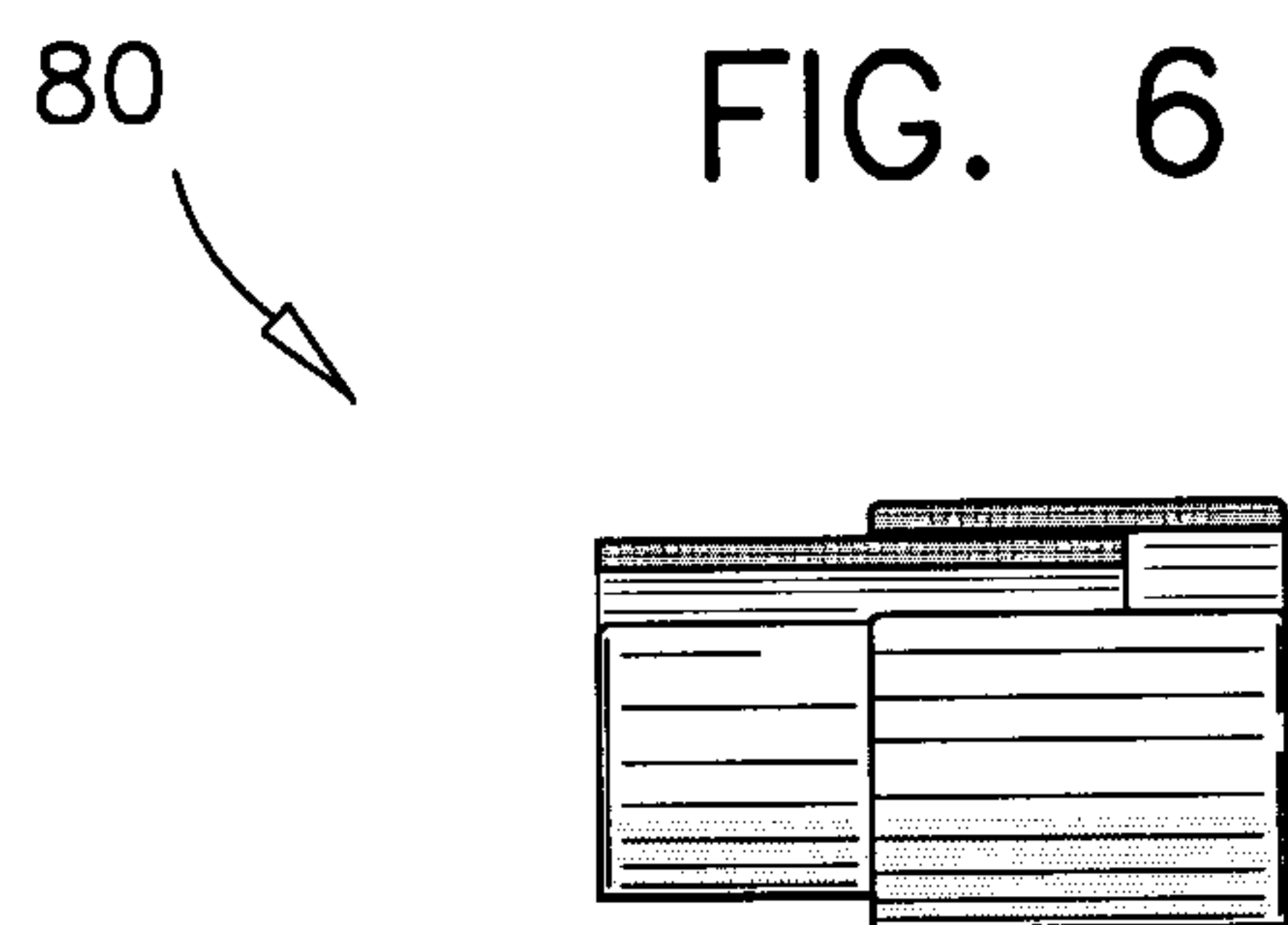


FIG. 7

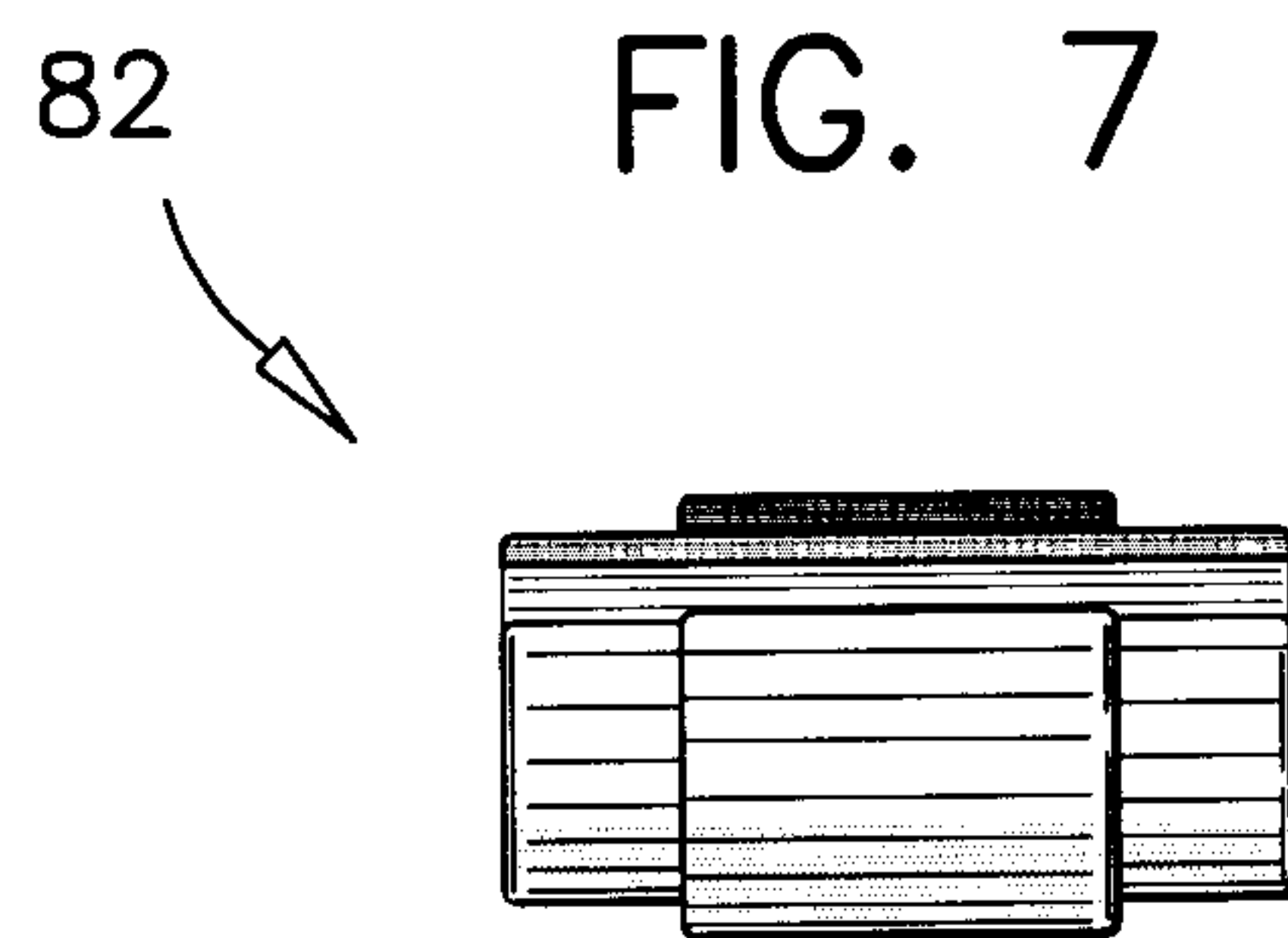


FIG. 8

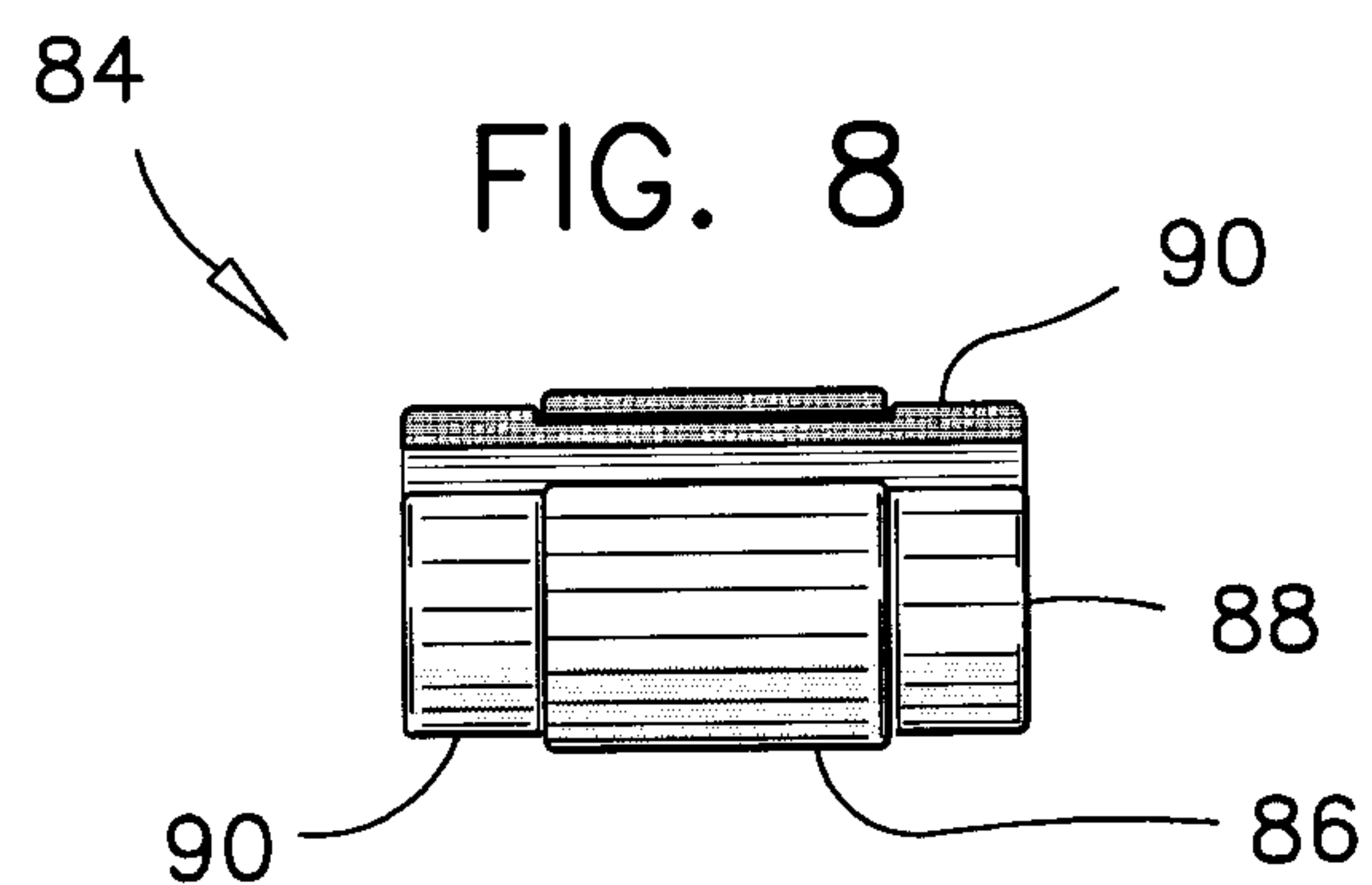


FIG. 9

