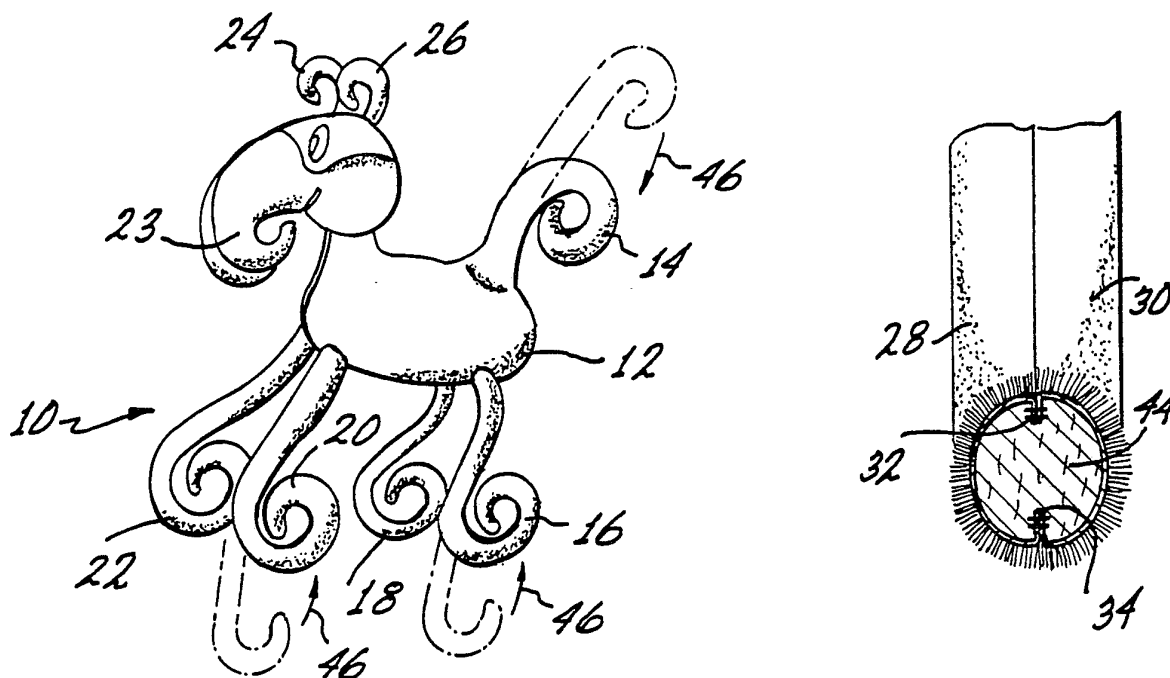




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁴ : A63H 3/02	A1	(11) International Publication Number: WO 88/ 04567 (43) International Publication Date: 30 June 1988 (30.06.88)
<p>(21) International Application Number: PCT/US87/03313</p> <p>(22) International Filing Date: 11 December 1987 (11.12.87)</p> <p>(31) Priority Application Number: 944,057</p> <p>(32) Priority Date: 18 December 1986 (18.12.86)</p> <p>(33) Priority Country: US</p> <p>(71) Applicant: MATTEL, INC. [US/US]; 5150 Rosecrans Avenue, Hawthorne, CA 90250 (US).</p> <p>(72) Inventor: AUTORE, Gregory, J. ; 3556 Garnet, #321, Torrance, CA 90503 (US).</p> <p>(74) Agents: SULLIVAN, Daniel, F. et al.; Mattel, Inc., M.S. 01-111-A03, 5150 Rosecrans Avenue, Hawthorne, CA 90250-6692 (US).</p>		<p>(81) Designated States: AT (European patent), AU, BE (European patent), BR, CH (European patent), DE (European patent), FR (European patent), GB, GB (European patent), IT (European patent), KR, LU (European patent), NL (European patent), SE (European patent).</p> <p>Published With international search report.</p>

(54) Title: STUFFED TOY HAVING SPIRAL-SHAPED APPENDAGES



(57) Abstract

A stuffed toy (10) having spiral-shaped, form-retaining appendages (14). The appendages (14) have spiral-shaped outer covers (28), (30) made out of a compliant material which are secured together at longitudinal seams (32), (34) extending along the length of the appendages (14). Fill material (44) is stuffed inside the appendages (14) formed by the covers (28), (30). As a result, tapered spiral-shaped appendages (14) are fabricated which return to their original shape after being deformed without the necessity of using elastic bands, metal devices, or resilient material.

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---STUFFED TOY HAVING SPIRAL-SHAPED APPENDAGES---

BACKGROUND OF THE INVENTION

The present invention relates generally to stuffed toys and to the methods of fabricating such toys, and more particularly to a stuffed toy having spiral-shaped form-retaining appendages and to the method of fabricating such a toy.

In the past, various types of form-retaining toys or figures have been fabricated. For example, U.S. Patent Nos. 4,226,046; 3,928,933; 3,557,436; 3,448,539; 3,097,446; and 2,830,402 disclose toys or figurines using metal devices or resilient material to retain their shapes. Another shape-retaining toy is shown in U.S. Patent No. 2,853,831. Resilient bracelets are disclosed in U.S. Patent Nos. 788,221; 243,704; and 240,096. Stuffed or soft toys having appendages which can be manipulated or positioned are described in U.S. Patent Nos. 4,540,378; 4,170,086; 3,942,283; 2,997,810; and 1,435,267. U.S. Patent No. 4,296,567 describes a figure toy which can be suspended from

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a support using the weighted ends of the toy's flexible appendages. Finally, a form-retaining stuffed figurine is disclosed in U.S. Patent No. 4,505,687 which utilizes a piece or band of elastic in a partially tensioned state to retain the figurine in a predetermined coiled shape.

None of the above patents discloses a toy having a spiral-shaped, stuffed appendage which may be manually deformed and then released, resulting in the appendage returning to its original shape without the necessity of using an elastic band, metal device, or resilient material. Elimination of elastic bands, metal devices and resilient material from stuffed form-retaining appendages would provide a more economical toy. Such spiral-shaped, form-retaining appendages allow a child to suspend a toy from a support, wrap the appendages around the toy, or play with the toy in a variety of different ways. Accordingly, there is a need in the toy manufacturing arts for a stuffed toy having spiral-shaped, form-retaining appendages and for a method of fabricating such a toy.

SUMMARY OF THE INVENTION

It is an object of this invention to provide a stuffed toy having spiral-shaped, form-retaining appendages which retain their shape without the necessity of using elastic bands, metal devices or resilient material.

It is another object of this invention to provide a stuffed toy having spiral-shaped, form-retaining appendages which have fabric outer covers secured together along longitudinal seams.

It is still another object of this invention to provide a stuffed toy having spiral-shaped, form-retaining appendages which are stuffed harder with fill material near the ends of the tapered appendages.

It is still another object of this invention to provide a method of fabricating a stuffed toy having spiral-shaped, form-retaining appendages.

These and other objects and advantages are attained by a stuffed toy having spiral-shaped, form-retaining appendages. The appendages have spiral-shaped outer covers made out of a compliant material which are secured together at longitudinal seams extending along the length of the appendages. Fill material is stuffed inside

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the appendages formed by the covers. As a result, tapered spiral-shaped appendages are fabricated which return to their original shape after being manually deformed without the necessity of using elastic bands, metal devices, or resilient material.

The various features of the present invention will be best understood, together with further objects and advantages by reference to the following description of the preferred embodiments taken in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of an embodiment of the stuffed toy of the present invention having spiral-shaped, form-retaining appendages;

FIG. 2 is an enlarged perspective view of one embodiment of a spiral-shaped, form retaining appendage;

FIG. 3 is a cross-sectional view taken in the direction of arrows 3-3 shown in FIG 2;

FIG. 4 is an enlarged perspective view of another embodiment of a spiral-shaped, form-retaining appendage;

FIG. 5 is a cross-sectional view taken in the direction of arrows 5-5 shown in FIG. 4;

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FIGS. 6 through 8 are perspective views showing how different embodiments of the stuffed toy of the present invention may be suspended from a support using the spiral-shaped, form-retaining appendages; and

FIG. 9 is a plan view of an outer cover cut from a spiral-shaped pattern.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following specification taken in conjunction with the drawings sets forth the preferred embodiments of the present invention in such a manner that any person skilled in the toy manufacturing arts can use the invention. The embodiments of the invention disclosed herein are the best modes contemplated by the inventor for carrying out his invention in a commercial environment, although it should be understood that various modifications can be accomplished within the parameters of the present invention.

Referring now to the drawings and particularly to FIG. 1, a preferred embodiment of the stuffed toy 10 of the present invention is shown. The toy 10 has a body portion 12 with a plurality of spiral-shaped, form-retaining appendages 14 through 26 attached thereto. Any number of

appendages may be attached to the toy 10. Also, the appendages may vary in shape or size. The shape or size of the body portion 12 may also vary and may represent any animate or inanimate form. For example, different embodiments of the toy 10 are shown in FIGS. 6 through 8.

FIG. 4 shows one embodiment of the spiral-shaped, form retaining appendages. The shown appendage has outer covers 28 and 30 which are secured together along longitudinal inner and outer seams 32 and 34, respectively. Seams 32 and 34 are located along the curved inner and outer peripheries of the appendage, respectively, as shown in FIG. 4. Covers 28 and 30 may be made from any type of flexible or compliant material such as fabric, cloth, or the like. FIG. 9 shows one such outer cover which has been cut from a spiral-shaped pattern. Note that the cover has a width w which gradually diminishes in size as the appendage tapers from position 36 where the spiral shape starts to position 38 near the free end of the appendage. As a result, the cross-section of the appendage decreases in size as the width w gradually diminishes along the spiral shape. Upper portion 40 of the cover is used to attach the appendage to the body portion 12 of the toy 10.

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The appendage shown in FIG. 4 is fabricated by cutting covers 28 and 30 from a compliant material using a spiral-shaped pattern (see FIG. 9). The covers 28 and 30 are then secured together along seams 32 and 34 using any available method such as stitching, or the like. Typical stitches 42 are best shown in FIG. 3. Fill or stuffing material 44 is then placed inside the appendage formed by covers 28 and 30. Any type of fill material 44 may be used such as nylon, cotton, fiber fills, or the like which provides a soft appendage. The fill material 44 is preferably stuffed harder near positions 38 and 39 (see FIG. 9) of the tapered, spiral-shaped appendage for the reasons explained below.

After the covers 28 and 30 have been secured together and the appendage has been stuffed with fill material 44, the appendage provides form-retaining features due to its spiral shape and the seams 32 and 34 which furnish additional resiliency holding the appendage in its spiral shape. As such, the seams 32 and 34 act like a spring biasing or forcing the appendage to retain its original spiral shape. Stuffing the fill material 44 harder near positions 38 and 39 (see FIG. 9) also increases the resiliency of the appendage. Also the fill material 44 may

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be stuffed harder near position 36 if desired. As a result, after the appendages are stretched or deformed as illustrated by dashed lines in FIG. 1 and then released, they return to their original spiral shapes when released as indicated by arrows 46 without the necessity of using elastic bands, metal devices, or resilient material. The combination of using spiral-shaped covers, longitudinal seams and fill material stuffed harder near the ends of the tapered appendages furnishes desired resiliency for the soft, plush appendages.

FIGS. 6 through 8 show how different embodiments of the toy 10 may be suspended from a support 48 using the spiral-shaped, form-retaining appendages. Since the fill material 44 is stuffed harder near positions 38 and 39 (see FIG. 9), the spiral-shaped portion of the appendages may be easily secured to the support 48.

FIG. 2 shows another embodiment of the spiral-shaped, form-retaining appendages. The shown appendage has three outer covers 50 through 54 secured together at seams 56 through 62 forming a spiral-shaped appendage. The additional seams add increased resiliency to the appendage. Any desired number of seams or covers may be used for the appendages.

The above description discloses the preferred embodiments of the present invention. However, persons of ordinary skill in the toy field are capable of numerous modifications once taught these principles. Accordingly, it will be understood by those skilled in the art that changes in form and details may be made to the above-described embodiments without departing from the spirit and scope of the invention.

I CLAIM:

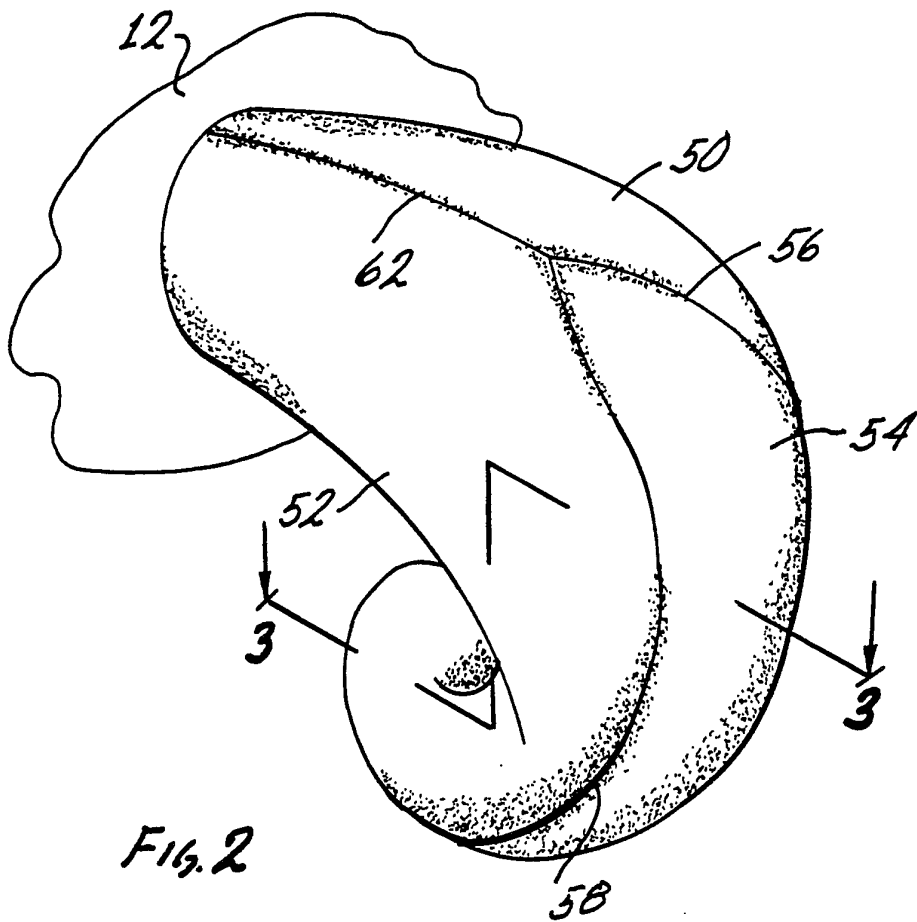
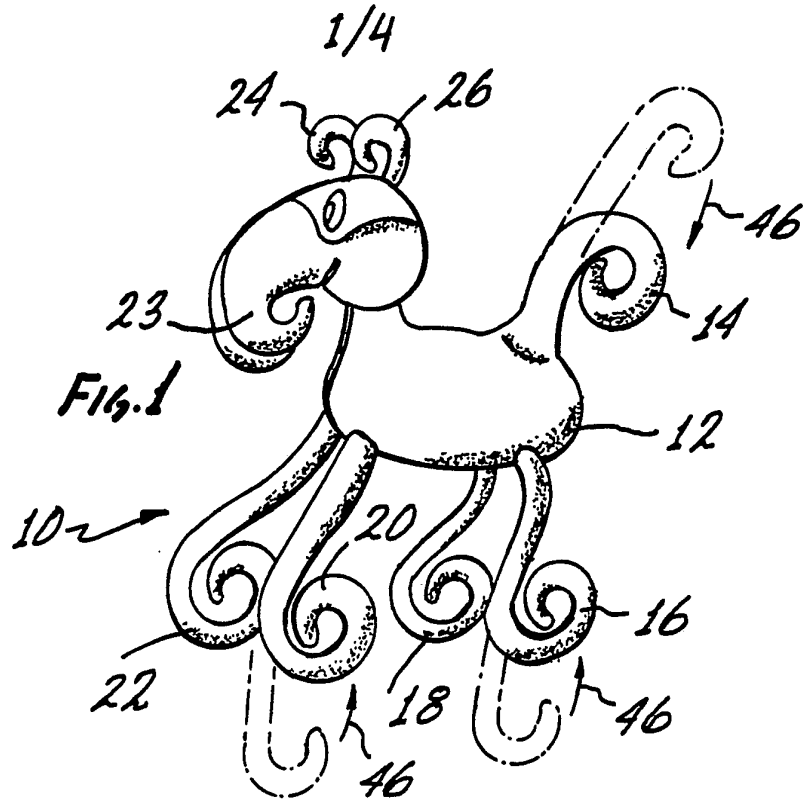
1. A stuffed toy comprising:
a body portion; and
at least one spiral-shaped appendage, said appendage including (a) at least two outer covers of compliant material secured together by seams extending longitudinally along the length of said appendage and (b) fill material stuffed inside said outer covers, said appendage having a cross-section which gradually diminishes in size along the length of said appendage forming a tapered spiral-shaped appendage, said appendage capable of returning to said tapered spiral shape after forces causing deformation of said appendage are removed.
2. The stuffed toy of Claim 1, wherein said outer covers are made of fabric material and stitched together along said seams.
3. The stuffed toy of Claim 2, wherein said fill material is stuffed harder near the free end of said appendage.
4. A stuffed toy comprising:
a body portion; and
at least one spiral-shaped appendage attached to said body portion, said appendage including (a) two spiral-

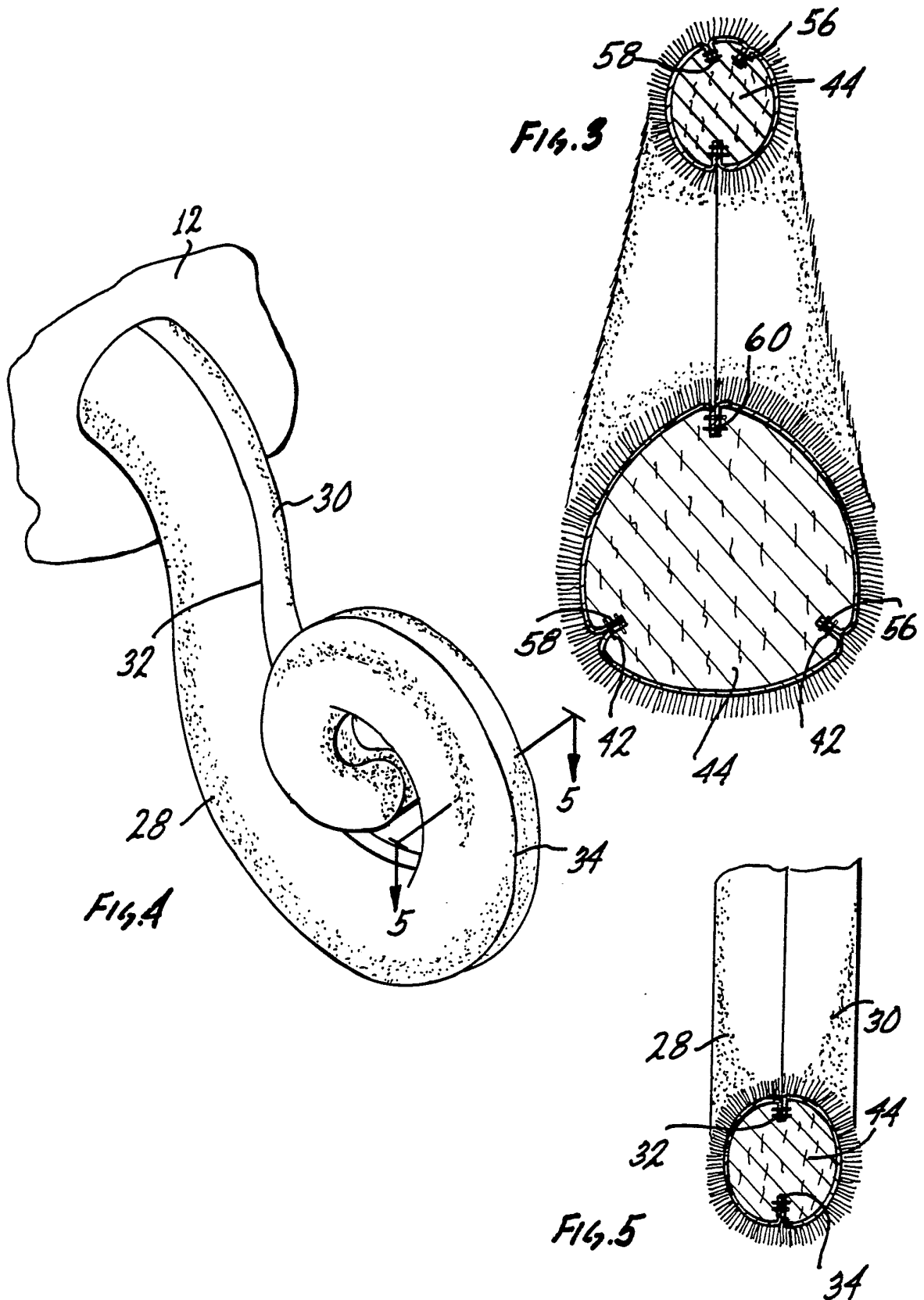
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shaped outer covers of compliant material secured together by seams extending longitudinally along the length of said appendage and (b) fill material stuffed inside said outer covers, said appendage having a gradually tapered spiral shape which diminishes in cross-section reaching a minimum size near the free end of said appendage, said appendage capable of returning to said tapered spiral shape after forces causing deformation of said appendage are removed, said fill material being stuffed harder near said free end.

5. A method of fabricating appendages for a stuffed toy comprising the steps of:
 - cutting at least two outer covers from a compliant material using a spiral-shaped pattern;
 - Securing said outer covers together along longitudinally extending seams;
 - stuffing said secured outer covers with a fill material so that a tapered spiral-shaped appendage is formed; and
 - attaching one end of said appendage to said stuffed toy, said appendage capable of returning to said tapered spiral shape after forces causing deformation of said appendage are removed.

6. The method of said Claim 5 wherein said fill material is stuffed harder at the free end of said appendage.





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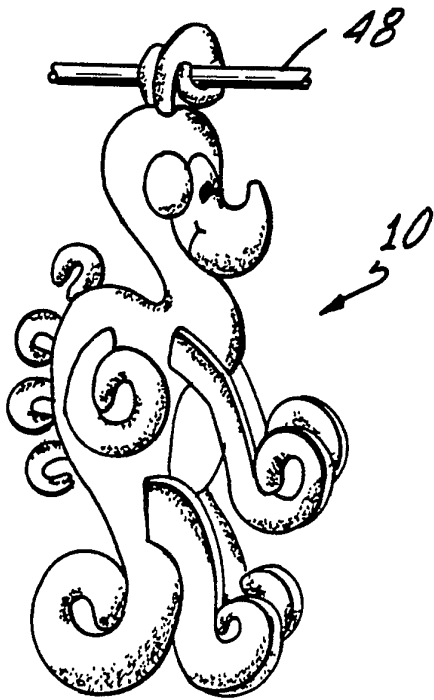


Fig. 6

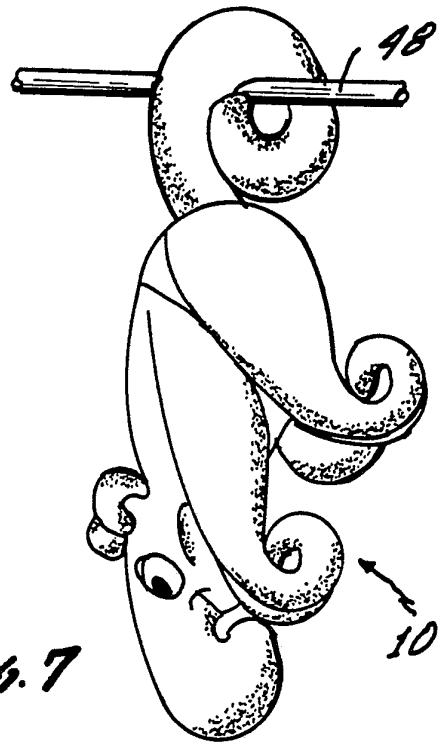


Fig. 7

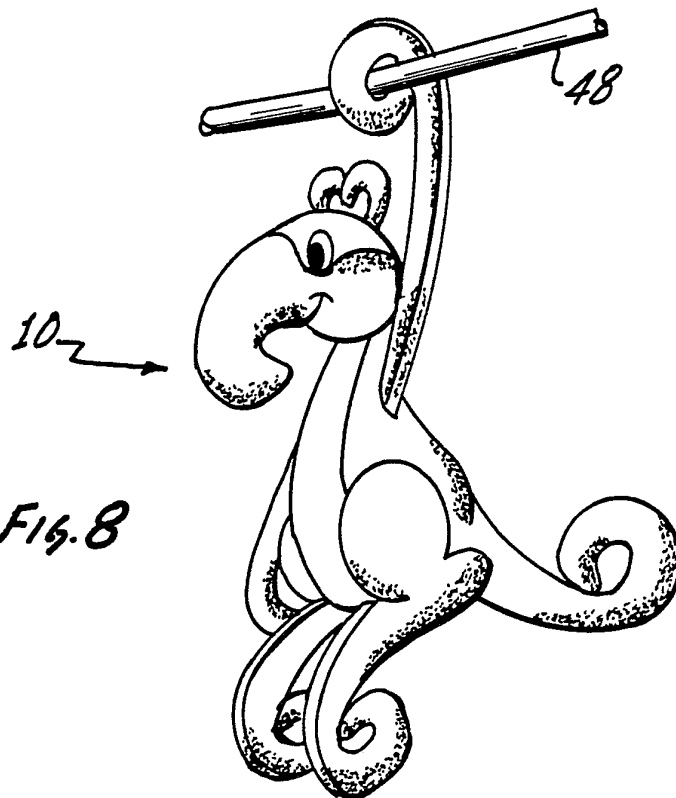


Fig. 8

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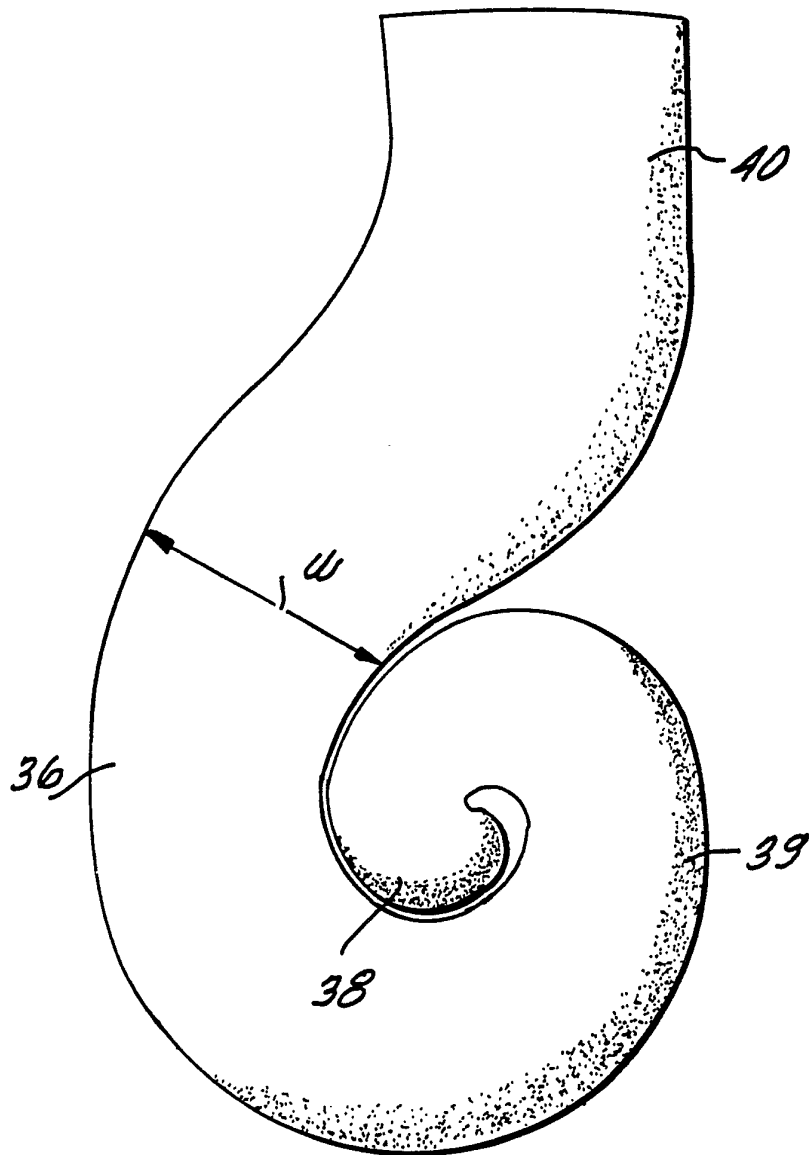


Fig. 9

INTERNATIONAL SEARCH REPORT

PCT/US87/03313

International Application No

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ¹		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC(4): A63H 3/02		
U.S. Cl.: 446/369		
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U.S.	446/314, 368, 369, 371	
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III. DOCUMENTS CONSIDERED TO BE RELEVANT ^{1,4}		
Category ⁵	Citation of Document, ⁶ with indication, where appropriate, of the relevant passages ^{1,7}	Relevant to Claim No. ^{1,8}
Y	US,A, 4,505,687 (MUNRO) 19 MARCH 1985 See entire document	1-6
Y	US,A, 4,540,378 (CUSIMANO) 10 SEPTEMBER 1985, see entire document	1-6
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IV. CERTIFICATION		
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28 JANUARY 1988	20 MAR 1988	
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ISA/US	Michael Brown <i>Michael Brown</i>	