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(54) **BEANIE OBJECTS**

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(57) **ABSTRACT**

An object has a covering that defines an internal pocket, a bendable support frame positioned inside the pocket and defining the shape of the object, and filling material provided inside the pocket and surrounding the support frame, the filling material comprised of a plurality of small particles.

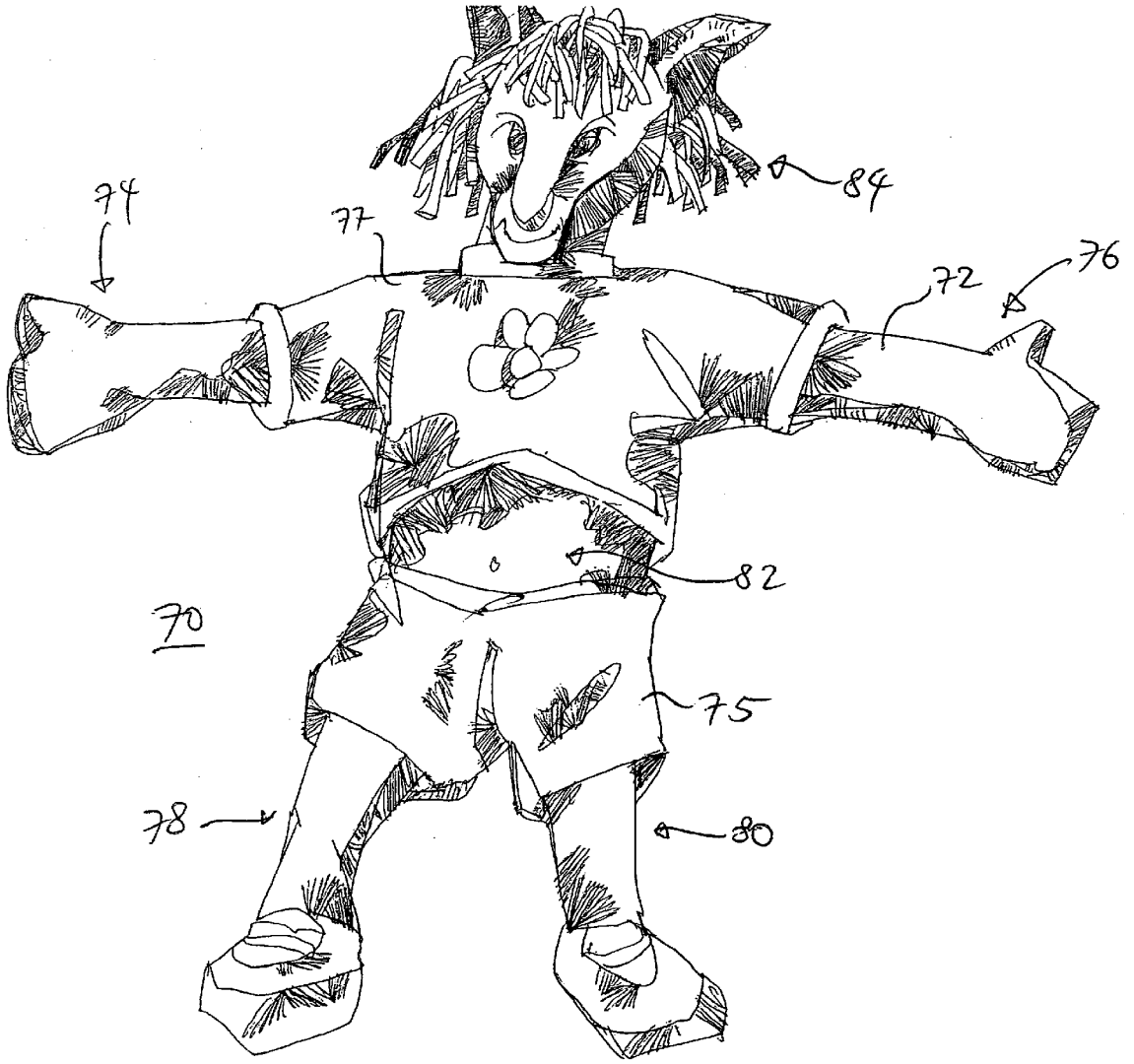


FIG. 1

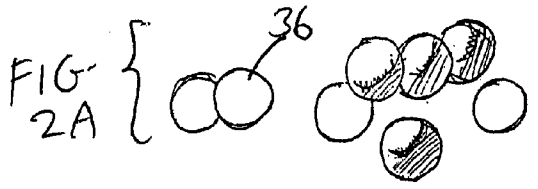


FIG. 2A

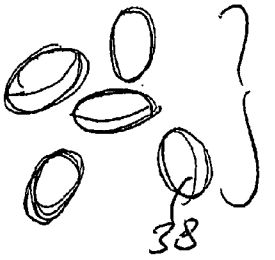


FIG. 2B

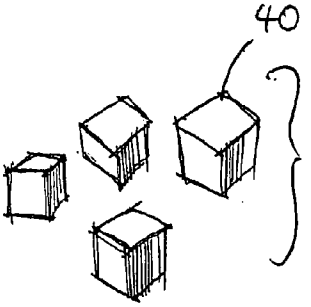


FIG. 2C

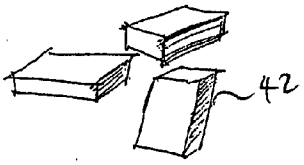


FIG. 2D

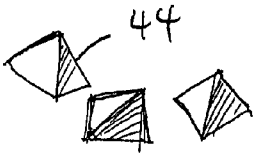


FIG. 2E

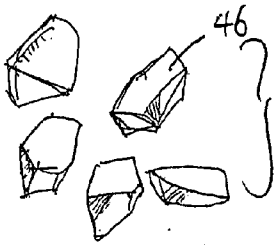


FIG 2F

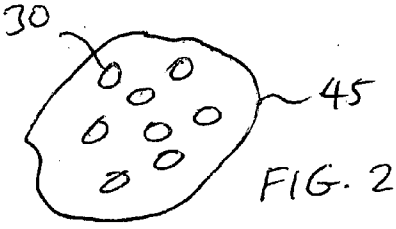


FIG. 2G

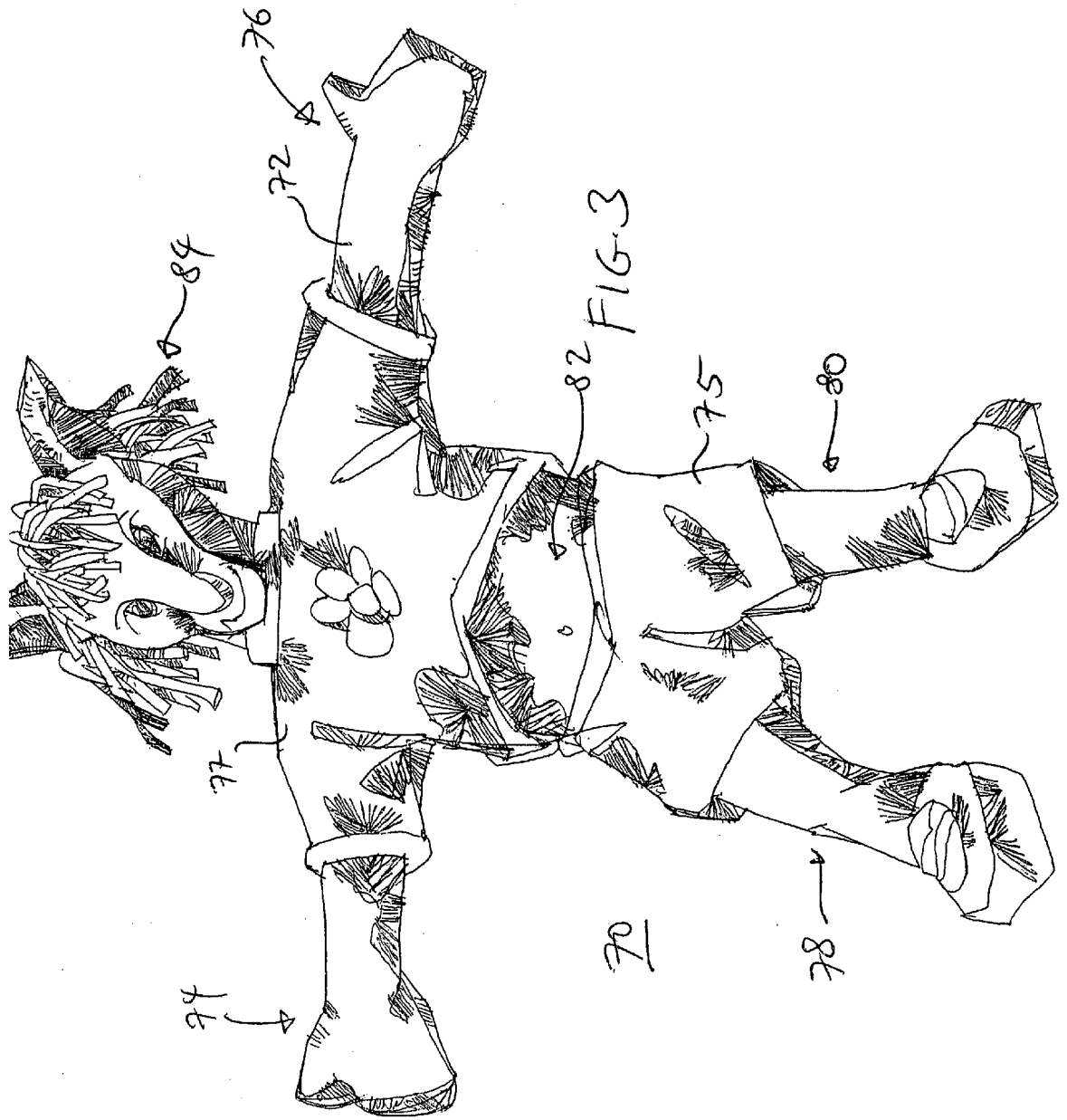


FIG-3

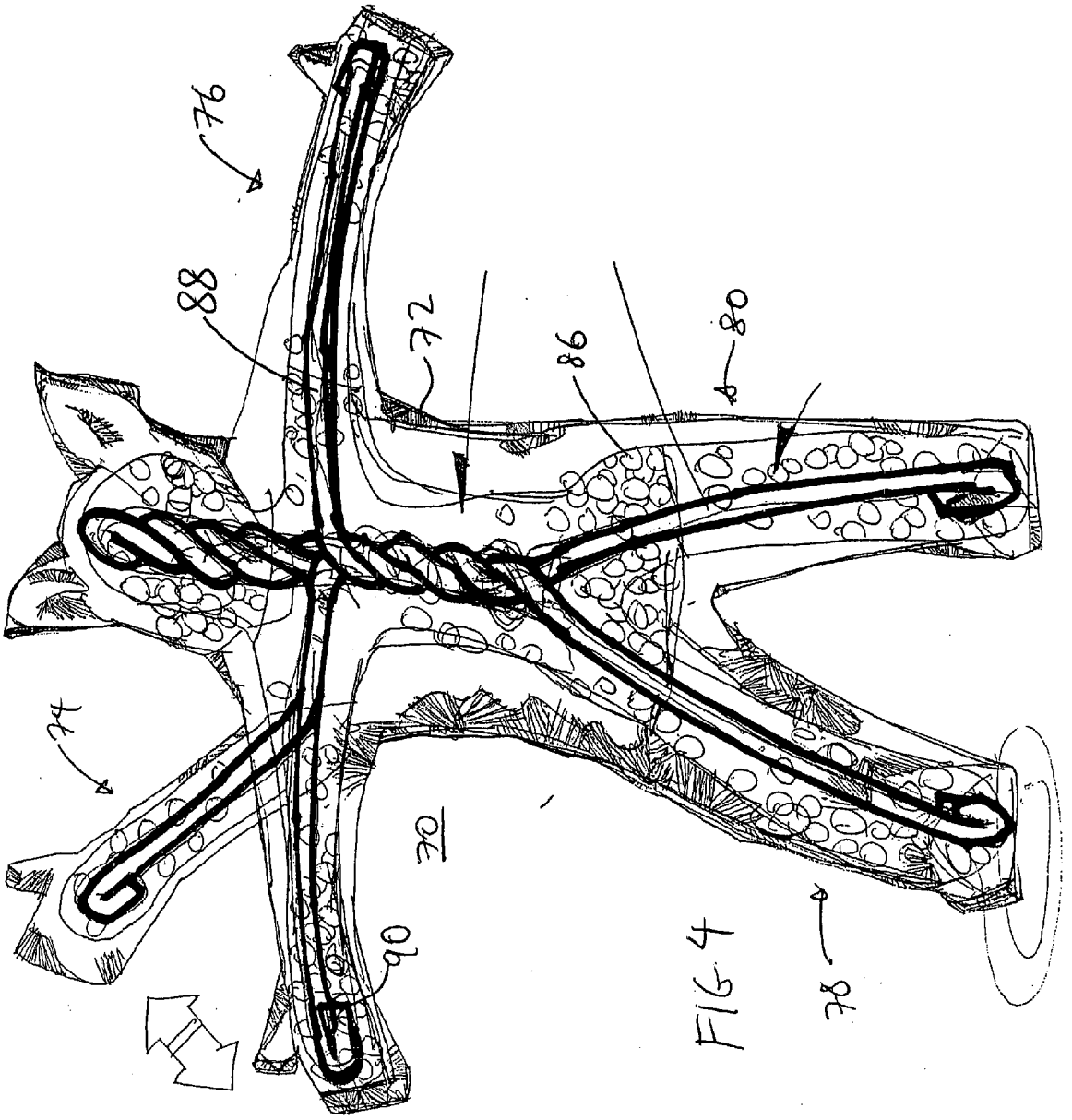


FIG. 4

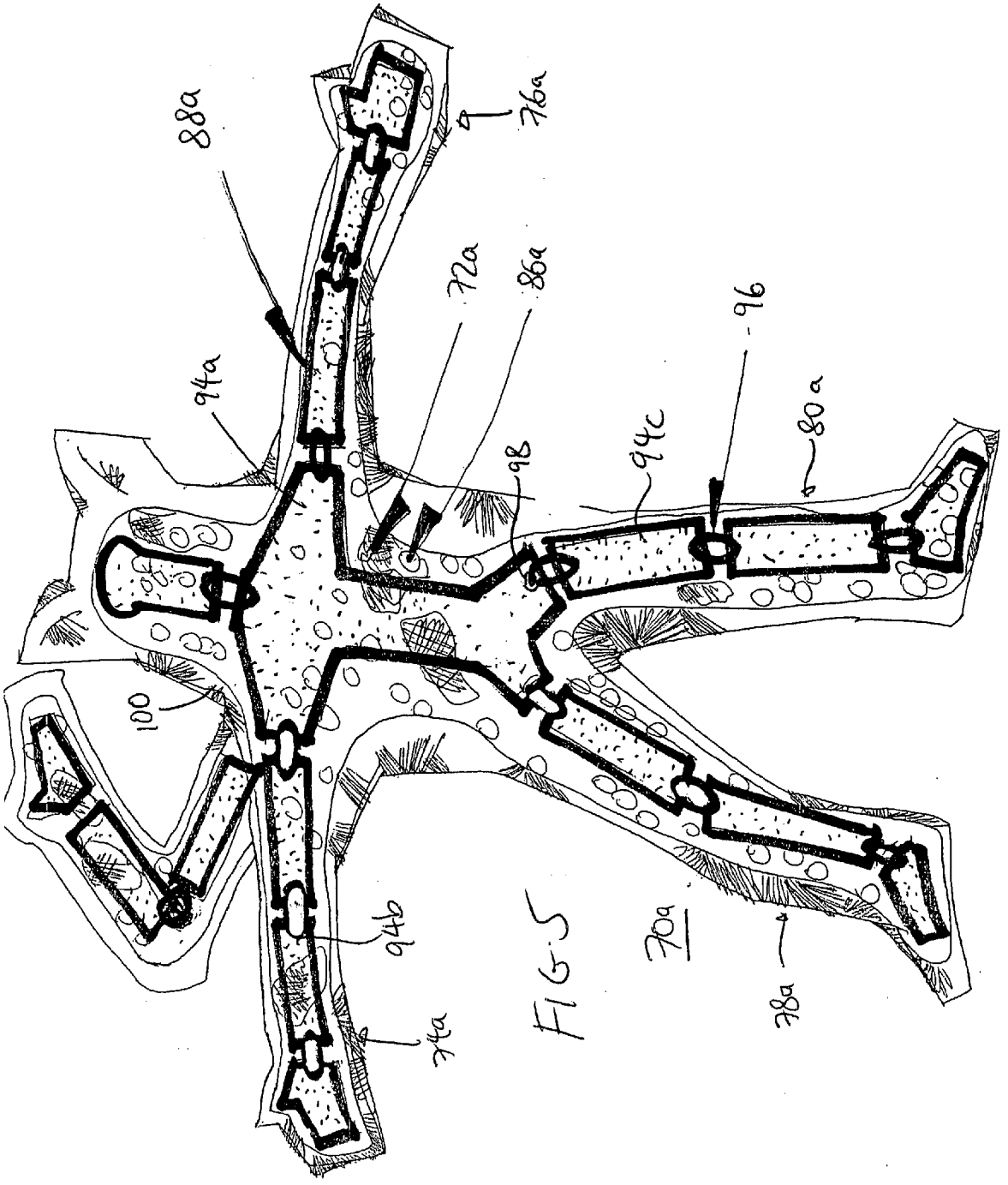


Fig. 5

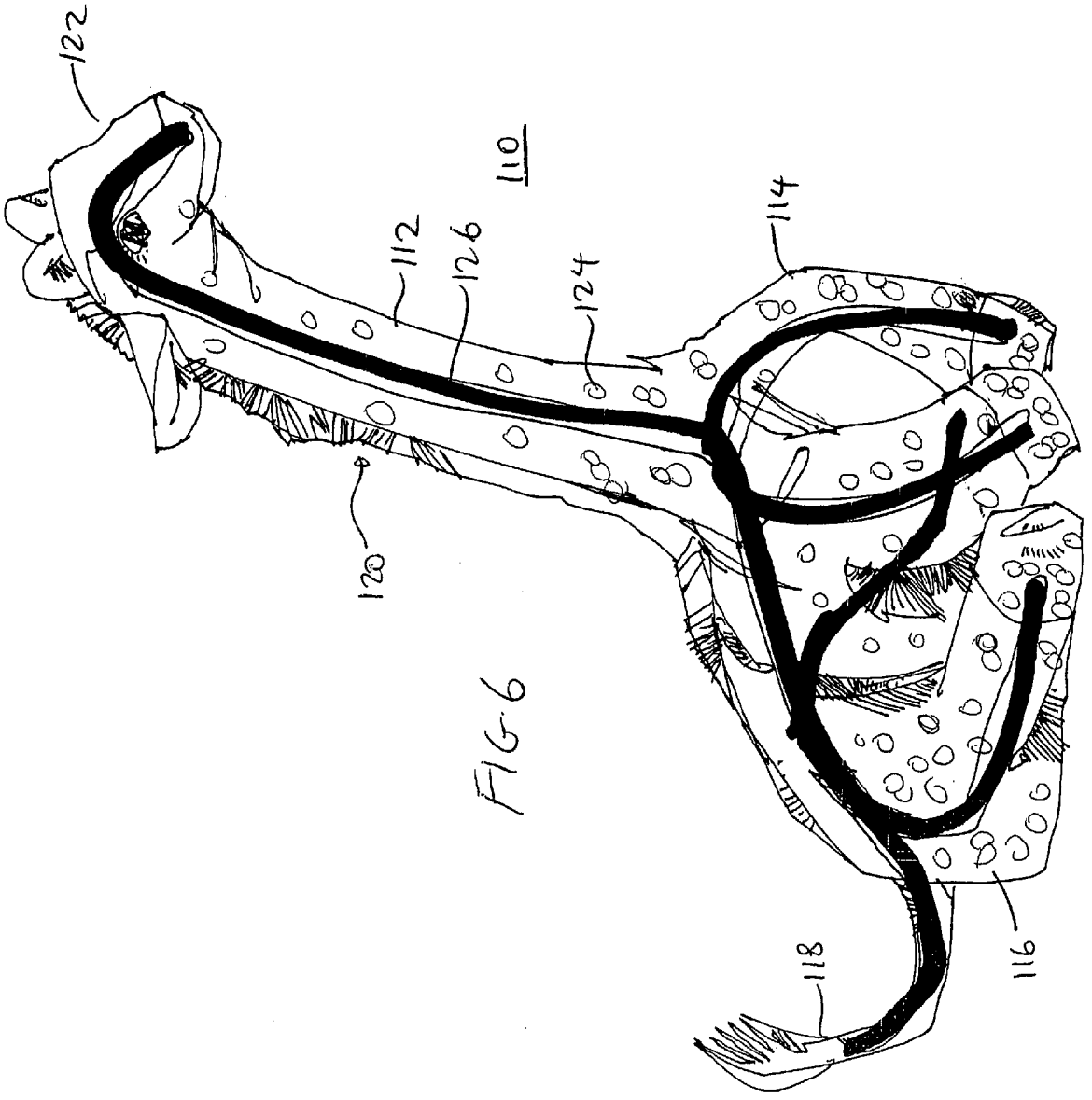


FIG 6

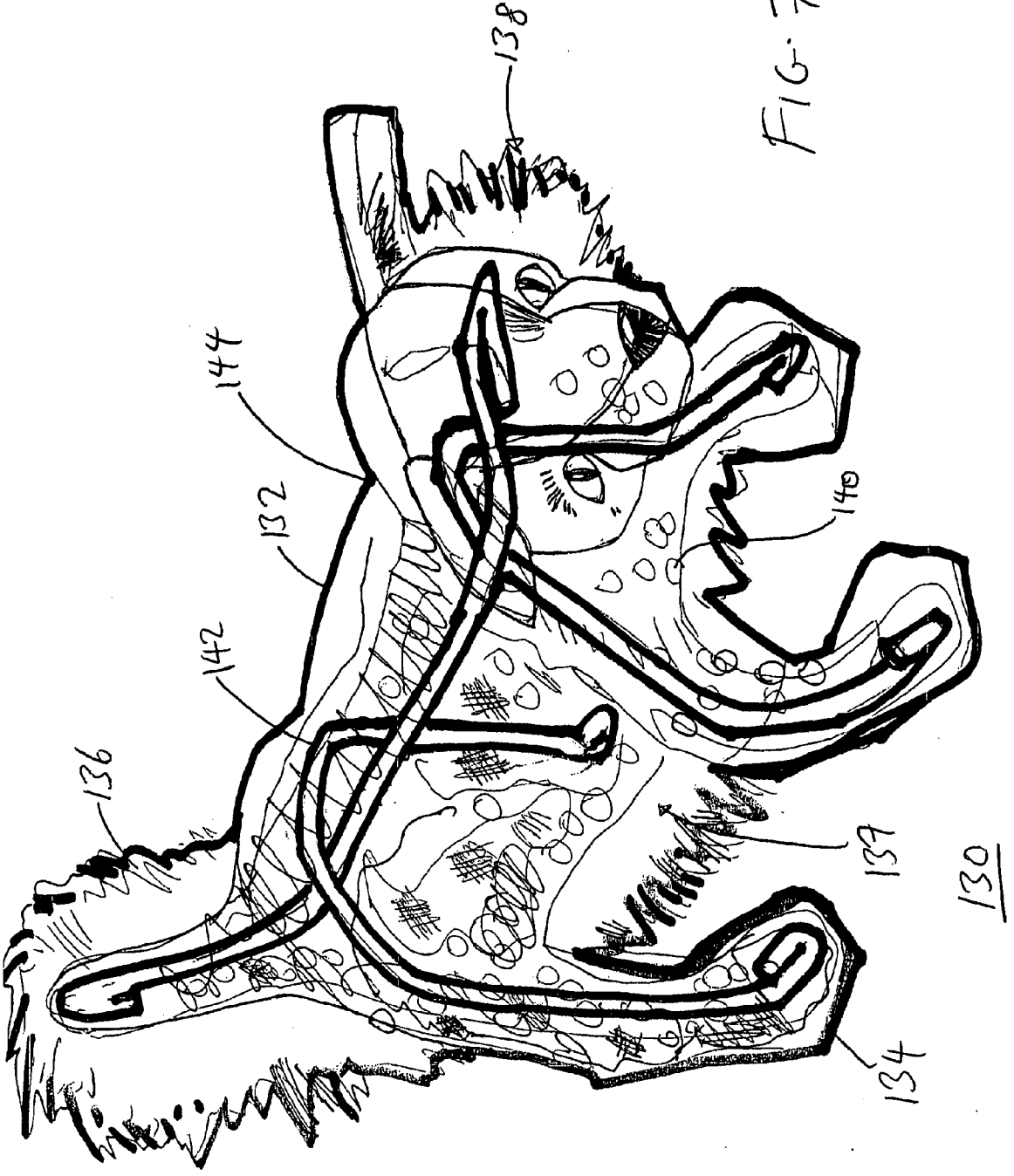


FIG. 7

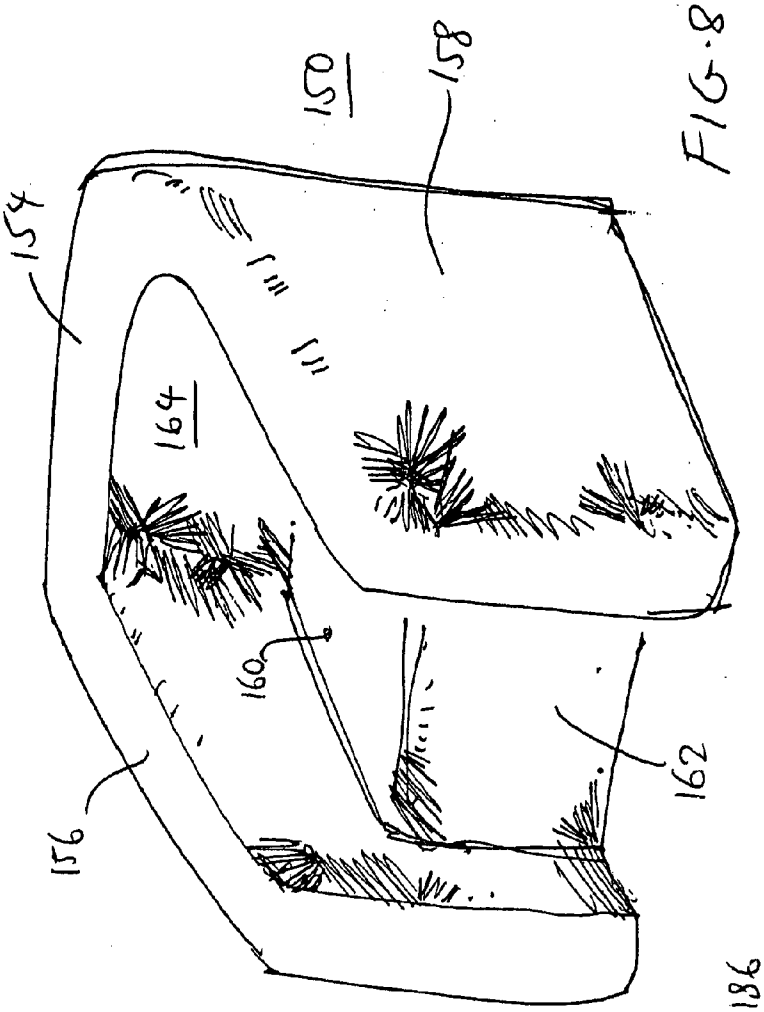


FIG. 8

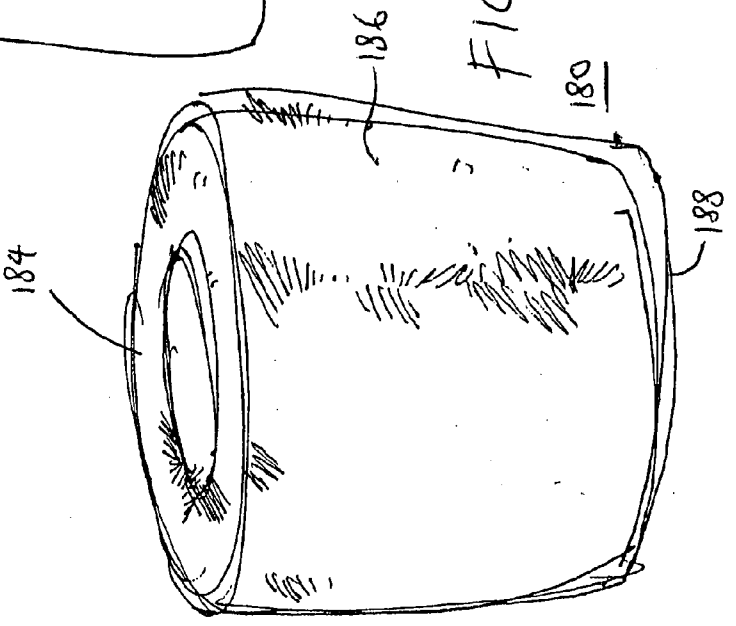


FIG. 10

FIG. 9.

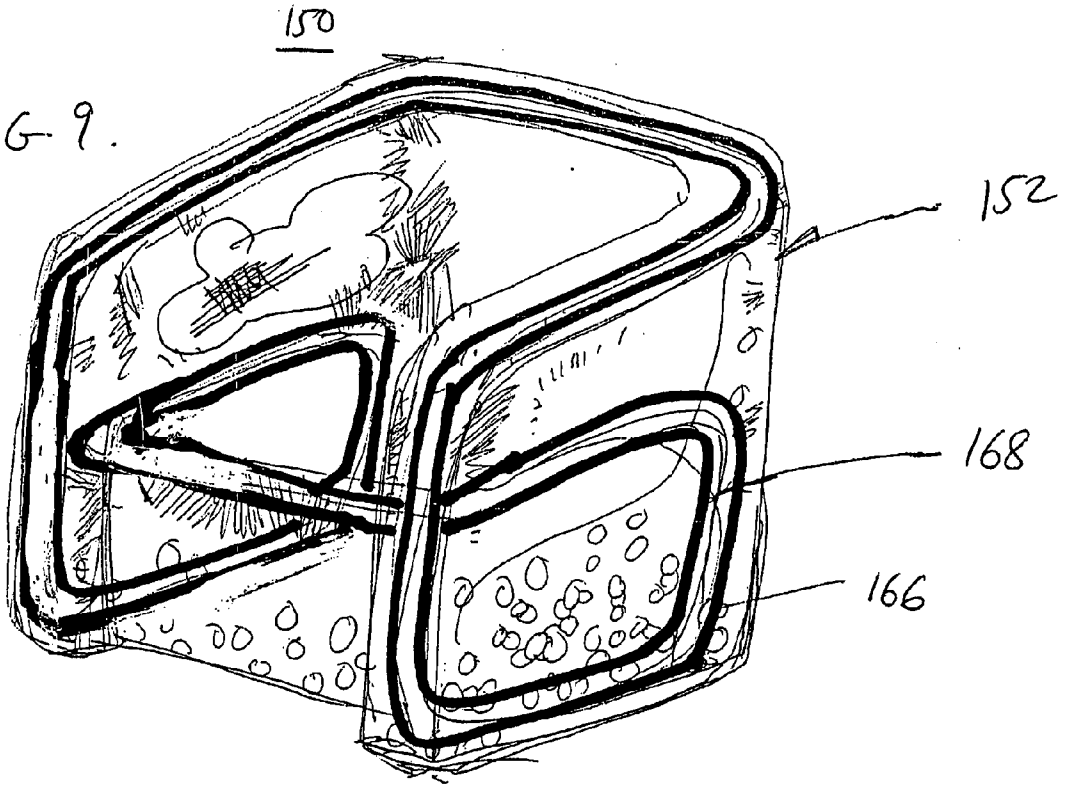
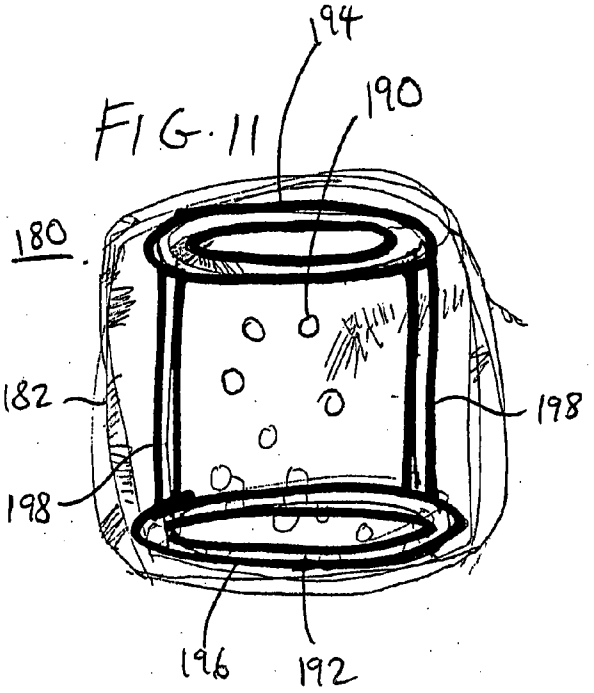


FIG. 11



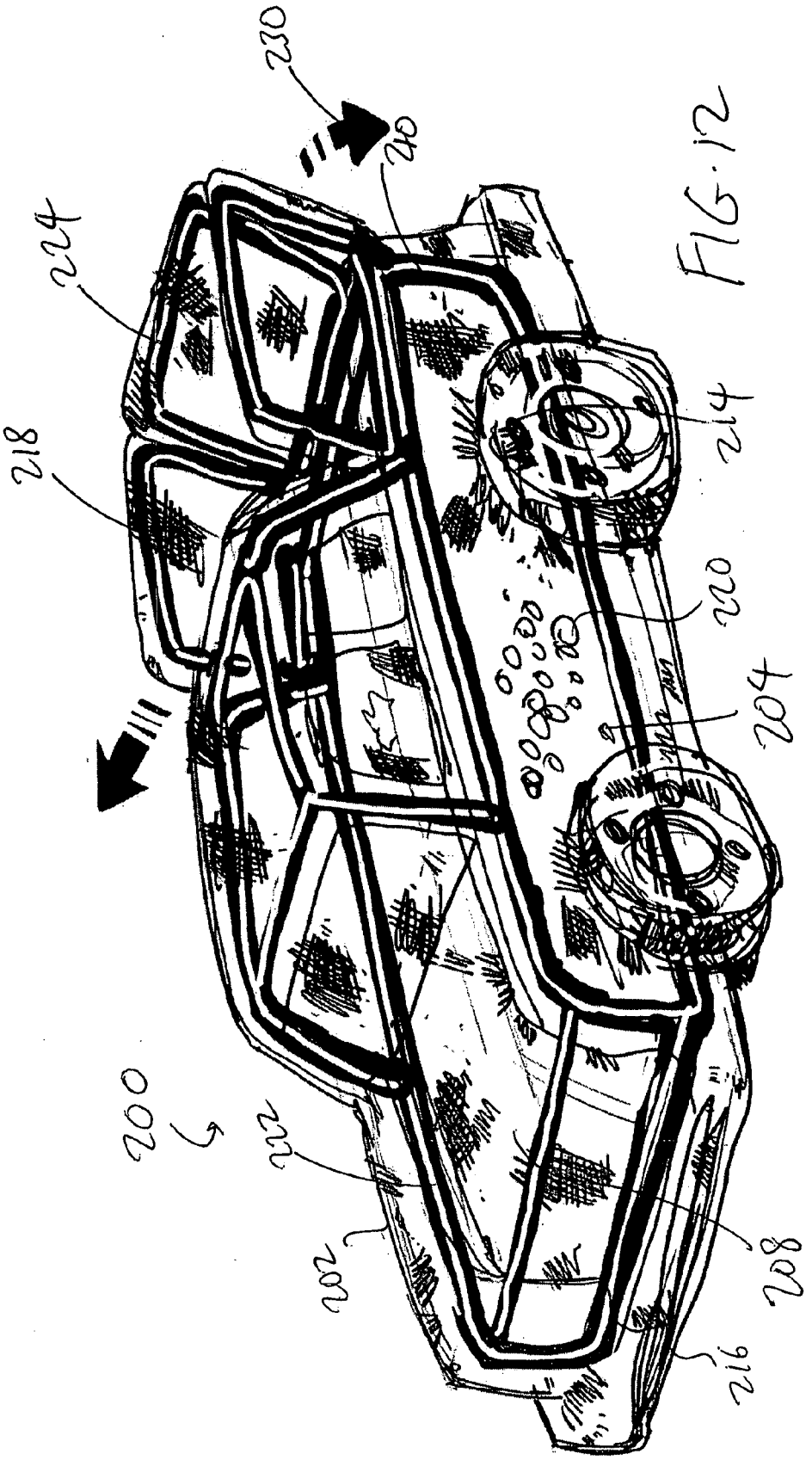


FIG. 12

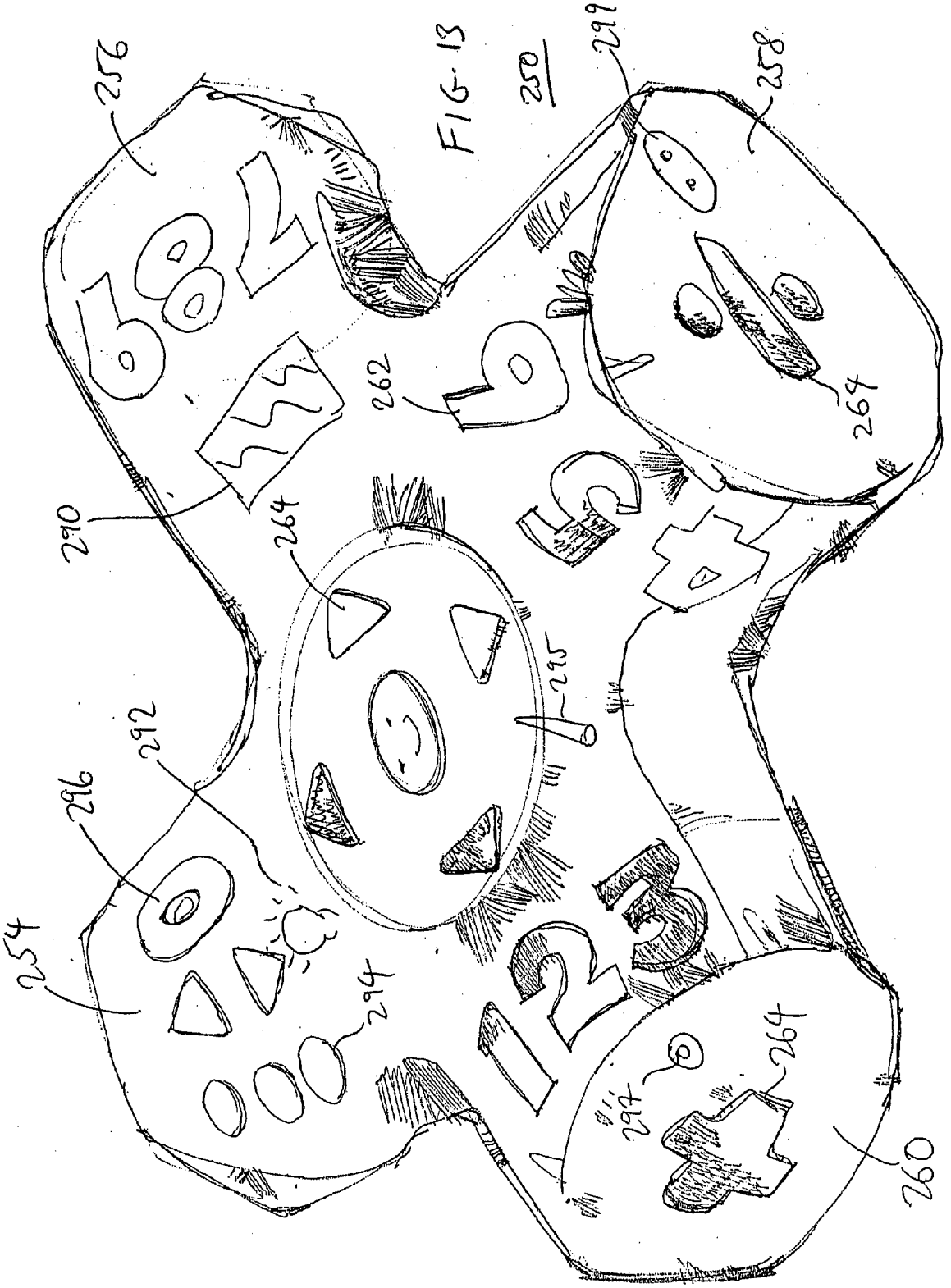


FIG. 13
250
256
258
299
262
264
290
292
296
254
294
295
297
260

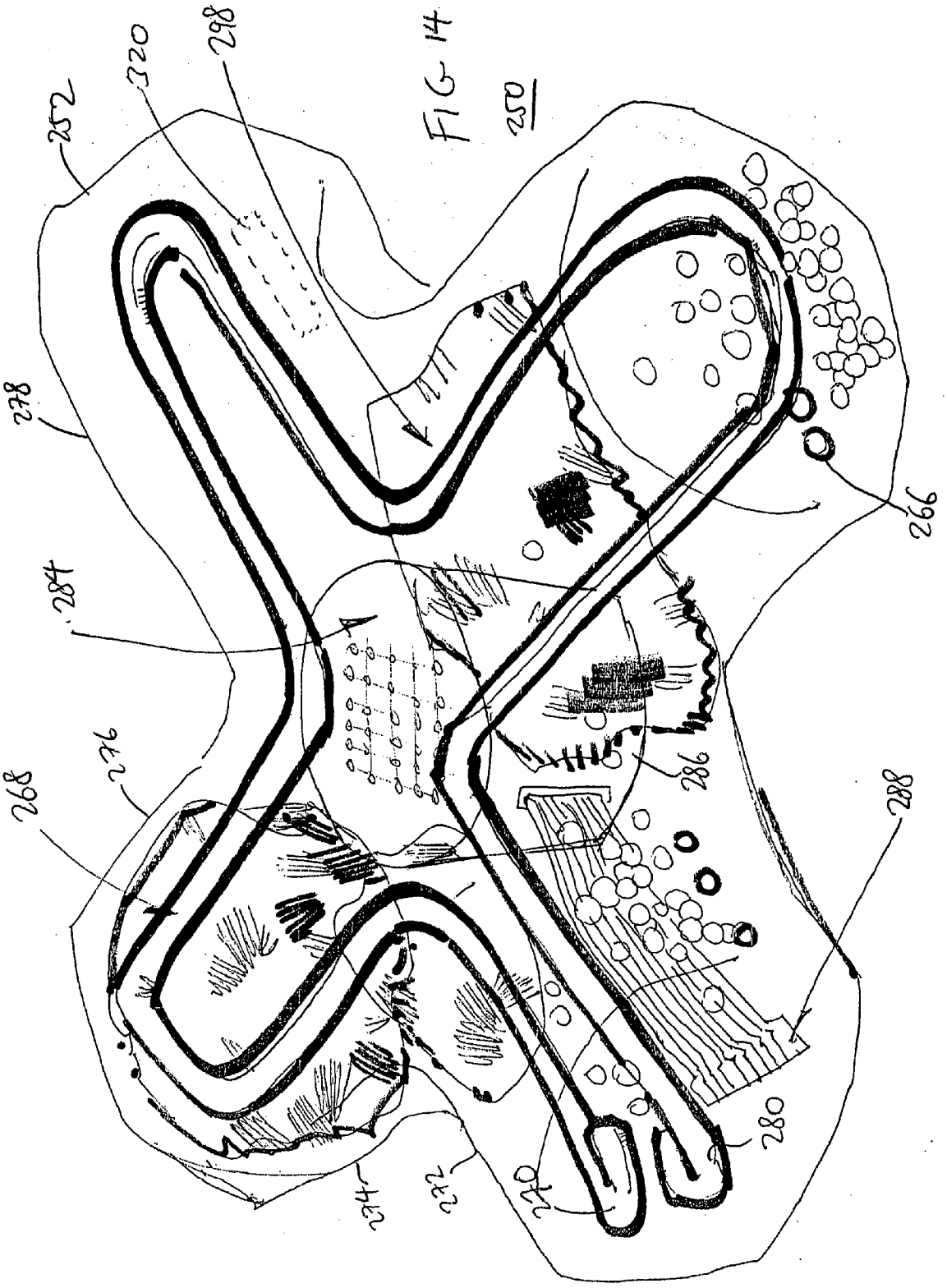


FIG 14
250
252
320
298
278
284
276
268
266
286
288
280
220
232
234

BEANIE OBJECTS

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to soft objects that can be conformed to any desired shape.

[0003] 2. Description of the Prior Art

[0004] Beanie toys are usually filled with bean-like particles so that they have a soft feel when gripped, and can be easily conformed to any desired stance or configuration. As a result, beanie toys have become very popular among children, who enjoy having this ability to constantly change the configuration of a toy object to any desired configuration.

[0005] Unfortunately, beanie toys cannot maintain the configuration on their own because the bean-like particles are subject to external forces, such as gravity, that cause the beanie toy to often assume unnatural or different configurations.

[0006] Thus, there still remains a need for a soft object that can be easily conformed to many different configurations and stances, yet provide the ability to be maintained in a desired configuration.

SUMMARY OF THE DISCLOSURE

[0007] It is an object of the present invention to provide a soft object that can be easily conformed to many different configurations and stances.

[0008] It is another object of the present invention to provide a soft object that can be maintained in a desired configuration.

[0009] In order to accomplish the objects of the present invention, the present invention provides an object having a covering that defines an internal pocket, a bendable support frame positioned inside the pocket and defining the shape of the object, and filling material provided inside the pocket and surrounding the support frame, the filling material comprised of a plurality of small particles.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. **1** is a front perspective view of a soft object according to one embodiment of the present invention showing a cut-away view of a portion thereof.

[0011] FIGS. **2**A-**2**F illustrate different particles that can be used for the filling material.

[0012] FIG. **2**G illustrates a pouch that can be used to hold filling material.

[0013] FIG. **3** is a front perspective view of a soft toy according to another embodiment of the present invention.

[0014] FIG. **4** illustrates the internal components of the soft toy of FIG. **3** according to one embodiment thereof.

[0015] FIG. **5** illustrates the internal components of the soft toy of FIG. **3** according to another embodiment thereof.

[0016] FIGS. **6** and **7** illustrate the internal components of two different soft toys according to different embodiments thereof.

[0017] FIG. **8** is a perspective view of a soft sofa according to another embodiment of the present invention.

[0018] FIG. **9** illustrates the internal components of the sofa of FIG. **8**.

[0019] FIG. **10** is a perspective view of a soft ottoman according to another embodiment of the present invention.

[0020] FIG. **11** illustrates the internal components of the ottoman of FIG. **10**.

[0021] FIG. **12** is a perspective view of a soft vehicle according to another embodiment of the present invention, showing some of the internal components thereof.

[0022] FIG. **13** is a perspective view of a soft game pad according to another embodiment of the present invention.

[0023] FIG. **14** illustrates the internal components of the game pad of FIG. **13**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0024] The following detailed description is of the best presently contemplated modes of carrying out the invention. This description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating general principles of embodiments of the invention. The scope of the invention is best defined by the appended claims.

[0025] The present invention provides soft objects that are filled with bean-like particles so that the objects can be easily conformed to many different configurations and stances. The soft objects of the present invention are also provided with bendable skeletal frames that provide the necessary support to maintain the object in the desired configuration. The principles of the present invention can be applied to a wide variety of objects, including toys, furniture, pillows and game pads, among others.

[0026] FIG. **1** illustrates a simple object **20** according to one embodiment of the present invention. The object **20** can take the form of an elongated pillow or toy that can be curled or wrapped around as shown in FIG. **1**. The object **20** can be made by providing a covering **22**, wrapping its opposing edges **24** and **28** together, and then stitching or otherwise connecting the opposing edges **24** and **28** together to form an internal pocket **26**.

[0027] The material for the covering **22** can be any material that is soft and flexible, and can include fabric, nylon, film, leather, and the like.

[0028] The pocket **26** is filled by a filling material **30** that is generally comprised of a plurality of small particles. These small particles should have sufficient weight to allow the resulting object **20** to have sufficient stability when in use, yet should be configured in size and shape such that they allow different portions of the object **20** to be bent or otherwise conformed to assume different stances and positions. Examples of particles that can be used for the filling material **30** include generally round beans **36** (which can be dried beans, or made of plastic or metal), as shown in FIG. **2**A, or generally oval beans **38** (which can be dried beans, or made of plastic or metal), as shown in FIG. **2**B. Other examples of particles that can be used for the filling material **30** include chips or blocks, such as square blocks **40** (which can be made of plastic or metal), as shown in FIG. **2**C, or rectangular blocks **42** (which can be made of plastic or metal), as shown in FIG. **2**D, or triangular blocks **44** (which can be made of plastic or metal), as shown in FIG. **2**E. The particles used for the filling material **30** can even have an irregular shape **46** and be made of plastic or metal, as shown in FIG. **2**F. Other examples include beads and granular materials, such as grain, rice, sand, or the like.

[0029] The filling material **30** can fill all or part of the entire volume (i.e., the pocket **26**) of the covering **22**, and this will depend on the degree of flexibility desired. For example, if the filling material **30** fills virtually all of the interior space of the covering **22**, the resulting object **20** will be more difficult to bend. On the other hand, by leaving more unfilled space in the

pocket **26**, the various parts of the object **20** will be easier to bend. In addition, the filling material **30** can be provided inside one or more pouches **45** (see FIG. **2**G), with one or more of these pouches **45** being used to fill the interior space of the covering **22**. These pouches **45** can be made of fabric, nylon, or any of the materials described above for the covering **22**.

[0030] The object **20** also includes a support frame **50** that extends through selected portions of the elongated configuration of the object **20**. The support frame **50** provides the object **20** with sufficient rigidity at selected portions of the object **20** so that these selected portions of the object **20** can be maintained at desired positions. In one embodiment, the support frame **50** can extend throughout the entire elongated object **20** so that the object **20** can be bent at any location along its length, and have the bend maintained by the support frame **50**. The support frame **50** is preferably made of a material that is easily bendable (i.e., can be plastically deformed) from a first shape into a second shape, yet is sufficiently rigid so that it maintains its second shape after it has been bent. Non-limiting examples of such a material can include metal and plastics, among others. In the embodiment of FIG. **1**, the support frame **50** is illustrated as being embodied in a wire-like form, but as illustrated hereinbelow, the support frame **50** can be embodied in other forms. The wire-like support frame **50** extends through the pocket **26** and is completely surrounded by the filling material **30**. The ends (e.g., see end **52**) of the support frame **50** can be rounded, tapered, curled or bent to form a non-sharp end, to prevent the otherwise sharp end from piercing the covering **22**.

[0031] In use, the user can easily conform or bend any portion of the object **20** to any desired configuration because of the following reasons. First, the covering **22** is made from a flexible material. Second, the filling material **30** is comprised of particles that are small enough so that the selected portions of the object **22** that are being bent by the user can conform easily and smoothly to such bending. Third, the material of the support frame **50** is flexible enough to allow the user to easily bend selected portions of the object **22**. After selected portions of the object **22** have been bent, the rigidity of the support frame **50** maintain these selected portions in their bent configurations. For example, in FIG. **1**, the object **20** is conformed to curl around itself to form a base portion **54**, and is conformed to form two specific bends **56** and **58** so that an end **60** can be suspended at a higher elevation than the base portion **54**. The support frame **50** maintains the various curls and bends **56**, **58** so that the object **20** can be maintained in the configuration shown in FIG. **1**. Thus, the present invention provides an object **20** that can be easily conformed into any desired configuration, yet maintain the conformed configuration while not being subjected to or affected by incidental external forces such as gravity.

[0032] FIGS. **3** and **4** illustrate the application of the principles of the present invention to a soft toy **70**. The soft toy **70** can be a doll which has a covering **72** that can be provided with appropriate body parts, such as a pair of arms **74**, **76**, a pair of legs **78**, **80**, a torso **82**, and a head **84**. Other body parts, such as eyes, ears, a nose, hair and a mouth, among others, can also be provided on the head **84**. The doll **70** can even be dressed with a pair of shorts **75** and a shirt **77**. Filling material **86** (which can be any of the filling material **30** described above) is used to fill the covering **72**, and a support frame **88** extends through the torso **82**, the arms **74**, **76** and the legs **78**, **80** of the doll **70**. The support frame **88** can be made up of one or more metal wires that can be bent, and then retain its bent configuration. The extremities (e.g., **90**) of the support frame **88** can be curled or bent to form a rounded and non-sharp end. The arms **74**, **76** and the legs **78**, **80** of the doll **70** can be bent and conformed to any desired stance. For example, the arm **74** can be bent upwardly as shown in FIG. **4** for the doll **70** to raise its arm **74**. The support frame **88** is flexible enough to be bent, yet can retain the bent stance to keep the arm **74** raised until it is desired to move the arm **74** in another direction.

[0033] FIG. **5** illustrates a doll **70***a* having the same construction as the doll **70**, except that the support frame **88***a* is different from the support frame **88**. Otherwise, the doll **70***a* can have the same features as the doll **70**. The support frame **88***a* is made up of a plurality of flexible plates that are interconnected by hinging joints **96**. The plates can be made of the same material described above for the support frame **50**, or can even be made from a completely rigid material. The plates can vary in shape and size depending on where they are positioned. The thickness of the plates can also vary depending on where the plates are used. For example, the plate **94***a* that defines the torso **82***a* of the doll **70***a* can be larger and thicker, while the plates **94***b* and **94***c* that define the arms **74***a*, **76***a* and the legs **78***a*, **80***a*, respectively, can be more elongated and thinner in configuration. Each plate **94***a*, **94***b*, **94***c* can have a hole **98** at each end or extremity, with each hole **98** adapted to receive a loop **96** that functions as a hinging joint. Thus, each loop **96** connects two adjacent plates by looping or coupling the adjacent holes **98** of two adjacent plates.

[0034] In operation, the arms **74***a*, **76***a*, legs **78***a*, **80***a*, and neck **100** of the doll **70***a* can be bent or conformed about the hinging joints **96**. For example, the arm **74***a* can be raised as shown in FIG. **5** by bending about one of the hinging joints **96** along the arm **74***a*. The hinging joints **96** allow for such body parts to be bent, and the stiffness or rigidity of the plates **94** functions to retain the bent stance to keep the arm **74***a* raised until it is desired to move the arm **74***a* in another direction.

[0035] FIG. **6** illustrates another soft toy **110** that embodies the principles of the present invention. The soft toy **110** can be a giraffe, dinosaur or other animal which has a covering **112** that can be provided with appropriate body parts, including arms **114**, legs **116**, a tail **118**, a neck **120**, and a head **122**. Filling material **124** (which can be any of the filling material **30** described above) is used to fill the covering **112**, and a support frame **126** extends through the arms **114**, the legs **116**, the tail **118**, the neck **120**, and the head **122**. The support frame **126** can be made up of one or more metal wires that can be bent, and then retain its bent configuration. The arms **114**, the legs **116**, the tail **118**, the neck **120**, and even the head **122** of the toy **110** can be bent and conformed to any desired stance. The support frame **126** is flexible enough to be bent, yet can retain the body part in the bent stance until it is desired to move it in another direction.

[0036] FIG. **7** illustrates another soft toy **130** that embodies the principles of the present invention. The soft toy **130** can be a dog or other animal which has a covering **132** that can be provided with appropriate body parts, including four legs **134**, a tail **136**, a torso **137**, and a head **138**. Filling material **140** (which can be any of the filling material **30** described above) is used to fill the covering **132**, and a support frame **142** extends through the legs **134**, the tail **136**, the torso **137**, and the head **138**. The support frame **142** can be made up of one or more metal wires that can be bent, and then retain its bent configuration. The legs **134**, the tail **136**, the torso **137** and the head **138** (via a neck portion **144**) of the toy **130** can

be bent and conformed to any desired stance. The support frame **142** is flexible enough to be bent, yet can retain the body part in the bent stance until it is desired to move it in another direction.

[0037] FIGS. **8-11** illustrate the application of the principles of the present invention to a soft furniture. For example, FIGS. **8** and **9** illustrate a soft chair or sofa **150**, and FIGS. **10** and **11** illustrate a soft ottoman **180** that can be used with the sofa **150**. Referring first to FIGS. **8** and **9**, the sofa **150** has a covering **152** that includes a rear wall **154**, a left side wall **156** and a right side wall **158** that define a U-shaped configuration. The covering **152** also includes a seat **160** that is provided in the interior of the U-shaped configuration, and a front wall **162** extends from the front of the seat **160** to the ground. The inner surface **164** (which is part of the covering **152**) of the rear wall **154** functions as a back rest.

[0038] Filling material **166** (which can be any of the filling material **30** described above) is used to fill the covering **152**, and a support frame **168** is provided inside the covering **152** to define the shape of the sofa **150**, and provide structure and support to the sofa **150** when a person sits on the sofa **150**. As shown in FIG. **9**, the support frame **168** can be a continuous metal wire that extends horizontally along the top of the rear wall **154**, the left side wall **156** and the right side wall **158**, then extends vertically down the front of the left side wall **156** and the right side wall **158**, and then extends horizontally along the bottom of the left side wall **156** and the right side wall **158**. The wire of the support frame **168** then extends vertically for about half the way up along the sides of the rear wall **154**, and then extends horizontally along the center of the left side wall **156** and the right side wall **158** towards the front, and then horizontally along the top of the front wall **162**. Thus, the support frame **168** is positioned inside the covering **152** in a manner that defines the various walls **154**, **156**, **158**, **162**, and the seat **160**. The continuous wire that makes up the support frame **168** can be bent, and then retain its bent configuration. Although a user may not wish to do this, it is possible to bend any of the walls **154**, **156**, **158**, **162** to a limited degree. In any case, the support frame **168** in this embodiment is shown as providing another useful and different benefit: to provide rigidity to a typically heavy and solid object (i.e. the sofa **150**) that can now be provided in a soft, lightweight and conformable manner. In other words, even if the support frame **168** is not intended to be bent in this embodiment, it provides rigidity and a shape outline for the sofa **150** while allowing the sofa **150** to be lightweight.

[0039] Referring now to FIGS. **10** and **11**, the ottoman **180** has a covering **182** that includes a top wall **184**, a cylindrical side wall **186** and a bottom wall **188**. Filling material **190** (which can be any of the filling material **30** described above) is used to fill the covering **182**, and a support frame **192** is provided inside the covering **182** to define the shape of the ottoman **180**, and provide structure and support to the ottoman **180**. As shown in FIG. **11**, the support frame **192** can be made up of four metal wires, a first generally circular wire **194** that extends about the periphery of the top wall **184**, a second generally circular wire **196** that extends about the periphery of the bottom wall **188**, and two generally vertical spaced apart wires that extend vertically along the cylindrical side wall **186** and which have opposing ends connected to the first and second wires **194** and **196**. Thus, the support frame **192** is positioned inside the covering **182** in a manner that defines the various walls **184**, **186** and **188**, and thereby defines the shape of the ottoman **180**.

[0040] FIG. **12** illustrates the application of the principles of the present invention to a soft toy vehicle **200**. The vehicle **200** has a covering **202** that includes the body **204** of the vehicle **200**, the front hood **208**, the rear trunk **210**, the wheels **214**, the bumpers **216**, and the windows **218**, among other parts. Each of these parts can be illustrated or represented providing appropriate indicia or designs on to the same covering **202**. In addition, some of these parts (e.g., the wheels **214**) can be provided separately from the covering **202** and then attached (e.g., by stitching) to the covering **202**.

[0041] Filling material **220** (which can be any of the filling material **30** described above) is used to fill the covering **202**, and a support frame **222** is provided inside the covering **202** to define the shape of the vehicle **200**, and to provide structure and support to the vehicle **200**. As shown in FIG. **12**, the support frame **222** can be a plurality of metal wires that extend around the periphery of the vehicle **200** to define the outward shape of the vehicle **200**. Different support frames **224** can even define some of the components, such as the windows **218**. As shown by the arrows **230**, the windows **218** can be bent or flexed, with the support frame(s) **224** functioning to provide form and rigidity to the windows **218** while allowing them to be bent. Other than the windows **218**, other components such as doors, the hood **208** and a sun-roof (not shown) can all be flexed or bent in a similar manner to provide a toy vehicle whose shape can be changed by the user.

[0042] FIGS. **13** and **14** illustrate the application of the principles of the present invention to a soft game pad **250** which can also be used as a pillow. The game pad **250** has a covering **252** that has a cross-shaped configuration defining four extensions or bays **254**, **256**, **258**, **260** that extend from the center of the game pad **250**. Indicia **262** and control buttons (e.g., **264**) that are well-known in the art can be provided (e.g., sewn) on the outer surface of the covering **252**, or extending through the covering **252** from the housing **286** of a speaker unit **284**.

[0043] Filling material **266** (which can be any of the filling material **30** described above) is used to fill the covering **252**, and a support frame **268** is provided inside the covering **252** to define the shape of the game pad **250**, and to provide structure and support to the game pad **250**. As shown in FIG. **15**, the support frame **222** can, in one non-limiting example, be a single metal wire that extends in a U-shaped manner through the bays **254**, **256**, **258**. For example, a first end **270** of the support frame **268** can begin at the bay **260**, and then extend along a side **272** of the bay **260** towards the center of the game pad **250**, and then along the adjacent side **274** of an adjacent bay **254** to the end of the bay **254**, where it then reverses direction and extends along another side **276** of the bay **254** towards the center of the game pad **250**, and then along the adjacent side **278** of another adjacent bay **256**, and so on until terminating at a second end **280** at the originating bay **260** adjacent the first end **270**. Thus, the support frame **268** illustrated in FIG. **15** essentially forms a double-wired support at each bay **254**, **256**, **258**, **260**.

[0044] The game pad **250** also includes electronic features. For example, a speaker unit **284** can be positioned among the filling material **266** and stitched to the covering **252** at about the center of the game pad **250**. The speaker unit **284** can have a housing **286** that houses an actual speaker, and other associated electronics (e.g., integrated circuits, microprocessors, chips, batteries, etc.) that are well-known in the art. A strip of connective wiring **288** or the like (e.g., conductive ink) can be electronically coupled to the electronics in the speaker hous-

ing **286** and extend through the filling material **266** to be connected to one or more control buttons **264** in the bay **260**. Other electronic features can be provided in addition to, or in lieu of, the speaker unit **284**, including keypads, a mini-screen **290** (like a mini computer monitor), lights **292**, touch pads **294**, on-off switches **296**, compact-disc players, etc. Each of these electronic articles can be connected to switches and control buttons via wiring similar to the wiring **288**. In addition, each of these electronic articles can have housings (e.g., mini-screen **290**, speaker unit **294**) that are connected or attached to the covering **252** by screws or glue, or can be directly stitched (e.g., lights **292**, touch pads **294**, control buttons **264**) to the covering **252**. A battery compartment **320** can also be provided inside the covering **252** to store batteries that can be used to power the electronic components described above, or power can be provided via a socket **299**.

[0045] In addition, a communication port **297** (e.g., a USB port) can be provided on the covering **252** and coupled by the wiring **288** to a microprocessor for facilitating communication between the game pad **250** and another game pad **250** or via the internet. Communication can also be facilitated via an antenna **295** that can extend from the covering **252**, and which is coupled to the microprocessor.

[0046] Thus, the game pad **250** can be used by a child to play music or to play interactive games. The game pad **250** provides a soft and conformable toy which is both pleasing and comfortable for a child to hold, or to rest his or her hands on. The support frame **268** provides the necessary rigidity to maintain the configuration of the game pad **250**. In addition, if desired, a user may bend any of the bays **254**, **256**, **258**, **260** to give the game pad **250** a new configuration. For example, if all four bays **254**, **256**, **258**, **260** were bent down, each bay **254**, **256**, **258**, **260** would form a leg, and the game pad **250** would resemble a table. The support frame **268** is flexible enough to be bent, yet can retain the bent stance to keep the bays **254**, **256**, **258**, **260** in a bent position until it is desired to move the bays **254**, **256**, **258**, **260** in another direction.

[0047] In addition, the support frame **268** can be configured and structured differently, depending on the desired functions and operation of the game pad **250**.

[0048] In addition to the filling material **30** described above, soft filling material can be intermixed or provided inside any of the coverings of the present invention. For example, referring to FIG. **14**, soft fillers **298** can be provided inside the covering **252** and intermixed with the filling material **266**. Examples of such soft fillers **298** can include spongy materials, pillow stuffing material (e.g., synthetic downy fibrous material), cotton, wadding, or the like.

[0049] Any of the principles from one embodiment can be applied to the other embodiments. For example, the support frame shown and described in connection with FIG. **5** can be used in any of the other embodiments. Similarly, the electronic components shown and described in connection with FIGS. **13** and **14** can be used in any of the other embodiments.

[0050] While the description above refers to particular embodiments of the present invention, it will be understood that many modifications may be made without departing from the spirit thereof. The accompanying claims are intended to cover such modifications as would fall within the true scope and spirit of the present invention.

What is claimed is:

1. An object having a shape, comprising:
a covering that defines an internal pocket;
a bendable support frame positioned inside the pocket and defining the shape of the object; and
filling material provided inside the pocket and surrounding the support frame, the filling material comprised of a plurality of small particles.

2. The object of claim **1**, further including an electronic component coupled to the covering.

3. The object of claim **1**, wherein the filling material is a plurality of beans.

4. The object of claim **1**, wherein the filling material is a plurality of blocks.

5. The object of claim **1**, wherein the object is a toy.

6. The object of claim **5**, further including a toy shirt worn over the covering.

7. The object of claim **1**, wherein the support frame is a single piece of wire.

8. The object of claim **1**, wherein the support frame comprises a plurality of plates that are connected by hinged joints.

9. A chair having a shape, comprising:
a covering that defines an internal pocket;
a bendable support frame positioned inside the pocket and defining the shape of the chair; and
filling material provided inside the pocket and surrounding the support frame, the filling material comprised of a plurality of small particles.

10. The chair of claim **9**, further including an electronic component coupled to the covering.

11. The chair of claim **9**, wherein the filling material is a plurality of beans.

12. The chair of claim **9**, wherein the filling material is a plurality of blocks.

13. The chair of claim **9**, wherein the support frame is a single piece of wire.

14. The chair of claim **9**, wherein the support frame comprises a plurality of plates that are connected by hinged joints.

15. A game pad having a shape, comprising:
a covering that defines an internal pocket;
a bendable support frame positioned inside the pocket and defining the shape of the chair; and
filling material provided inside the pocket and surrounding the support frame, the filling material comprised of a plurality of small particles.

16. The game pad of claim **15**, further including an electronic component coupled to the covering.

17. The game pad of claim **15**, wherein the filling material is a plurality of beans.

18. The game pad of claim **15**, wherein the filling material is a plurality of blocks.

19. The game pad of claim **15**, wherein the support frame is a single piece of wire.

20. The game pad of claim **15**, wherein the support frame comprises a plurality of plates that are connected by hinged joints.

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