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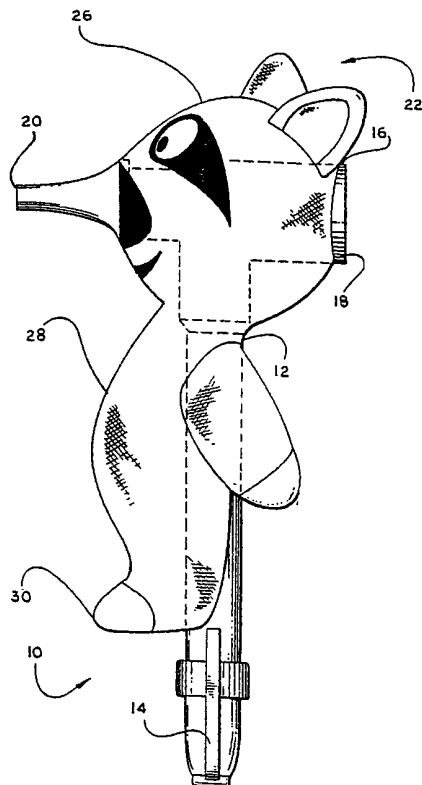
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[Continued on next page]

(54) Title: FIGURE FOR ATTACHMENT TO AN APPARATUS FOR PERFORMING MEDICAL EXAMINATIONS ON CHILDREN

(57) Abstract: A figure toy (22) for attachment to an apparatus (10) for performing examinations on children which includes a toy-like figure attached to and/or at least partially encompassing the examination apparatus for distracting the child prior to or during the examination. The toy-like figure may be any child attracting figure and may resemble a fictional or real animal, human, or the like.



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- *With amended claims.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

**FIGURE FOR ATTACHMENT TO AN APPARATUS FOR
PERFORMING MEDICAL EXAMINATIONS ON CHILDREN**

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

This invention relates to devices which are used to perform routine medical examinations on children. More specifically, this invention relates to a figure for attachment to an existing device for performing examinations on children.

DESCRIPTION OF THE PRIOR ART

Medical instruments, including otoscopes, have been in existence for some time. The appearance of a medical instrument, while fulfilling the function of the instrument, can also be useful in instilling psychological security in a patient. Instruments are therefore usually designed to look as professional and sanitary as possible. Adult patients are often anxious about the quality and sterility of their medical care, and the austere professional appearance of the medical instruments is useful in quieting their anxieties. Less anxious patients tend to be more cooperative during examination and treatment. Less anxious patients also have a better mental attitude toward their treatment. Due to human psychology, the physical appearance of medical instruments is a very important element of medical care.

Pediatric patients have different anxieties than adult patients. Because children have a wider range of psychological responses to their medical treatment, instilling a good mental attitude in the patient is even more important when treating children. A child is usually very anxious about the friendliness and concern he or she will receive when being closely examined by a strange doctor. The unfamiliar environment of a hospital or other treatment facility exacerbates the child's fears. The austere appearance of the unknown medical instruments may further scare the child. The child's apprehension may hinder both treatment and recovery.

The performance of an ear examination on a child is often difficult because the child tends to squirm or shy away from the otoscope being used to effect the examination. It is particularly important that a child remain motionless during an ear examination because the speculum of the otoscope must be precisely positioned with respect to the child's ear canal. However, this is often difficult to accomplish, because the appearance of the otoscope makes the child uneasy.

The importance of a child's psychological security during medical treatment is well recognized. The workings of stethoscopes and other medical devices should be explained to a child before being used, and children should be given a chance to use an instrument themselves to see how it works. Teddy bears are often given to children when receiving treatment to further instill a sense of security. But the appearance of the instruments used during the examination has heretofore not been modified for child care. In an effort to design instruments which psychologically reassure an adult, instruments have been designed with an appearance that may psychologically threaten a child. It is clear that there is an unfulfilled need

in the prior art for medical instruments which do not appear as foreign and threatening to children.

SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide an existing otoscope or similar medical instrument with an appearance which is less threatening and foreign to small children than that of instruments presently in use.

In order to achieve these and other objects of the invention, an apparatus for performing a medical examination on a child includes an instrument for performing the desired examination and a structure encompassing at least a part of the instrument for distracting the child prior to or during the examination, whereby the child will be less apprehensive about the examination.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view of a figure attached to a known otoscope which illustrates an embodiment of the invention.

FIG. 2 is a fragmentary cross-sectional view taken through the embodiment of the invention which is illustrated in FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, wherein like reference numbers designate corresponding structure throughout the views, in FIGS. 1 and 2 known otoscope 10 includes a handle portion 12 having an optional pocket clip 14, a viewing head 16 having a cylindrical outer surface 18, and a speculum 20 which is adopted for insertion into an ear canal of a patient. Otoscope 10 is of known construction and may be configured of any of the various shapes and sizes generally employed in otoscopes. As may be seen in FIG. 1, according to an embodiment of the invention, a toy-like figure 22 is provided encompassing at least a part of otoscope 10 for distracting a child prior to or during an ear examination. Figure 22 may be of various sizes and shapes to fit existing otoscopes and accommodate the size and shape of the otoscope selected while accomplishing the objective of appearing less threatening to a child during examination. In the embodiment depicted in FIGS. 1 and 2, the toy-like figure 22 may be shaped to resemble any figure, fanciful or not, and is advantageously a child attractive figure such as a fictional or real animal, creature, or human figure. Preferably, the figure is a humorous human or shaped to resemble an animal such as animal 24 having a head 26, two arms 28 and two legs 30. Preferably, the figure encompasses a major portion of otoscope head 16 and most preferably speculum 20 extends through, or appears to be an extension of, the figure's body. Particularly preferred is where the speculum appears to be an extension of the figure's nose or mouth with the body encompassing the cylindrical outer surface 18 of the viewing head 16, and a portion of handle 12, as is best shown in FIG. 1. The head 26 of animal 24 is arranged to face in the same direction as the speculum 20 which projects from the viewing head 16. Preferably, figure 22 is integral with the viewing head 16, as is shown in cross section in FIG. 2. Figure 22 may be removable from viewing head 16 and may be attached to or fastened to an otoscope by any

known means. Advantageously, a portion of figure 22 may be fastened or attached to cylindrical outer surface 18 of viewing head 16 by known fastening or attaching means. Advantageously a Velcro-type fastener or the like is used.

FIG. 2 further shows known elements of otoscope 10, i.e. handle 12 including a lamp 32 that is positioned within a T-shaped open space 34 that is defined in handle 12 and viewing head 16. A mirror element 36 is positioned within the open space 34 to reflect light from lamp 32 toward the speculum 20. Mirror element 36 is washer-shaped, having an inner edge 38 which defines a hole through which light may pass. Aligned with the hole which is defined by edge 38 is a lens element 40 that is mounted within the viewing head 16. The end portion of viewing head 16 is lens 40 which has an opening defined therein through which an image may pass, and terminates in a shroud 42 for shading the opening.

When the otoscope 10 is in use, lamp 32 is caused to emit a light, which is reflected by mirror element 36 through an opening 44 which is defined in a distal end of the speculum 20. This light will illuminate the ear canal of the patient that is being examined. The brightened image of the ear canal is then reflected back through the speculum 20, through the hole which is defined by the inner edge 38 of mirror element 36, through lens 40 where it is magnified for the benefit of the person performing the examination. These and other details of the otoscope are well-known to those skilled in the art and are not considered essential to understand the invention.

The figure of the present invention may be made of a natural or synthetic material, may be soft material, deformable material, non-deformable material, or may be at least partly made of fabric material. The figure of the present invention may be made of plastic material, composite material, any of the various nylon or other synthetic fiber materials, clay material, metallic material, or a combination thereof. In addition the figure may be dyed, painted or colored to resemble its natural appearance or a fanciful color and/or appearance.

The apparatus of the present invention may be constructed such that the figure is permanently attached to the otoscope, where the figure is releasably fastened or releasably attached to the otoscope, or where the figure fits over the otoscope like a sock, mitten, puppet, glove, or the like and the speculum extends from and through the figure's body, preferably through the nose.

Advantageously the figure of the present invention resembles an animal or a human clown. Preferably, said figure resembles a raccoon, a pig, a dog, a rabbit, a horse, a monkey, a chipmunk, a deer, a goose, a duck, or a bear.

In operation, a health professional may show otoscope 10 to a child prior to performing an examination. Due to the presence of the toy-like figure 22 on otoscope 10, the otoscope will appear to be less foreign and less threatening to the child than another otoscope would be. During the examination, the child is less likely to be apprehensive, which will make the examination safer and more efficient to conduct.

It should be understood that even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

What is claimed is:

1. A child distracting figure attached to an apparatus for performing an examination on a child comprising:

a toy-like figure at least partially encompassing said apparatus, for distracting the child prior to or during the examination, whereby the child will be less apprehensive about the examination while it is being performed.
2. The child distracting apparatus of claim 1 wherein the examination apparatus is an otoscope having a handle portion, a viewing head and a speculum attached to said viewing head, said speculum being adapted for insertion into the ear of a child; and the toy-like figure at least partially encompasses the viewing head of said otoscope.
3. The figure of claim 2 wherein the speculum of the apparatus extends through the figure's body.
4. The figure of claim 3 wherein the speculum of the apparatus extends through the figure's nose.
5. The figure of claim 3 wherein the speculum of the apparatus extends through the figure's mouth.
6. The figure of claim 1 made of a soft material.
7. The figure of claim 1 made of a deformable material.
8. The figure of claim 1 made of a non-deformable material.
9. The figure of claim 1 at least partly made of a fabric material.
10. The figure of claim 1 made of a material selected from the group consisting of natural and synthetic materials.
11. The figure of claim 1 made of a material selected from the group consisting of plastics, composites, synthetic fibers, clays, metals and combinations thereof.
12. The figure of claim 2 manufactured in various sizes and shapes so as to fit or accommodate an otoscope of any size and shape.
13. The figure of claim 2 permanently attachable to the otoscope.
14. The figure of claim 2 releasable attachable to the otoscope.
15. The figure of claim 1 formed to resemble a fictional human, creature, or animal.

16. The figure of claim 1 formed to resemble a real human, creature, or animal.
17. The figure of claim 15 formed to resemble a raccoon, a pig, a dog, a rabbit, a horse a rabbit, a horse, a monkey, a chipmunk, a deer, a goose, a duck, a bear, or a human clown.
18. The figure of claim 16 formed to resemble a raccoon, a pig, a dog, a rabbit, a horse, a monkey, a chipmunk, a deer, a goose, a duck, a bear, or a human clown.
19. A toy-like figure at least partially encompassing an apparatus for performing an examination on a child, which said figure distracts the child prior to or during the examination, whereby the child will be less apprehensive about the examination while it is being performed.
20. The toy-like figure of claim 19 wherein the examination apparatus is an otoscope having a handle portion, a viewing head and a speculum attached to said viewing head, said speculum being adapted for insertion into the ear of a child; and the toy-like figure at least partially encompasses the viewing head of said otoscope.
21. The toy-like figure of claim 20 wherein the figure substantially encompasses the otoscope except for the speculum which extends through the figure's nose.
22. The figure of claim 19 made of a soft material.
23. The figure of claim 22 wherein the figure is not attached to the apparatus.
24. The figure of claim 22 wherein the figure is attached to the apparatus.
25. The apparatus of claim 23 wherein the figure fits over the apparatus like a sock, mitten or puppet.

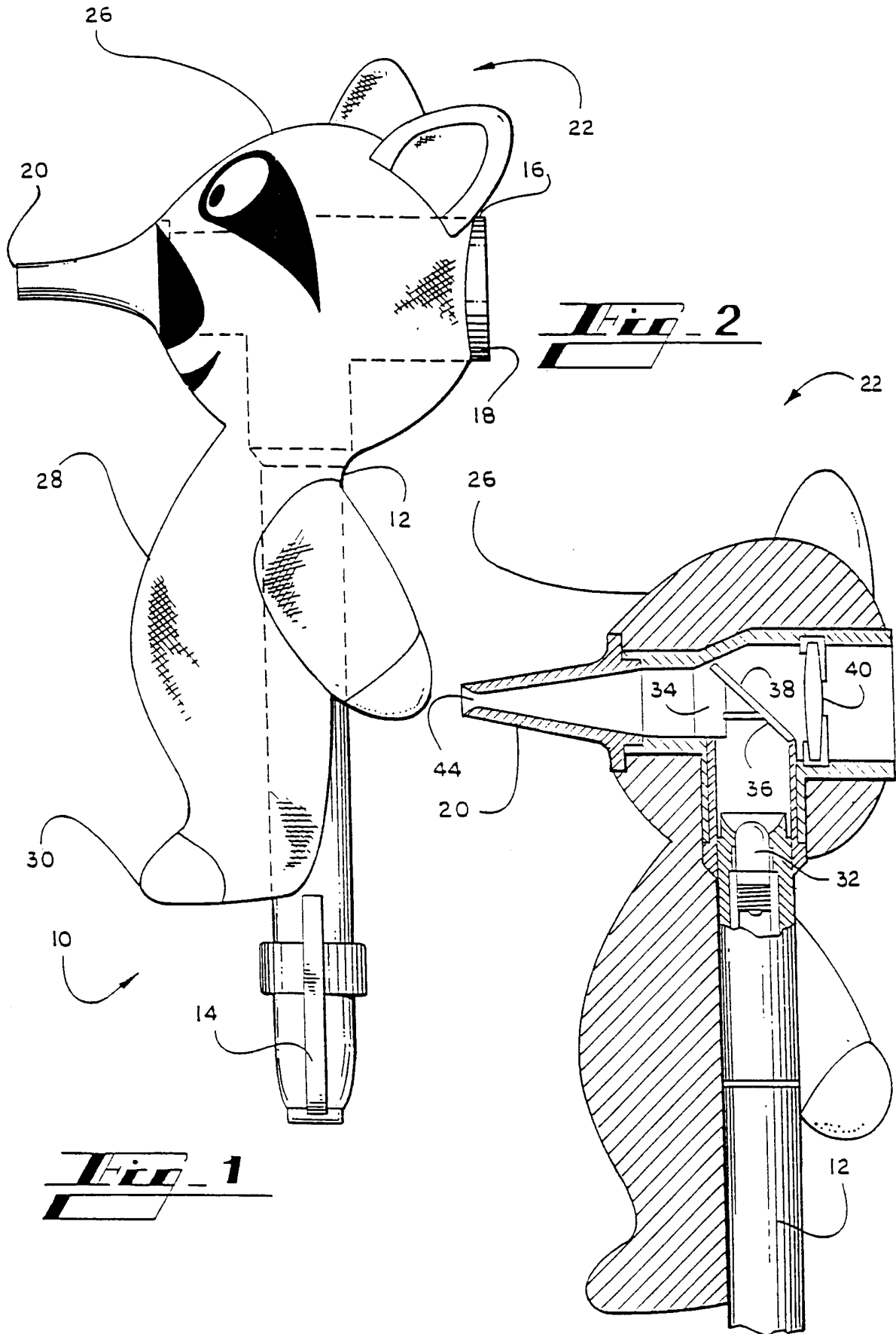
AMENDED CLAIMS

[received by the International Bureau on 08 November 2000 (08.11.00)
original claims 1, 19 and 15-18 amended; remaining claims unchanged (2 pages)]

1. A child distracting figure attached to an apparatus for performing an examination on a child comprising:

a toy-like figure at least partially encompassing said apparatus, wherein at least an examination portion of the apparatus extends through the figure's body, for distracting the child prior to or during the examination, whereby the child will be less apprehensive about the examination while it is being performed.
2. The child distracting apparatus of claim 1 wherein the examination apparatus is an otoscope having a handle portion, a viewing head and a speculum attached to said viewing head, said speculum being adapted for insertion into the ear of a child; and the toy-like figure at least partially encompasses the viewing head of said otoscope.
3. The figure of claim 2 wherein the speculum of the apparatus extends through the figure's body.
4. The figure of claim 3 wherein the speculum of the apparatus extends through the figure's nose.
5. The figure of claim 3 wherein the speculum of the apparatus extends through the figure's mouth.
6. The figure of claim 1 made of a soft material.
7. The figure of claim 1 made of a deformable material.
8. The figure of claim 1 made of a non-deformable material.
9. The figure of claim 1 at least partly made of a fabric material.
10. The figure of claim 1 made of a material selected from the group consisting of natural and synthetic materials.
11. The figure of claim 1 made of a material selected from the group consisting of plastics, composites, synthetic fibers, clays, metals and combinations thereof.
12. The figure of claim 2 manufactured in various sizes and shapes so as to fit or accommodate an otoscope of any size and shape.

13. The figure of claim 2 permanently attachable to the otoscope.
14. The figure of claim 2 releasable attachable to the otoscope.
15. The apparatus of claim 1 wherein the figure is selected from the group consisting of a fictional human, a fictional creature, and animal.
16. The apparatus of claim 1 wherein the figure is selected from the group consisting of a real human, a real creature, and animal.
17. The figure of claim 15 wherein the figure is selected from the group consisting of a raccoon, a pig, a dog, a rabbit, a horse, a monkey, a chipmunk, a deer, a goose, a duck, a bear, and a human clown.
18. The figure of claim 16 wherein the figure is selected from the group consisting of a raccoon, a pig, a dog, a rabbit, a horse, a monkey, a chipmunk, a deer, a goose, a duck, a bear, and a human clown.
19. A toy-like figure at least partially encompassing an apparatus for performing an examination on a child, wherein at least an examination portion of the apparatus extends through the figure's body, which figure distracts the child prior to or during the examination, whereby the child will be less apprehensive about the examination while it is being performed.
20. The toy-like figure of claim 19 wherein the examination apparatus is an otoscope having a handle portion, a viewing head and a speculum attached to said viewing head, said speculum being adapted for insertion into the ear of a child; and the toy-like figure at least partially encompasses the viewing head of said otoscope.
21. The toy-like figure of claim 20 wherein the figure substantially encompasses the otoscope except for the speculum which extends through the figure's nose.
22. The figure of claim 19 made of a soft material.
23. The figure of claim 22 wherein the figure is not attached to the apparatus.
24. The figure of claim 22 wherein the figure is attached to the apparatus.
25. The apparatus of claim 23 wherein the figure fits over the apparatus like a sock, mitten or puppet.



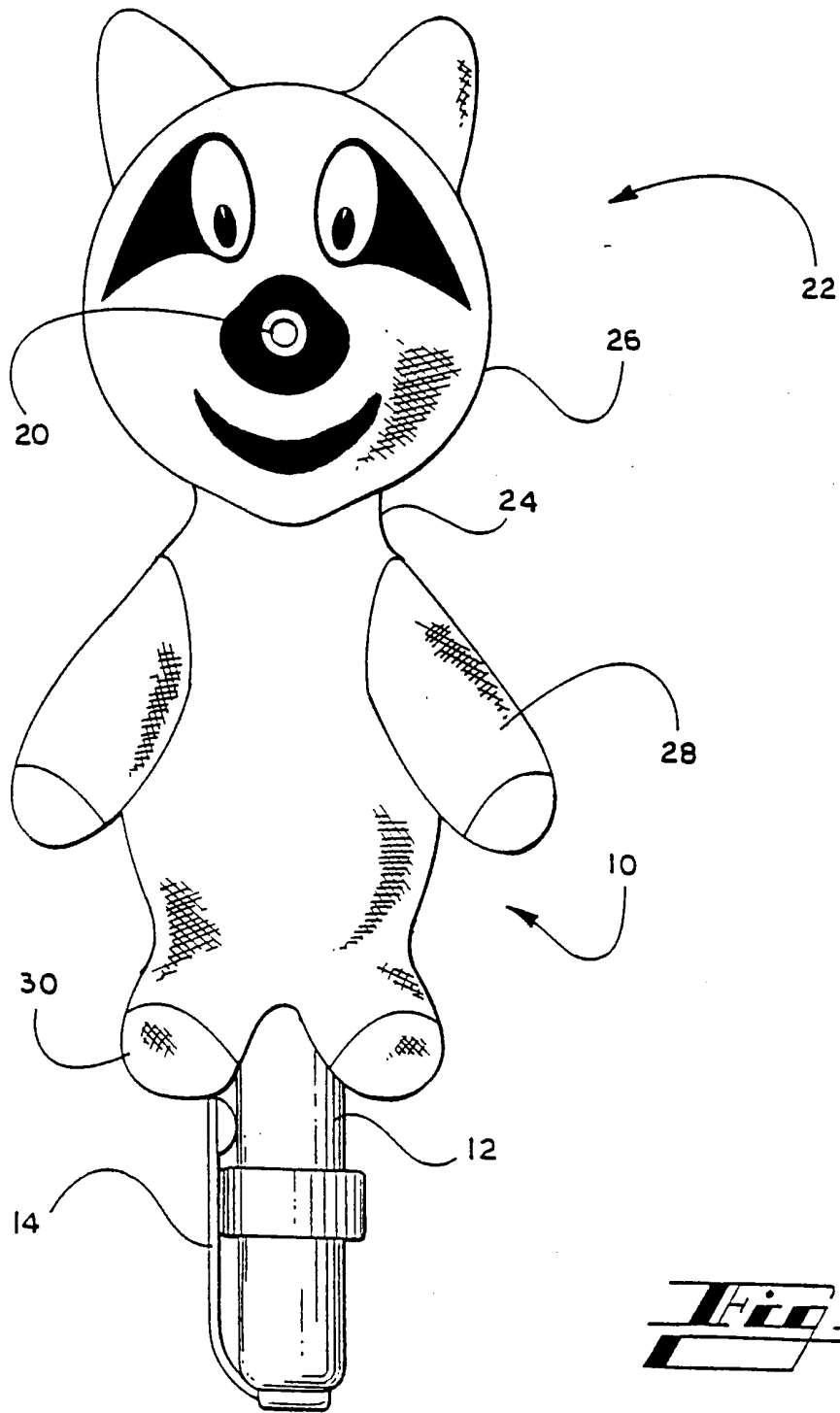


Fig. 3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/17289

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :A61B 1/22
US CL : 446/72

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)

U.S. : 446/72, 73, 74
600/200,240

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

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.
X --- Y	US 5,038,755 A (<i>BURGIO et al.</i>) 13 August 1991, See Entire Reference	1-3, 8- 10-20 ----- 4-7, 9, 21-25

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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