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(54) **COCHLEAR IMPLANT DOLL**

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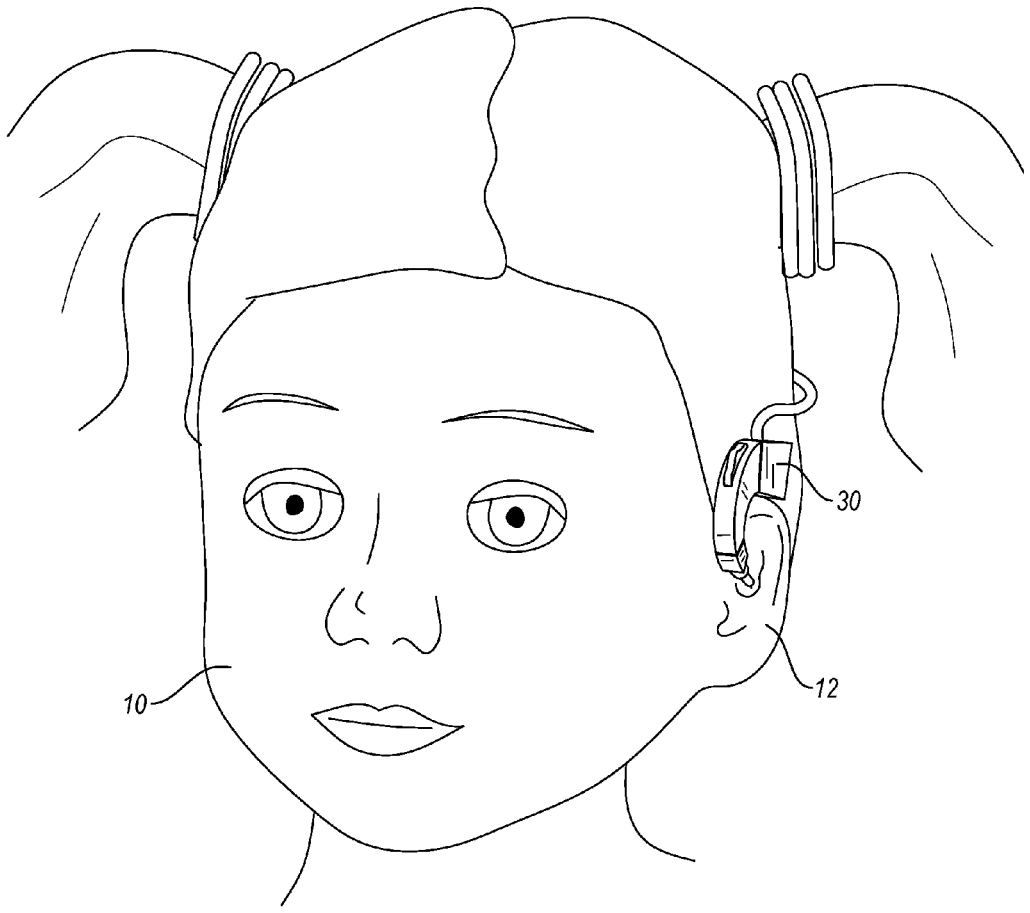
(57) **ABSTRACT**

A doll may imitate having a cochlear implant by providing an attachment structure, such as a magnet, post-and-hole, hook-and-loop fasteners, or other means, for selectively attaching a simulated external component of a cochlear implant to the doll's head. The simulated implant may be made to mimic any known or later developed implant and may be positioned on either the right or left sides of the doll's head, or both.



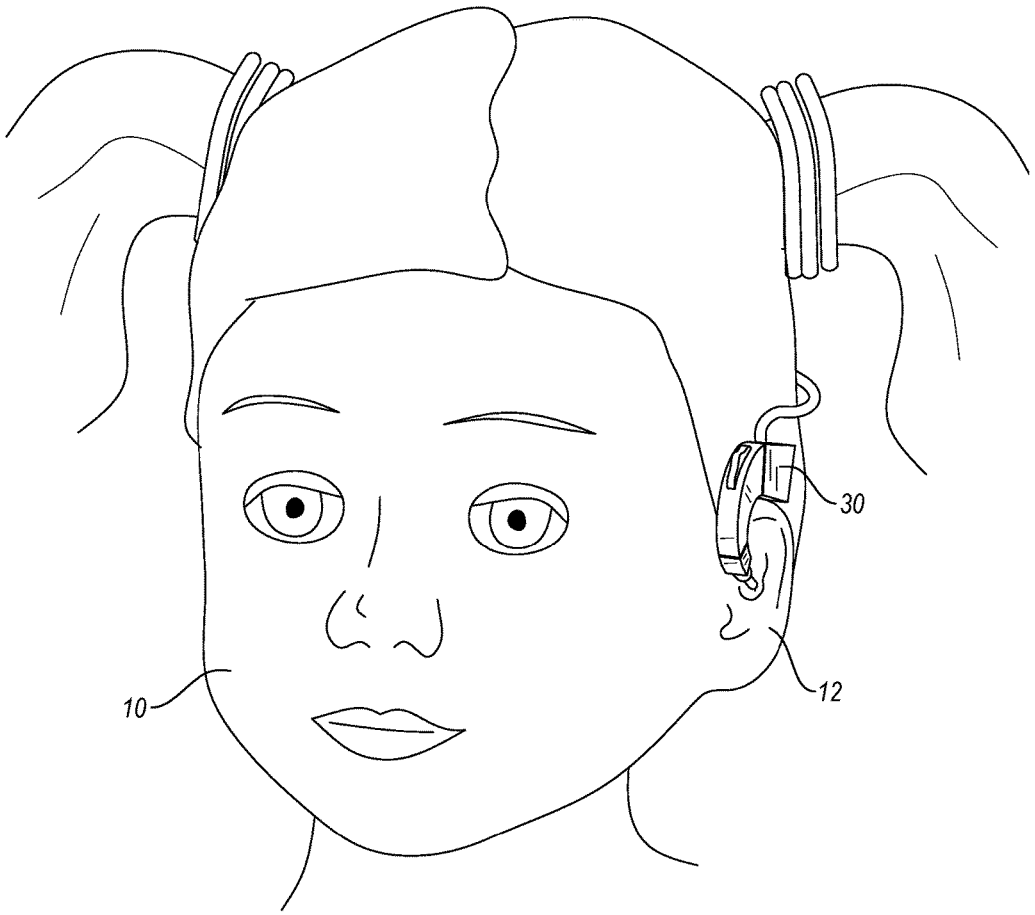


FIG. 1

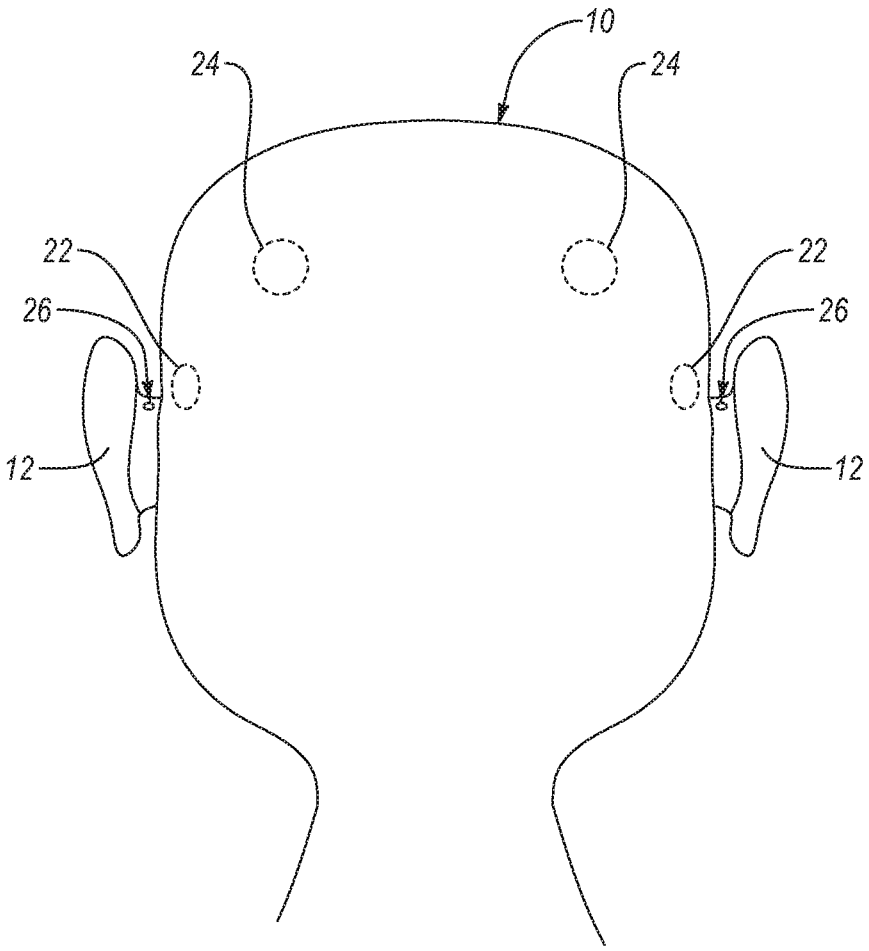


FIG. 2

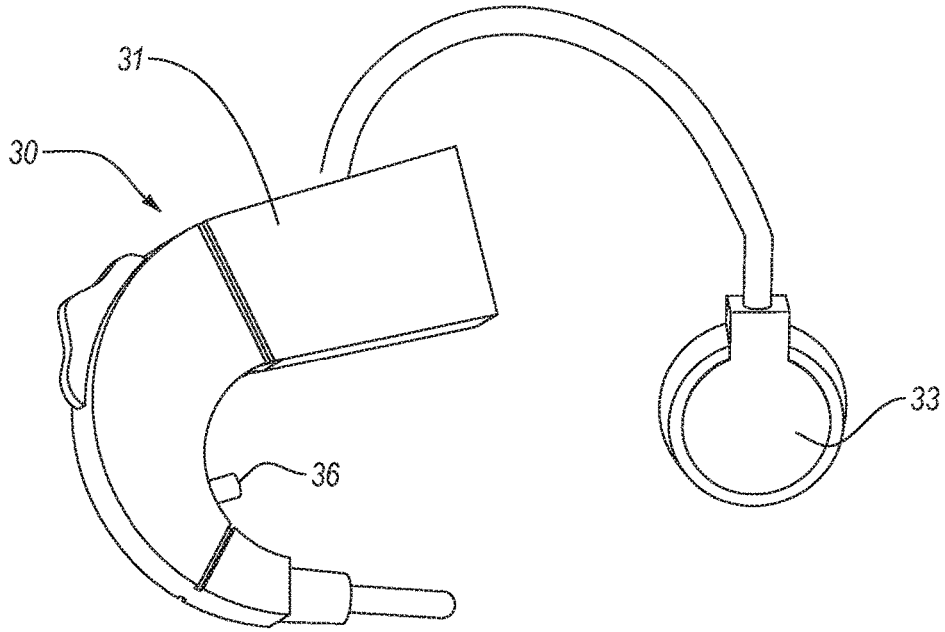


FIG. 3

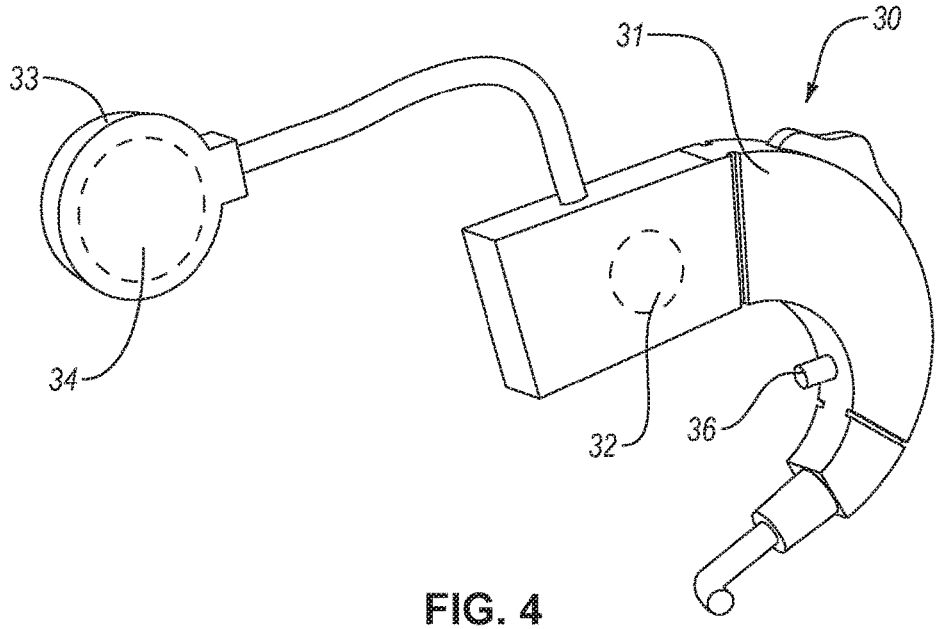


FIG. 4

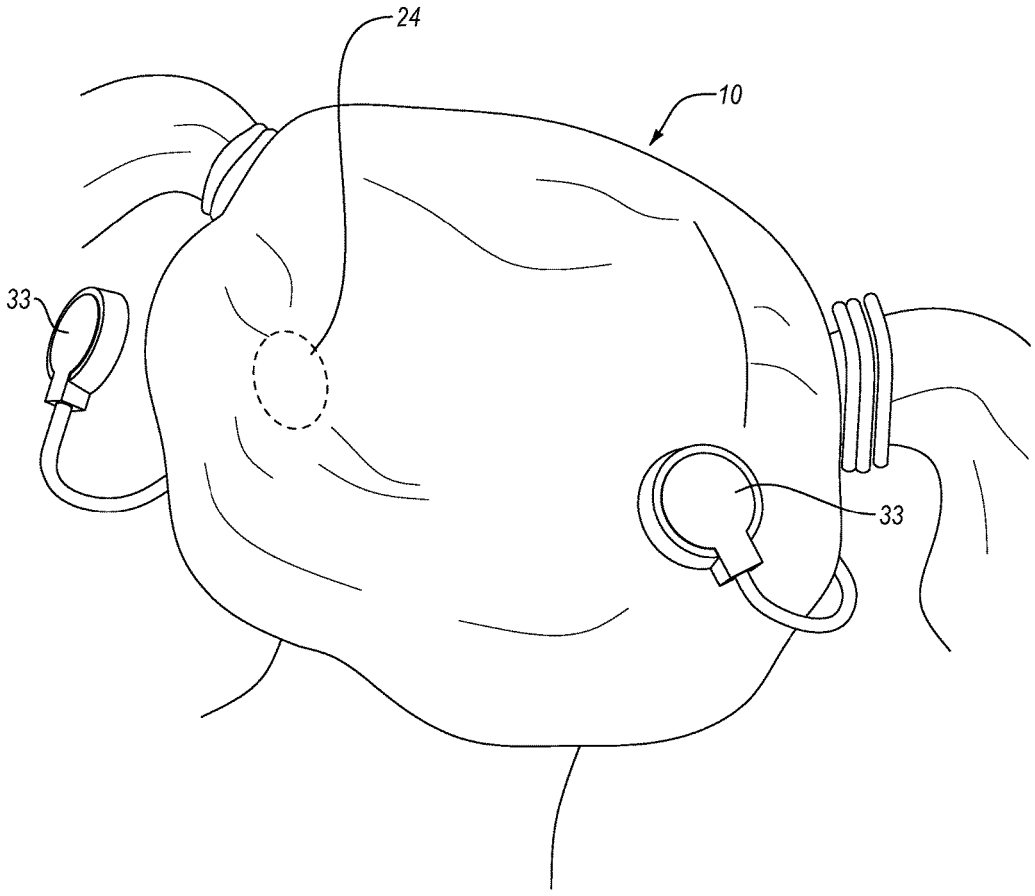


FIG. 5

COCHLEAR IMPLANT DOLL

CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] The present Application claims priority as a non-provisional perfection of prior filed U.S. Application No. 62/540,865, filed Aug. 3, 2017, and incorporates the same by reference in its entirety.

FIELD OF THE INVENTION

[0002] The present invention relates to the field of toys and more particularly relates to a doll with a cochlear implant attachment which may be selectively positioned and removed from the head of the doll.

BACKGROUND OF THE INVENTION

[0003] Dolls are an old type of toy. Various figurines, dating thousands of years old, have been found by archeologists. These older figurines are often believed to have been used for religious purposes, but eventually figurines and dolls became used as playthings for children. Dolls stimulate children in areas of interpersonal relationships and societal roles as often a doll becomes either a surrogate best friend, a child, or an avatar for the child in question. As such, it is frequently noted that children like dolls that "look like" them. This concept related to anything related to a child's body image, from gender and race, to approximate age, and even disability. The present invention is a doll that endeavors to "look like" children who have hearing difficulties addressed by cochlear implants. Such dolls are not on the market, much less having a removable implant feature which emulates real life as external implant hardware is removable. The present invention represents a departure from the prior art in that the doll of the present invention allows for a removable and attachable toy cochlear implant to be used with the doll in question.

SUMMARY OF THE INVENTION

[0004] In view of the foregoing disadvantages inherent in the known types of dolls, an improved doll. may provide a toy representation of a cochlear implant which contains a means of selectively mounting the simulated external implant hardware.

[0005] The more notable features of the invention have thus been outlined in order that the more detailed description that follows may be better understood and in order that the present contribution to the art may better be appreciated. Additional features of the invention will be described hereinafter and will form the subject matter of the claims that follow.

[0006] Many objects of this invention will appear from the following description and appended claims, reference being made to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

[0007] Before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for description and should not be regarded as limiting.

[0008] As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods, and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. **1** is a profile view of a doll head with the external simulated cochlear implant.

[0010] FIG. **2** is a rear elevation of the doll of FIG. **1**, with the external simulated cochlear implant removed.

[0011] FIG. **3** is a perspective view of the external simulated cochlear implant shown in FIG. **1**.

[0012] FIG. **4** is an alternate perspective view of the external simulated cochlear implant shown in FIG. **1**.

[0013] FIG. **5** is a rear perspective view of the doll head of FIG. **1**, with a portion of the simulated external cochlear implant removed.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] With reference now to the drawings, a preferred embodiment of the cochlear implant doll is herein described. It should be noted that the articles "a", "an", and "the", as used in this specification, include plural referents unless the content clearly dictates otherwise.

[0015] A cochlear implant is a device usually constructed of an internal component and an external component. The internal component is surgically implanted into the head of the patient and attached to the patient's auditory system. The internal component usually comprises a receiver positioned above the ear on the patient's head and an electrode which then extends to the cochlear nerve. This internal component is covered by the patient's scalp. The external component comprises at least one microphone, a power supply, and some processors which are housed in a unit that is usually worn over the ear and is then connected to a transmitter antenna which magnetically interfaces with the receiver. The external component will receive all auditory stimuli and transform it into an electromagnetic signal which is transmitted to the internal component by electromagnetic inductance. The internal component then stimulates the cochlear nerve of the patient and allows the patient to hear.

[0016] Referring to the Figures, a doll's head **10**, with appropriate features such as ears **12**, may be fitted with a simulated external implant component **30**. The head **10** may be manufactured of any known or later discovered material which is suitable for a doll, including but not limited to: polymers, including vinyl, fabric and cloth, rubber, or porcelain. Ears **12** should present some space between them and the head **10**. Magnets **22**, **24** are positioned in the doll's head to provide attachment points for the simulated external implant **30**. These magnets are positioned above the ears **22** and further up the sides of the doll's head, ideally in the upper rear quadrant **24** (FIG. **2**). These magnets then simulate not only the positioning of the implant, but also its attachment mechanism. Ideally, magnets are positioned on

both sides of the head, though single left- or right-sided versions may also be manufactured. The simulated external implant (FIGS. **3** and **4**) then has corresponding magnets **32**, **34** in the simulated microphone body **31** and transmitter **33** to match the head's.

[0017] An alternate attachment means would be the use of a post-and-hole interface where an attachment post **36** on the simulated external implant component **30** and a corresponding hole **26** behind the ears **12** of the doll's head **10**, This interface may either replace or supplement the use of magnets **22**, **32**. While it should be understood that a similar post-and-hole interface could be used in the top of the doll's head (in place of or supplementing magnets **24**, **34**), it should also be recognized that the use of magnets **24**, **34** alone more realistically simulates the physical body of the child. In use, FIGS. **1** and **5**, the simulated microphone body **31** is positioned over the ear **12** of the doll's head **12**, utilizing the magnet and/or post interface, while the simulated transmitter **33** is attached higher up the head at magnet **24**.

[0018] Other attachment means may be utilized, including but not limited to hook-and-loop fasteners, snaps, ties, hooks, or anything now known or later discovered which would efficiently mount the simulated cochlear implant **30** on the doll's head **10** in an appropriate position. The simulated external portion of the cochlear implant **30** may be made of any suitable material and in any acceptable configuration to mimic standard cochlear implant model. It may also be made to utilize whatever attachment strategy is desired for the construction of a specific doll.

[0019] Although the present invention has been described with reference to preferred embodiments, numerous modifications and variations can be made and still the result will come within the scope of the invention. No limitation with respect to the specific embodiments disclosed herein is intended or should be inferred.

What is claimed is:

1. A doll comprising:

a. a doll head which is further comprising at least one ear;

b. a simulated external portion of a cochlear implant, having a simulated microphone body and a simulated transmitter, the simulated microphone body configured to fit in a space defined by the doll's head and at least one ear and the simulated transmitter attachable at another location on the doll's head.

2. The doll of claim **1**, the simulated external portion of a cochlear implant being at least partially attachable to the doll head by at least one magnet.

3. The doll of claim **2**, the simulated external portion of a cochlear implant being at least partially attachable to the doll head by the use of a post-and-hole interface behind the at least one ear.

4. The doll of claim **1**, the simulated external portion of a cochlear implant being at least partially attachable to the doll head by the use of a post-and-hole interface behind the at least one ear.

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