(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 529 171 A1**

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **91500152.3**

(51) Int. Cl.5: **A63H 3/24**

(22) Date of filing: **30.12.91**

(30) Priority: **23.08.91 ES 9102652**

(43) Date of publication of application:
03.03.93 Bulletin 93/09

(84) Designated Contracting States:
AT BE CH DE DK FR GB GR IT LI LU NL SE

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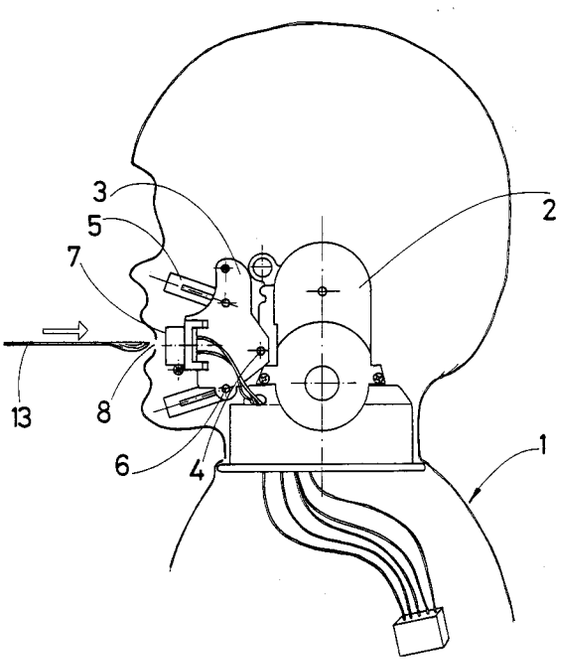
(54) Doll simulating feeding.

(57) A new doll toy. In the invention a doll adopting a conventional shape of a little boy or girl has been designed by including inside the head an electro-mechanical unit-2- and a rocking piece-3- holding two pivoted arms-5- being a part of said unit, the motion of the arms originating successive deformations of the flexible material making up the mouth by pretending a chewing function synchronised with sounds in the way of sentences starting to be voiced when a circuit -10-regulating said voicing is being connected and the voicing is continued with different sentences when a spoon-13- is being inserted into the doll's mouth, said spoon being provided with a specially configured end for the selective operation of some sensors-7- provided at the doll's mouth oppositely located at an opening -8-.

Fig. 3



EP 0 529 171 A1

The present invention refers to a now doll toy.

In the present invention, a doll adopting the conventional shape of a little boy or girl has been designed,and inside the doll is included an electromechanical unit, a rocking piece holding two pivoted arms being a part of said unit, the motion of said arms originating successive deformations of the flexible material compounding the mouth by pretending a chewing function synchronized with sounds as in the way of spoken sentences starting to be voiced when a circuit regulating said voicing is connected and the voicing is continued albeit with different sentances when a spoon is inserted into the doll's mouth, said spoon being provided with a specially configured end for the selective performance of some sensors oppositely positioned in an opening existing at the doll's mouth.

The above described doll organisation allows, when the circuit is connected using a switch located at the doll's back,that a first sound release in the way of a sentence is heard randomly asking for a meal from a predetermined group. Spoons equivalent to each of the predetermined meals are available. The right sensor is activated upon insertion of the suitable spoon into the doll's mouth; the operation of the electromechanical unit is then achieved, and the mouth in the chewing function is moved and concurrently a sound associated to said function is released. When the spoon is drawn out from the mouth, a new sentence will be voiced and after a few seconds the cycle starting sentence will again be repeated.

If the spoon inserted into the mouth is not that required for the requested food, the release of a different sentence will be originated and repeated until the sensor activating spoon is removed from the mouth, and again turning to the voicing of the cycle starting sentence thereafter.

To facilitate the explanation, the present invention is accompanied by some drawing sheets wherein a preferred embodiment cited only by way of example has been shown.

In the drawings:

Figure 1 is a perspective front view of the doll showing its internal organisation.

Figure 2 pertains to a front view of the previous cited mechanism.

Figure 3 is a side view of the doll's head,wherein the electromechanical unit is housed.

Returning now to thc figures, it will appreciated in this embodiment, a doll-1- externally adopting the required shape, and including inside an electromechanical unit contained within a frame -2- comprising an electromotor and a pinion and cogwheel combine,each other operatively engaged to drive a piece-3- attached to the frame with a shaft -4- on which this piece might be pivoted, this piece of flexible material being the holder of the arms -5- rotating on their respective shafts-6-and a row of sensors -7- is provided therebetween oppositely located at the opening -8- provided at the doll's mouth.

Inside the doll, an enclosure -9- for a battery set is provided, this battery set connected to and commanding the electronic circuit -10- by means of which the different mechanisms are driven.

The electronic circuit -10- is connected to an on-off switch.

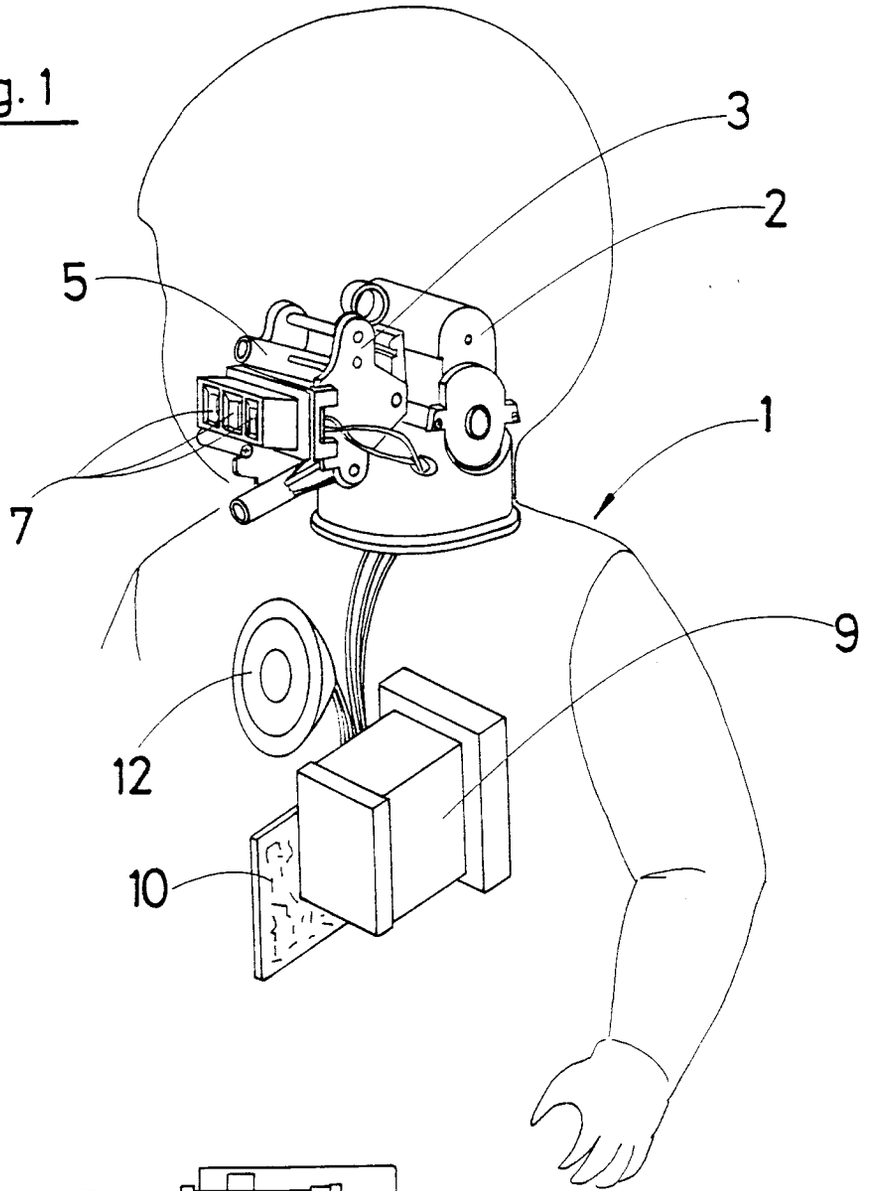
An acoustic arrangement -12- commanded by the electronic circuit -10- to which is connected, is also a part of the components unit included in the doll's body. With this arrangement engaged, different sentences can also be voiced, which contents changed as a function of the sensors-7- being activated when a spoon-like piece -13- provided with a configured end for pressing some predetermined sensors is inserted.

Claims

1. A new doll toy of the type adopting throughout its unit a conventional suitable shape, including inside an electronic circuit connected to an on-off switch activated from a command located at the the doll back's external side and also to a battery set commanding the circuit and remaining engaged within a frame housed at the doll's body,this frame being reached from an opening also located at the doll back area, this frame being closed using an adjustable cover and a second frame is also incorporated inside the doll's head, with an electromotor included therein which is driving its power towards a mechanism made up with a piece,cogwheel and pinion assembly for the operation of a movable pivoting body on a shaft which is binding this body to said frame, essentially characterized in that said body has upwardly and downwardly two movable arms pivotedly linked to said body by one of its ends and being free from the opposite end, these arms being driven by the electromechanical unit such as its motion is transmitted to the flexible and soft material making up the doll's mouth, in this way successive deformations similar to the chewing function are achieved and between both arms being provided a row of sensors connected to the electronic circuit and oppositely located to an opening provided at the doll's mouth, this opening designed to allow the insertion of a spoon toy with a suitably configured end to facilitate the selective pressing of the sensors, this function originating the release of sounds in the way of sentences and/or chewing noises received by a reproduc-

ible arrangement making them audible from outside.

Fig. 1



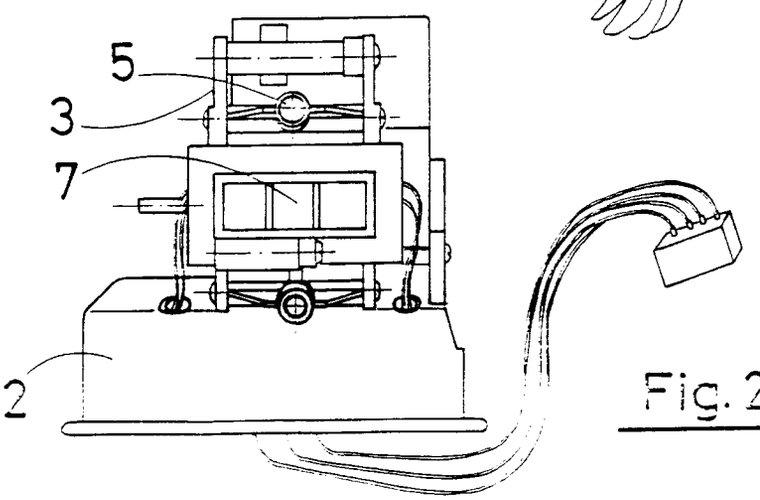
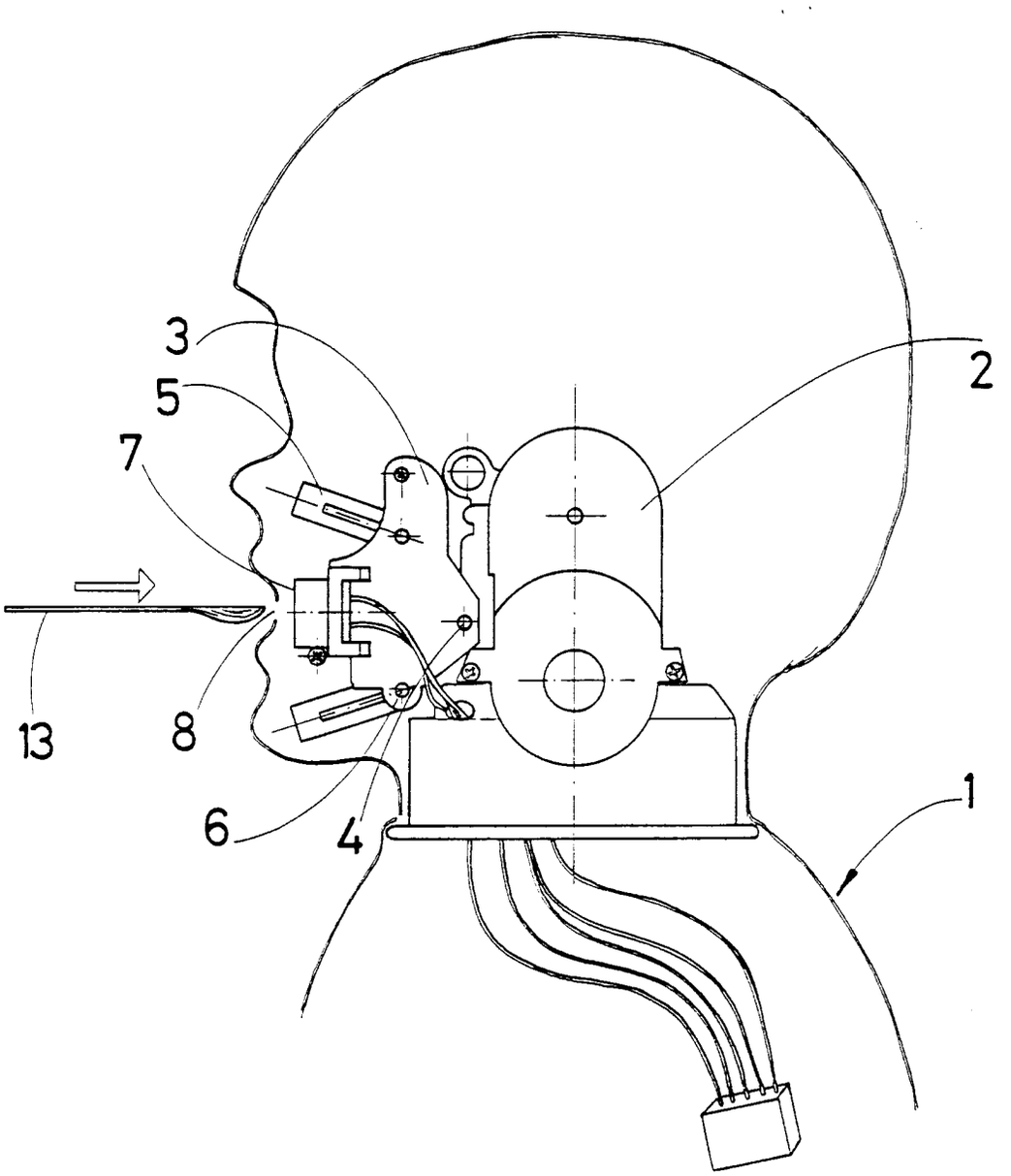


Fig. 2

Fig. 3



European Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 91 50 0152

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	US-A-5 037 345 (NAKAYAMA) * the whole document *	1	A63H3/24
A	US-A-3 444 645 (TEPPER ET AL) * column 5, line 18 - line 72; figures 4-6 *	1	
A	DE-U-9 013 837 (IRWIN TOY LTD) * claim 1; figures *	1	
A	US-A-4 565 536 (VAIRO) * claim 1; figures *	1	
A	GB-A-993 080 (GARDEL ET AL) * page 3, line 19 - line 29; figure 7 *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A63H

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	20 NOVEMBER 1992	CLARKSON P.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P0401)