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Kinberg

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[54] **READILY ERASABLE DOLL FACE ASSEMBLY**

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[73] Assignee: **Horsman Dolls Inc.,** Columbia, S.C.

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[52] **U.S. Cl.** ..... **46/135 R,** 35/62, 35/66

[51] **Int. Cl.** **A63h 3/36**

[58] **Field of Search** ..... 46/116, 135 R; 35/66, 61, 35/62; 40/37

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[57] **ABSTRACT**

A doll including a head provided with a readily erasable face made up of a sheet of translucent synthetic resin coated with or incorporating an iridescent dye and adapted to be brought into intimate contact so as releasably to adhere to a backing plate by application of a stylus or the like along lines or over areas to cause the dye to glow to simulate facial features and including a torso provided with means such as a bellows or the like adapted to be manually actuated to force air into the space between the translucent sheet and the backing plate thus to separate the two to erase the simulated features or the like theretofore placed on the face.

8 Claims, 2 Drawing Figures

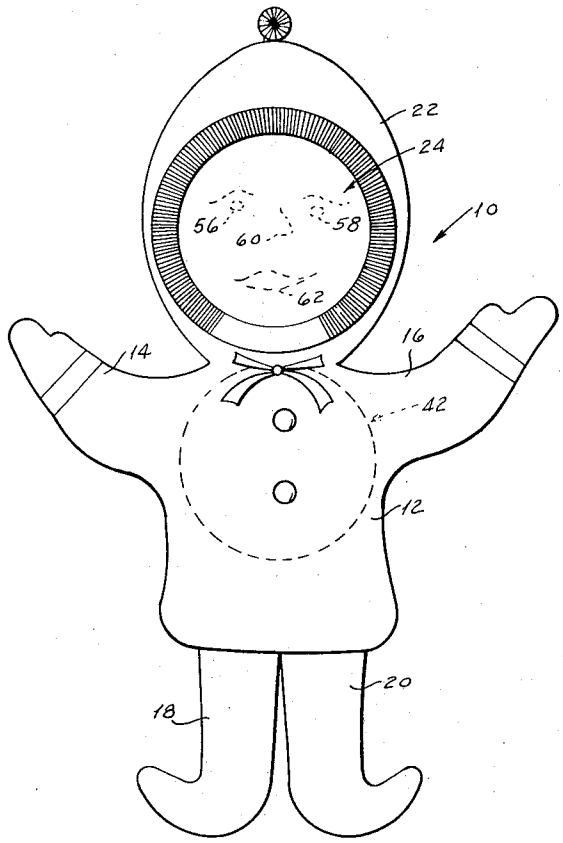
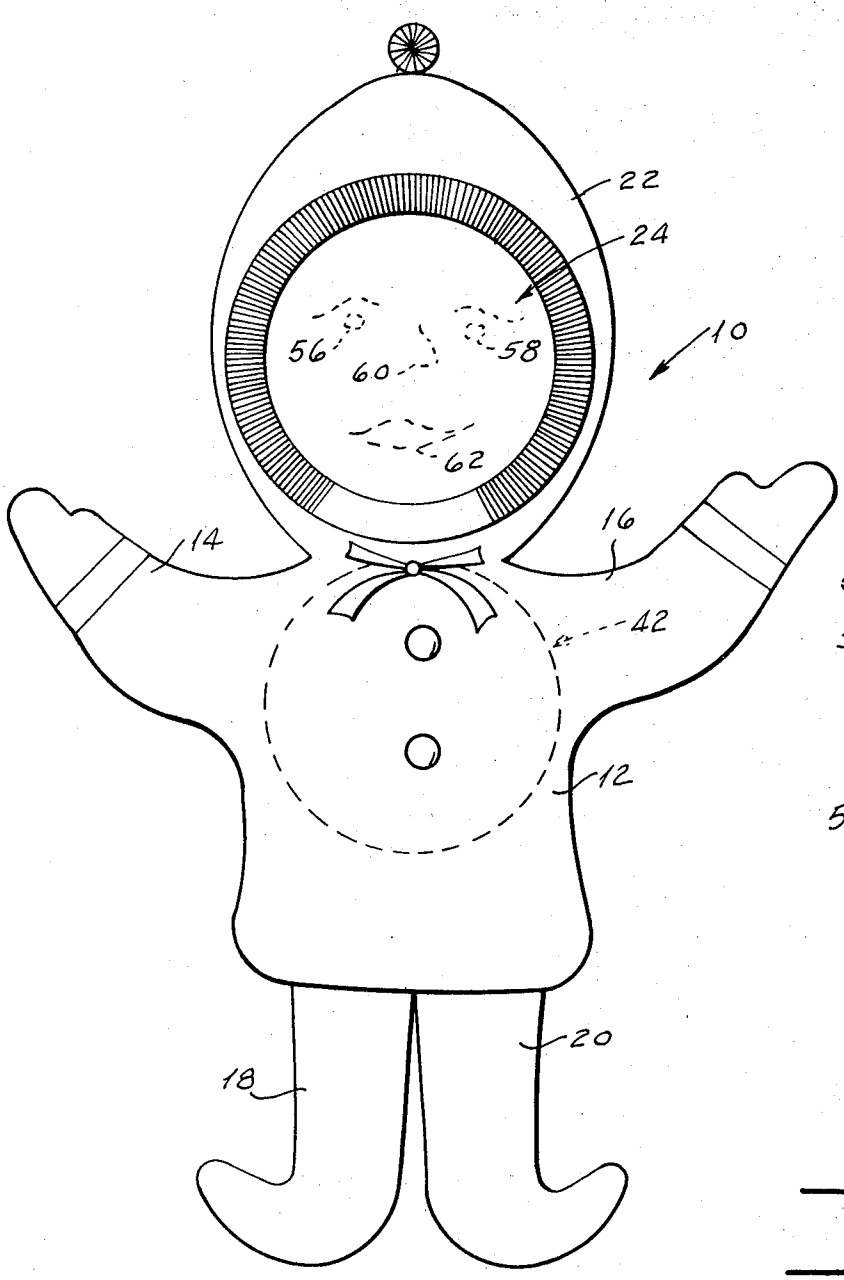


Fig 1


22
24
10
56
60
58
62
14
16
42
12
20
18

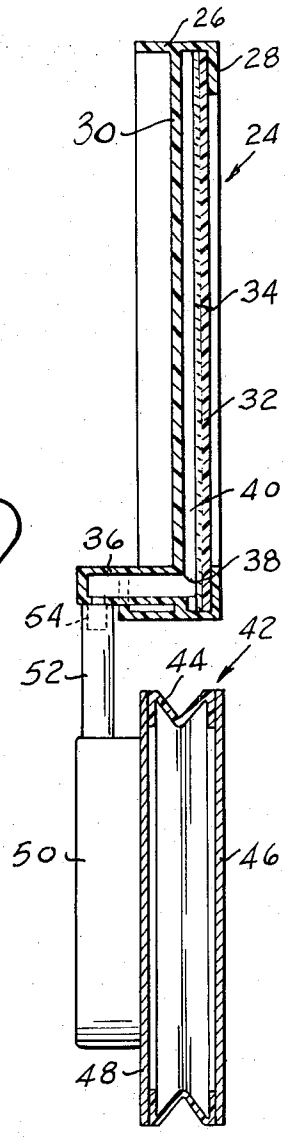

26
28
30
24
34
32
40
36
38
54
42
52
44
50
46
48

Fig 2

READILY ERASABLE DOLL FACE ASSEMBLY

BACKGROUND OF THE INVENTION

Many and varied forms of dolls are known in the prior art. For the most part the dolls have fixed features. Elements such, for example, as the eyes, may be movable. There are also known in the prior art dolls to which various combinations of features and articles of clothing can be applied to make up different characters, for example. It will readily be appreciated that the appeal of a doll to a child is enhanced by the manner in which the doll can be manipulated so as to change its features or attitudes or both.

Also known in the prior art are paints and crayons and the like which can be used to draw features on a blank face. Such articles when used by a small child are messy and the resultant picture is not readily erased.

I have invented a doll having a face on which various features can be represented by use of a stylus or the like. I provide my doll with manually actuatable means which can be manipulated readily to erase features which theretofore have been simulated on the doll's face. My doll is extremely simple in construction for the result achieved thereby. It is neat and clean in use. It is inexpensive to manufacture. It has a relatively long life in use.

SUMMARY OF THE INVENTION

One object of my invention is to provide a doll having a face on which features or the like can readily be simulated by use of a stylus or the like.

Another object of my invention is to provide a doll provided with means for readily erasing features and the like which theretofore have been simulated on the doll's face.

A further object of my invention is to provide a doll having a readily erasable face assembly which does not involve the use of messy writing implements or paints or the like.

Still another object of my invention is to provide a doll having a readily erasable face assembly which is simple in construction.

A still further object of my invention is to provide a doll having a readily erasable face assembly which is inexpensive to manufacture.

Yet another object of my invention is to provide a doll having a readily erasable face assembly which has a relatively long life in use.

Other and further objects of my invention will appear from the following description.

In general my invention comtemplates the provision of a doll including a head having a normally blank face made up of a flexible translucent plastic sheet coated with or incorporating an iridescent dye and mounted in closely spaced relationship to an opaque backing plate so as to permit a stylus or the like to be pressed against the flexible sheet along the lines or over areas to activate the dye to simulate facial features and including a torso housing manually operable means such as a bellows or the like adapted to be squeezed to force air into the space between the flexible sheet and the backing plate to move them apart thus to erase any features theretofore applied to the face.

BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings which form part of the instant specification and which are to be read in conjunction therewith and in which reference numerals are used to indicate like parts in the various views:

FIG. **1** is a front elevation of a doll incorporating my readily erasable doll face assembly.

FIG. **2** is a sectional view of my readily erasable doll face assembly which is incorporated in the doll illustrated in FIG. **1**.

DESCRIPTION OF THE PREFERRED EMBODIMENT

One form of doll indicated generally by the reference character **10** which may be provided with my readily erasable doll face assembly includes a body portion or torso **12**, arms **14** and **16**, legs **18** and **20** and a head **22**. The torso, arms, legs and head may be formed in any suitable manner such, for example, as by stitching pieces of fabric to each other to form a skin or shell of the appropriate configuration which may be filled with any suitable stuffing or filling known to the art.

The doll **10** is provided with a face assembly indicated generally by the reference character **24** which may be mounted by any suitable means in an opening in the front of the head **22**. The assembly **24** includes a relatively rigid frame **26** which may be molded from any appropriate synthetic resin and which may be formed with a retaining flange **28** extending around the periphery thereof. The frmae **26** and its flange **28** are adapted to be secured in the head opening by means of an adhesive or the like.

I provide frame **26** with a backing plate **30** of opaque material. Plate **30** may be formed integrally with the frame **26** or may be adhered therein by use of a suitable cement. While the backing plate **30** may be any appropriate color, preferably I make the plate white.

I assemble a flexible sheet **32** of synthetic resin to the inside of the flange **28** so that the inner surface of the sheet is in closely spaced relationship to the surface of the backing plate **30**. Sheet **32**, in particular its outer surface, forms the face area of the doll head. In the form of my invention illustrated in the drawings, I provide the inner surface of the sheet **32** with a coating **34** of an iridescent dye. The dye may be any appropriate color such, for example, as pink. While I have shown a coating **34** of the inner surface of the sheet **32**, it will readily be appreciated that I might, if desired, incorporate the dye in the sheet or, alternatively, coat the outer surface of the sheet with the dye. U.S. Pat. No. 3,761,343, issued Sept. 25, 1973, to Benjamin Kinberg and Richard J. Mayer for Means for Providing a Semi-permanent Iridescent Display discloses an arrangement pursuant to which I form the erasable facial display of my doll.

I form or otherwise provide the backing plate **30** with a fitting **36** leading to an opening **38** communicating with the space **40** between the inner surface of sheet **32** and the backing plate **30**.

The torso **12** houses a bellows indicated generally by the reference character **42** having a resilient wall **44** extending around the periphery thereof and end plate **46** and **48** secured to the wall **44** in any suitable manner known to the art. A fitting **50** communicating with the interior of the bellows through the end plate **48** is connected by a pipe **52** to a fitting **54** leading to the interior of the fitting **36**.

In use of the doll **10** provided with my readily erasable face assembly **24**, the child playing with the doll may, for example, apply a stylus or even his fingernail

or the like to the outer surface of sheet **32** to bring the inner surface thereof into intimate contact with the outer surface of backing plate **30** along lines or over areas to simulate desired features. In the particular embodiment of my doll described hereinabove in which a pink iridescent dye is used before the application of pressure to the outer surface of sheet **52** the face area appears as a dull pink in color. After pressure has been applied to bring the surface of sheet **32** into intimate contact with the surface of plate **30** to cause the sheet to adhere to the backing plate in desired areas the dye will glow in these areas to simulate facial features, for example. By way of example, in FIG. **1** I have illustrated the simulation of the doll's eyes **56** and **58**, a nose **60** and a mouth **62.** When it is desired to erase the features from the face, all the child need do is to squeeze the doll' s torso **12** to compress the bellows **42** to cause air to be expelled therefrom through tube **52** and through fitting **38** into the space **40** between the inner surface of sheet **34** and the other surface of the backing plate **30.** As this space fills with air under pressure, the surfaces of the sheet and the backing plate are separated so that the simulated features disappear and the face area again appears as a dull pink.

It will be seen that I have accomplished the objects of my invention. I have provided a doll having a face assembly on which features can readily erasably be represented. Features theretofore applied to my doll's face assembly can readily be erased by a simple manual operation. The application of features to my face assembly does not require the use of messy writing instruments or paints or the like. No erasers are required to remove the features. My readily erasable doll's face assembly is simple in construction and in operation. It is inexpensive to manufacture.

It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and subcombinations. This is contemplated by and is within the scope of my claims. It is further obvious that various changes may be made in details within the scope of my claims without departing from the spirit of my invention. It is, therefore, to be understood that my invention is not be limited to the specific details shown and described.

Having thus described my invention, what I claim is:

1. A doll including in combination, a torso, a head carried by said torso, a face opening in said head, a face assembly comprising an opaque backing plate, a translucent flexible sheet incorporating an iridescent dye, means mounting said flexible sheet and said backing plate in cooperative relationship with an inner surface of said sheet in closely spaced relationship to the surface of said backing plate, said face assembly being positioned in said face opening, the inner surface of said flexible sheet adapted releasably to adhere to the surface of said backing plate in response to pressure applied to the outer surface thereof to cause said dye to glow at points at which said pressure is applied to present a display corresponding to locations at which said pressure is applied, a bellows in said torso adapted to be compressed in response to squeezing of said torso, and means providing communication between the interior of said bellows and the spaces between said sheet and said backing plate to erase a display in response to said squeezing.

2. A doll including a combination, a head provided with a face area having an outer surface, said head including means responsive to the application of pressure to the outer surface of said face area for producing a two-dimensional display in regions of said face area over which pressure is applied, a compressible body portion connected to said head, and means in said body portion for erasing said display responsive to the application of pressure to said compressible body portion.

3. A doll as in claim **2** in which said face area is generally flat.

4. A doll as in claim **2** in which said display producing means presents an iridescent display in response to said application of pressure.

5. A doll as in claim **2** in which said display producing means comprises an opaque backing plate, a flexible sheet of synthetic resin and means mounting said sheet in front of said backing plate with the outer surface of the sheet exposed and constituting said outer surface of said area, and with the inner surface of said sheet in closely spaced relationship to said backing plate, said inner surface of said flexible sheet tending to adhere to the surface of said backing plate upon being brought into contact therewith in response to pressure applied to the outer surface of said flexible sheet.

6. A doll as in claim **5** in which said flexible sheet includes an iridescent dye.

7. A doll as in claim **6** in which said dye is a coating.

8. A doll as in claim **2** in which said means in said body portion is a bellows and means connecting said bellows to said display presenting means.

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