

BABY SOOTHER

The present invention relates to a method of manufacturing a baby soother and a baby soother
5 manufactured thereby.

In the past, one type of baby soother (commonly referred to as dummies) have been made of rubber or artificial rubber in the shape of a nipple. These
10 baby soothers have not been found to be suitable for babies about to grow their first milk teeth. Baby soothers with rubber nipples do not help babies to develop strong gums and help them to get over their teething problems.

15 Baby soothers for older, teething babies have been known and are frequently in the shape of rings and referred to as "teething rings". Teething rings particularly those filled with a liquid such as
20 distilled water have been known. These teething rings are filled with the liquid and are sealed from the outside. They have been conventionally made of a plastics type sealable material and as a result of the sealing process the teething rings have a sharp
25 edge where the sealing process has taken place. This sharp edge provides a possible danger to the mouths of babies using the teething ring.

The present invention provides a method of
30 manufacturing a baby soother comprising providing a material of a type sealable by high frequency welding, shaping the material, and sealing the

material with high frequency welding to form a hollow article with a filling aperture, turning the article thus produced inside out, filling it with a liquid and thereafter closing the filling aperture of the
5 hollow article.

In a preferred arrangement the finally sealed part of the baby soother is surrounded by another smooth part of the baby soother. This smooth part of the baby
10 soother may comprise, for example, a handle portion.

The invention also provides a baby soother manufactured in accordance with the above method.

15 The invention provides a great improvement upon the earlier type baby soothers in that the sharp sealed edge is disposed inside the baby soother so that it does not damage the baby's mouth.

20 A method of the invention and a baby soother in the form of a teething ring manufactured thereby will now be described by way of example only and with reference to the accompanying drawings in which:

25 Figure 1 shows a first stage of the manufacture of the teething ring according to the invention,

Figures 2 to 6 show successive stages of the manufacture of the teething ring according to the
30 invention, and,

Figure 7 shows a teething ring manufactured according

to the method of the invention.

Referring to the drawings, the first stage of the method of the invention comprises providing two
5 shaped pieces of food-grade PVC and arranging them face to face. It will be seen that the two pieces each comprise a circular portion 10 and a neck portion 11 extending radially from the circular portion 10. As is clear from Figure 1 the edges of
10 the two pieces of PVC are sealed together by means of a high frequency welding along the line 12. This means that the two cut edges form a relatively sharp edge 15 extending adjacent and outside the weld line 12. It should be noted that the outer end of the
15 neck portion 11 is not sealed at this stage.

A central hole 13 is then cut through the circular portion 10 of the article shown in Figure 1 and this produces the article shown in Figure 2.

20 The article is then turned inside out. Alternatively the article of Figure 1 can be turned inside out and then the hole 13 cut. The effect of this is that the sharp edge produced by the weld line 12 is inside the article. The neck portion 11 is then
25 trimmed so as to produce the article shown in Figure 3.

In the next step shown in Figure 4 the central hole 13 is sealed by means of a high frequency weld along the weld line 14. In the article shown in Figure 4
30 there is therefore only one opening 18 to the interior of the article and that is at the neck. The neck 11 is then trimmed and welded to produce the neck

portion shown in Figure 5 so that the opening 18 into the interior of the article is narrow.

5 The article is now filled with a liquid such as distilled water through the opening 18. The liquid within the article will produce a doughnut type shape to the article.

10 The opening 18 is then sealed by high frequency welding and trimmed as is clear from Figure 6.

15 Figure 7 shows the completed teething ring in which a handle 17 has been moulded over the sealed opening 18. The handle which may be of a more rigid plastics material can be in two portions which can be fitted together and then welded or adhesively connected together. The handle 17 covers any exposed sharp portion produced by welding of the neck portion 11 and opening 18.

20 The sharp edges which are still present owing to the weld line 14 welding the central hole 13 will not come into contact with the baby's gums.

25 In this way there has been provided a doughnut shaped teething ring in which the sharp edges produced by the welding of the portions together during manufacture and which might contact the baby's gums are inside the teething ring.

CLAIMS

1. A method of manufacturing a baby soother comprising providing a material of a type sealable by high frequency welding, shaping the material, and sealing the material with high frequency welding to form a hollow article with a filling aperture, turning the article thus produced inside out, filling it with a liquid and thereafter closing the filling aperture of the hollow article.
2. A method as claimed in claim 1 in which the closed filling aperture of the baby soother is then surrounded by a further smooth part of the baby soother.
3. A method as claimed in claim 2 in which the further smooth part comprises a handle portion.
4. A method as claimed in any of claims 1 to 3 in which the article, after being turned inside out, is cut to provide a hole through the article which is sealed by high frequency welding before the article is filled with liquid.
5. A method of manufacturing a baby soother as claimed in claim 1 substantially as hereinbefore described.
6. A baby soother as manufactured by the method of any of claims 1 to 5.

18



6

7. A baby soother substantially as shown in Figure
7.
