

(19)



(11)

EP 2 586 420 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
19.03.2014 Bulletin 2014/12

(51) Int Cl.:
A61J 17/00 ^(2006.01) **A47G 21/04** ^(2006.01)

(21) Application number: **12189916.5**

(22) Date of filing: **25.10.2012**

(54) **Feeding utensil for a baby**

Babyfütterungsutensil

Ustensile d'alimentation pour bébé

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**

(30) Priority: **25.10.2011 GB 201118439**

(43) Date of publication of application:
01.05.2013 Bulletin 2013/18

(73) Proprietor: **Craig, James
Dundee Tayside DD4 9RH (GB)**

(72) Inventor: **Craig, James
Dundee Tayside DD4 9RH (GB)**

(74) Representative: **Gaunt, Thomas Derrick et al
Ablett & Stebbing
7-8 Market Place
London W1W 8AG (GB)**

(56) References cited:
WO-A1-2010/109246 US-A1- 2011 106 156

EP 2 586 420 B1

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

Description

[0001] The present invention relates to a feeding utensil for a baby and, in particular, a feeding spoon/soother for use when feeding a baby, see e.g. WO 2010/109 246.

[0002] The transition of a baby's diet from liquids to soft baby foods can be difficult. A baby starts being fed with liquid diet and, through instinct, they learn to suckle and draw liquid from a bottle or breast nipple. However, when the baby is old enough to shift to eating soft, semi-solid foods, it can be difficult for them to adapt from this learnt suckling action to feeding from a spoon.

[0003] In this connection, from bottle or breast feeding, the baby learns to "latch on" to the feeding nipple when it is placed in their mouth. This contrasts greatly with the action of eating with a spoon. Firstly, the baby cannot "latch on" to the spoon, but instead must loosely close their mouth over the spoon and allow it to be drawn out whilst they retain the food in their mouth. Secondly, it can often be difficult or uncomfortable for a baby to receive the spoon head in their mouth due to its large, rigid head. As such, it is common to only place food on the tip of the spoon and tilt the spoon to tip it into the baby's mouth. This can be messy and also promote an unnatural feeding action. Thirdly, when feeding from a bottle or nipple the baby is used to drawing food continually whenever the nipple is in their mouth. This is very different from spoon feeding where the baby must learn to eat food intermittently each time the spoon is placed in their mouth and then removed.

[0004] The present invention therefore seeks to provide a device for addressing the above problem.

[0005] According to the present invention as defined by claim 1, there is provided a feeding utensil for a baby comprising a handle; and a teat comprising a food retaining region formed at a distal end thereof and having a solid interior, the upper surface of the food retaining region being profiled for retaining food thereon; and a biteable region connected to the handle and having an interior cavity for permitting compression of the biteable region when bitten by a baby on closing their mouth over the food retaining region.

[0006] In this way, the present invention provides a feeding utensil which eases a baby's transition from liquid to solid or semi-solid foods. The food retaining region of the teat is formed as a solid structure, helping it to maintain its profile on insertion into, and when held within, a baby's mouth. This prevents food held on its upper surface from falling off. At the same time, the biteable region provides a relatively soft, compressible, region which a baby can bite into when the teat is inserted into their mouth. This allows the baby to effectively latch onto this region of the teat, whilst suckling food off the relatively more rigid food retaining region. The teat is thereby formed as a single body with two integrally formed regions which have different functional properties owing to their different interiors. The biteable region allows the baby to feed in a similar way to bottle/nipple feeding by

biting on the teat, whilst at the same time the baby learns to feed intermittently. Furthermore, as the rigid food retaining region tends to retain its profile, the baby also gets used to drawing food from an upper surface of a less compressible object, as they would with a spoon.

[0007] Preferably, the teat has a substantially consistent thickness along its length. In this way, the teat can be smoothly inserted into a baby's mouth, down to the biteable region. It also allows the baby to easily close their mouth over the teat for suckling food off the food retaining region.

[0008] Conveniently, the teat has a maximum width within the food retaining region. In this way, the teat generally adopts a spoon-shape, with the food retaining region adopting the general shape of the spoon head, and the biteable region forming its neck. As such, a relatively large quantity of food can be placed on the food retaining region, whilst still allowing the baby to close their mouth over the teat. The wide shape also encourages the baby to learn to open their mouth wide enough for spoon feeding.

[0009] Preferably, the exterior surface of the teat is profiled to provide a smooth transition between the food retaining region and the biteable region. This helps a baby to accept the whole teat more easily.

[0010] Preferably, the width of the biteable region gradually increases as it extends toward the food retaining region. In this way, a smooth transition with the food retaining region is achieved.

[0011] Preferably, the upper surface of the food retaining region defines a recess for retaining food, the recess having its maximum depth at the centre of the food retaining region. In this way, the upper surface of the food retaining region generally adopts a spoon shape, allowing a quantity of food to be partially received in the recess. This helps to avoid food falling off the sides of the teat.

[0012] Conveniently, the thickness of the biteable region is smaller than its width. This allows the baby to suckle the teat, with their mouth closed over the biteable region.

[0013] Preferably, the teat curves downwardly from the biteable region to the food retaining region. Preferably, the curvature of the teat is profiled for accommodating the shape of a tongue. With these features, the teat is able to conform more closely to the interior of the baby's mouth.

[0014] Preferably, the teat is shaped so that the food retaining region is disposed relatively lower than the biteable region. This facilitates the easy scooping and delivery of food on the food retaining region.

[0015] Preferably, the teat is formed of a flexible polymer. In this way, the resilience of the polymer allows the biteable region to quickly revert back to its original configuration after it is removed from a baby's mouth. Furthermore, this also provides the utensil with a similar feel to bottle nipple, thereby helping the baby to transition from bottle feeding.

[0016] Preferably, the food retaining region and the

biteable region are integrally formed. In this way, the risk of separation of the two regions is minimised, resulting in a very durable teat which can reliably withstand chewing by the baby. Furthermore, it also allows for simplified manufacture, with the different properties of the two regions being imparted due to their different interiors.

[0017] Conveniently, the feeding utensil further comprises a shield located at the connection between the biteable region and the handle for preventing said teat from being swallowed or partially swallowed.

[0018] Preferably, the shield comprises one or more ventilation holes. This prevents saliva build-up.

[0019] An illustrative embodiment of the present invention will now be described with reference to the accompanying drawings in which:

Figure 1 shows a top view of a feeding utensil according to an embodiment of the present invention; Figure 2 shows a cross-sectional view of the feeding utensil along the line X-X; and Figure 3 shows a perspective view of the feeding utensil.

[0020] Figures 1 to 3 show a baby feeding utensil 1 according to an embodiment of the present invention. The feeding utensil 1 comprises a handle 10 which is connected to a teat formation 40 via connector 20. A shield 30 is also provided between the handle 10 and the teat 40.

[0021] The teat 40 has a spoon-like shape, with its distal end forming a food retaining region 42 similar to the head of a spoon. A connecting region or part 44 of the teat 40 is provided between the food retaining region 42 and the handle 10, similar to the neck of a spoon. As such, it has a smaller width than the food retaining region 42 (see Figure 1). The teat 40 is formed as a single piece and, in this embodiment, is made of a silicone. Silicone is preferred because it is sterilisable, and is taste and odour free.

[0022] The food retaining region 42 of the teat 40 is formed with a solid interior, and is profiled to define a recess on its upper surface into which food can be partially received. In this respect, the recess has its maximum depth at the centre of the food retaining region 42 in order to optimise food retention. The food retaining region 42 is also sized for retaining a quantity of food suitable for one baby's mouthful. This avoids a user from placing too much food in the baby's mouth at one time.

[0023] As shown in Figure 2, the exterior of the food retaining region 42 forms a smooth bowl-like support, with the thickness of material though this region of the teat (i.e. in a vertical plane) acting to support the recesses on its upper surface.

[0024] The connecting part 44 of the teat 40 forms a biteable region. As shown in Figures 1 and 3, the width of the biteable region 44 (i.e. in the horizontal plane) gradually increases as it extends towards the food retaining region 42. This provides a smooth transition between the

two regions, allowing the teat 40 to be easily inserted into a baby's mouth. As the same time, the relatively narrow base of the biteable region 44, near the handle 10, allows a baby's mouth to easily close over the teat 40.

[0025] As shown in Figure 2, the interior of the biteable/connecting region 44 is provided with an air filled cavity 43, formed along the length of the biteable region 44. As a consequence of this air cavity, compared to the solid body of the food retaining region 42, the biteable region 44 is relatively compressible. This allows a baby to bite down and suckle the biteable region when the teat 40 is inserted into their mouths.

[0026] The air cavity 43 has an opening at the rear end of the teat, adjacent the handle 10. This allows the biteable region to be easily compressed when bitten, forcing air within the cavity out through the opening.

[0027] As shown in Figure 2, the food retaining region 42 and the biteable region 44 are integrally formed, with the teat having a substantially consistent thickness along its length. This provides a smooth transition between the two regions and avoids the risk of their separation when the teat is chewed.

[0028] The teat 40 curves downwardly from the biteable region 44 to the food retaining region 42 such that the food retaining region 42 is disposed relatively lower than the biteable region 44. This curvature of the teat 40 helps food to be scooped up, as well as allowing the teat to be better accommodated within the baby's oral cavity.

[0029] The handle 10 is formed of a rigid plastic material and comprises a number of teething formations on its surface. As such, the handle provides a teething surface for soothing the baby's gums. The handle 10 is also sized to be too wide to fit in a baby's mouth entirely to prevent swallowing.

[0030] The shield 30 is also formed of a rigid plastic material and is provided with a plurality of ventilation holes 32 for preventing saliva building up on its surface. The shield acts to prevent the teat 40 from being positioned too far into a baby's mouth.

[0031] In use, a user feeding a baby will place a portion of food on the food retaining area 42 of the teat 40. The resilience of the silicone material forming the teat 40, particularly over the solid food retaining area 42, provides sufficient support for the weight of the portion of food.

[0032] Once inserted into a baby's mouth, the baby is able to close their mouth over the teat 40, biting or latching onto the biteable region 44. Due to the resilience of the flexible polymer and the presence of interior cavity 43, this action results in the biteable region 44 being reversibly compressed as the cavity 43 compresses and deforms. At the same time, the relatively more rigid solid body of the food retaining region 42 maintains its shape. This supports the food during the biting action, allowing the baby to perform the active step of sucking or drawing the food off the retaining region 42 in their own time. This helps to develop the skills the baby needs for conventional spoon feeding.

[0033] When the baby is ready for more food, the teat

40 can be withdrawn from the baby's mouth, at which point the resilience of the teat 40 returns it to its undeformed configuration, and the process can be repeated.

[0034] As will be understood, the above action provides a helpful transition between bottle/nipple feeding and spoon feeding. That is, the baby is able to feed in a similar way to bottle/nipple feeding as they can latch onto the teat and suckle. At the same time, the baby learns to feed intermittently, in the same way as they would by spoon feeding, as well as the action of opening their mouths wide to accommodate the teat.

[0035] In addition to the above, it will also be understood that the collapsable nature of the biteable region allows the utensil to also be used as a soother or dummy for the baby. This increases the baby's familiarity with the device, thereby helping them to learn to accept the utensil and solid foods into their mouth.

[0036] It will be understood that the embodiment illustrated above shows applications of the invention only for the purposes of illustration. In practice the invention may be applied to many different configurations, the detailed embodiments being straightforward for those skilled in the art to implement.

[0037] In this respect, although in the above embodiment, the teat has been provided with an air cavity, it will be understood that alternative configurations may be used. For example, the teat may be provided with sealed fluid gel filled cavity. Nevertheless, the biteable region of the teat is configured so that it can at least partially collapse or flatten in the sense that it deforms when a baby bites it. In this way, the baby is able to "latch on" to the teat, before sucking food from it, in a similar manner to how they would feed from a nipple.

Claims

1. A feeding utensil (1) for a baby comprising:

a handle (10); and
a teat (40) comprising:

a food retaining region (42) formed at a distal end thereof and having a solid interior, the upper surface of the food retaining region being profiled for retaining food thereon; and
a biteable region (44) connected to the handle (10) and having an interior cavity (43) for permitting compression of the biteable region (44) when bitten by a baby on closing their mouth over the food retaining region (42).

2. A feeding utensil according to claim 1, wherein the teat has a substantially consistent thickness along its length.

3. A feeding utensil according to claim 1 or 2, wherein the teat has a maximum width within the food retaining region.

4. A feeding utensil according to any preceding claim, wherein the exterior surface of the teat is profiled to provide a smooth transition between the food retaining region and the biteable region.

5. A feeding utensil according to any preceding claim, wherein the width of the biteable region gradually increases as it extends toward the food retaining region.

6. A feeding utensil according to any preceding claim, wherein the upper surface of the food retaining region defines a recess for retaining food, the recess having its maximum depth at the centre of the food retaining region.

7. A feeding utensil according to any preceding claim, wherein the thickness of the biteable region is smaller than its width.

8. A feeding utensil according to any preceding claim, wherein the teat curves downwardly from the biteable region to the food retaining region.

9. A feeding utensil according to claim 9, wherein the curvature of the teat is profiled for accommodating the shape of a tongue.

10. A feeding utensil according to any preceding claim, wherein the teat is shaped so that the food retaining region is disposed relatively lower than the biteable region.

11. A feeding utensil according to any preceding claim, wherein the teat is formed of a flexible polymer.

12. A feeding utensil according to any preceding claim, wherein the food retaining region and the biteable region are integrally formed.

13. A feeding utensil according to any preceding claim, further comprising a shield (30) located at the connection between the biteable region (44) and the handle (10) for preventing said teat from being swallowed or partially swallowed.

14. A feeding utensil according to claim 14, wherein the shield (30) comprises one or more ventilation holes (32).

Patentansprüche

1. Ein Utensil (1) zum Füttern eines Babys bestehend

aus:

einem Griff (10) und
einem Nuckel (40) bestehend aus:

einem die Nahrung aufnehmenden Bereich (42), der an dessen distalen Ende gebildet ist und einen festen Innenbereich aufweist, wobei die Oberfläche des die Nahrung aufnehmenden Bereichs ein Profil hat, auf dem die Nahrung aufgenommen wird; und einem Beißbereich (44), der mit dem Griff (10) verbunden ist und eine interne Aushöhlung (43) hat, um ein Zusammendrücken des Beißbereichs (43) zur ermöglichen, wenn das Baby beim Schließen des Munds über den die Nahrung aufnehmenden Bereich (42) darauf beißt.

2. Ein Utensil zum Füttern entsprechend Anspruch 1, wobei der Nuckel entlang seiner Länge eine im Wesentlichen beständig Dicke aufweist. 20
3. Ein Utensil zum Füttern entsprechend Anspruch 1 oder 2, wobei der Nuckel im die Nahrung aufnehmenden Bereich eine Maximalbreite aufweist. 25
4. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei die Außenfläche des Nuckels so profiliert ist, dass sie einen glatten Übergang zwischen dem die Nahrung aufnehmenden Bereich und dem Beißbereich liefert. 30
5. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei die Breite des Beißbereichs in Richtung des die Nahrung aufnehmenden Bereichs allmählich zunimmt. 35
6. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei die Oberfläche des die Nahrung aufnehmenden Bereichs eine Vertiefung für die Aufnahme der Nahrung definiert, wobei die Vertiefung in der Mitte des die Nahrung aufnehmenden Bereichs ihre maximale Tiefe hat. 40
7. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei die Dicke des Beißbereichs kleiner als seine Breite ist. 45
8. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei sich der Nuckel vom Beißbereich zum die Nahrung aufnehmenden Bereich nach unten wölbt. 50
9. Ein Utensil zum Füttern entsprechend Anspruch 9, wobei die Wölbung des Nuckels so profiliert ist, dass sie die Form einer Zunge aufnehmen kann. 55

10. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei der Nuckel so geformt ist, dass der die Nahrung aufnehmende Bereich relativ zum Beißbereich niedriger positioniert ist.

11. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei der Nuckel aus einem elastischen Polymer geformt ist.

12. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, wobei der die Nahrung aufnehmende Bereich und der Beißbereich integral gebildet sind.

13. Ein Utensil zum Füttern entsprechend einem der vorhergehenden Ansprüche, zudem weiterhin ein Schild (30) gehört, der sich an der Verbindungsstelle zwischen dem Beißbereich (44) und dem Griff (10) befindet, um zu verhindern dass der genannte Nuckel verschluckt oder teilweise verschluckt wird.

14. Ein Utensil zum Füttern entsprechend Anspruch 14, wobei der Schild (30) ein oder mehrere Luftlöcher (32) hat.

Revendications

1. Un ustensile d'alimentation (1) pour bébé comprenant :

une poignée (10), et
une tétine (40) comprenant :

une zone de rétention d'aliments (42) formée à une extrémité distale de celle-ci et possédant un intérieur solide, la surface supérieure de la zone de rétention d'aliments étant profilée de façon à retenir des aliments sur celle-ci, et
une zone pouvant être mordue (44) raccordée à la poignée (10) et possédant une cavité intérieure (43) destinée à permettre une compression de la zone pouvant être mordue (44) lorsqu'elle est mordue par un bébé lors de la fermeture de sa bouche sur la zone de rétention d'aliments (42).

2. Un ustensile d'alimentation selon la Revendication 1, où la tétine possède une épaisseur sensiblement homogène le long de sa longueur.

3. Un ustensile d'alimentation selon la Revendication 1 ou 2, où la tétine possède une largeur maximale à l'intérieur de la zone de rétention d'aliments.

4. Un ustensile d'alimentation selon l'une quelconque

des Revendications précédentes, où la surface extérieure de la tétine est profilée de façon à fournir une transition douce entre la zone de rétention d'aliments et la zone pouvant être mordue.

5

5. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où la largeur de la zone pouvant être mordue augmente graduellement à mesure qu'elle s'étend vers la zone de rétention d'aliments. 10
6. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où la surface supérieure de la zone de rétention d'aliments définit un renforcement pour la rétention d'aliments, le renforcement présentant sa profondeur maximale au niveau du centre de la zone de rétention d'aliments. 15
7. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où l'épaisseur de la zone pouvant être mordue est inférieure à sa largeur. 20
8. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où la tétine s'incurve vers le bas de la zone pouvant être mordue à la zone de rétention d'aliments. 25
9. Un ustensile d'alimentation selon la Revendication 9, où la courbure de la tétine est profilée de façon à s'adapter à la forme d'une langue. 30
10. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où la tétine est façonnée de sorte que la zone de rétention d'aliments soit disposée relativement plus bas que la zone pouvant être mordue. 35
11. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où la tétine est formée à partir d'un polymère souple. 40
12. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, où la zone de rétention d'aliments et la zone pouvant être mordue sont formées d'un seul tenant. 45
13. Un ustensile d'alimentation selon l'une quelconque des Revendications précédentes, comprenant en outre une paroi (30) située au niveau de la connexion entre la zone pouvant être mordue (44) et la poignée (10) de façon à empêcher ladite tétine d'être avalée ou partiellement avalée. 50
14. Un ustensile d'alimentation selon la Revendication 14, où la paroi (30) comprend un ou plusieurs trous de ventilation (32). 55

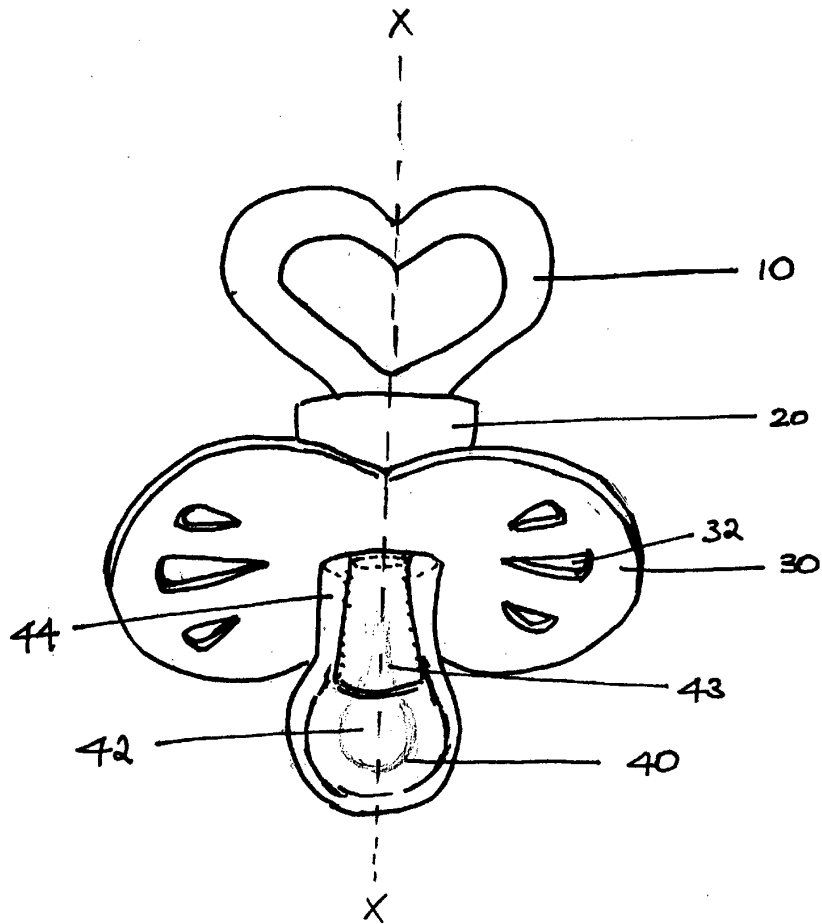


FIGURE 1

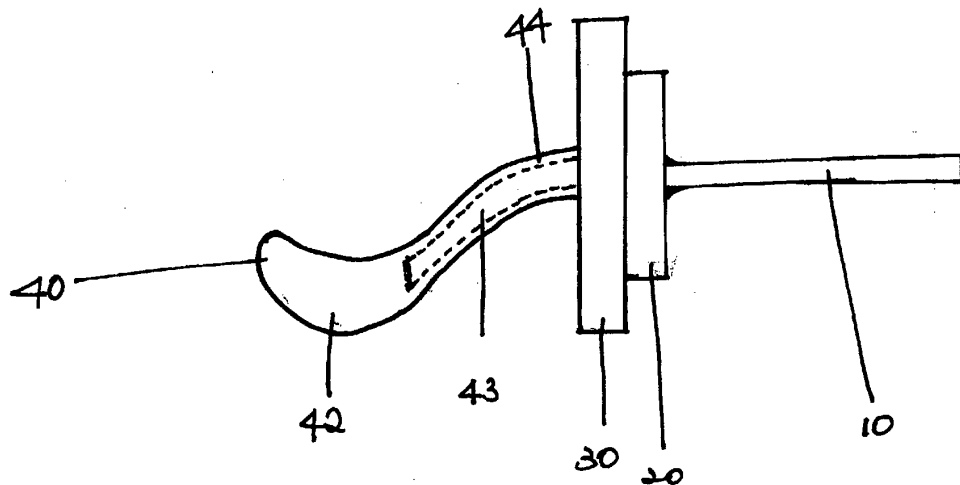


FIGURE 2

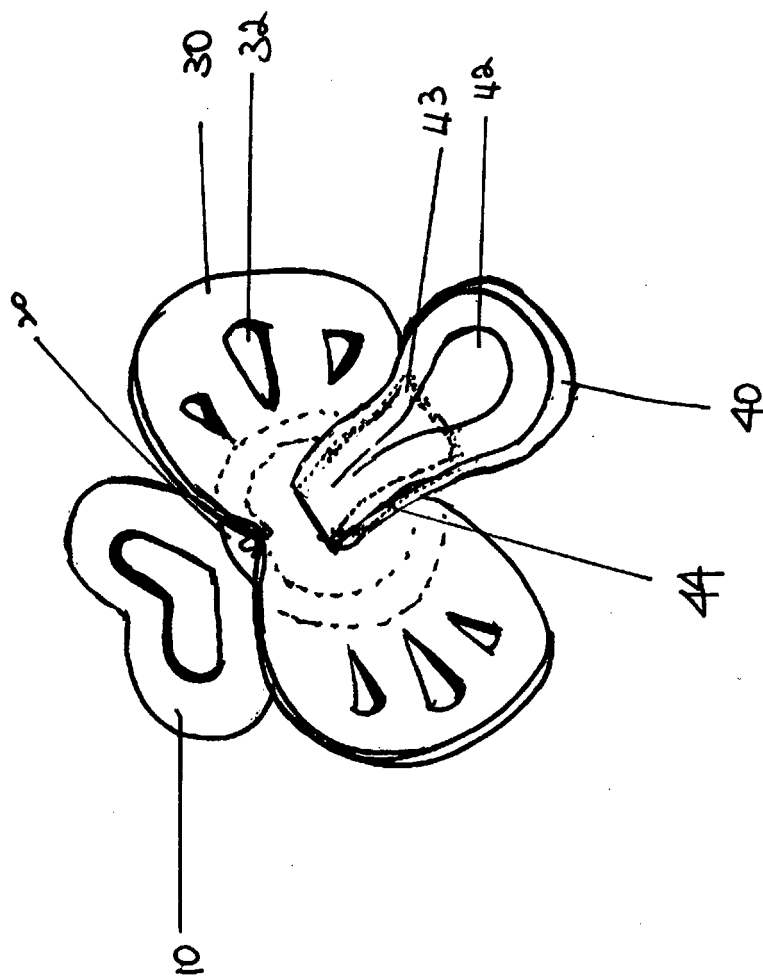


Figure 3

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- WO 2010109246 A [0001]