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(54) **DEVICE FOR A SET OF CUTLERY**

VORRICHTUNG FÜR BESTECKSET

DISPOSITIF POUR UN ENSEMBLE DE COUVERTS

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Description

Device for a Set of Cutlery

[0001] The present invention concerns a device for a set of cutlery for children and comprising a spoon piece and/or a fork piece having a handle connected to the proper eating part of the piece of the set of cutlery, the handle having a grip part, which allows for the user of the piece of the set of cutlery to grasp, by a so-called precision grasp, around the handle of the piece of the set of cutlery in question, i.e., between the thumb and at least one more finger.

[0002] Cutlery for particularly children but also for old people and handicapped is made in a number of different variants and forms. Small children advantageously grasp objects using the so-called pincer grasp, which involves that the object in question is grasped between the thumb and one or more other fingers of the same hand. The ability to get food down varies from child to child when they are allowed to eat by themselves using a suitable cutlery when they have passed the stage when they eat the food directly with their hands.

[0003] It is then important that the child can grasp the piece of the cutlery in question, viz., a spoon or a fork, so that the food remains on the proper eating part of the piece of cutlery and is controlled and adjusted by the grip part of the piece of cutlery.

[0004] Examples of cutlery comprising particular grip parts are shown in, e.g., US 4563826A where the handle is angled in a special way, US 527115A where the handle forms a double loop, US 1625003A where the handle comprises a finger hole, US 2338980A where the handle forms a grip ring, US 2889624A where the handle is provided with a finger hole, and US 2682705A showing a spoon having a rotatably angled and bent thin handle but which is intended to be grasped by the entire hand,

[0005] The fine motor ability of the hand is about the ability to handle items by the hands, i.e., to reach, grasp, manipulate, and drop. It is based on an interaction between fine motor and gross motor functions and involves hands as well as arms and shoulders. At one year of age, children begin to use the precision grasp. Speed, coordination, force control, motor memory and motor programmes are component parts of the precision grasp which are developed and refined. The precision grasp is primarily a function of the radial side of the hand, and involves a manipulative handling of an object or tool between the thumb and the fingertips, particularly the index and middle fingers.

[0006] The functional position of the hand, the optimal position for work and relaxation, is with the forearm in an intermediate position concerning the pronation and supination, or against the pronation, as well as the wrist somewhat dorsally flexed and intermediate position between radial and ulnar flexion. The thumb is in opposition to the index and middle fingers and the fingers are slightly flexed. The child is, by the precision grasp, forced to hold

the piece of cutlery horizontally. Common cutlery known, children can angle and thereby the food may fall off or not come into the mouth.

[0007] Thus, the main object of the present invention is to provide a device of the above-mentioned type and which is made to enable an improved eating ability by the piece of the cutlery in question for children and others who utilize the cutlery.

[0008] US 5,058,279 A concerns cutlery intended for physically handicapped persons, particularly for persons who have limited wrist mobility. This is realized when reading column 3, lines 3-12, how the piece of cutlery is grasped by persons in question by their entire hand around the cutlery handle and its sides (5, 3, 6) and by the thumb on the upper side. Then the proper cutlery head (8) is facing the person in question. A piece of cutlery is grasped in accordance with the present US 5,058,279 A, i.e., with the palm of the hand along the side (5) and with the fingers bent around the rear edge (3) and then along the side (6). The thumb assumes a position on top of the upper side (4). The food replenishment part (8) is then facing the person. Said grasp can scarcely be compared to the precision grasp, which is the same as when a pencil or a sewing needle is grasped.

[0009] By also JP 2000157401 A, US 2338980 A, US 1619878 A, EP 0694370 A1, US 5075975 A, US 2995265 A, and US 4779344 A, sets of cutlery are known, but neither these have the advantages and technical effects and purposes as are intended according to the present invention. US 2889624A discloses a device according to the preamble of claim 1.

[0010] Said object is achieved by means of a device according to the present invention, as defined in claim 1.

[0011] There are several advantages of said set of cutlery in comparison with known cutlery, e.g.:

- the set of cutlery have a multigrip function (they give the possibility to hold the handle in various ways, e.g. precision grasp, key grasp, transverse volar grasp, thumb grasp)
- low weight, which makes the pieces very light
- the spoons are angled in different ways
- they are made in various shapes and colours, which makes the meal an inviting activity.

[0012] The present invention is based on the grip part, and thanks to this and its new features, the possibility is opened up that the child who utilizes a piece of the cutlery in question can grasp the handle in a particular way, which is suitable for the child in question, viz., the precision grasp (the pincer grasp).

[0013] The device for a set of cutlery for children and having a handle that allows for the child in question to grasp said cutlery by the precision grasp, i.e., having the cutlery handle situated between the child's thumb and one finger, is formed according to the present invention by cutlery having fixed dimension intervals, which cannot be exceeded or fallen below if the child should be able

to utilise the cutlery in question.

[0014] Thus, it is important that the following dimension interval is kept;

- * The width of the handle is 1-10 mm,
- * The height of the handle is 10-30 mm at the grip area.
- * The handle has a depression at the grip area, for the formation of a finger grip.

[0015] The invention is described below in the form of a number of examples, reference being made to the drawings, in which

Fig. 1 shows in perspective a spoon not according to the invention obliquely from above,
 Fig. 2 shows the spoon held in a particular way at its rear handle portion by the precision grasp,
 Fig. 3 shows the spoon from the side,
 Fig. 4 shows a further grasped spoon, not according to the invention
 Fig. 5 shows a fork having a handle not according to the invention,
 Fig. 6 shows a spoon not according to the invention having the handle in elevated position,
 Figs. 7-12 show design of handles not according to the invention having indentation and grasping of the piece of the set of cutlery,
 Figs. 13-16 show pieces of a set of cutlery not according to the invention having holes through the handle and the grasping of the same, and
 Figs. 17-18 show pieces of the set of cutlery according to the invention, having handles formed as an animal body and an animal head, respectively.

[0016] A device 1 for a set of cutlery 2, comprising a spoon piece 3 and/or a fork piece 4 and having a handle 5, 6 connected to the proper eating part 7, 8 of the piece of the set of cutlery, has the handle 5, 6 arranged in a particular way, and that the grip part 9, 10 thereof is arranged so that its longitudinal mean plane 11, 12 extends essentially perpendicular to said eating part 7, 8 of the piece of the set of cutlery along an essentially mutual vertical longitudinal mean plane 13, 14 through the same. More precisely, the handle 5, 6 has a grip part 9, 10, which preferably extends at an angle V of 30-45° up or down from the proper eating part 7, 8 of the piece of the set of cutlery, as seen from the horizontal longitudinal mean plane 17, 18 of said eating part. Furthermore, the width B of the handles 5, 6 is 1-10 mm and the handle 5, 6 has a height H that exceeds said width B . Thereby, it is allowed for the user 19 of the piece of the set of cutlery 2 to grasp, by the so-called precision grasp or pincer grasp, around the handle 5, 6 of the piece of the set of cutlery 2 in question, i.e., between the thumb 20 and at least one more finger 21-24. Thereby, a suitable distance between the thumb and a further interacting finger is the same as said width B of the piece of the set of

cutlery.

[0017] The height H of the handle 5, 6 is 10-30 mm at the proper grip area 25, 26 of the handle 5, 6, which increases in height H from the area of a connection 27, 28 between the handle 5, 6 and said eating part 7, 8.

[0018] Furthermore, the handle 5, 6 has a grip-improving depression 29, 30 at the proper grip area 25, 26, and that a depression is situated on each side I, II of the handle 5, 6.

[0019] According to further examples, a said depression extends entirely through the handle 5, 6 for the formation of a through hole 31, 32. For the purpose of strengthening, the handle connects to the eating part 7 via a tapering joint part 33 connected to the under side of the eating part 7.

[0020] The handle 5, 6 may have an outer end part 34, 35, which projects for the formation of a tip from said grip area 25, 26 and on which the piece of the set of cutlery 2 in question can be placed on a table 36 or any other suitable underlayer.

[0021] Furthermore, the handle 5, 6 may have a widened contact surface 37, 38, either at the connection to the eating part 7, 8 or at the outer end part 34, 35 of the handle, whereby said widened contact surface 37, 38 is arranged to allow the piece of the set of cutlery 2 in question to be placed with the handle 5, 6 in raised position on an underlayer 36.

[0022] With the purpose of making the set of cutlery 2 more interesting to the users, and then particularly the children, the handle 5, 6 of the piece of the set of cutlery 2 in question is formed as some suitable fantasy figure 39, 40, e.g. as an animal, for instance snake, wolf, or swan, as partly is shown in the drawings, or as a vehicle not shown. The design of the figures has to be such that it is allowed to grasp the piece of the set of cutlery in question by means of the precision grasp.

[0023] Suitably, the piece of the set of cutlery 2 consists of environmental-friendly plastic material but also metal may be a possibility.

[0024] The invention is naturally not limited to the examples described above and shown in the accompanying drawings, but is defined in the claims.

Claims

1. Device (1) for a set of cutlery (2) for children and comprising a spoon piece (3) and/or a fork piece (4) having a handle (5) connected to the proper eating part (7, 8) of the piece of the set of cutlery, the handle (5, 6) having a grip part (9, 10), which allows for the user (19) of the piece of the set of cutlery (2) to grasp, by a so-called precision grasp, around the handle (5, 6) of the piece of the set of cutlery in question, i.e., between the thumb (20) and at least one more finger (21-24), the handle (5, 6) has a depression (29, 30) at the proper grip area (25, 26), for the formation of a finger grip, that the depression (29, 30)

is situated on each side (I, II) of the handle (5, 6), preferably that the depression extends entirely through the handle (5, 6) for the formation of a through hole (31, 32), and that the handle is formed as a fantasy figure, animal or vehicle, designed to allow said precision grip and to make the device more interesting to children, **characterized in**

that the width (B) of the handle (5, 6) is 1-10 mm, that the handle (5, 6) has a height (H) that is 10-30 mm at the proper grip area (25, 26) of the handle (5, 6), that the handle (5, 6) increases in height (H) from the area of the connection (27, 28) to said eating part (7, 8), and that the grip part (9, 10) is arranged so that its longitudinal mean plane (11, 12) extends essentially perpendicular to said eating part (7, 8) of the piece of the set of cutlery along an essentially mutual longitudinal mean plane (13, 14) through the same.

2. Device according to claim 1, wherein the handle (5) connects to the eating part (7) via a tapering joint part (33) connected to the under side of the same.
3. Device according to any one of the above claims, wherein the handle (5, 6) has an outer end part (34, 35), which projects for the formation of a tip from said grip area (25, 26).
4. Device according to any one of the above claims, wherein the grip part (9, 10) extends at an angle (V) of 30-45° up or down from the proper eating part (7, 8) of the piece of the set of cutlery, whereby, in combination with said angle (V) and handle width (B), the eating part (7, 8) more easily gets into position and prevents food from falling off the eating part (7, 8).
5. Device according to any one of the above claims, wherein the handle (5, 6) has a widened contact surface (37, 38), either at the connection to the eating part (7, 8) or at the outer end part (34, 35) of the handle (5, 6), whereby said widened contact surface (37, 38) is arranged to allow the piece of the set of cutlery (2) in question to be raised with the handle (5, 6) in raised position.

Patentansprüche

1. Vorrichtung (1) für ein Besteck (2) für Kinder, die ein Löffelstück (3) und/oder ein Gabelstück (4) mit einem Griff (5) umfasst, der mit dem richtigen Essteil (7, 8) des Stücks des Bestecks verbunden ist, wobei der Griff (5, 6) ein Greifteil (9, 10) aufweist, das es dem Benutzer (19) des Stücks des Bestecks (2) ermöglicht, durch einen sogenannten Präzisionsgriff, um den Griff (5, 6) des betreffenden Stücks des Bestecks herum, d.h. zwischen dem Daumen (20) und

mindestens noch einem Finger (21-24), zu greifen, der Griff (5,6) eine Vertiefung (29, 30) an dem richtigen Greifbereich (25, 26), zur Bildung eines Fingergriffs aufweist, dass die Vertiefung (29, 30) an jeder Seite (I, II) des Griffs (5, 6) angeordnet ist, vorzugsweise dass sich die Vertiefung völlig durch den Griff (5, 6) hindurch für die Bildung eines Durchgangslochs (31, 32) erstreckt, und dass der Griff als eine Fantasiefigur, ein Fantasietier oder -Fahrzeug gebildet ist, die bzw. das ausgestaltet ist, um einen solchen Präzisionsgriff zu ermöglichen und um die Vorrichtung interessanter für Kinder zu machen,

dadurch gekennzeichnet,

dass die Breite (B) des Griffes (5, 6) 1-10 mm beträgt, dass der Griff (5, 6) eine Höhe (H) aufweist, die am richtigen Greifbereich (25, 26) des Griffs (5, 6) 10-30 mm beträgt, dass sich die Höhe (H) des Griffs (5, 6) von dem Bereich des Verbindungsberreichs (27, 28) bis zum Essteil (7, 8) vergrößert, und dass das Greifteil (9, 10) derart angeordnet ist, dass sich seine Längsmittlebene (11, 12) im Wesentlichen senkrecht zum Essteil (7, 8) des Stücks des Bestecks entlang einer im Wesentlichen gegenseitigen Längsmittlebene (13, 14) durch diese hindurch erstreckt.

2. Vorrichtung nach Anspruch 1, wobei sich der Griff (5) mit dem Essteil (7) über ein sich verjüngendes Gelenkteil (33) verbindet, das mit dessen unteren Seite verbunden ist.
3. Vorrichtung nach einem der vorgehenden Ansprüche, wobei der Griff (5, 6) ein äußeres Endteil (34, 35) aufweist, das von dem Greifbereich (25, 26) zur Bildung einer Spitze hervorragt.
4. Vorrichtung nach einem der vorgehenden Ansprüche, wobei sich das Greifteil (9, 10) um einen Winkel (V) von 30-45° nach oben oder nach unten von dem richtigen Essteil (7, 8) des Stücks des Bestecks erstreckt, wobei, in Kombination mit dem Winkel (V) und der Griffbreite (B), das Essteil (7, 8) einfacher in seine Position erlangt und verhindert, dass Essen vom Essteil (7, 8) herunterfällt.
5. Vorrichtung nach einem der vorgehenden Ansprüche, wobei der Griff (5, 6) eine erweiterte Kontaktfläche (37, 38), entweder bei der Verbindung mit dem Essteil (7, 8) oder am äußeren Endteil (34, 35) des Griffs (5, 6), aufweist, wobei die erweiterte Kontaktfläche (37, 38) angeordnet ist, um zu ermöglichen, dass das betreffende Stück des Bestecks mit dem Griff (5, 6) in eine angehobene Position angehoben werden kann.

Revendications

1. Dispositif (1) pour un ensemble de couverts (2) pour enfant et comprenant une pièce de cuillère (3) et / ou une pièce de fourchette (4) ayant une manche (5) reliée à la partie appropriée à manger (7, 8) de la pièce de l'ensemble de couverts, la manche (5, 6) ayant une partie de préhension (9, 10), qui permet à l'utilisateur (19) de la pièce de l'ensemble de couverts (2) de saisir, par une dite saisie de précision, autour de la manche (5, 6) de la pièce de l'ensemble de couverts concerné, c'est-à-dire entre le pouce (20) et au moins un autre doigt (21-24), la manche (5, 6) présente une dépression (29, 30) au niveau de la zone de préhension appropriée (25, 26), pour la formation d'un bout du doigt, que la dépression (29, 30) est située de chaque côté (I, II) de la manche (5, 6), de préférence que la dépression s'étend entièrement à travers la manche (5, 6) pour la formation d'un trou traversant (31, 32), et que la manche est formée comme une figurine fantaisie, un animal ou un véhicule, conçue pour permettre une telle préhension de précision et pour rendre le dispositif plus intéressant pour les enfants,
caractérisé en
ce que la largeur (B) de la manche (5, 6) est de 1 à 10 mm, que la manche (5, 6) a une hauteur (H) qui est de 10 à 30 mm au niveau de la zone de préhension appropriée (25, 26) de la manche (5, 6), que la manche (5, 6) augmente en hauteur (H) depuis la zone de relèvement (27, 28) jusqu'à ladite partie appropriée à manger (7, 8), et que la partie de préhension (9, 10) est agencée de sorte que son plan moyen longitudinal (11, 12) s'étend sensiblement perpendiculairement à ladite partie appropriée à manger (7, 8) de la pièce de l'ensemble de couverts le long d'un plan moyen longitudinal essentiellement mutuel (13, 14) à travers celle-ci.
2. Dispositif selon la revendication 1, dans lequel la manche (5) se relie à la partie appropriée à manger (7) via une partie de joint conique (33) reliée à la face inférieure de celle-ci.
3. Dispositif selon l'une quelconque des revendications précédentes, dans lequel la manche (5, 6) présente une partie d'extrémité extérieure (34, 35), qui fait saillie pour la formation d'une pointe à partir de ladite zone de préhension (25, 26).
4. Dispositif selon l'une quelconque des revendications précédentes, dans lequel la partie de préhension (9, 10) s'étend selon un angle (V) de 30 à 45 ° vers le haut ou vers le bas par rapport à la partie appropriée à manger (7, 8) de la pièce de l'ensemble de couverts, grâce à quoi, en combinaison avec ledit angle (V) et la largeur de la manche (B), la partie à manger (7, 8) se met plus facilement en place et empêche

les aliments de tomber de la partie à manger (7, 8).

5. Dispositif selon l'une quelconque des revendications précédentes, dans lequel la manche (5, 6) présente une surface de contact élargie (37, 38), soit au niveau du relèvement à la partie appropriée à manger (7, 8) soit à la partie d'extrémité extérieure (34, 35) de la manche (5, 6), ladite surface de contact élargie (37, 38) étant agencée pour permettre à la pièce de l'ensemble de couverts concerné (2) d'être soulevée avec la manche (5, 6) en position soulevée.

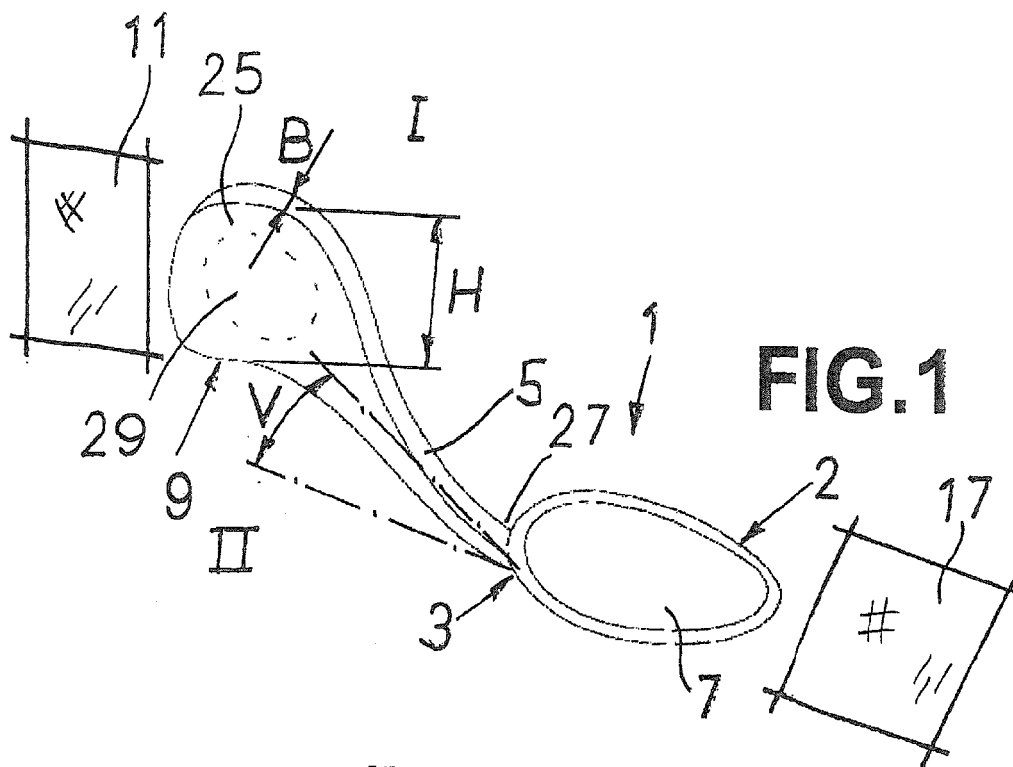


FIG. 1

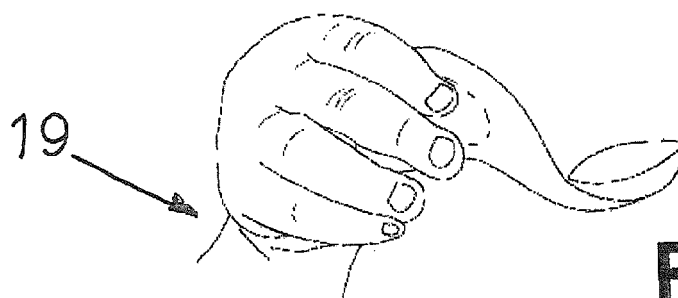


FIG. 2

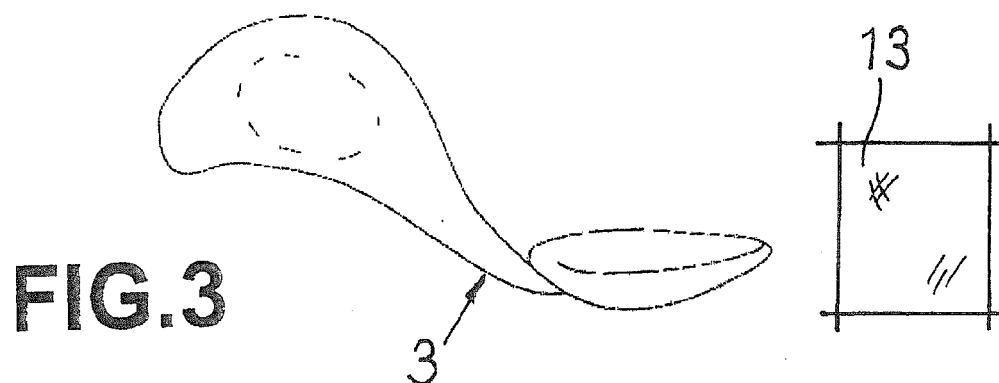


FIG. 3

FIG.4

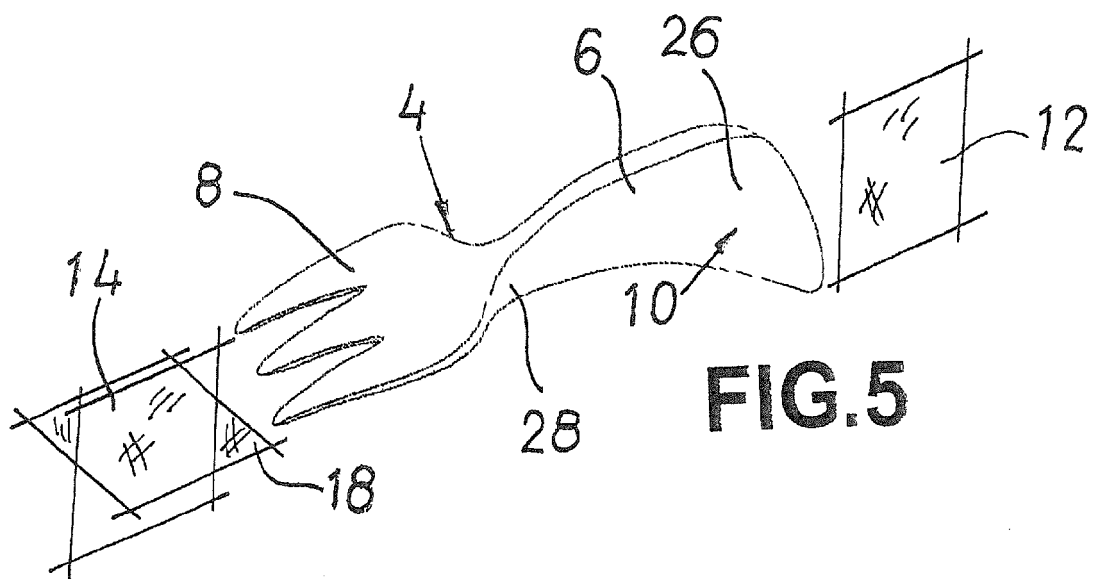
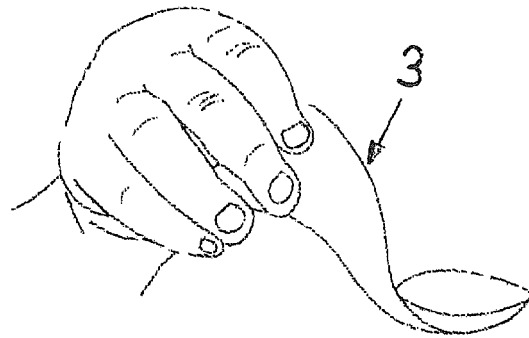
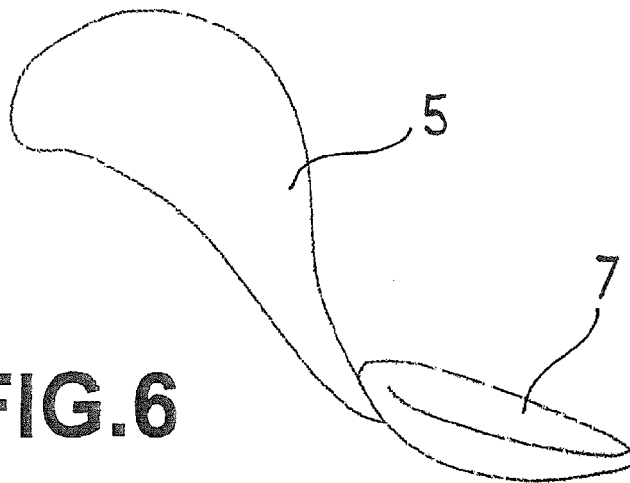
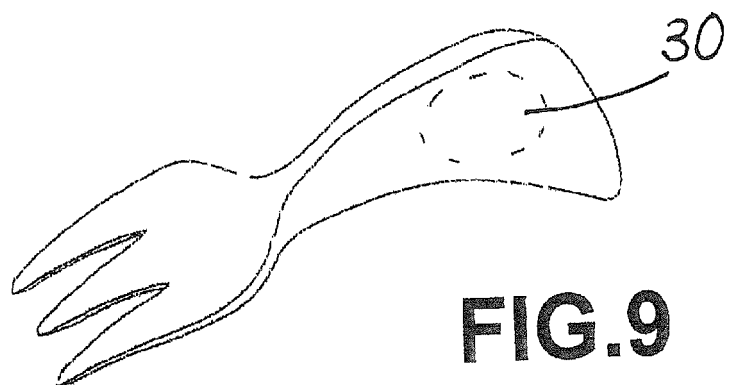
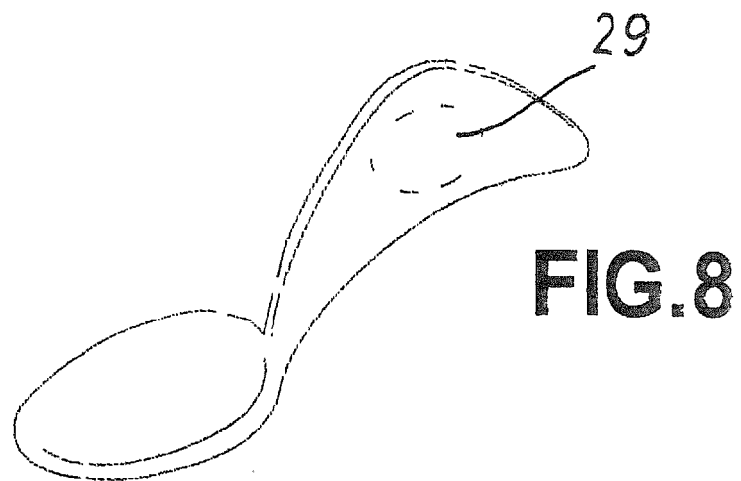
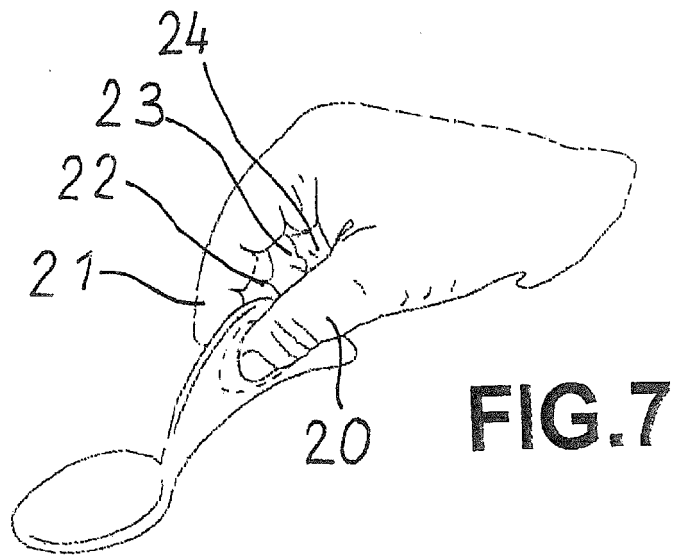


FIG.5

FIG.6





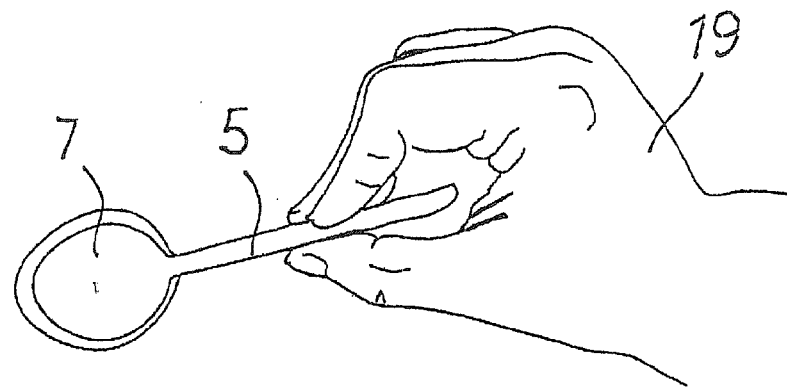
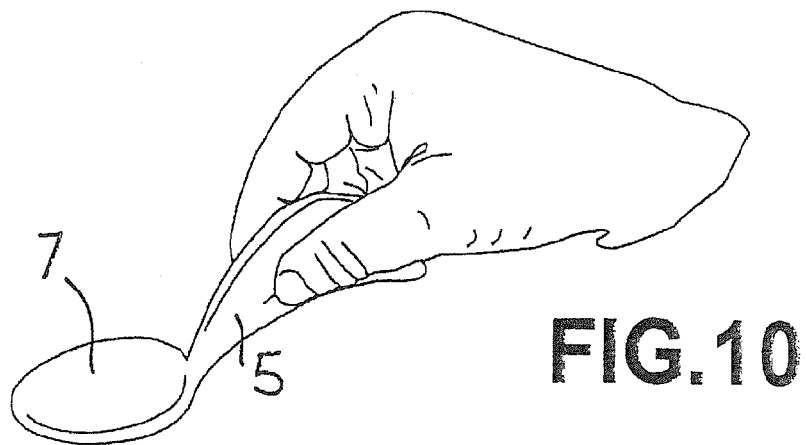


FIG. 11

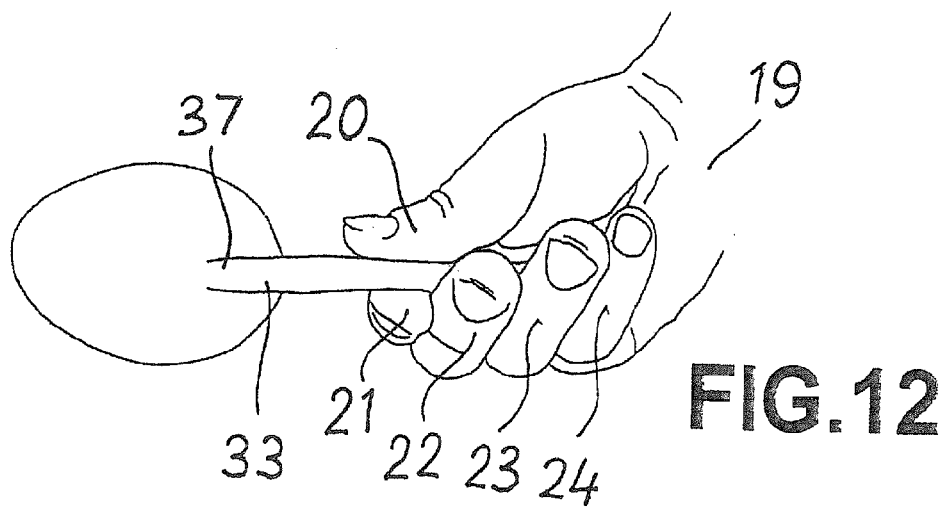


FIG. 12

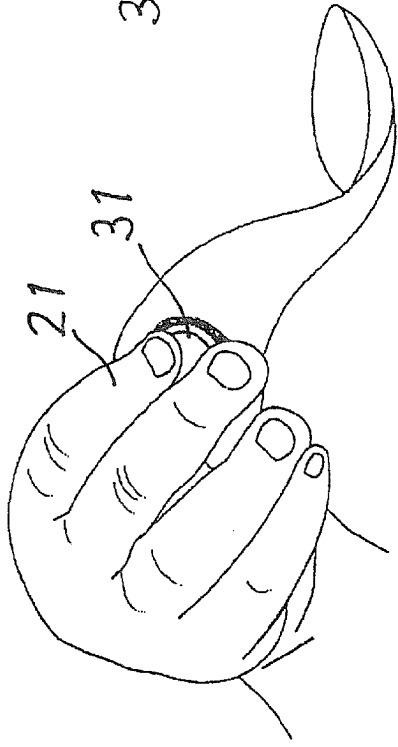


FIG. 13

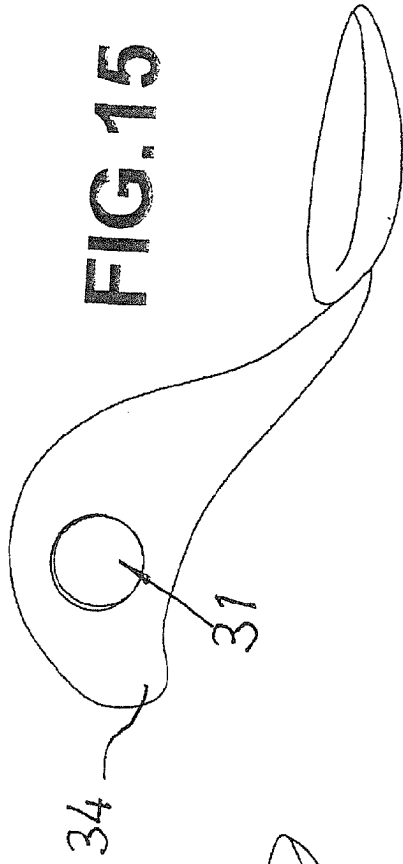


FIG. 15

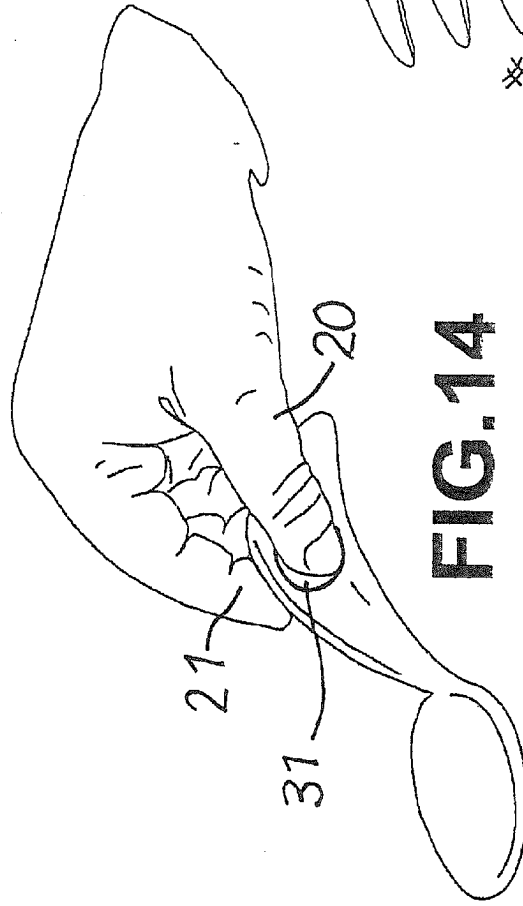


FIG. 14

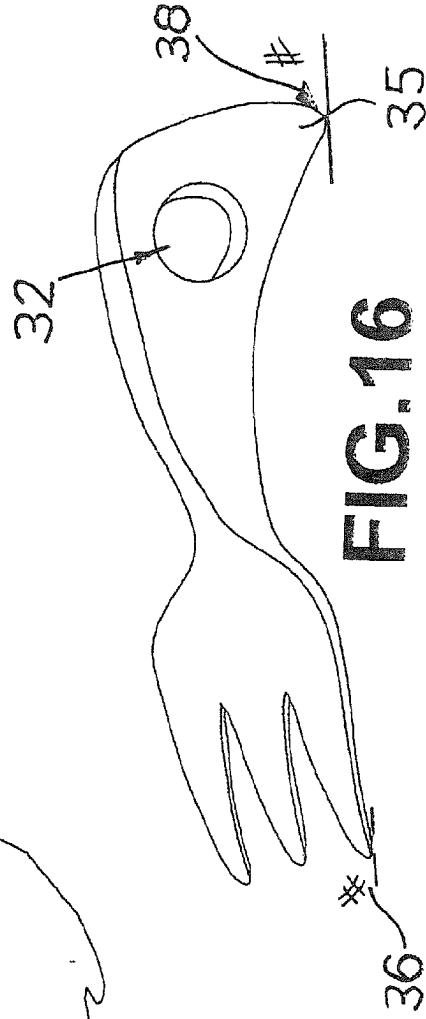
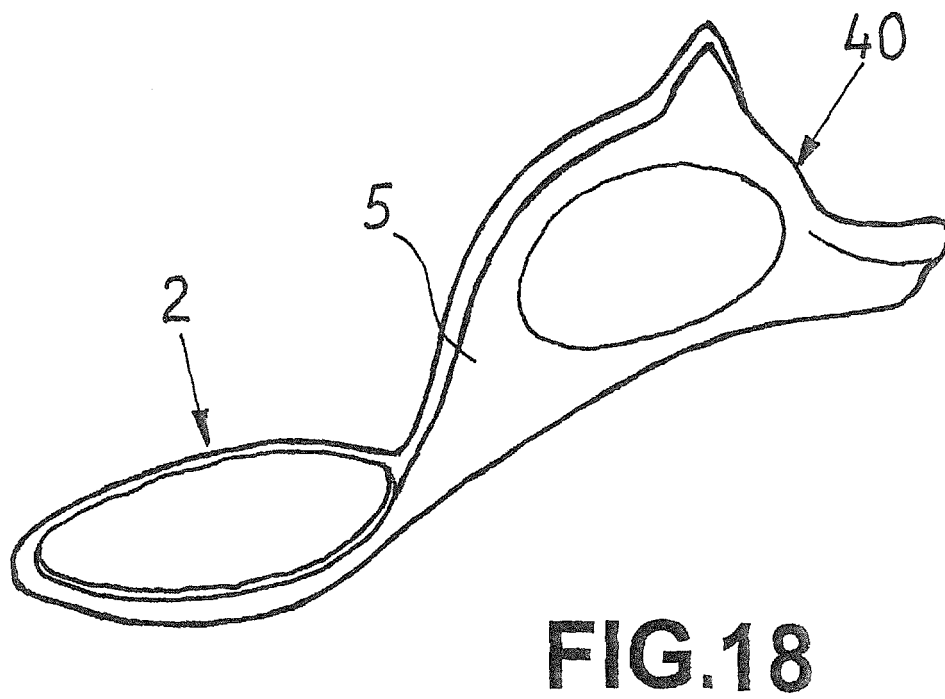
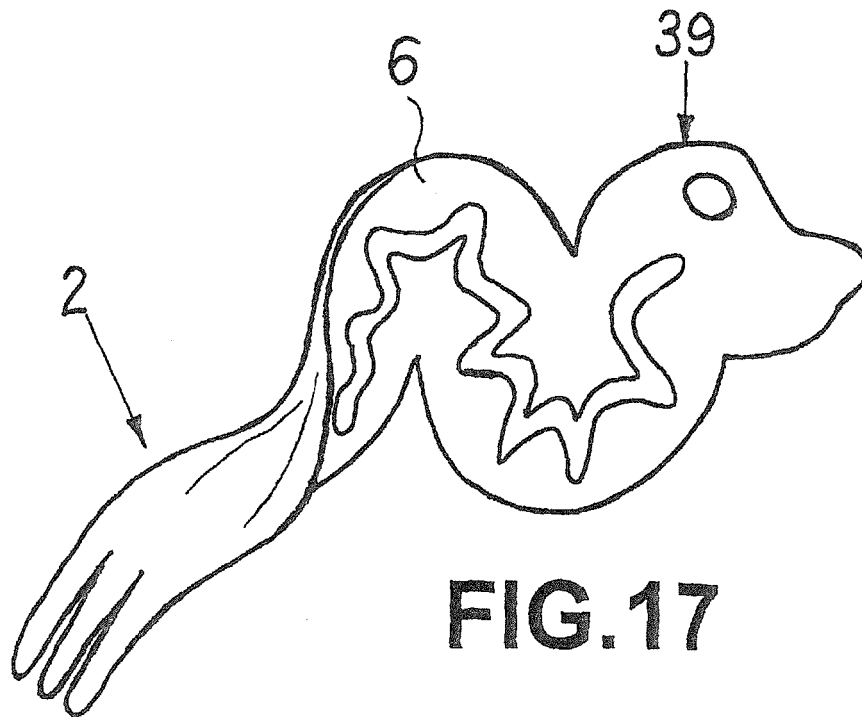


FIG. 16



REFERENCES CITED IN THE DESCRIPTION

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