

(19)



(11)

EP 2 074 924 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
12.05.2010 Bulletin 2010/19

(51) Int Cl.:
A47L 15/50^(2006.01)

(21) Application number: **07124115.2**

(22) Date of filing: **28.12.2007**

(54) **Basket handle**

Korbgriff

Anse de panier

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE
SI SK TR**

(43) Date of publication of application:
01.07.2009 Bulletin 2009/27

(73) Proprietor: **Vestel Beyaz Eşya Sanayi Ve Ticaret
A.S.**
45030 Manisa (TR)

(72) Inventors:
• **Hülagü, Orhan**
45030 Manisa (TR)

• **Alkin, Osman**
45030 Manisa (TR)

(74) Representative: **Cayli, Hülya**
Paragon Consultancy Inc.
Koza Sokak No: 60/6
GOP
06700 Ankara (TR)

(56) References cited:
WO-A-2004/000090 DE-A1- 19 726 553
GB-A- 2 198 032 US-A1- 2002 139 809

EP 2 074 924 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

Technical Field

[0001] This invention relates to a cutlery basket (basket for forks-spoons-knives) with an adjustable handle length for use in dishwashers.

Prior Art

[0002] In dishwashers, movable baskets for washing cutlery tools such as fork-spoon-knife are widely used. In general, these baskets are placed at the middle section on the dishwashers' lower basket. Since they are portable, it is possible to take them out of the machine, if desired. Therefore, there are handles on the baskets through which the users can grip. In general, handles rose up from the center of the fork-spoon-knife basket are kept longer in order to prevent sharp objects to pierce the users' hands. This usually brings a problem for fork-spoon-knife baskets put in the lower basket and prevents this basket (fork-spoon-knife basket) being used in the upper basket. Although fork-spoon-knife baskets with removable handles have been developed, assembly-disassembly operations in these baskets keep users too much employed. Moreover, said snags in these handles generally fitted as snag engagement are deformed by being overused and then they can possibly be broken causing loss in their functions.

[0003] In prior art published patent application US2002139809, a fork-spoon-knife basket whose handle can turn both right and left is described. In this basket although it is possible for this handle to give more space for its basket by turning to right and left, protruding sections of the elongated stemmed tools in the basket obstruct handle to come its central position which is the lifting up position of the handle. Also the handle, due to its structure, forms a protrusion on the side at which it is turned and causes some constriction in the available space at sides of the basket.

[0004] In prior art another published patent application WO2004000090, a fork-spoon-knife basket which can be separated into many parts is described. In order to use this basket in the upper dish basket, the handle should be completely separated from the basket. Furthermore, removing handle from the basket is used for demounting all parts of the basket. Although it is possible to use demounted basket parts in the upper basket, it is troublesome for putting and taking them out of the upper basket without a handle and it also causes a problem for a user to grip and carry the basket. Additionally, assembly-disassembly operations of the basket take time and also the user should keep the unused parts in a secure place. In addition, since the mounting operation of these multiple parts baskets is time consuming, it causes an increase in the cost during production.

Brief Disclosure of the Invention

[0005] Fork-spoon-knife basket improved according to this invention has a compact structure with a handle which is easily shortened and elongated without the need of demounting in order to be placed in the upper basket. The handle positioned at the central section of said basket (or at the center of gravity) is shortened and elongated by moving it a bit towards and away from the basket, if desired. In order to achieve this, lower part of the handle is divided into two symmetrical sections. Each of them is attached on two opposite surfaces of the vertical mounting plate in the middle of the basket. On each surface, there is a respective socket to guide the lower part of the handle and a respective hook on the upper section of the socket to prevent complete separation of the handle from the basket.

[0006] The user can utilize the handle according to his/her needs by moving it downwards or upwards. When it is pushed completely downwards, the height of the handle can be adapted to be equal to the heights of the tools inside and thus it is easily placed in the upper dish shelf. If the basket is taken out from the dishwasher, then the handle can simply be elongated for ease of carrying. In particular, the handle should be elongated during carriage to prevent tools inside from piercing the users' hands. Another advantage for shortening ability of the basket handle is that it provides easiness to place it in cupboards and shelves in the kitchen when it is not used in the machine. In the case the heights of the shelves are not enough, height of the handle is shortened and this provides an advantage for placing the basket.

[0007] An important feature of the invention is that mounting of the basket is achieved in a fast way. Owing to small number of parts to be mounted and simple geometric structures of these parts, both easiness of mounting and time saving are achieved. Also this makes used parts more reliable and long lasting.

Objective of the Invention

[0008] An objective of this invention is a basket for forks-spoons-knives which can be placed in both lower and upper dish baskets in dishwashers.

[0009] Another objective of the invention is to provide a handle for said basket with a structure having shortening and elongating capability.

[0010] Further object of the invention is to provide a fork-spoon-knife basket having a compact structure which can be placed in the upper basket without the need of demounting.

[0011] Another object of the invention is to provide a fork-spoon-knife basket which has fast mounting and which is reliable and inexpensive.

Description of the Drawings

[0012] An exemplary fork-spoon-knife basket for dish-

washers according to the invention is shown in the attached drawings, wherein:

Figure 1 shows side views of the fork-spoon-knife basket for dishwashers.

Figure 2 is a top perspective view of the fork-spoon-knife basket.

Figure 3 is a perspective view of handle when it is attached to the mounting plate at the basket.

Fig. 4 is a perspective view of the mounting plate.

Fig. 5 is a front view of the plate.

Fig. 6 is a side sectional view of the plate.

Figure 7 is a perspective view of the handle.

Figure 8 is a side perspective view of the handle.

[0013] The parts in the figures are numbered one by one and the corresponding terms of these numbers are given below.

Handle (1)

Body (2)

Grip section (10)

Leg (11)

Upper body (12)

Opening (13)

Lower body (14)

Mounting plate (3)

Plate surface (30)

Rib (31)

Rib inclination (35)

Hook (32)

Snag (32s)

Gap (32v)

Support surface (33)

Rib (34)

Upper edge (34u)

Lower edge (34d)

Passage (35)

Gap (36)

Disclosure of the Invention

[0014] Fork-spoon-knife basket whose side views are given in figures 1-2 comprises a handle (1) movable up and down and a body (2) inside which fork-spoon-knife tools are placed. As can be seen from the perspective view in Figure 3, handle (1) is attached to a mounting plate (3) placed in the middle section of the body (2). (Mounting plate (3) can be considered as a constant or a removable part of the body (2). In order to make attached drawings more illustrative, mounting plate (3) is shown unattached from the body in figures 4-6).

[0015] The mounting plate (3) shown in figures 4-6 comprises a couple of ribs (31) extending downwards from the upper section on at least one surface (30) of the plate (3); a passage (35) located between the ribs (31); a respective hook (32) at the lower section of each rib (31), extending downwards such that there is a gap (32v) between them and the surface (30); a support surface (33) located below the hooks (32) and having a distance to the surface (30), a leg (11) of the handle (1) (figures 7-8) can be engaged from above to below into that gap (36) between it and the surface (30).

[0016] The gap (35) between said ribs (31) is formed such that the handle (1) can only move up and down. In other words, ribs (31) extend vertically to the surface (30) and run downwardly parallel to the vertical edges of the surface. In this way, only up and down movements of the handle (1) placed in the gap (35) between two ribs (31) are possible.

[0017] There is a respective inclination (31 i) expanding downwards on the upper section of each rib (31). These inclinations (31i) are utilized during the first mounting (details are described below) of the handle (1) to the plate (3).

[0018] As shown in figures 4 and 6, on the support surface (33) there is at least one rib (34) extending from the support surface (33) to the plate surface (30). The gap (36) between each rib (34) and the plate surface (30) has a width such that the lower section of the handle (1) can pass through. Upper edge (34u) of each rib (34) is inclined upwards and the lower edge (34d) is inclined downwards. Support surface (33) is connected to the plate surface (30) from at least one side thereof (from both sides on the exemplary views in figure 4).

[0019] At the lower section of each hook (32), there is at least one snag (32s) with a triangular shape whose one edge extends towards to the gap (32v) between it and the surface (30). The snag (32s) has a dimension such that it allows the leg (11) at the lower section of the

handle (1) to be engaged compressively into said gap (32v).

[0020] All details on a surface (30) of aforementioned plate (3) may be at the opposite face thereof in a symmetrical manner. Although it is possible to implement the invention by using details at only one surface (30), using with a pair of surfaces concerning with a handle (1) to carry the body (2) in a more balanced way is shown in attached figures.

[0021] The handle (1) shown in Figures 7-8 comprises a grip section (10) formed on its upper section for a user to hold; an upper body (12) extending below that section (10) downwards in a rod shape; a lower body (14) formed by at least one of two opposite surfaces of upper body (12) via extending downwards as a rod shape; a respective leg (11) extending towards at least one side below the lower body (14). In a handle (1) shown in Figures 7-8, the opening (13) between a pair of lower body (14) which is formed by extension downwards of both opposite surfaces of upper body (12) is kept in a width to receive the plate (3). When a second lower body (14) is used, there is a respective leg (11) extending towards at least one side below that lower body (14).

[0022] Firstly in the mounting of the handle (1) to the plate (3), a respective leg (11) spaced apart at two separate lower bodies (14) of the handle (1) is pushed towards the plate (3) such that the upper section of the plate (3) is engaged into the gap (13) there between. At the same time, surfaces of the legs (11) which are facing each other contact with the outside of the ribs (31). The expansion of each rib (31) with a respective inclination to downward (31i) causes legs (11) and lower bodies (14) to separate from each other by stretching. When the legs (11) progress a little bit downwards from where the rib's inclinations (31 i) ended, they come close to the plate surface (30) by stretching back after being released from the ribs (31). In this position, when the handle (1) is pulled up, legs (11) are compressively fixed in lower section of the hook (32) from between the surface (30) and the snag (32s). In this position shown in Figure 3, handle (1) does not slide downwards per se unless it is pushed that way. In case that the handle (1) is pushed downwards again, if the legs (11) move away from the plate (3) due to elasticity, they come close to the plate (3) and fit again in aforementioned gap (36) by guiding the inclined upper edges (34u) of the ribs (34). Complete filling of handle's (1) opening (13) by the plate (3) can be considered as the last point of downwards movement of the handle (1). Even the handle (1) moves upwards, inclined lower edges (34d) of the ribs (34) guide the legs again into the gap (36). When they move further, as mentioned earlier, legs (11) are stuck below the hooks (32). Thus, the lower and upper positions of the handle (1) are arranged. By guiding each lower body (14) of the handle in each said passage (35) only up and down movements of the handle are allowed. The handle (1) can be located on intermediate positions per se besides the highest and the lowest positions by the small recessions and protrusions on each

part (1, 3) where the handle (1) contacts the plate (3), and by engagement of both parts (1, 3) together with some friction. Said recessions and protrusions or the amount of friction would not prevent user to move the handle (1) and can be adjusted at a level such that they would not slide down per se.

Claims

1. A fork-spoon-knife basket for dishwashers comprising a handle (1) having an adjustable height and a body (2) in which fork-spoon-knife tools are placed, **characterized in that** it further comprises a couple of ribs (31) extending downwards from the upper section on at least one surface (30) of a mounting plate (3) associated with the body (2); a passage (35) located between the ribs (31) in which a rod shaped lower body (14) of the handle (1) is guided to enable up and down movements thereof; a respective hook (32) extending downwards from the lower section of each rib (31), such that there is a gap (32v) between them and the surface (30) in which a leg (11) of the handle (1) is engaged when the handle (1) is in its upper position; and a support surface (33) located below the hooks (32) such that there is a gap (36) between it and the surface (30), in which the leg (11) of the handle (1) is engaged when the handle (1) slides between its upper and lower positions.
2. A fork-spoon-knife basket according to the claim 1, **characterized in that** at least one rib (34) extending towards the plate surface (30) from the support surface (33) is present.
3. A fork-spoon-knife basket according to the claim 2, **characterized in that** each rib (34) is inclined such that its upper edge (34u) faces upwards.
4. A fork-spoon-knife basket according to the claim 2, **characterized in that** each rib (34) is inclined such that its lower edge (34d) faces downwards.
5. A fork-spoon-knife basket according to the claim 2, **characterized in that** the support surface (33) is attached to the plate surface (30) from at least one side.
6. A fork-spoon-knife basket according to the claim 1, **characterized in that** at the upper edge of each rib (31) there is a respective inclination (31 i) expanding downwards.
7. A fork-spoon-knife basket according to the claim 1, **characterized in that** at the lower edge of each hook (32) there is at least one snag (32s) expanding towards the gap (32v).

8. A fork-spoon-knife basket according to the claim 7, **characterized in that** the snag (32s) has a dimension such that it allows the leg (11) of the handle (1) to be engaged compressively into said gap (32v).
9. A fork-spoon-knife basket according to the claim 1, **characterized in that** a lower body (14) at the handle (1) has a rod shaped structure formed by extending downwards of at least one of two opposite surfaces of upper body (12) in a rod shape.
10. A fork-spoon-knife basket according to the claim 9, **characterized in that** the handle (1) comprises a grip section (10) formed above the upper body (12) for a user to hold.
11. A fork-spoon-knife basket according to the claim 1, **characterized in that** said leg (11) is such that it extends towards at least one side below each lower body (14).
12. A fork-spoon-knife basket according to the claim 9, **characterized in that** an opening (13) in a width to receive the plate (3) is present between lower bodies (14).
13. A fork-spoon-knife basket according to the claim 1, **characterized in that** small recessions and protrusions are present on both parts (1, 3) where the handle (1) contacts the plate (3), without preventing the user to move the handle (1) and being at a level such that sliding down per se is prevented.
14. A fork-spoon-knife basket according to the claim 1, **characterized in that** frictionally contacting parts of the handle (1) and the plate (3) are such that they would not prevent the user to move the handle (1) and also prevent it from sliding down per se.
15. A fork-spoon-knife basket according to any of the preceding claims, **characterized in that** said all details on a surface (30) of the plate (3) are present at the opposite face thereof in a symmetrical manner.

Patentansprüche

1. Besteckkorb für Spülmaschinen, einen Handgriff (1) mit einer einstellbaren Höhe, und einen Körper (2) aufweisend, in den das aus Gabeln, Löffeln und Messern bestehende Besteck eingesetzt wird, **dadurch gekennzeichnet, dass** er darüber hinaus ein Paar Rippen (31) aufweist, die sich vom oberen Abschnitt auf mindestens einer Fläche (30) einer mit dem Körper (2) verbundenen Halteplatte (3) nach unten erstrecken; einen Durchgang (35), der sich zwischen den Rippen (31) befindet, in dem ein stabförmiger unterer Körper (14) des Handgriffs (1) geführt ist, um

aufwärts und abwärts gerichtete Bewegungen von diesem zu ermöglichen; wobei sich ein jeweiliger Haken (32) vom unteren Abschnitt jeder Rippe (31) so nach unten erstreckt, dass ein Zwischenraum (32v) zwischen diesen und der Fläche (30) besteht, in den ein Schenkel (11) des Handgriffs (1) eingreift, wenn sich der Handgriff (1) in seiner oberen Position befindet; und eine Stützfläche (33), die sich so unter den Haken (32) befindet, dass ein Zwischenraum (36) zwischen ihr und der Fläche (30) besteht, wobei der Schenkel (11) des Handgriffs (1) in Eingriff gelangt, wenn der Handgriff (1) zwischen seiner oberen und unteren Position gleitet.

2. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** mindestens eine Rippe (34) vorhanden ist, die sich von der Stützfläche (33) zur Plattenfläche (30) erstreckt.
3. Besteckkorb nach Anspruch 2, **dadurch gekennzeichnet, dass** jede Rippe (34) so geneigt ist, dass ihre obere Kante (34u) nach oben gewandt ist.
4. Besteckkorb nach Anspruch 2, **dadurch gekennzeichnet, dass** jede Rippe (34) so geneigt ist, dass ihre untere Kante (34d) nach unten gewandt ist.
5. Besteckkorb nach Anspruch 2, **dadurch gekennzeichnet, dass** die Stützfläche (33) von mindestens einer Seite her mit der Plattenfläche (30) verbunden ist.
6. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** es an der oberen Kante jeder Rippe (31) eine jeweilige Neigung (31 i) gibt, die sich nach unten aufweitet.
7. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** es an der unteren Kante jedes Hakens (32) mindestens einen Ansatz (32s) gibt, der sich zum Zwischenraum (32v) aufweitet.
8. Besteckkorb nach Anspruch 7, **dadurch gekennzeichnet, dass** der Ansatz (32s) eine derartige Abmessung hat, dass er es dem Schenkel (11) des Handgriffs (1) ermöglicht, mit Druck in dem Zwischenraum (32v) in Eingriff zu gelangen.
9. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** ein unterer Körper (14) am Handgriff (1) eine stabförmige Struktur hat, die **dadurch** gebildet ist, dass mindestens eine von zwei entgegengesetzten Flächen des oberen Körpers (12) in einer Stabform nach unten verlängert ist.
10. Besteckkorb nach Anspruch 9, **dadurch gekennzeichnet, dass** der Handgriff (1) einen Griffabschnitt (10) aufweist, der über dem oberen Körper (12) ge-

bildet ist, damit ein Benutzer ihn festhalten kann.

11. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** der Schenkel (11) dergestalt ist, dass er sich unterhalb jedes unteren Körpers (14) zu zumindest einer Seite erstreckt. 5
12. Besteckkorb nach Anspruch 9, **dadurch gekennzeichnet, dass** eine Öffnung (13) in einer Breite zur Aufnahme der Platte (3) zwischen den unteren Körpern (14) vorhanden ist. 10
13. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** kleine Vertiefungen und Vorsprünge an beiden Teilen (1, 3) vorhanden sind, wo der Handgriff (1) die Platte (3) berührt, ohne den Benutzer daran zu hindern, den Handgriff (1) zu bewegen und auf einer derartigen Höhe zu sein, dass ein Nach- 15 unten-Gleiten von sich aus verhindert wird.
14. Besteckkorb nach Anspruch 1, **dadurch gekennzeichnet, dass** sich reibend berührende Teile des Handgriffs (1) und der Platte (3) dergestalt sind, dass sie den Benutzer nicht daran hindern, den Handgriff (1) zu bewegen und diesen auch daran hindern, von sich aus nach unten zu gleiten. 20
15. Besteckkorb nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** alle Einzelheiten auf einer Fläche (30) der Platte (3) auch auf ihrer entgegengesetzten Seite symmetrisch vor- 25 handen sind.

Revendications

1. Panier à couverts pour lave-vaisselle comprenant une anse (1) ayant une hauteur ajustable et un corps (2), dans lequel des couverts sont placés, **caracté- 30 risé en ce qu'il** comprend en outre un couple de nervures (31) s'étendant vers le bas depuis la section supérieure sur au moins une surface (30) d'une plaque de montage (3) associée au corps (2) ; un passage (35) situé entre les nervures (31), dans lequel un corps inférieur en forme de tige (14) de l'anse (1) est guidé pour permettre des mouvements mon- 35 tants et descendants ; un crochet respectif (32) s'étendant vers le bas depuis la section inférieure de chaque nervure (31) de sorte qu'il y ait une fente (32v) entre la surface (30) et elle, dans laquelle une jambe (11) de l'anse (1) est engagée lorsque l'anse (1) est dans sa position supérieure ; et une surface de support (33) située sous les crochets (32) de sorte qu'il y ait une fente (36) entre la surface (30) et elle, dans laquelle la jambe (11) de l'anse (1) est engagée 40 lorsque l'anse (1) glisse entre ses positions supérieures et inférieures. 45 50 55

2. Panier à couverts selon la revendication 1, **caracté- 5 risé en ce qu'au** moins une nervure (34) s'étendant vers la surface plate (30) depuis la surface de support (33) est présente.
3. Panier à couverts selon la revendication 2, **caracté- 10 risé en ce que** chaque nervure (34) est inclinée de sorte que son arête supérieure (34u) soit tournée vers le haut.
4. Panier à couverts selon la revendication 2, **caracté- 15 risé en ce que** chaque nervure (34) est inclinée de sorte que son arête inférieure (34d) soit tournée vers le bas.
5. Panier à couverts selon la revendication 2, **caracté- 20 risé en ce que** la surface de support (33) est fixée à la surface plate (30) depuis au moins un côté.
6. Panier à couverts selon la revendication 1, **caracté- 25 risé en ce que** sur l'arête supérieure de chaque nervure (31) se trouve une inclinaison respective (31 i) s'étendant vers le bas.
7. Panier à couverts selon la revendication 1, **caracté- 30 risé en ce que** sur l'arête inférieure de chaque crochet (32) se trouve au moins un accroc (32s) s'étendant vers la fente (32v).
8. Panier à couverts selon la revendication 7, **caracté- 35 risé en ce que** l'accroc (32s) présente une dimension de sorte à permettre à la jambe (11) de l'anse (1) d'être engagée par compression dans ladite fente (32v).
9. Panier à couverts selon la revendication 1, **caracté- 40 risé en ce qu'un** corps inférieur (14) sur l'anse (1) présente une structure en forme de tige formée par l'extension vers le bas d'au moins l'une des deux surfaces opposées du corps supérieur (12) en une forme de tige.
10. Panier à couverts selon la revendication 9, **caracté- 45 risé en ce que** l'anse (1) comprend une section de préhension (10) formée au-dessus du corps supérieur (12) pour qu'un utilisateur la tienne.
11. Panier à couverts selon la revendication 1, **caracté- 50 risé en ce que** ladite jambe (11) est telle qu'elle s'étend vers au moins un côté au-dessous de chaque corps inférieur (14).
12. Panier à couverts selon la revendication 9, **caracté- 55 risé en ce qu'une** ouverture (13) dans une largeur pour recevoir la plaque (3) est présente entre les corps inférieurs (14).
13. Panier à couverts selon la revendication 1, **caracté-**

risé en ce que de petits creux et saillies sont présents sur les deux parties (1, 3) où l'anse (1) touche la plaque (3) sans empêcher l'utilisateur de déplacer l'anse (1) et étant à un niveau tel que le glissement vers le bas soit empêché en soi.

5

14. Panier à couverts selon la revendication 1, **caractérisé en ce que** des parties de contact de friction de l'anse (1) et de la plaque (3) sont telles qu'elles n'empêcheraient pas l'utilisateur de déplacer l'anse (1) et l'empêcheraient aussi de glisser vers le bas en soi.

10

15. Panier à couverts selon l'une quelconque des revendications précédentes, **caractérisé en ce que** tous lesdits détails sur une surface (30) de la plaque (3) sont présents de manière symétrique sur la face opposée.

15

20

25

30

35

40

45

50

55

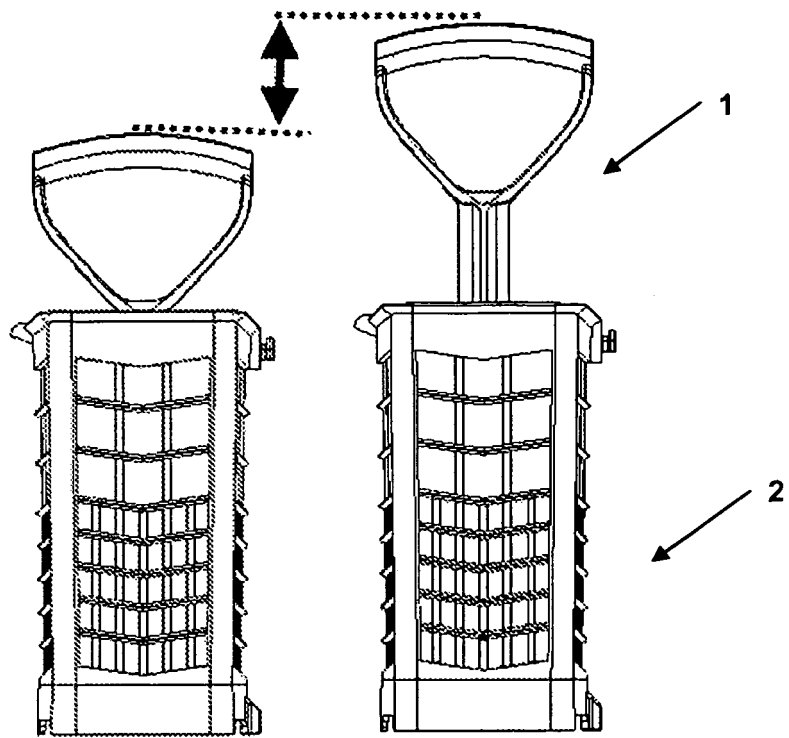


Figure - 1

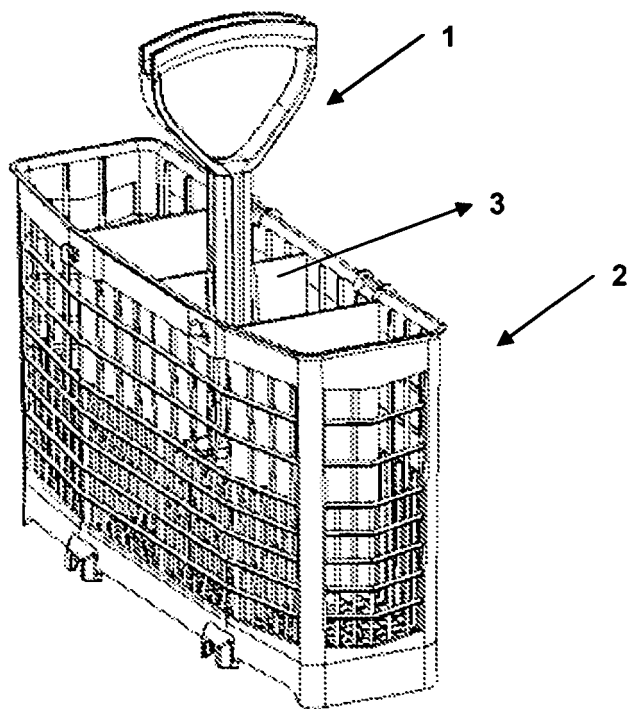


Figure - 2

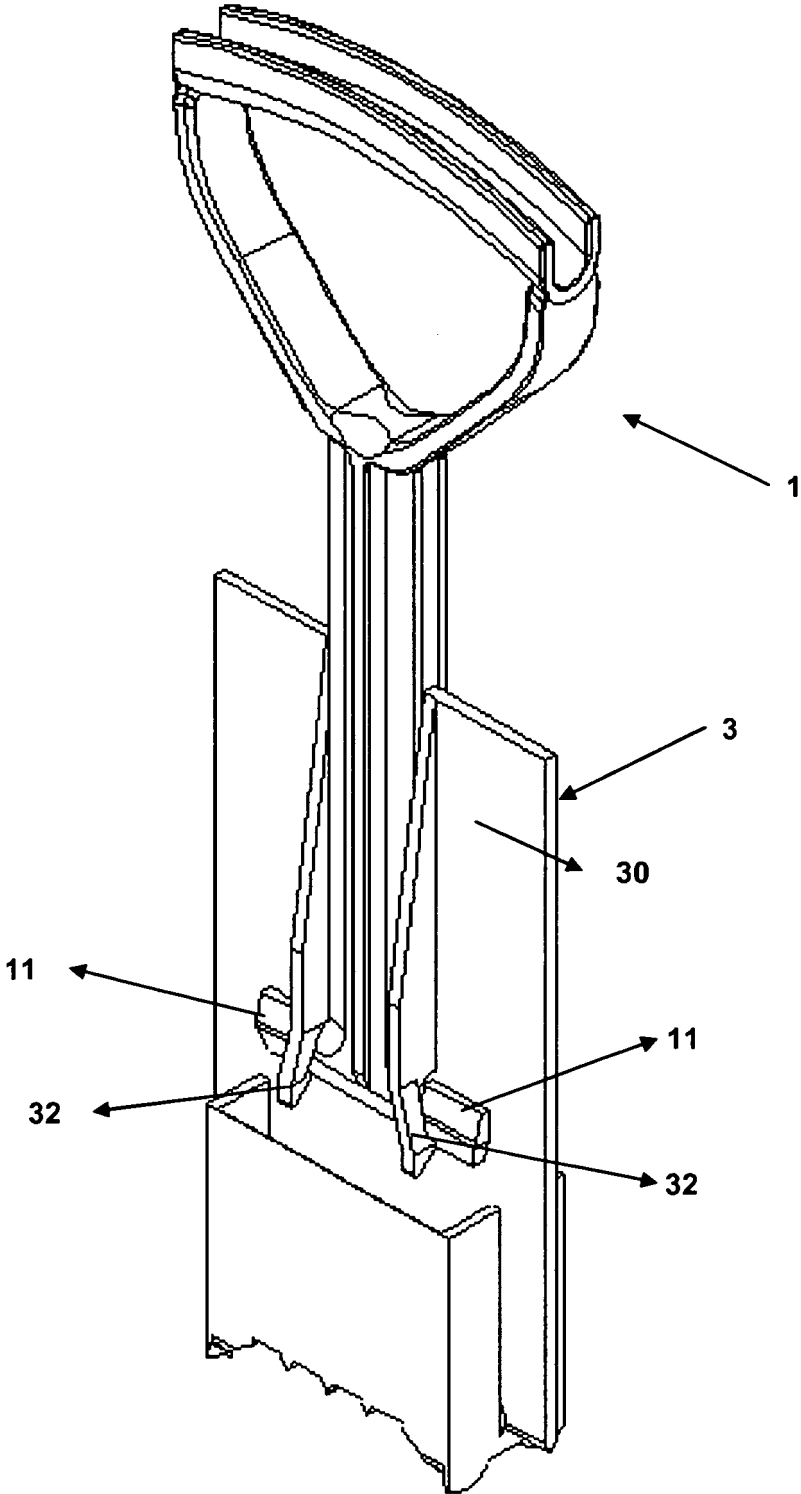


Figure – 3

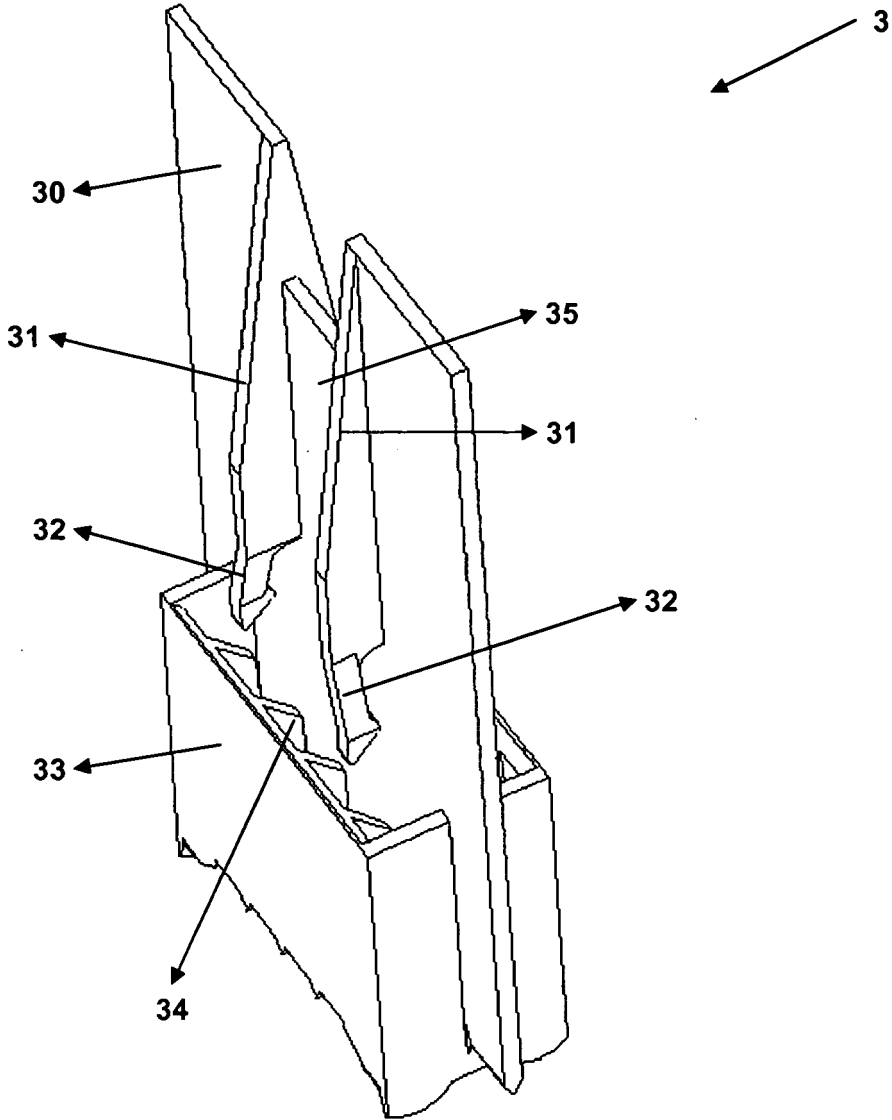


Figure - 4

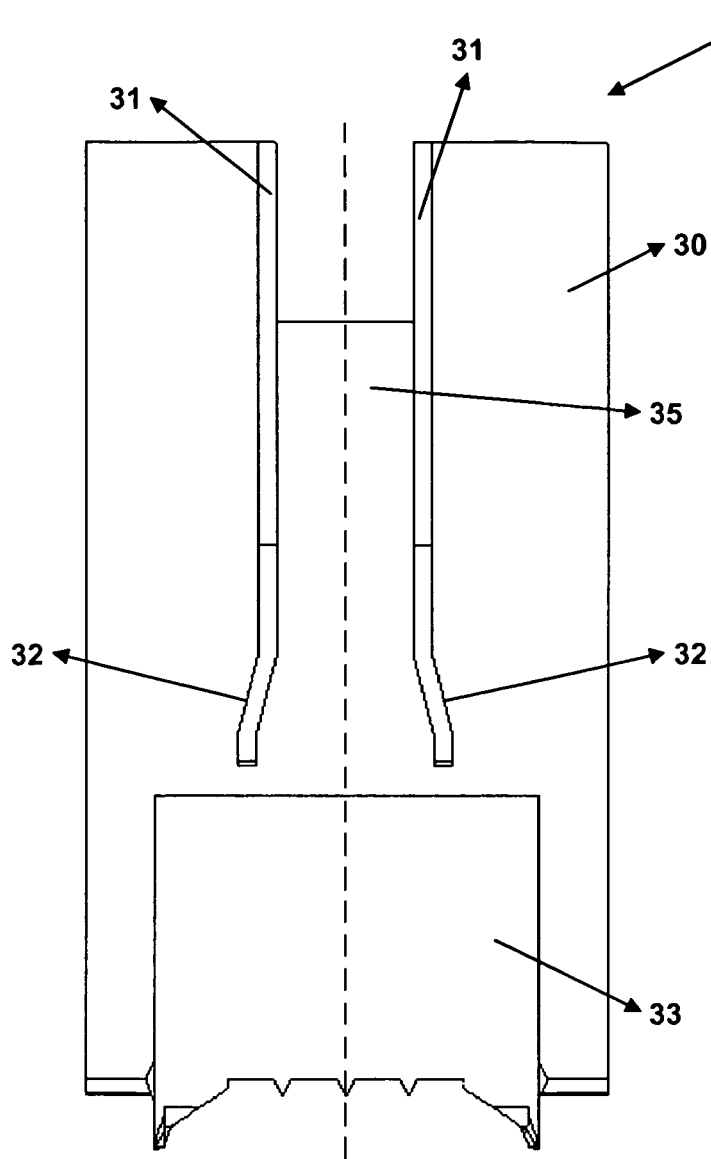


Figure - 5

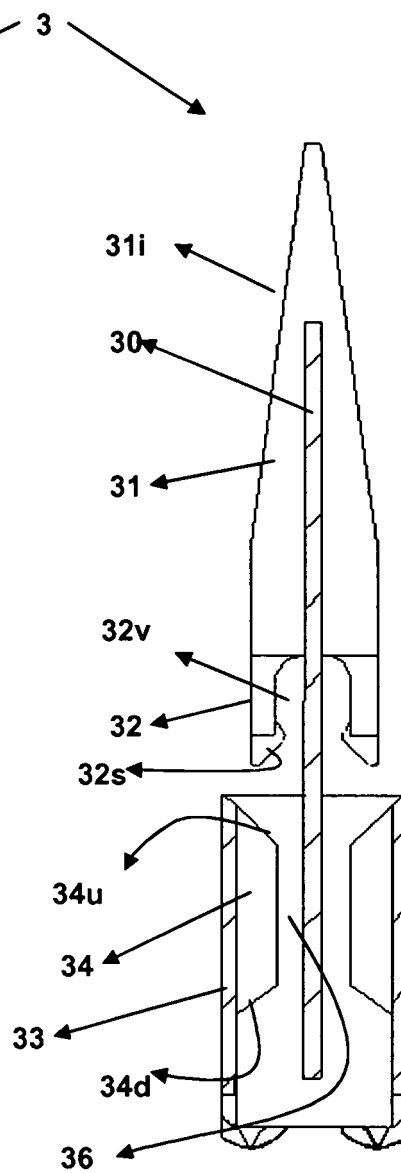


Figure - 6

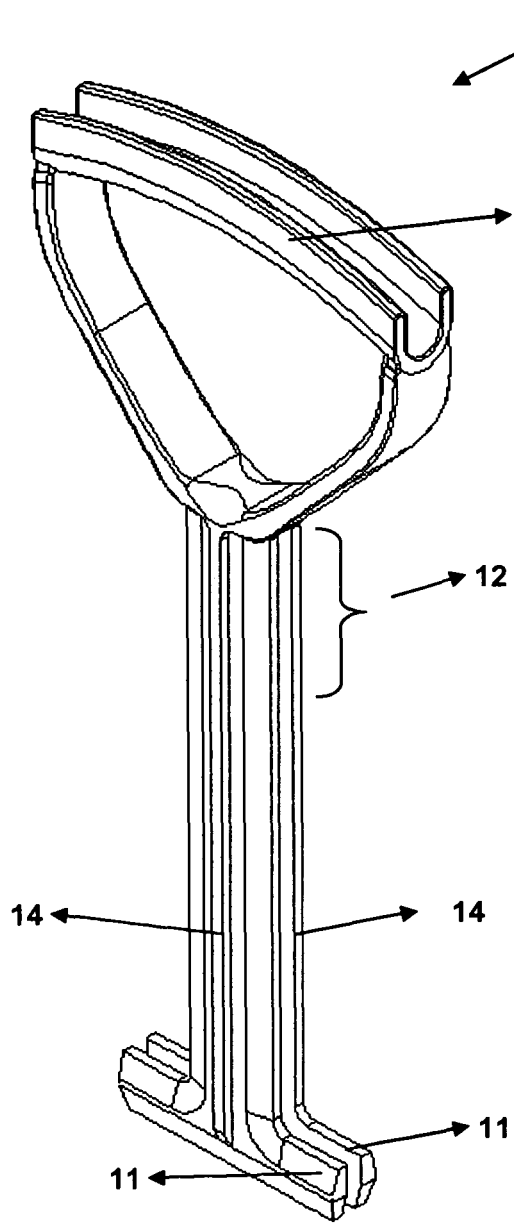


Figure - 7

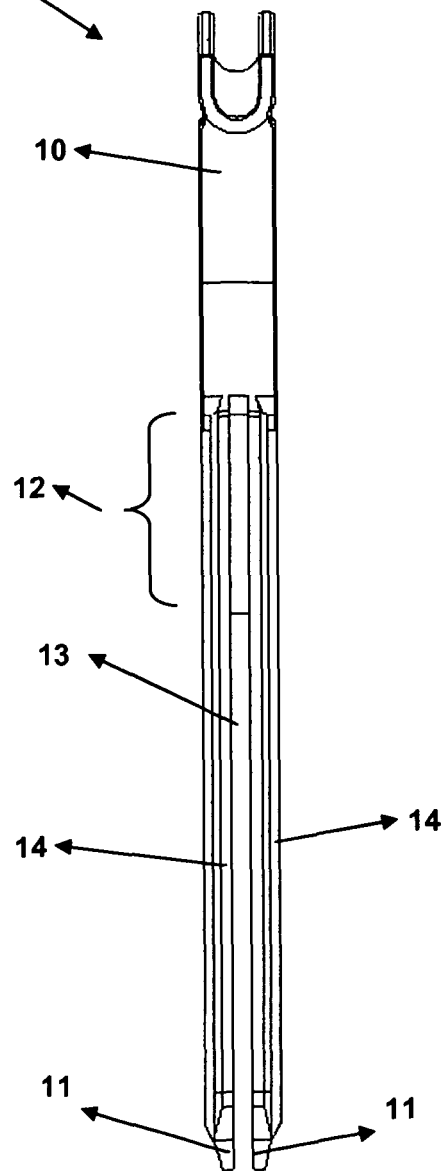


Figure - 8

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

- US 2002139809 A [0003]
- WO 2004000090 A [0004]