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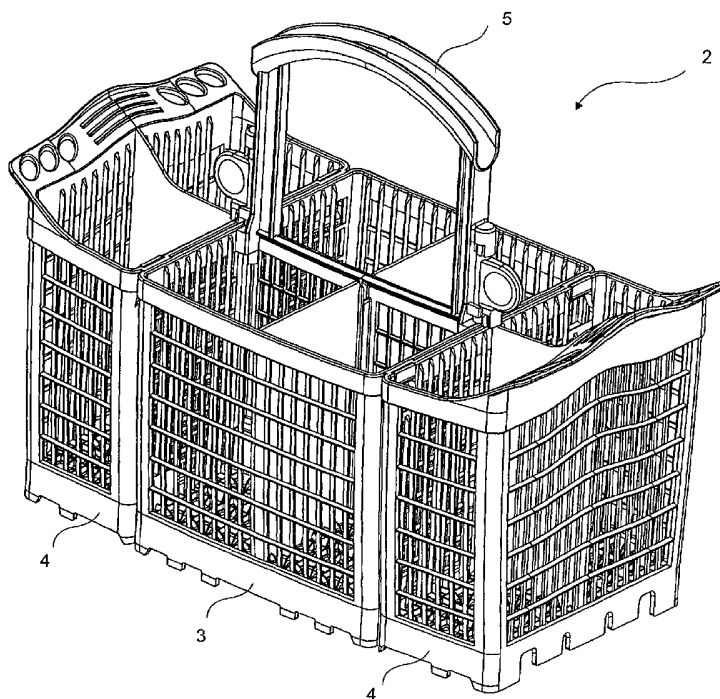
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(54) Title: A MODULAR CUTLERY BASKET



(57) Abstract: This invention is related to a modular cutlery basket (2) to provide flexible use by means of a locking mechanism (6) in a dishwasher.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A MODULAR CUTLERY BASKET

This invention is related to a modular cutlery basket for dishwashers.

- 5 In domestic dishwashers, cutlery baskets are used to ensure effective cleaning of the small items like cutlery during the washing operation.

Fixed cutlery baskets with predetermined capacity do not allow the user to load various amounts of items for washing. In order to eliminate this problem, cutlery
10 baskets with multiple compartments are provided however separating, re-joining, carrying the separated compartments are not easy for the user.

In the state of the art, in US 543 1294 releasably joined components of a modular cutlery basket assembly and its functions are described.

15

The object of this invention is to provide a modular cutlery basket to provide flexible use in holding the items like cutlery in a dishwasher.

The cutlery basket to attain the object of this invention is shown in the attached
20 drawings wherein:

Figure 1 is a perspective view of a modular cutlery basket

Figure 2 is an exploded top view of a modular cutlery basket

Figure 3 is an exploded detail view of a locking mechanism

25 Figure 4 is a partially detailed perspective view of a locking mechanism

Figure 5 is a partially detailed perspective view of a locking mechanism in open position ,

Figure 6 is a partially detailed perspective view of a locking mechanism in closed position,

30 Figure 7 is a perspective view of a handle,

Figure 8 is a cross-sectional detailed view showing how to attach the handle to the main basket compartment

Figure 9 is an exploded bottom view of a modular cutlery basket

Figure 10 is a perspective view of a dish rack into which a cutlery basket
5 compartment is located.

The parts in the drawings are numbered as follows:

- | | | |
|----|-----|----------------------------------|
| | 1. | Dish rack for dishwasher |
| 10 | 2. | Modular cutlery basket |
| | 3. | Main basket |
| | 4. | Supplementary baskets |
| | 5. | Handle |
| | 6. | Locking mechanism |
| 15 | 7. | Key |
| | 8. | Handgrip |
| | 9. | Shaft |
| | 10. | Ratchet |
| | 11. | Key holder |
| 20 | 12. | Upper hold |
| | 13. | Finger |
| | 14. | Lower hold |
| | 15. | Main basket hanger |
| | 16. | Main basket hanger hold |
| 25 | 17. | Supplementary basket hanger |
| | 18. | Supplementary basket hanger hold |
| | 19. | Locking projection |
| | 20. | Detent |
| | 21. | Separator duct |
| 30 | 22. | Detent hold |
| | 23. | Separator |

- 24. Key plug
- 25. Projection
- 26. Projection hold
- 27. Handle duct
- 5 28. Handle rail

Dishwashers comprise one or more dish racks (1) to hold items to be washed and one or more modular cutlery baskets (2) to hold cutlery or several other small utensils to allow an efficient washing operation.

10

Modular cutlery basket (2) comprises a main basket (3), one or more supplementary baskets (4), a handle (5) dividing the main basket (3) into compartments used to carry the parts it is attached to, one or more locking mechanism (6) to join and hold the main basket (3) and supplementary baskets (4) together.

15

The locking mechanism (6) comprises one or more keys (7) to provide locking by rotating the same, one or more key holders (11) located on the handle (5) embedding the key (7), one or more key plugs (24) located on the main basket (3) and corresponding to the shape of the key (7), one or more locking projections (19) with a projection hold (26) and placed on the said supplementary baskets (4) to ensure locking by pressure.

20

25

The key (7) comprises a handgrip (8) to turn the key (7), a partially rounded angular shaft (9) to be embedded into the key holder (11) and to hold fix when the locking mechanism (6) is in open or closed position, a ratchet (10) to provide locking by pressing the locking projection (19) and a projection (25) to make sure that the locking mechanism (6) is fixed in closed position by resting on the projection hold (26).

30

5 The key holder (11) comprises an upper hold (12) which grips the shaft (9) from top and having a corresponding shape of the shaft (9), one or more fingers (13) to support the key (7) from its sides and to prevent the key (7) to fall down when attached to the handle (5) in open position and a lower hold (14) bearing the shaft (9) from below.

10 The main basket (3) is provided with one or more basket hangers (15) on its side walls to be joined with the supplementary baskets (4) and one or more main basket hanger holds (16), one or more separators (23) to divide the space into compartments, one or more C-shaped handle ducts (27) to secure the handle, one or more detent holds (22) to secure the handle (5) to the basket (3).

15 The handle (5) comprises a separator duct (21) to be secured to the separator (23), one or more handle rails (28) fixed to the handle duct (27) and one or more detents (20) to secure the handle (5) to the main basket (3).

20 Supplementary baskets (4) comprise one or more supplementary basket hangers (17) attached from their side walls to the main basket hanger holds (16) to be secured to the main basket (3), one or more supplementary basket hanger holds (18) to which the main basket hangers (15) are secured and one or more separators (23) dividing the main basket (3) into compartments.

25 To connect the parts of the modular cutlery basket (2) to each other, keys (7) are placed into the key holder (11) existing on the handle (5). Keys (7) placed in this way into their holders by turning either side after holding from handgrip (8) are brought onto the finger (13) and in this way, the locking mechanism (6) is brought to its open position. After
30 separator duct (21) is secured to the separator (23), and handle rails (28)

are secured to the handle duct (27), the handle (5) is pushed inside the main basket (3) until detents (20) are fastened to detent holds (22). After main basket hangers(15) are fastened to the supplementary hanger holds (18) and supplementary basket hangers (17) to main basket hanger holds (16), in this way the supplementary baskets (4) are secured to the main basket (3), keys (7) are turned by holding from handgrip (8) until the projections (25) rest on the projection holds (26) to bring the locking mechanism (6) to the closed positions, thus ensuring the locking. As all the components of the modular cutlery basket (2) are locked by the locking mechanism (6), it is easily and safely handled as a single basket.

By releasing the locking mechanism (6) and separating the baskets from each other, each basket may be used in any desired location on the dish rack (1) and thus this assembly provides easy and flexible use of the basket.

CLAIMS

1. A modular cutlery basket (2) used in a dishwasher comprising a main basket (3), one or more supplementary baskets (4), a handle (5) dividing
5 the main basket (3) into smaller compartments and to carry the basket assembly characterized in that it comprises one or more locking mechanisms (6) having one or more keys (7) which ensures locking and releasing by turning either side, one or more key holders (11) bearing the key (7) located on the handle (5), one or more key plugs (24) placed on the
10 the main basket (3) provided with a shape to conform the key (7) and one or more locking projections (19) located on the supplementary baskets (4) which ensure locking by pressure.
2. A modular cutlery basket (2) as described in claim 1, characterized by its having a locking projection (19) comprising a projection hold (26).
- 15 3. A modular cutlery basket (2) as described in claim 1 and 2 characterized by its having a key (7) that comprises a handgrip (8) to turn it, a shaft (9) having partially rounded angular shape to be born in the key plug (11), a ratchet (10) which ensures locking by pressing the locking projection (19) and a projection (25) making sure that the locking mechanism (6) is held
20 fix in its closed position by resting on the projection hold (26).
4. A modular cutlery basket (2) as described in claim 1 to 3 characterized in that a key holder (11) comprises an upper hold (12) which grips shaft (9) from top corresponding the shape of the shaft (9), one or more fingers (13) to support the keys from sides (7) and a lower hold (14) to bear the
25 shaft (9) from bottom shaft.
5. A modular cutlery basket (2) as described in any of the claims mentioned above characterized in that the main basket (3) comprises one or more main basket hangers (15) to be secured to the supplementary baskets (4), one or more main basket hanger holds (16), supplementary baskets (4)
30 having one or more supplementary basket hangers (17) attached from their side walls to the main basket hanger holds (16) to be secured to the main

basket (3), one or more supplementary basket hanger holds (18) to which the main basket hangers (15) are secured.

- 5
6. A modular cutlery basket (2) as described in any of the claims mentioned above characterized in that the main basket (3) comprises one or more separators (23) to divide the basket into compartments, one or more handle ducts (27) to facilitate the handle (5) attachment, one or more detent holds (22) to secure the handle (5) to the main basket (3).
- 10
7. A modular cutlery basket (2) as described in any one of the claims above characterized in that the handle (5) comprises a separator duct (21) to be secured to the separator (23), one or more handle rails (28) fixed onto the handle duct (27), one or more detents (20) to secure the handle (5) to the main basket (3).
- 15
8. A modular cutlery basket (2) as described in any of the claims above characterized in that supplementary baskets (4) comprise one or more separators (33) to divide the basket into compartments separate volume of usage into compartments.
- 20
- 25
- 30

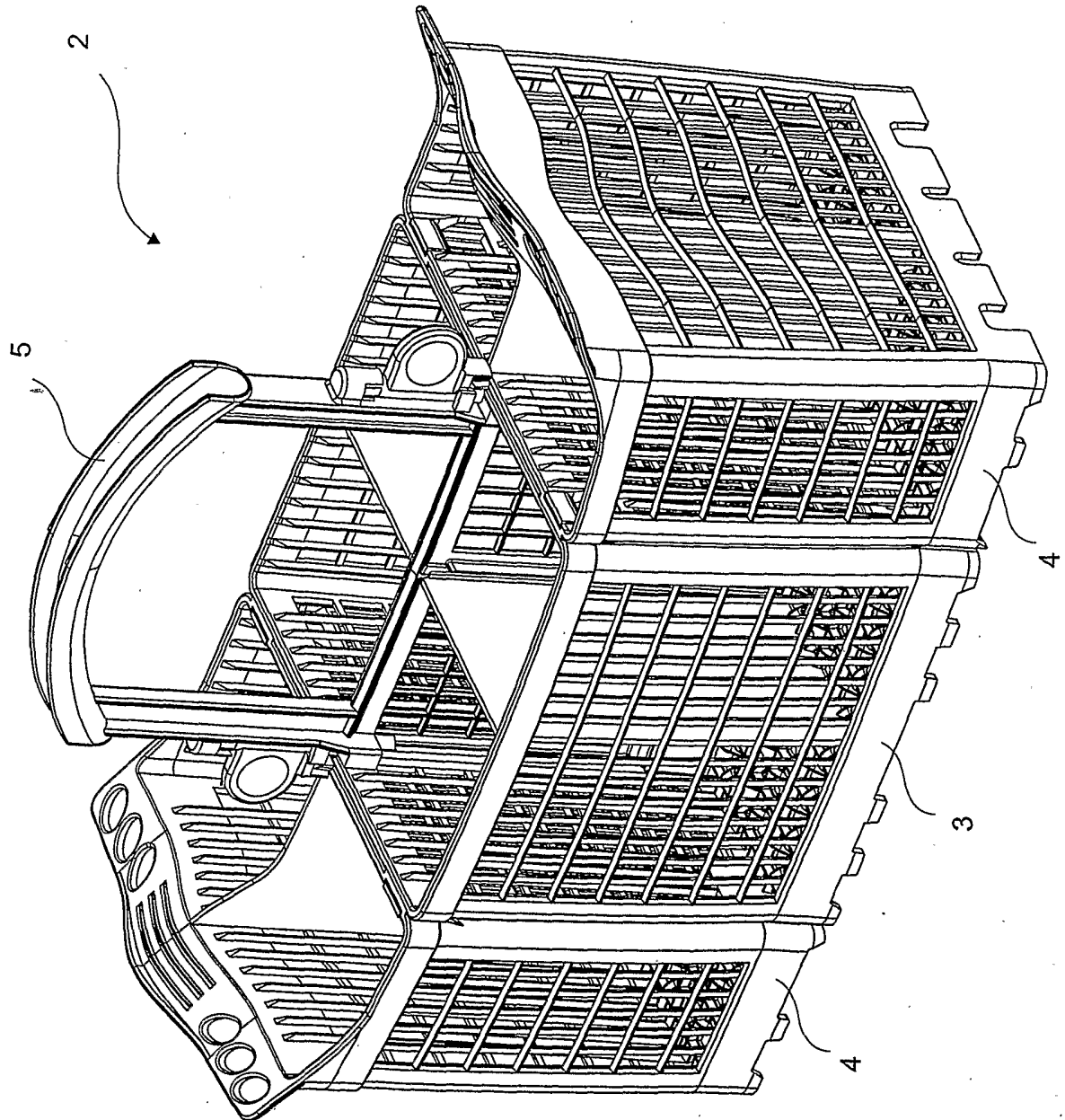


Figure 1

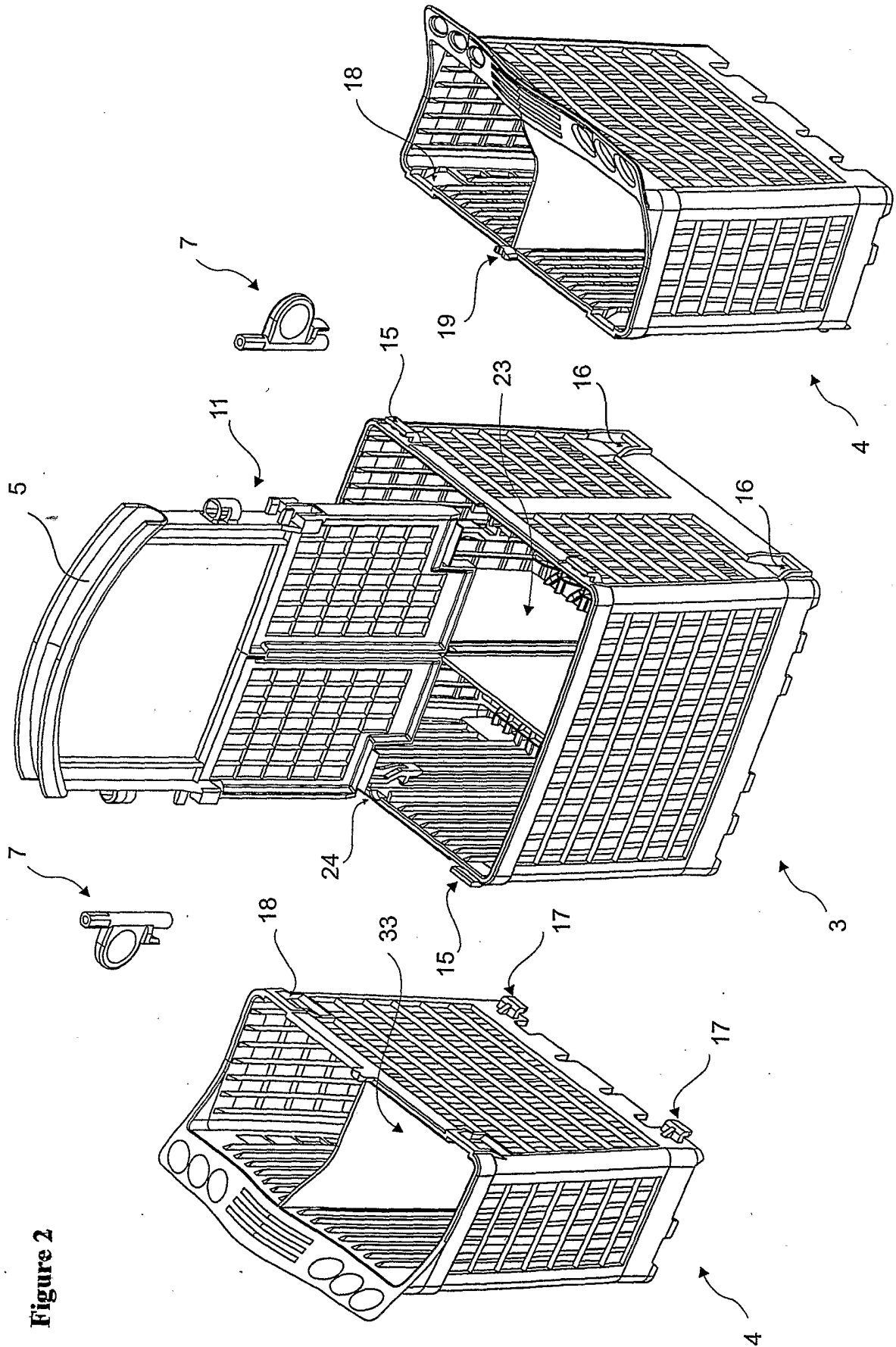


Figure 2

Figure 3

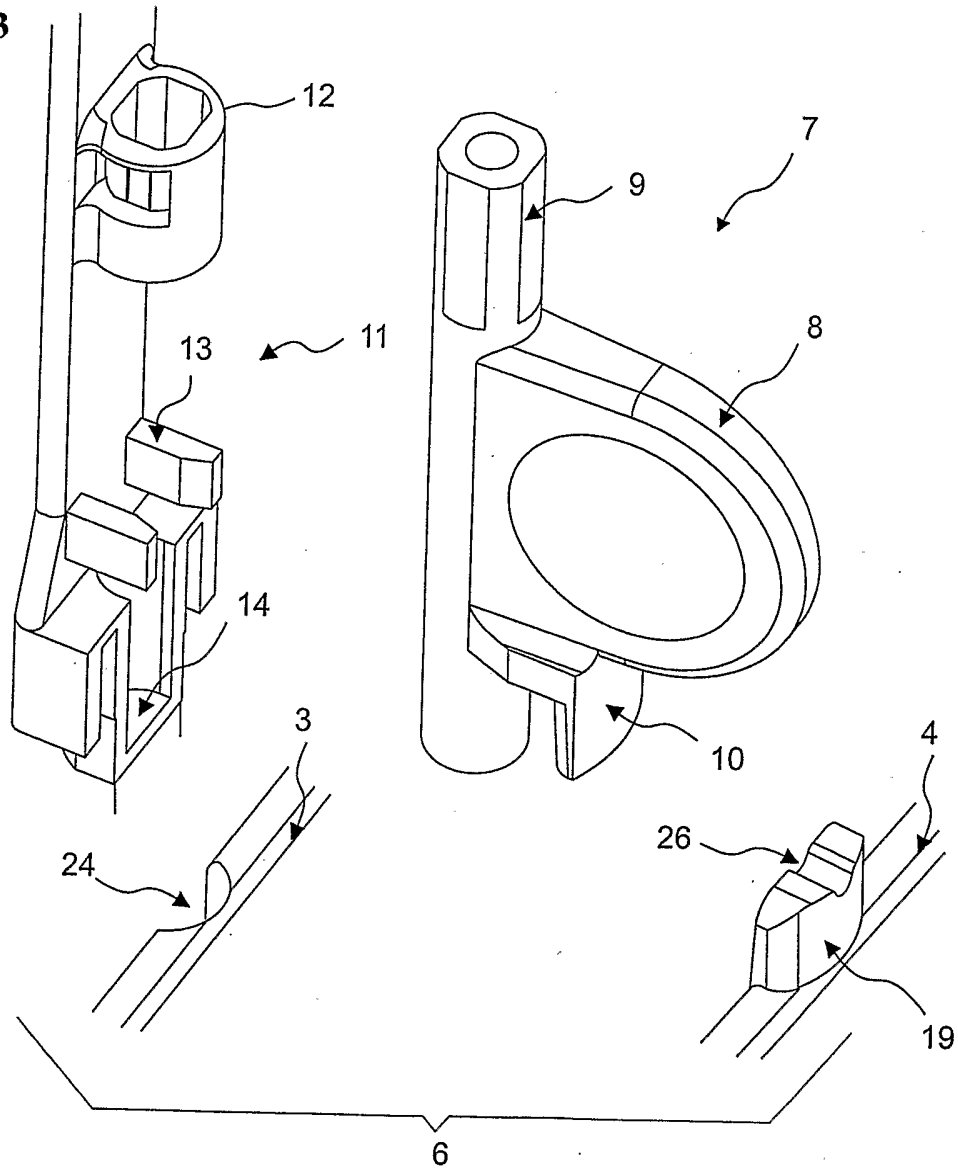


Figure 4

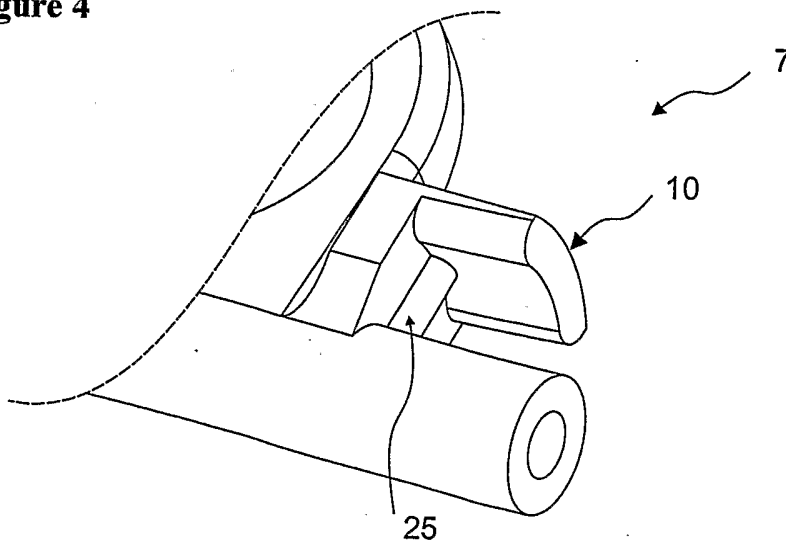


Figure 5

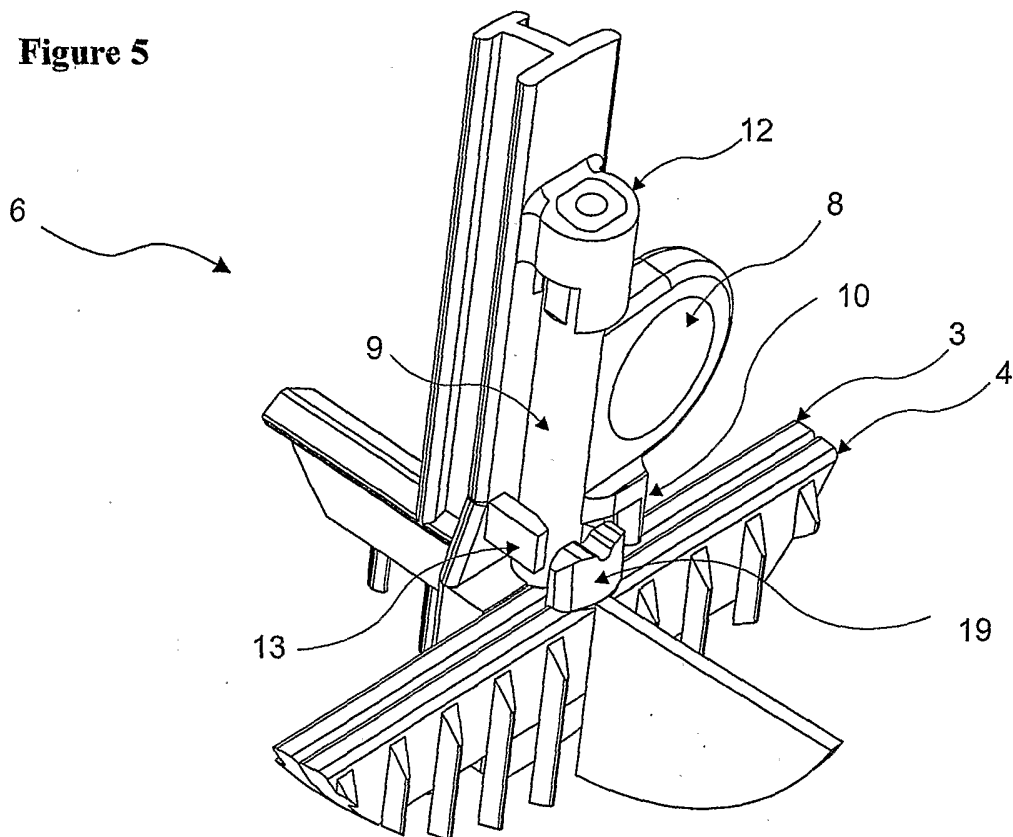


Figure 6

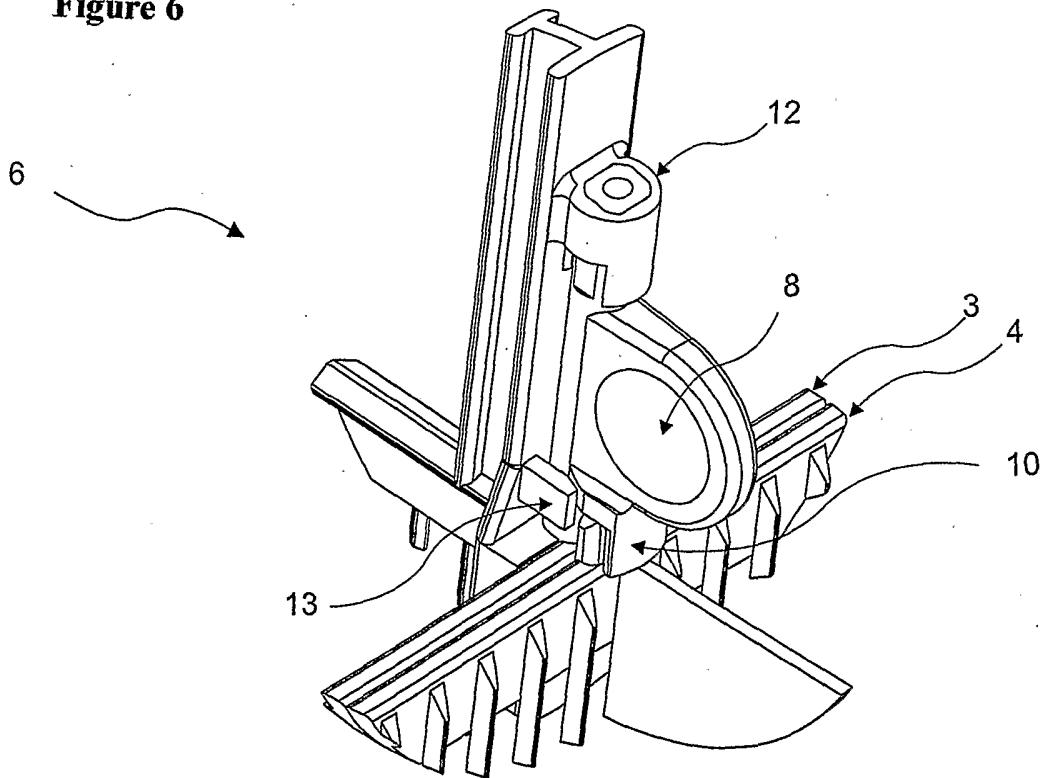


Figure 7

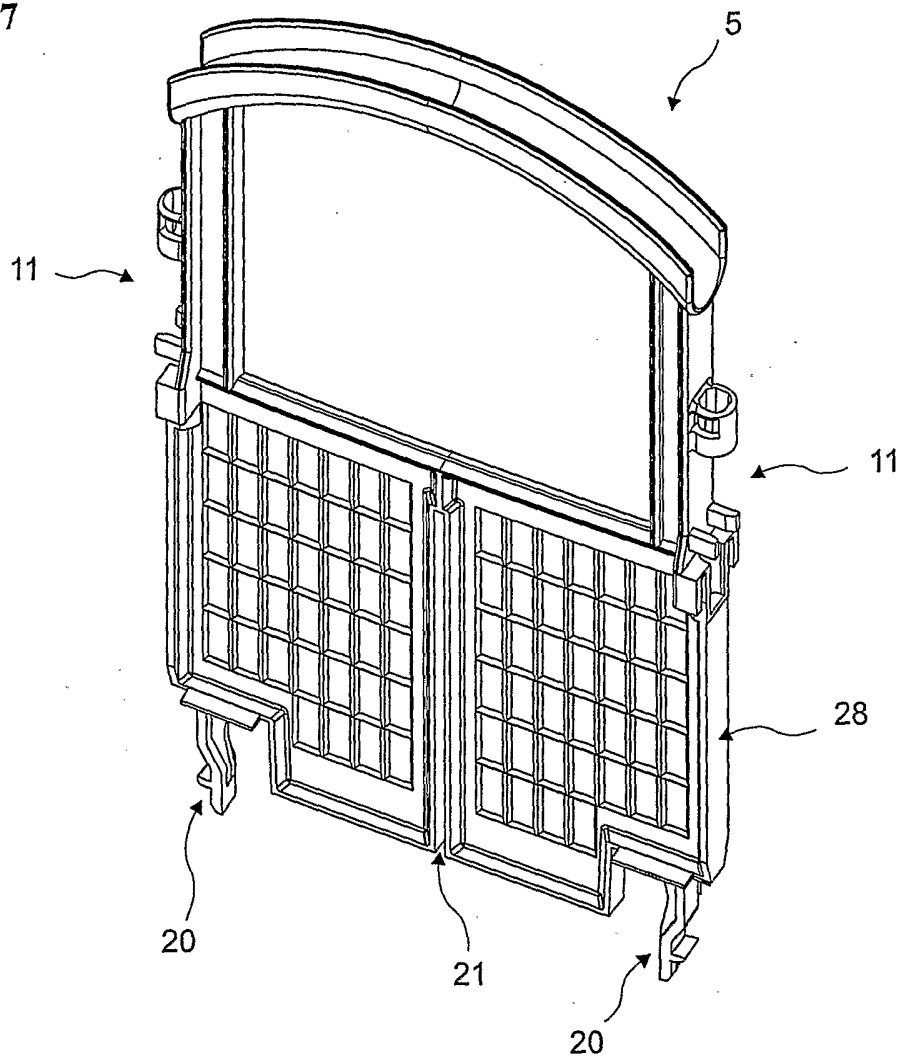


Figure 8

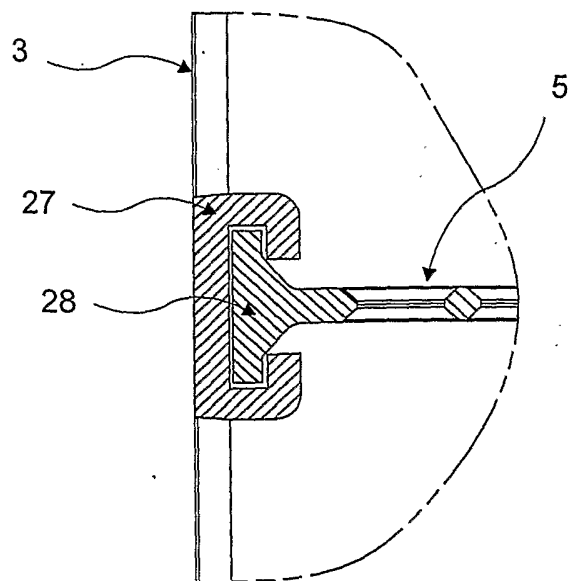


Figure 9

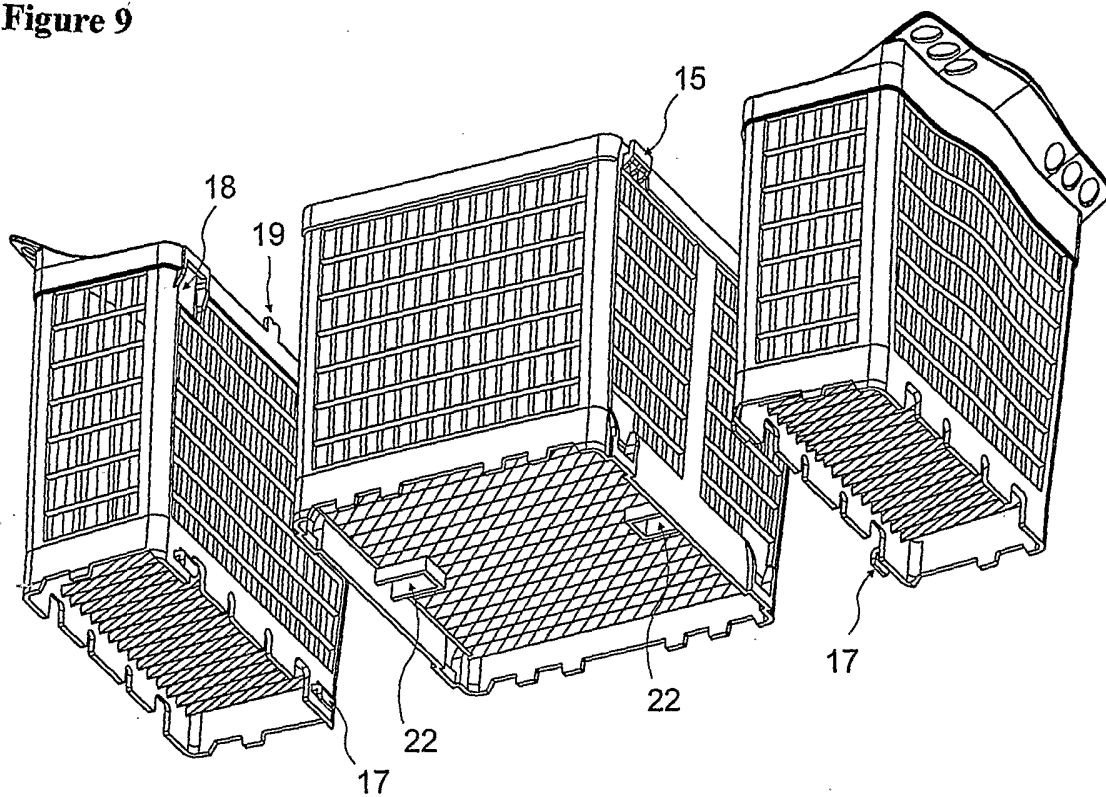
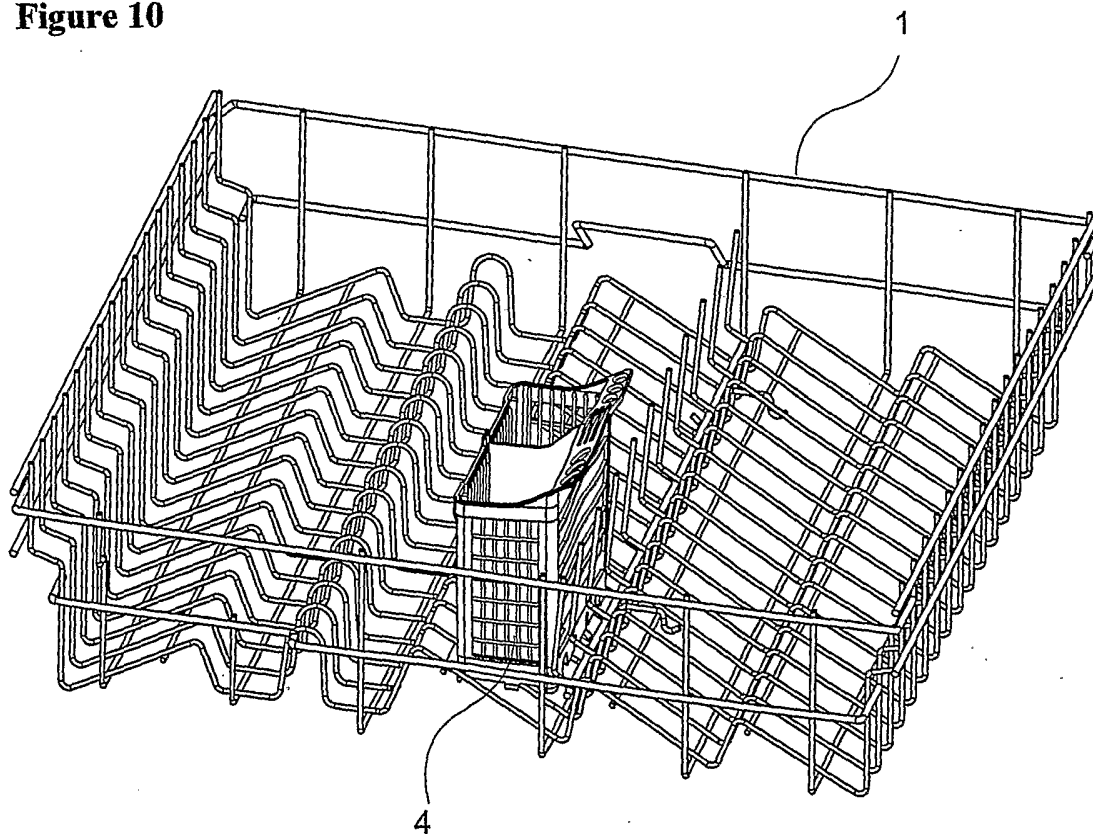


Figure 10



INTERNATIONAL SEARCH REPORT

International Application No

PCT/TR 03/00054

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A47L15/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A47L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 2002/139809 A1 (BARRY RODNEY J ET AL) 3 October 2002 (2002-10-03) page 1, paragraph 15 page 2, paragraph 19; figures 1,5,8	1-8
A	US 5 431 294 A (STOTTMANN RICHARD L ET AL) 11 July 1995 (1995-07-11) cited in the application column 2, line 61 -column 4, line 13; figures 2,4	1-8
A,P	EP 1 256 309 A (BONFERRARO S P A) 13 November 2002 (2002-11-13) figures 1,3	1-8
A	US 6 161 718 A (MONBO OPHELIA B) 19 December 2000 (2000-12-19) figure 1	1-8

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Date of the actual completion of the international search

29 October 2003

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INTERNATIONAL SEARCH REPORT

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