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(54) **Basket with cutlery holder for home dishwasher**

(57) A basket (12) for home dishwasher is described comprising at least one side wall (11) and at least one plastic shelf (3) connected with said at least one side wall (11) in order to form an angle smaller than a right

angle with the bottom plane (21) of said basket (12). The shelf (3) is made integral with at least one cutlery holder (1) comprising holes (2) for the housing of cutlery and wide areas (30) for the flow of the washing water and/or the flow of drying air

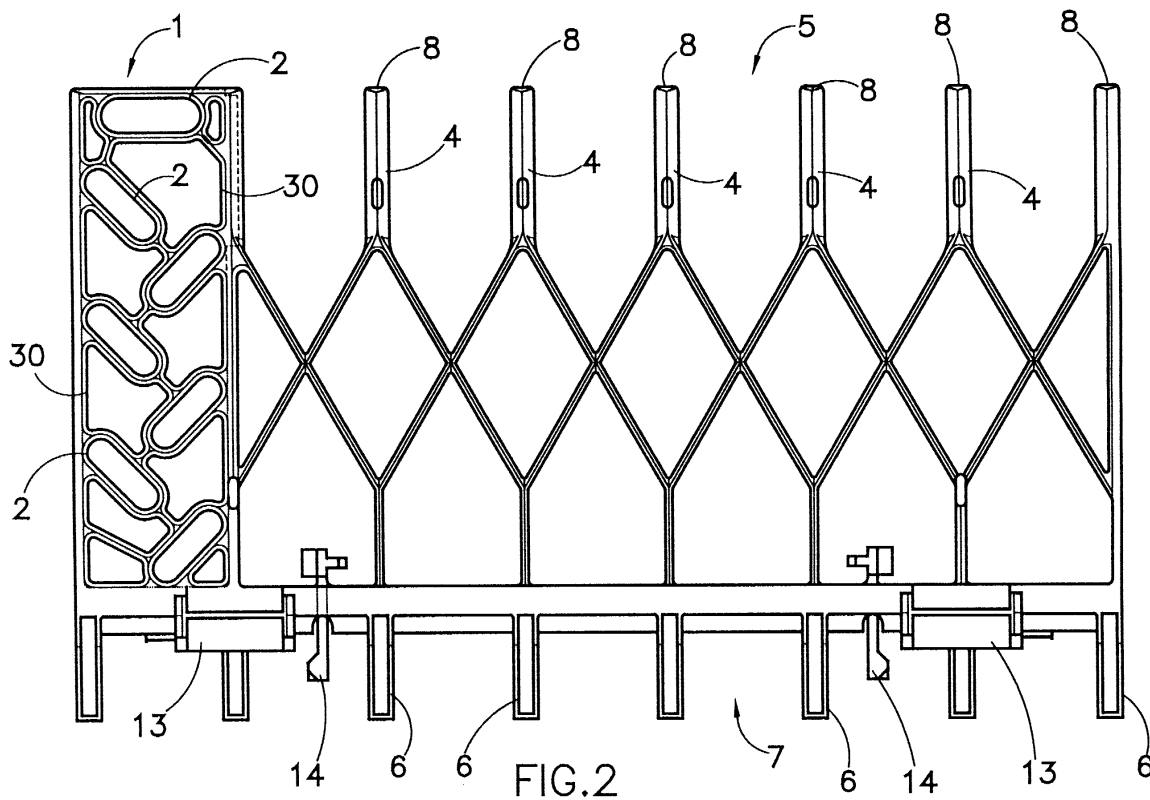


FIG. 2

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Description

[0001] The present invention refers to a basket with cutlery holder for home dishwasher, particularly to a dishwasher top basket.

[0002] Dishwasher baskets consist of rigid structures made up of steel rods that are welded to each other in interlacement and subsequently plasticised. The dishes are inserted in the appropriate spaces that are formed by the interlacement of the rods, so that they maintain a correct position, during washing, with such an inclination of the surfaces with respect to the washing spray coming from the sprayers as to avoid zones which are hardly reachable, directly or by deviation by the same spray.

[0003] The baskets of the dishwasher are constructed to rationalise the arrangement of the load of dishes inside the baskets, since the surface that is useful for the load has a limited size. In addition a very important prerogative consists in the safety of the load to be washed even when the weight of the latter is considerable.

[0004] At present, baskets for dishwashers comprise small plastic containers for cutlery that are placed in a separate position as regards the grid for the containment of the dishes. In this way the efficiency in the washing and possible drying of the cutlery is subordinated to the search and definition of the optimal position of the dishes. Therefore both the operations of washing and drying of the cutlery are penalised. In addition the capacity of the current cutlery containers is inevitably rather reduced.

[0005] In view of the state of the art herein described, object of the present invention is to realise a basket for dishwasher that has a support for cutlery in order to resolve the problems above exposed.

[0006] According to the present invention, such object is attained by means of a basket for home dishwashers comprising at least one side wall and at least one plastic shelf that is connected with said at least one side wall so as to form an angle smaller than a right angle with the bottom plane of said basket, characterized in that said shelf is made integral with to at least one cutlery holder comprising holes for the housing of cutlery and wide areas for the flow of the washing water and/or the flow of drying air.

[0007] Owing to the present invention it is possible to realise a basket for dishwasher with a cutlery holder that allows a different positioning of the cutlery inside the basket while favouring their washing and possible drying.

[0008] The characteristics and the advantages of the present invention will become evident from the following detailed description of an embodiment thereof, that is illustrated as a non-limiting example in the enclosed drawings, in which:

Figure 1 is a perspective view of the single cutlery holder according to the present invention;

Figure 2 is a front view of the support in Figure 1 fixedly mounted to a mobile shelf;

Figure 3 shows in longitudinal section a basket with a side wall provided with the mobile shelf in Figure 2;

Figure 4 shows, in front view, the basket in Figure 3 inserted in a dishwasher with the mobile shelf rotated in a first inclined position;

Figure 5 is similar to Figure 4, but with the mobile shelf in a second inclined position.

[0009] In Figure 1 there is shown a plastic cutlery holder 1 with rectangular shape that is internally provided with a plurality of holes 2 for the arrangement of various cutlery and with wide areas 30 for the flow of the washing water and/ or for the flow of drying air.

[0010] Two of such holders 1 are arranged at the sides and fixedly mounted to a plastic shelf 3, provided with teeth 4 making up a top rack 5 and with teeth 6 making up a bottom rack 7; the teeth 4 of said top rack 5 are preferably provided with appendixes 8, as visible in Figure 2 where a plastic shelf 3 with a single holder 1 is shown as an example.

[0011] The shelf 3 can be connected in fixed or mobile manner to a side wall 11 of a basket 12 of a dishwasher 20 but in such a way as to create a bottom plane 21 of the basket 12 with an angle smaller than a right angle. In the case of the mobile connection of the shelf 3 with the side wall 11 of the basket 12, the shelf 3 is turningly coupled to a horizontal rod 10 of the side wall 11 by snap insertion of said rod 10 in semi-cylindrical slot housings 13 of the shelf 3, as visible in Figure 3 and as known from the patent for utility model N. 00229638. The basket 12 is formed by steel rods that are welded in interlacement and plasticised so as to define a bottom plane 21 and at least one pair of side walls 11 with parallel spaces for containing and positioning dishes that are arranged vertically.

[0012] The shelf 3 is provided with hooks 14 for its locking in a first inclined position shown in Figure 4. Such locking is allowed by the contrast between the ends of said hooks 14 and vertical rods 15 of the wall 11. A second inclined position of the shelf 3 is made possible by simple resting of the lower end of the hooks 14 on the rods 15, as visible in Figure 5.

[0013] In the first inclined position the shelf 3 allows to load the basket 12 with dishes with standard dimensions; in addition the same shelf makes a plane available for the support of small and medium size cups, of ladles, of various tools with handle. In this case, the holder 1 can contain cutlery of various kind in its holes 2 while the top rack 5 can contain, in upside-down position, wine glasses with medium-thin stem.

[0014] In the second inclined position relatively light containers, for instance coffee cups, can be housed on the shelf 3, and the holder 1 can contain light cutlery, as for instance teaspoons. The basket 12 can be loaded with dishes having small, medium or exceptional diam-

eter.

[0015] The arrangement of the cutlery inside the dishwasher allows a more accurate washing of the same by limiting the contact zone of the tools and by favouring a better flow of the washing water. In fact the geometry of the cutlery holder 1 has solids and voids so as to limit the points of contact between tools as much as possible and to favour the drainage of the water.

[0016] In addition such arrangement of the cutlery allows to utilise wide areas for the passage of a constant heat flow for a more homogeneous drying of the same cutlery.

[0017] The position of the cutlery holder 1 anchored to the plastic shelf 3 allows to relieve the basket 12 of the load of cutlery and to eliminate the corners that are negative to the inlet of the washing water, thus allowing a general result of higher washing and drying efficiency as compared with the standards.

said shelf (3) can be locked in said first and second position by means of hooks (14) that are bucking with vertical rods (15) that are part of said at least one side wall (11) of the basket.

Claims

1. Basket (12) for home dishwasher comprising at least one side wall (11) and at least one plastic shelf (3) that is connected with said at least one side wall (11) in order to form an angle smaller than a right angle with the bottom plane (21) of said basket (12), characterized in that said shelf (3) is made integral with at least one cutlery holder (1) comprising holes (2) for the containment of cutlery and wide areas (30) for the flow of the washing water and/ or of the flow of drying air.
2. Basket according to claim 1, characterized in that said shelf (3) is connected with said at least one side wall (11) so as to be turningly coupled to it in order to be able to rotate around a horizontal axis between at least a first and a second angular position.
3. Basket according to claim 2, characterized in that said shelf (3) is coupled to said at least one side wall (11) of the basket (12) in an independent way, in order to allow an independent adjustment of the position of the basket.
4. Basket according to claim 1, characterized in that said shelf (3) is connected with said at least one side wall (11) of the basket (12) so as to be manually removable.
5. Basket according to claim 3, characterized in that the turning coupling of said shelf (3) to said at least one side wall (11) of the basket (12) is realised by means of semi-cylindrical slot housings (13) that are suitable for the insertion of a horizontal rod (10) that is a part of the same wall.
6. Basket according to claim 5, characterized in that

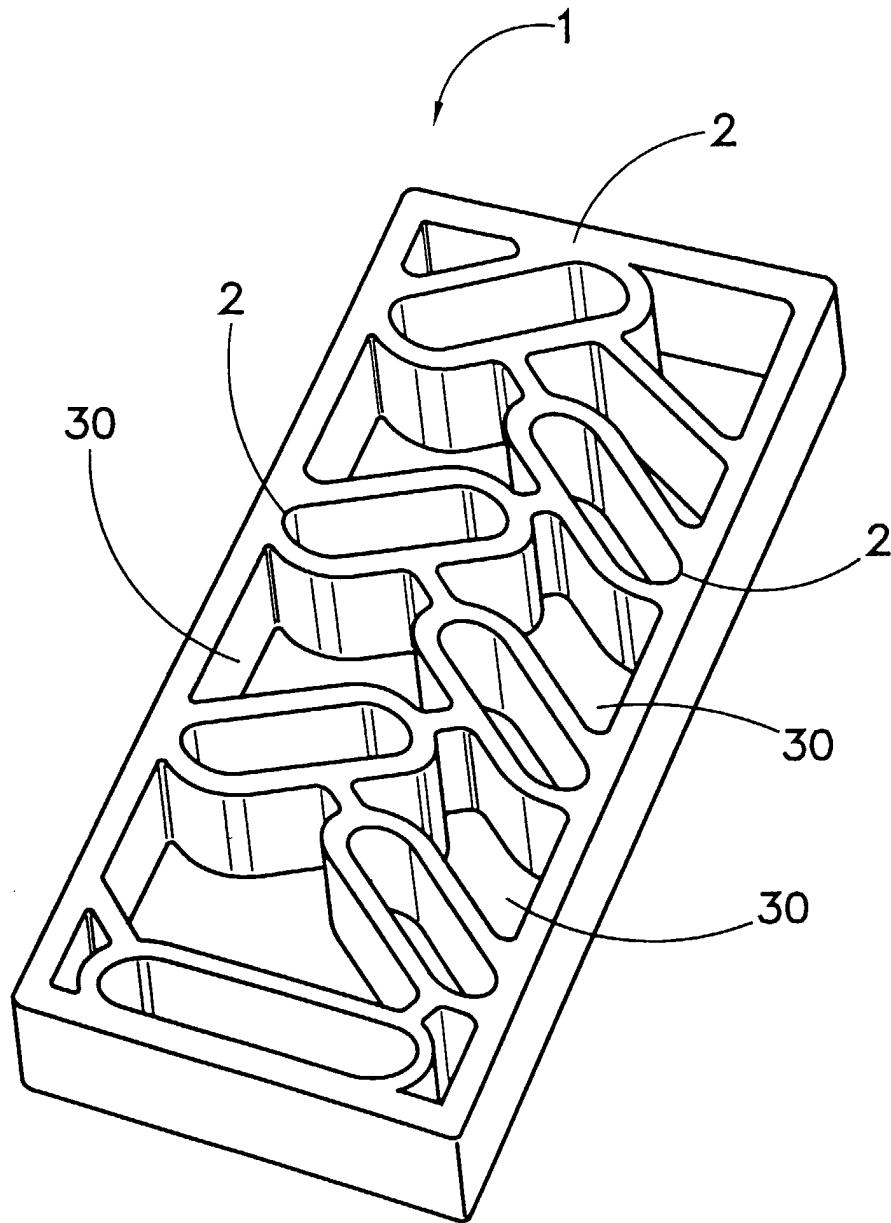
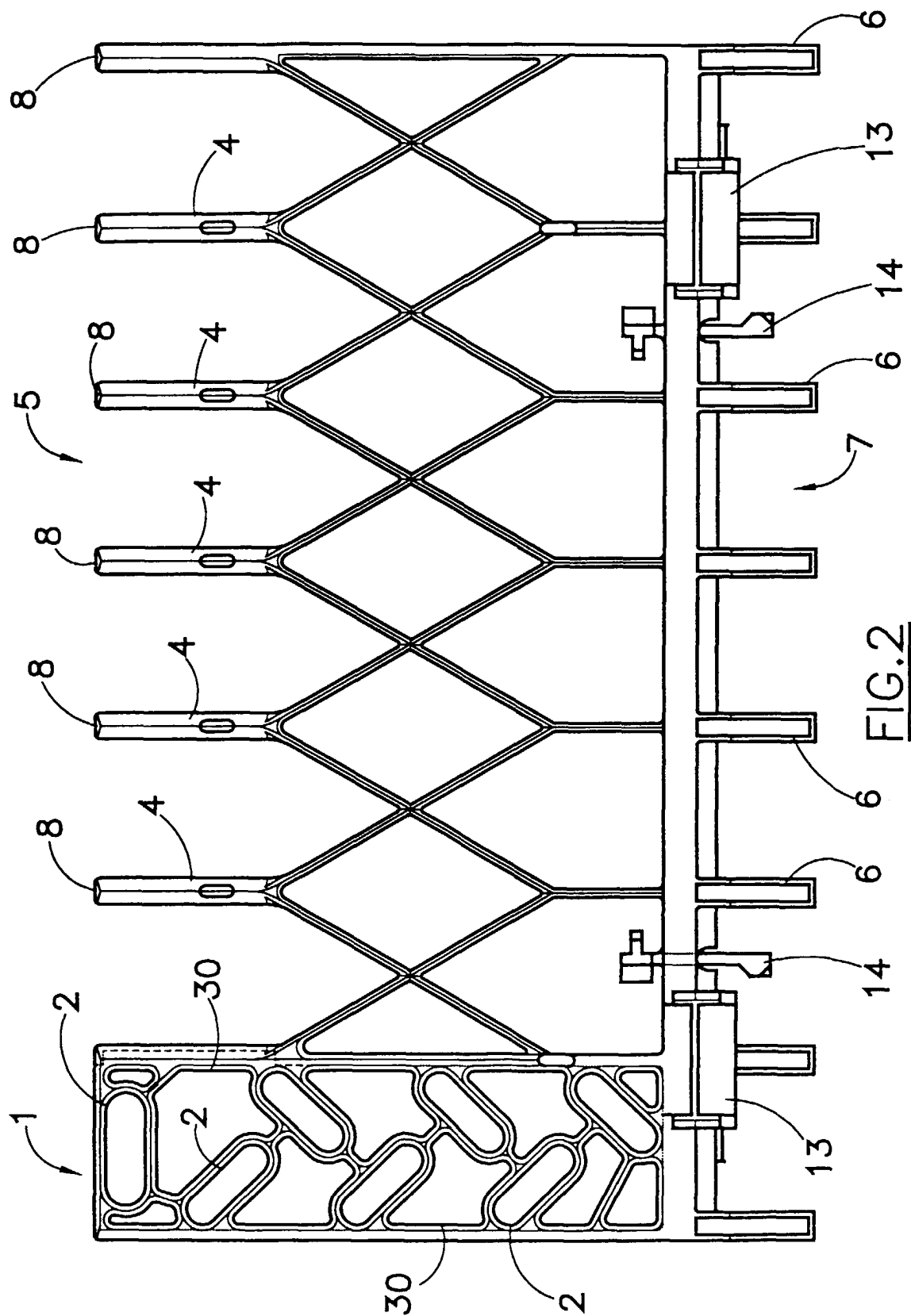


FIG. 1



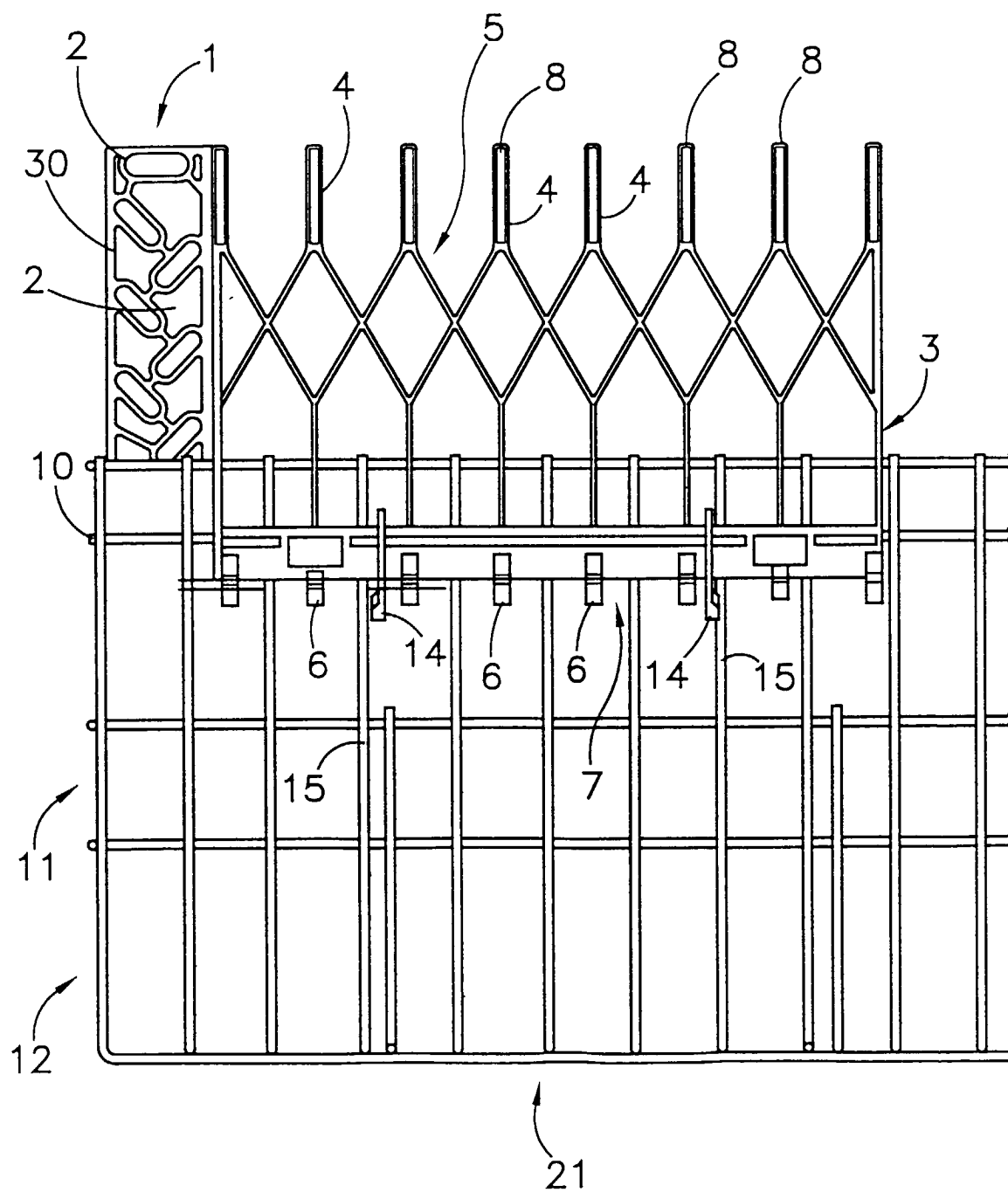
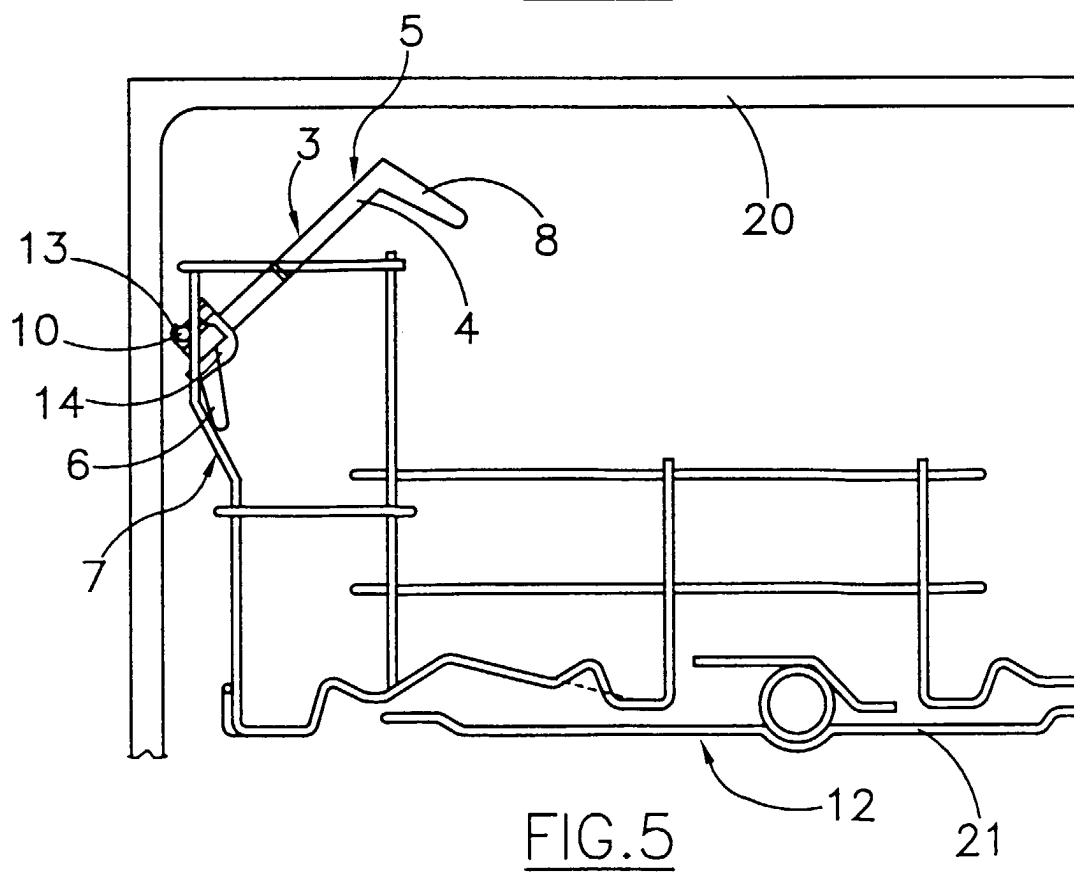
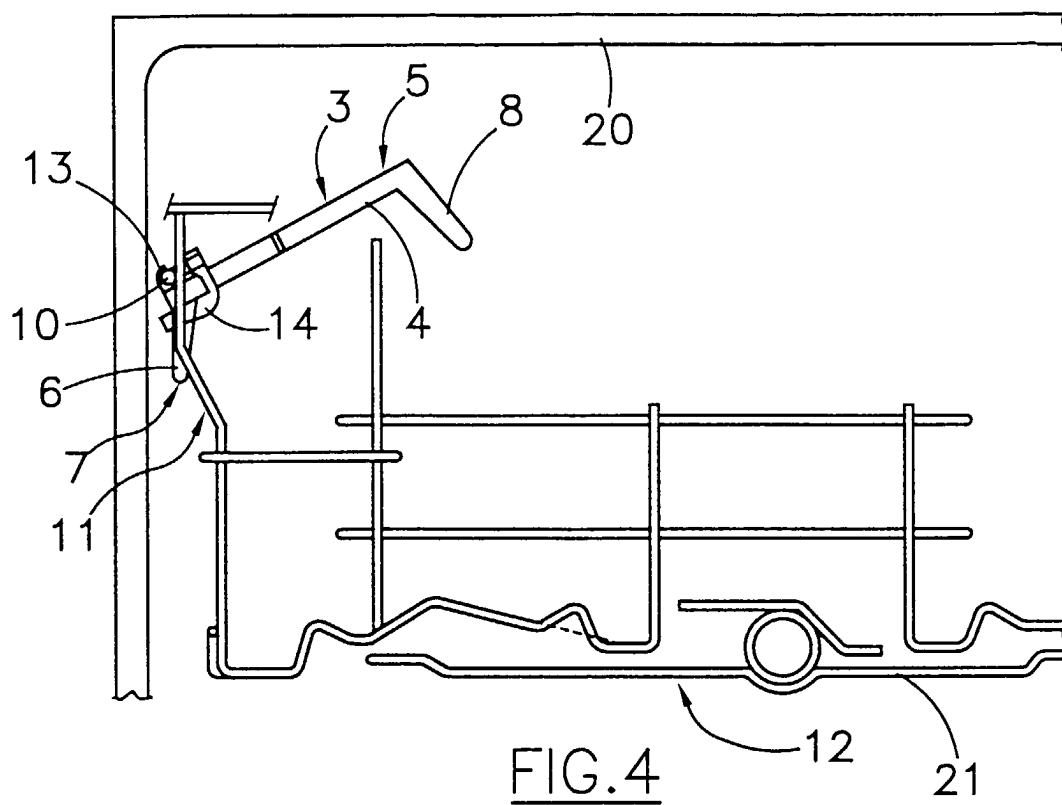


FIG.3





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EUROPEAN SEARCH REPORT

Application Number
EP 00 20 3734

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		27 February 2001	Fairbanks, S
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EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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27-02-2001

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