



(12)

EUROPEAN PATENT APPLICATION

(21) Application number : **94115841.2**

(51) Int. Cl.⁶ : **A47L 15/50**

(22) Date of filing : **07.10.94**

(30) Priority : **13.10.93 IT TO930747**

(43) Date of publication of application :
19.04.95 Bulletin 95/16

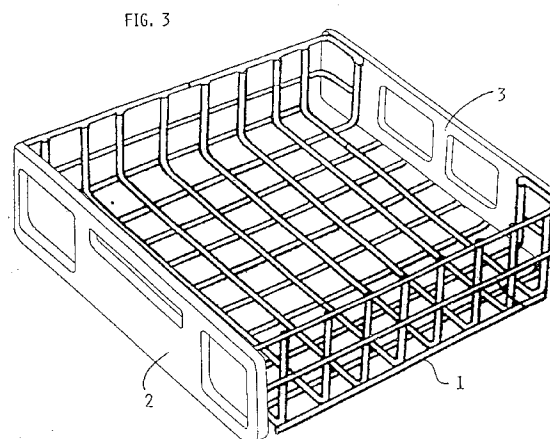
(84) Designated Contracting States :
DE ES FR GB IT

(71) Applicant : **MERLONI ELETTRODOMESTICI**
S.p.A.
Viale Aristide Merloni, 45
I-60044 Fabriano (AN) (IT)

(72) Inventor : **Alesso, Pietro**
Via Nazario Sauro 26
Pinerolo (TO) (IT)
Inventor : **Schena, Giuseppe**
Via Martiri della Libertà 18
Bricherasio (TO) (IT)

(54) **Basket for a dishwashing machine and manufacturing method thereof.**

(57) A manufacturing method is described of a dish-washing machine basket. The main characteristic of the described method consists in the fact that the basket is obtained by joining a base section (1), realised by way of expensive tools and being the same for all models of machine, and a variable additional part (2,3), being different according to the model



The present invention relates to a basket for a dish-washing machine and to a manufacturing method thereof.

It is known that dish-washing machines normally use two extractable dish holding baskets.

Said baskets are usually realised starting from a net of large metallic wires welded perpendicularly to each other so as to form a rectangle; the four edges of the rectangle are then folded upwards in order to form the side walls of the basket.

The baskets are then completed by welding so as to join the four side walls together.

If necessary the basket is completed by welding where appropriate other pieces of wire for the realisation of partitions or supports for the dishes; finally the basket is finished by covering in a known way the metallic wires with a layer of suitable plastic material.

Baskets obtained in this way are quite functional, even though the addition of certain possibilities could be useful, such as a container for small articles, such as coffee spoons, that could otherwise slide through spaces in the netting; moreover these are not very attractive and are all practically of the same appearance; on the other hand differentiating them passing from one model or a line of models requires variants in the tools used (those actually used for manufacturing such baskets are very expensive).

The aim of the present invention is that of indicating how it is possible to realise a basket for dish-washing machines and a method for its manufacture that, even with contained costs, allows for a greater possibility of aesthetic and/or functional design and simplifies the diversification of models.

For reaching such aims the present invention has as its subject a method of manufacture of a basket for a dish-washing machine, characterised in that the basket is obtained by joining a base section, realised with expensive tools being the same for all models of machine, and a variable additional part, being different according to the model or line of models, the likes of which is realised without the necessity of expensive tools.

In particular the present invention has as its subject a basket for dish-washing machines, realised with metallic net, characterised in that said basket provides a frontal section in a plastic material for improving the aesthetics and/or the functioning of the said basket.

Further characteristics and advantages of the present invention shall result in being clear from the following description and annexed drawings, supplied purely as an explanatory and non-limiting example, wherein:

- figure 1 represents a view of a basket according to usual techniques;
- figure 2 represents an enlarged view of a basket according to the invention;
- figure 3 represents a view of a basket assem-

bled according to the invention;

- figure 4 represents views of another two examples of baskets according to the invention;
- figure 5 represents a view of the frontal section being different than that for the basket of figure 3;
- the figures 6 and 7 represent a further example of the basket according to the invention.

In figure 1 a view of a basket according to usual techniques is represented, it is realised starting from a net of large metallic wires 9 perpendicularly welded one to the other so as to form a rectangle; the four edges of the rectangle are then folded upwards so as to form the lateral walls of the basket.

The basket is then completed by welding so as to join together the four said walls; finally the basket is finished by covering the metallic wires with a layer of suitable plastic material.

In figure 2 an enlarged view of a basket according to the invention is represented.

Said figure indicates:

- the metallic net basket 1; as is seen it is substantially the same as that known of figure 1, with the difference that in the front and rear walls the metallic structure is reduced, with the aim of reducing the cost of the basket, and for facilitating the arrangement of a frontal section 2 and of a rear head 3;
- a frontal section 2 in a plastic material, having three apertures; the central one also serves as a handle, while the two lateral ones serve so as to not obstruct the flow of water during the washing of the dishes; the frontal section 2 is snap fitted to the basket 1;
- a rear head 3, also realised in a plastic material that is snap fitted to the basket 1, as with the frontal section 2.

In the figure the bracings 4 are seen, only present in the lateral zones; and the base wires 5 can also be seen that are shorter in the frontal and rear zones, as mentioned above.

In figure 3 a view of a basket assembled according to the invention is represented; it is seen from such figure that also the rear head 3 has apertures for the passage of water during washing.

In figure 4 views of two other examples of baskets according to the invention are represented; it is seen how such baskets, that have internal supports realised in a known way, are only provided with the frontal sections in a plastic material and not the rear heads; the frontal sections 2 both provide handles and only one also provides two additional apertures for facilitating the flow of water.

In figure 5 a frontal section 2 is represented being different than that for the basket of figure 3.

It provides an anterior handle 6, realised in the form of an open box-like protrusion in the lower part for the introduction of fingers, and a rear pocket 7, apt

at containing small objects such as tea spoons.

Figure 6 illustrates, in an enlarged view, another possible realisation of the basket utilising the method according to the invention; the frontal section 2 in this example has sliding wheels 8, that in this way result in being partially hidden, improving therefore the overall appearance of the finished basket.

Figure 7 illustrates a further example of a basket realised using the method according to the invention; comprising a frontal section 2 with an opening handle and four wheels 8, and a rear head 3 with two wheels 8.

It results in being clear from the given description, with specific reference to a particular basket, that the invention provides for a method of manufacture of a basket for dish-washing machines, in which the basket is obtained by joining a base section (basket of metallic net 1), realised by way of expensive tools and being the same for all models of the machine, and a variable additional part (frontal section 2, rear head 3), that can be different according to the model or line of models, which is realised without the necessity of expensive tools, and can easily present ornamental or commercial motives being specific to one or more models, for example different brands.

From the given description the characteristics of the basket and of the method subject of the present invention result in being clear, as do its advantages.

In particular the basket according to the invention allows for, with a slight increase in costs, to obtain a variety of aesthetic models, for differentiating a line of appliances from another, perhaps sold with a different brand, and superior aesthetic and functional characteristics. It is clear that numerous variants can be made to the basket subject of the present invention, without departing from the novelty principles inherent in the innovative idea, as it is also clear that in the practical realisation of the invention the materials and the forms of the illustrated details may be different, and the same could be substituted with technically equivalent elements.

For example the additional part or parts (frontal section, rear head) rather than being of a plastic material can be realised in metal or another material, as also their configuration can be varied as desired.

Claims

1. Manufacturing method of a basket for a dish-washing machine, characterised in that the basket is obtained by joining a base section (1), realised by way of expensive tools and being the same for all models of machine, and a variable additional part (2,3), different according to the model or line of models, which is realised without the necessity of expensive tools.
2. Basket for dish-washing machine, realised according to the method of claim 1, characterised in that said basket (1) has a part realised in metallic net and a frontal section (2) realised in a plastic material for improving the aesthetics and/or functioning of the basket itself.
3. Basket for dish-washing machine, according to claim 2, characterised in that said basket (1) has a rear head (3) in a plastic material.
4. Basket for dish-washing machine, according to claims 2 or 3, characterised in that said frontal section (2) provides a handle (6) and that said handle (6) is realised by practising a slot or projection on said frontal section (2).
5. Basket for dish-washing machine, according to claims 2 or 3, characterised in that said frontal section (2) provides a container (7) for small objects, in particular tea spoons, said container (7) being in particular realised in the internal part of said frontal section (2).
6. Basket for dish-washing machine, according to claims 2 or 3, characterised in that said frontal section (2) and/or said rear head (3) provide apertures for the passage of water so as not to obstruct the flow of such water during the washing of the dishes.
7. Basket for dish-washing machine, according to claims 2 or 3, characterised in that for reducing the cost of such basket (1), and/or for facilitating the assembly, in the application area of said frontal section (2) and/or said rear head (3), the metallic structure is reduced (fig. 2).
8. Basket for dish-washing machine, according to claims 2 or 3, characterised in that said frontal section (2) and/or said rear head (3) are snap fitted to said basket (1).
9. Basket for dish-washing machine, according to claims 2 or 3, characterised in that said frontal section (2) and/or said rear head (3) comprise sliding wheels (8) and in particular said wheels result in being partially hidden from view (fig. 7).
10. Manufacturing method according to claim 1, characterised in that said variable additional part (2,3), is realised in a plastic material.
11. Manufacturing method according to claim 1, characterised in that said variable additional part (2,3), is realised in a metallic material.
12. Manufacturing method according to claim 1,

characterised in that said variable additional part (2,3), has ornamental or commercial motives being specific to one or more models.

13. Basket for dish-washing machine realised utilising the manufacturing method according to one or more of the previous claims. 5

10

15

20

25

30

35

40

45

50

55

4

FIG. 1

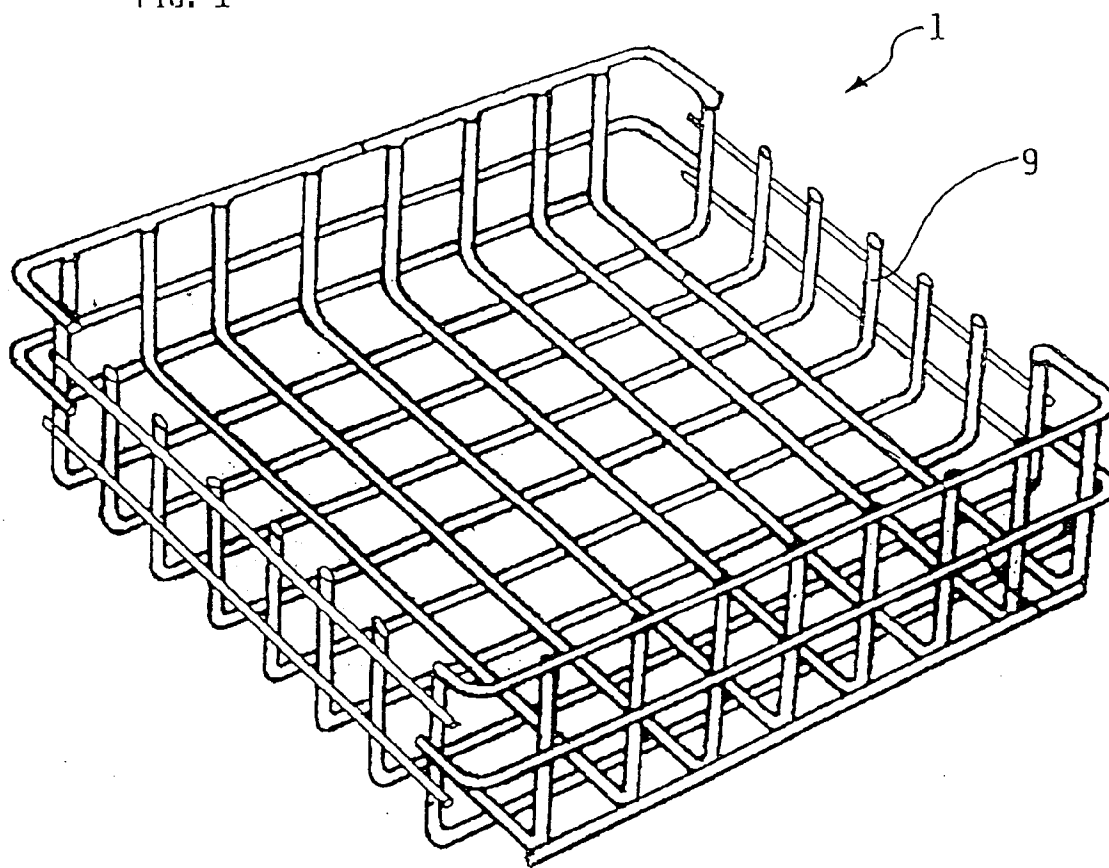


FIG. 5

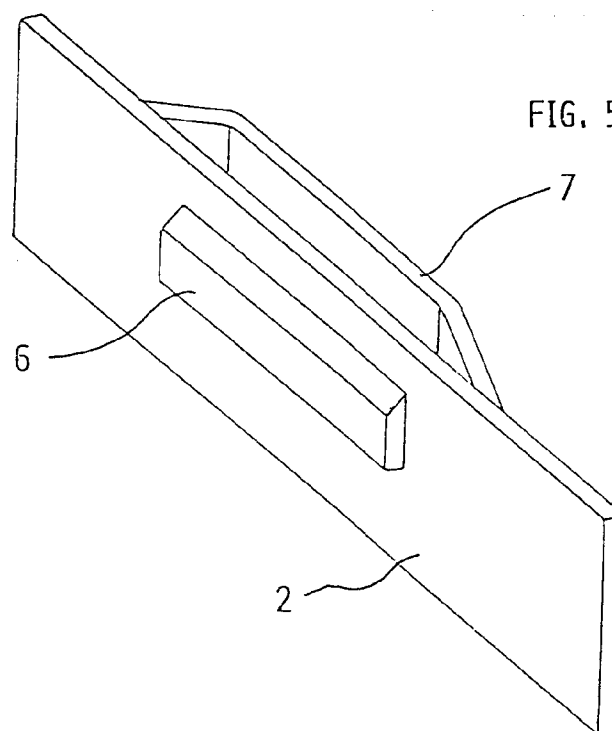


FIG. 2

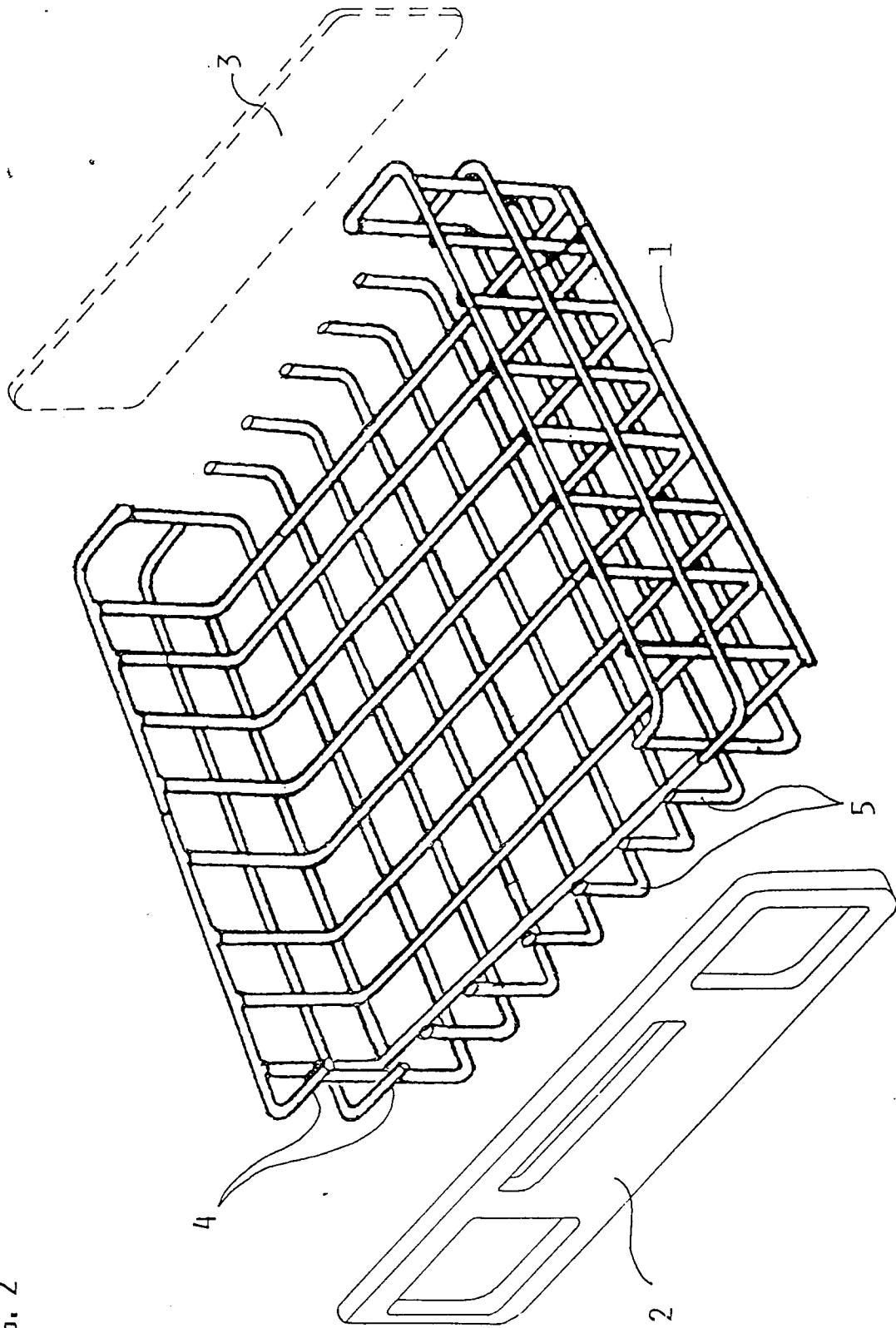


FIG. 3

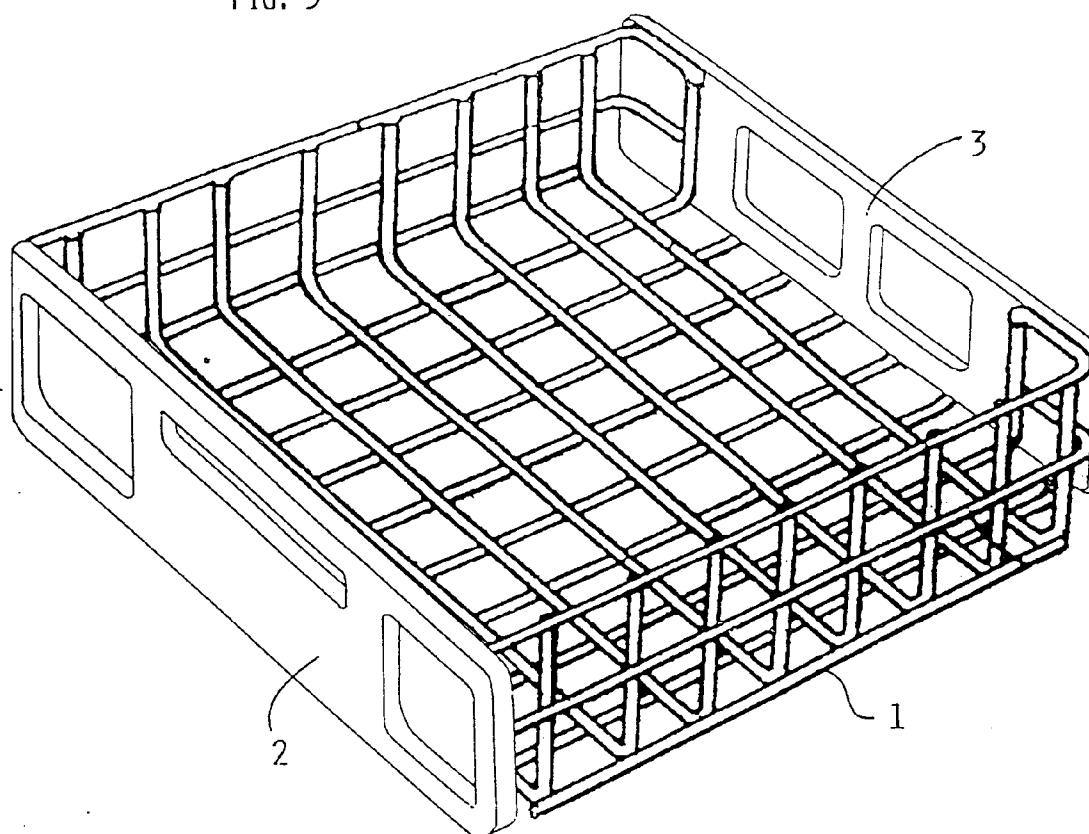


FIG. 4

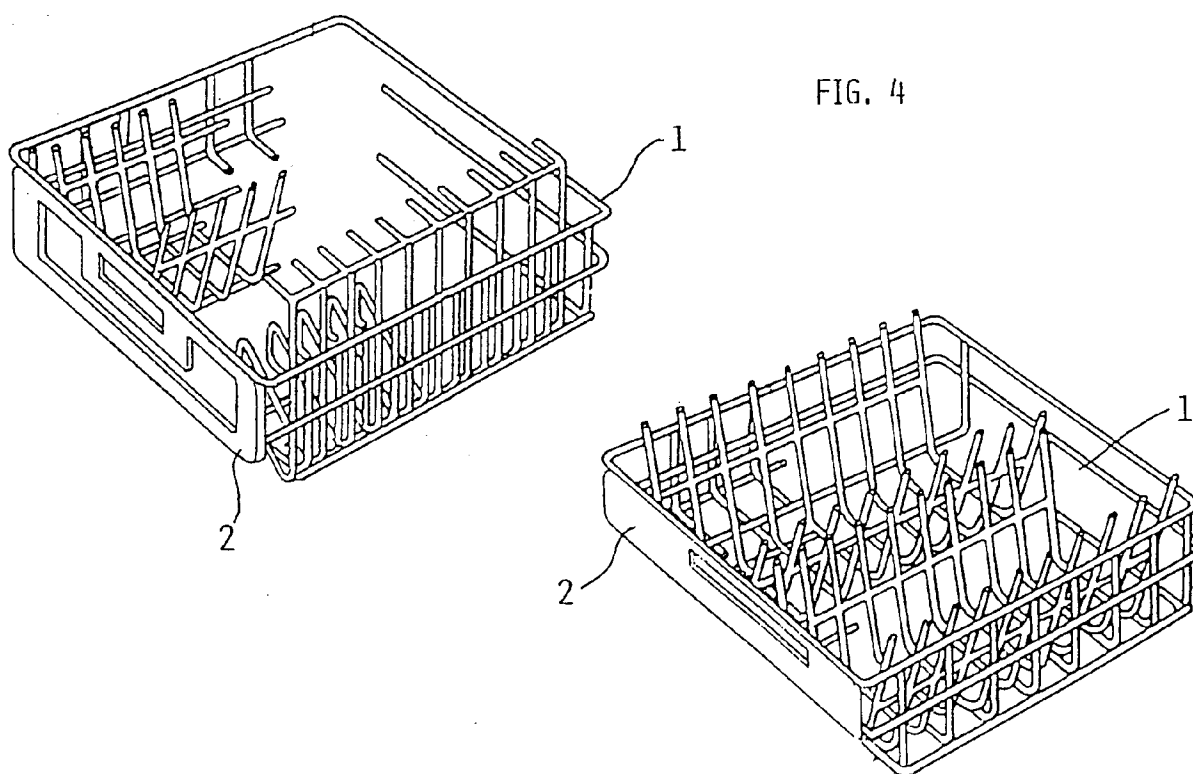


FIG. 6

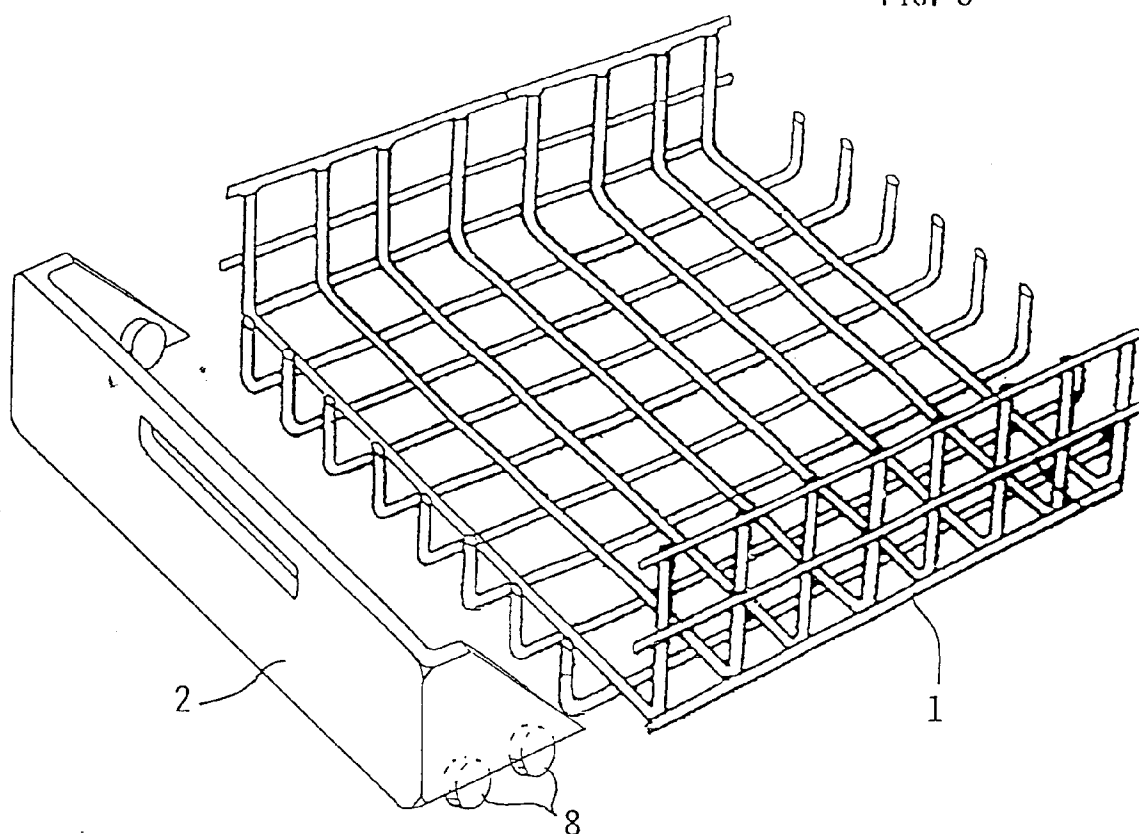
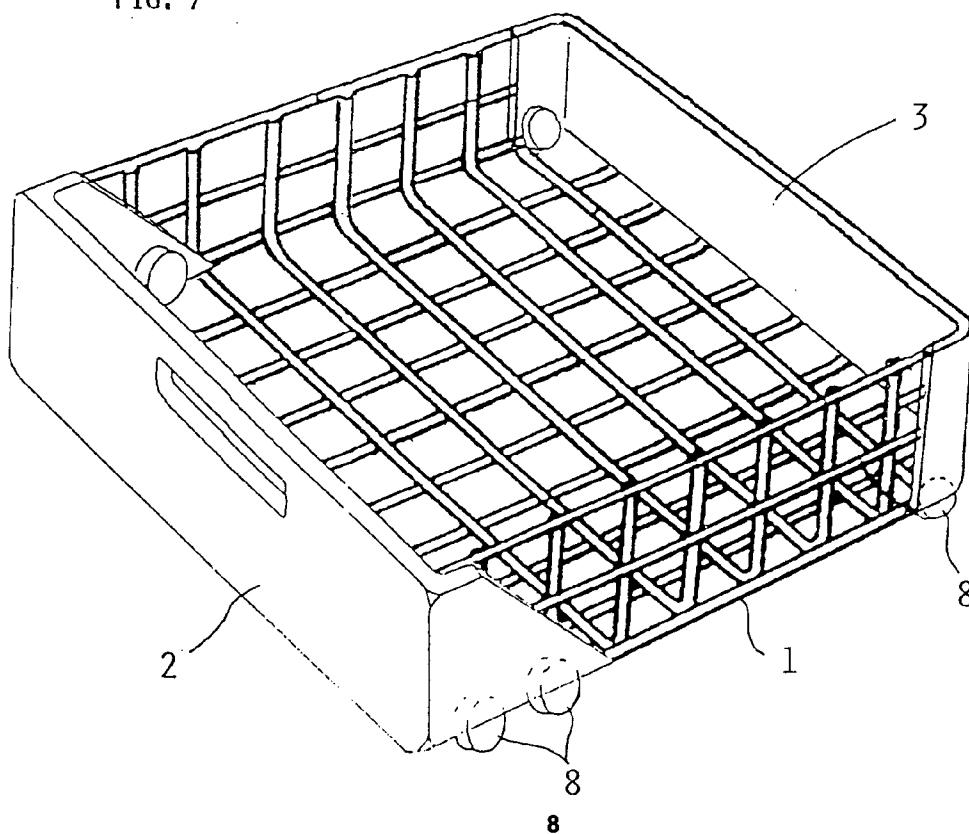


FIG. 7





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 94 11 5841

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)		
X	FR-A-2 019 259 (RIBER SAS DI GEOM. BERTOLINO RICCARDO & CO) * page 1 - page 3; figures * ---	1,2,6,9,10	A47L15/50		
A	DE-A-16 28 535 (H. SONNENSCHNEIN) * page 1 - page 10; figures * ---	1,2,4,6,10-13			
A	GB-A-P24437 (E.J. LARKUM) * page 2 - page 3; figures * &GB-A-24437 A.D. 1914 ---	1-3,6,10-13			
A	US-A-4 834 125 (R.W. INSALACO) * abstract; figures * ---	2,5			
A	FR-A-2 037 217 (WHIRLPOOL CO) * page 1 - page 5; figures * ---	2,5			
A	GB-A-M29270 (R.R. PARRY) * page 7, line 7 - line 14; figures 13,14 * &GB-A-29270 A.D. 1912 -----	2,5	<table border="1"> <tr> <td>TECHNICAL FIELDS SEARCHED (Int.Cl.6)</td> </tr> <tr> <td>A47L</td> </tr> </table>	TECHNICAL FIELDS SEARCHED (Int.Cl.6)	A47L
TECHNICAL FIELDS SEARCHED (Int.Cl.6)					
A47L					
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 9 January 1995	Examiner Vanmol, M		
<table border="0"> <tr> <td> CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document </td> <td> T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document </td> </tr> </table>				CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document				

EPO FORM 1503 03.82 (P04C01)