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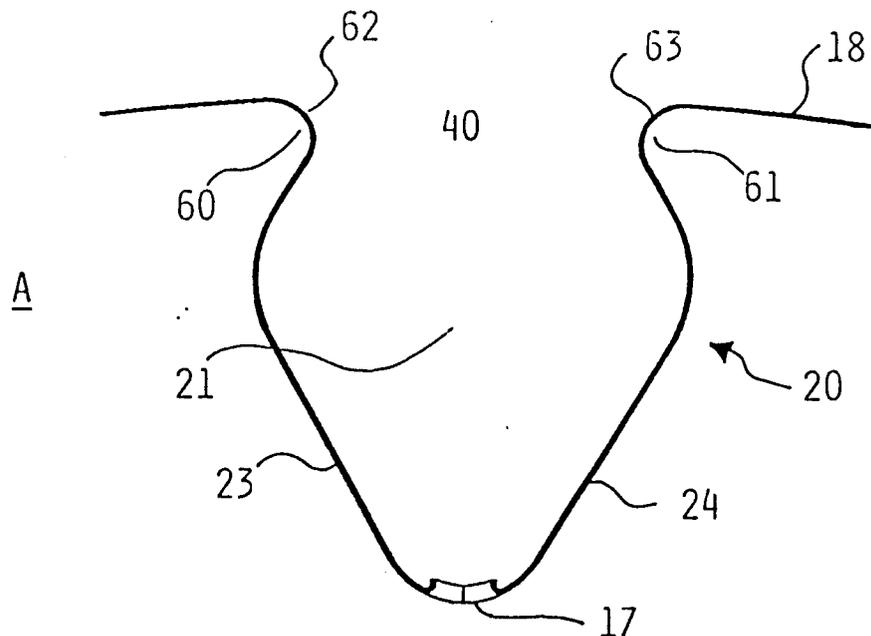
54 **Basket for laundry washing machines.**

57 A basket for laundry washing machines is described, of the type that rotates around a horizontal axis and comprising dragging elements (20) disposed in a longitudinal sense on its internal cylindrical wall, said dragging elements being able to contain in their interior washing liquid drawn from a washing tub and comprising at least one series of holes (17) able to cause the dropping of the liquid

gathered inside of same dragging elements on the garments to be washed contained in the basket.

The main characteristic of the described basket is that at least one of said dragging elements (20) is structured in such a way that the washing liquid is drawn and contained both in its interior and between its external surface and the internal surface of the basket.

FIG. 4



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The present invention refers to a basket for laundry washing machines, of the type that rotates around a horizontal axis and comprising dragging elements disposed in a longitudinal sense on its internal cylindrical wall.

As is known, in laundry washing machines the washing effect is reached through a rotary movement, mechanically imparted to a holed basket in which laundry to be washed is inserted.

In practice, the holed basket is partially immersed in a washing liquid contained in the lower part of a washing tub, so that the liquid can reach the laundry through the holes of the basket; obviously the level of the liquid, composed of water, detergents and washing additives, must be such so as to consent a satisfactory soaking of the laundry.

The actual washing is then reached by means of a dynamic action, obtained through the movement of the basket that, while rotating, agitates the laundry and causes the mechanical action that allows for the removal of the dirt.

It is known that to favour such action a certain number of dragging elements can be provided, disposed longitudinally on the cylindrical internal wall of the basket and directed towards its rotation axis.

It is also known the use of such dragging elements to contain washing liquid, drawn by the tub, that during the rotary movement of the basket falls on the laundry contained in the same, improving the effect of the washing.

This procedure provides that in correspondence with the dragging elements, on the external surface of the basket, mechanical means are arranged able to favour the drawing of the washing liquid from the tub during the rotation movement of the basket. The function of such mechanical means is also that of preventing the exit of the washing liquid drawn inside the hollow of the dragging element, at least during a fraction of the revolution of the basket.

The dragging elements are provide with holes that causes the dropping of the washing liquid inside of the basket, before the successive drawing, in order to obtain a better soaking of the laundry to be washed.

Such procedure, to which the present invention more specifically refers, has been known for many years (we see for example the French patents Nos. 377 638 and Nr. 820 133) and has up to the present day utilised buffer plates having the double aim of facilitating the drawing of the washing liquid and, mainly, to delimit the space inside of the dragging element, for with holding the same liquid. Without such buffer plates, in fact, during the rotation movement, the washing liquid would exit the dragging element in the same way in which it entered, outside the basket, without fulfilling the

desired function. On such a principle the English Patent Application Nr. 2 205 585 is based for example, in which buffer plates have the main aim of maintaining the washing liquid inside of the dragging element.

In several kinds of machine, furthermore, the basket can rotate in two senses, consequently buffer plates able to draw and to maintain the washing liquid shall be arranged in an opportune way: for example the free end of a buffer plate will be directed in a clockwise rotational sense, while that placed in correspondence with the successive dragging element will be directed in the counter clockwise sense. In other solutions (for example the European Patent Application Nr. 236 282) the same dragging element can draw and contain the washing liquid independently of the rotation sense of the basket; this is obtained by means of the division of the dragging element in two semi-dragging elements, one with the buffer plate directed in one sense and the other directed in the other rotation sense.

Other solutions in such sense (see for example the European Patent Application Nr. 244 365) provide for a complete wall instead of the buffer plate, so that the dragging element has no openings on the external surface of the basket; there are however openings provided on lateral surfaces of the dragging element, in order that the washing liquid can in any case enter, independently of the rotation sense of the basket.

The solutions up to now proposed, if on the one hand allow for obtaining a higher quality of the washing and/or a water and energy saving, if compared to traditional washing-machines without water conveyors, on the other hand determine an increase in the construction complexity of the basket, and a consequent increase of its costs. In fact, the realisation of conveyor elements and buffer plates, partial or complete, have to be carried-out through addition pieces that supposes specific workings, for example that of welding; in some of the cited solutions, the entire dragging element has to be added to the cylindrical wall of the basket. The realisation complexity increases when buffer plates are to be realised in order that they are able to operate in both the rotational senses of the basket and their realisation is furthermore complicated in cases in which it is decided to realise dragging elements divided midway, i.e. divided by a wall appropriately realised. It is therefore clear that the cost of the basket increases considerably in these cases.

The invention is based on the recognition of these facts; the aim of the present invention is therefore that of indicating a rotary basket for laundry washing machines, that exploits the presence of dragging elements for better soaking the gar-

ments to be washed, that is of simple realisation and of considerably reduced costs if compared to baskets of the known type, and that allows for obtaining optimal washing results; a further aim of the present invention is to indicate a particularly advantageous method of obtaining a basket so conceived.

To achieve these and other aims, the present invention has as its object a basket for laundry washing machines, of the type that rotates around a horizontal axis and comprising dragging elements disposed in a longitudinal sense on its internal cylindrical wall, said dragging elements being able to contain in their interior washing liquid drawn from a washing tub and comprising at least one series of holes able to cause the dropping of the liquid gathered inside of same dragging elements on the garments to be washed contained in the basket, characterised in that at least one of said dragging elements is conformed in such a way that the washing liquid is drawn and contained both in its interior and between its external surface and the internal surface of the basket.

Further aims and advantages of the present invention will result in being clear from the specified description that follows and by the annexed drawings supplied as an explanatory and non-limiting example, in which:

- Figure 1 represents a vertical sectioned view, of a laundry washing machine of a substantially known type;
- Figure 2 schematically represents a partial section of a basket for laundry washing machines according to the prior art;
- Figure 3 represents a partial and schematic view of the basket for laundry washing machines according to the present invention;
- Figure 4 schematically represents a partial section of the basket for laundry washing machines according to the present invention;
- Figure 5 represents a partial section of the basket for laundry washing machines according to the present invention;
- Figure 6 schematically represents a partial section of the basket for laundry washing machines according to a possible variant of the present invention;
- Figure 7 schematically represents a partial section of the basket for laundry washing machines according to a further possible variant of the present invention.

With reference to Figure 1, with 1 a laundry washing machine in its complex is indicated, with 2 a washing tub inside of which a rotary basket 4 is arranged. The surface of the basket has holes 12.

The rotation movement of the basket, that can happen in both senses, is obtained by means of an electric motor 6, of a belt 7 and of a pulley 8.

The holed basket includes dragging elements 5, disposed longitudinally on the cylindrical internal wall of the basket, and directed towards its rotation axis; the main aim of such elements 5 is to facilitate the movement of garments to be washed contained inside of the basket.

In Figure 2 a basket for laundry washing machines is represented partially, in section. In particular, in part A of the figure, a basket 10 is represented, made according to the prior art on the grounds of which dragging elements have the additional function of containing the washing liquid, drawn from the washing tub, that is then made to fall inside the basket for better soaking the garments to be washed.

The basket 10, in correspondence to a dragging element indicated with 3 in its complex, provides for a buffer plate 11; such buffer plate 11, united to the longitudinal walls 15 and 16 and to the lateral walls of the basket (not represented in the Figure) defines a space 12 inside the dragging element. The buffer plate is realised in such a way as to provide an opening 13, arranged at the level of the external edge of the basket and in a prior position to said space 12, with respects to the rotation sense indicated by the arrow X. The washing liquid can thus enter such opening 13 and be contained in the space 12 inside the dragging element 15 during a phase of upward movement.

Successively the same washing liquid, through a series of holes 14, will fall on the garments to be washed contained inside the basket. It is clear that without the presence of the buffer plate 11 and due to the form of the dragging element, the section of which is substantially triangular, the washing liquid cannot be withheld in quantity in the space 12 and thus taken upwards; in fact the walls 15 and 16 of the dragging elements are externally inclined, consequently the washing liquid would naturally be brought to exit where it entered; in the specific case illustrated in part B of the same Figure 2, without the presence of the buffer plate, the washing liquid would exit in the sense indicated by the arrow Y.

On the contrary, as can be seen in figures 3 and 4, the dragging element 20, made according to the details of the present invention, is adapted in such a way so as to not require mechanical elements or buffer plates placed on the surface 18 of the basket, on the contrary as is the case in the example illustrated in Figure 2, part A, and however in a way that does not require any additional element; normal holes 17 are of course provided for the dropping of the washing liquid (in such Figures, for simplicity sake, the lateral walls of the basket have not been represented).

In particular, as can be noted from Figure 4, part A, the dragging element 20 has a substantially

rhomboidal section, and has a throat 40 that determines a reduction of the opening of the interior space 21; such throat determines two symmetrical longitudinal recesses 60 and 61, in correspondence to the points in which from the surface 18 of the basket the curved walls 23 and 24 of the dragging element 20 originate. Such walls meet in correspondence with the bottom of the space 21, where the holes 17 have been realised.

Part B of figure 4 has the aim of evidencing how the presence of the throat 40 and of curved walls 23 and 24 have the effect of defining, with the assistance of the anterior and rear walls of the basket, four portions 25, 26, 27 and 28 able to contain the washing liquid. More in detail, during the rotation of the basket, according to the sense indicated by the arrow X, the dragging element will be able to collect and contain the washing liquid in portions 25 and 27, while during the rotation in the inverse sense the washing liquid can be gathered and contained in portions 26 and 28 (such portions, as will be herein below described, are obtained by directly forming the cylindrical wall of the basket).

In particular the washing liquid that will fill the portion 25 or 26 will be withdrawn from the lower zone of the tub, externally to the basket, while the washing liquid that will fill the portion 27 or 28 will be withdrawn from inside the basket, that is partially immersed in the washing liquid in its lower portion.

It is clear that the quantity of washing liquid that may be loaded by the dragging element, either to its interior (in the portion 25 or 26), or between its external surface and the internal surface of the basket (in the portion 27 or 28), is directly proportional to the curvature of walls 23 and 24 (or if preferred to the concavity of portions 25 and 26) and to the section of the throat 40. As can be understood from the figures, edges 62 and 63 that are created between the surface 18 of the basket and the walls 23 and 24 of the dragging element are substantially of an acute angle, slightly rounded, and this favours the conveyance of the washing liquid to the inside of the space 21 of the dragging element 20.

It is however to be specified that, besides the presence of the throat and its conveying effect, the quantity of water loaded inside the dragging element will normally be more than what may be contained in the portion 25 (or 26), because in the determination of such a quantity various factors come into play such as the rotation speed of the basket, the depression that is created inside of the space 21 when the dragging element 20 is immersed in the liquid on the bottom of the washing tub, the push that the incoming water has when the dragging element 20 begins to climb.

Then, at a certain point of the rotation of the

basket, the dragging element will begin to discharge inside of the basket the washing liquid contained in the portion 25 (or 26), that will drop on the bottom of the space 21 and will gradually flow through the holes 17.

The washing liquid contained in the portion 27 (or 28), due to gravity, will begin to be discharged gradually, depending on the inclination reached by the dragging element; it will fall inside the basket with a "waterfall" effect that is added to that originated by the liquid that flows through the holes 17 (as indicated with arrows in part C of the same Figure 4). It is furthermore noted that portions 27 and 28, determined by the longitudinal recesses on the external walls of the dragging element, and the concavity of portions 25 and 26, corresponding to the curvature of walls 23 and 24, confer a particular form to the dragging element that favours its main function, that is to agitate the garments to be washed inside of the basket.

From practical tests carried-out it results that the basket for laundry washing machines object of the present invention allows for the obtaining of optimal results, analogous to those obtainable through the use of baskets made according to the prior art.

The aims of the invention are thus perfectly reached inasmuch that an optimal quality of the washing is obtained without having to adapt the basket with additional mechanical means that require complex workings, in particular means that define or obstruct, partially or completely, the opening of the interior space of the dragging element. On the contrary, according to the described realisation of the invention, the opening of such space is completely free, no complex workings are necessary to equip the basket with other additional means, and the functioning is independent of the rotation sense of the basket.

The realisation of the basket therefore results in being extremely simplified and advantageous from an industrial viewpoint. In particular the basket according to present invention may be made eliminating completely a working phase that is typical of baskets according to the known art, that is the addition of buffer plates or of other conveyance means. Such additions, according to the prior art, realises an autonomous operation, in the sense that the buffer plates shall be expressly secured, through welding, or riveting, or bolting or other analogous method, with a consequent increase of the production costs of the basket. Further operations, and relative costs, are also necessary in cases in which the hollow of the mentioned dragging element is to be realised by means of two semi-cavities, through the fixing of a divisional wall. On the contrary, the basket according to the present invention, also fulfilling the same aims of

the known baskets cited, may be obtained by simply deforming a sheet material, for example stainless steel.

The method is therefore particularly advantageous, as the realisation through deforming allows for obtaining complete dragging elements from the sheet that will make up the cylindrical wall of the basket, with bending operations. Through the same operation fixing supports can also be obtained; with reference to figure 5, in which the basket according to invention is schematically illustrated in a partial section, in fact an edge of bent sheet is indicated with 110 (that has not been represented for simplicity in the previous figures) that is advantageously utilised for the fixing of the anterior and posterior walls of the basket. The presence of edges 110 is particularly advantageous, because in traditional baskets, the two anterior and posterior walls had to be united to the cylindrical wall through tie rods, secured between the two walls, or with suitable welded clamps.

The rhomboidal form of the dragging elements 20 may be obtained through two successive bending phases, on duly equipped machines, during the manufacturing of the basket. In the first phase the dragging element is conferred, in a known way, a wedge-shaped traditional form, and i.e. through:

- a holding action of the sheet in the parts which are destined to remain circumferential;
- an action of global movement of the sheet from the diameter of the initial folded cylinder towards the final diameter, minor than the previous, with bending and shaping of the sheet parts on the external surface destined to create the dragging elements;
- an action of flanging of the upper and lower edges of the initial sheet cylinder, previously, appropriately sheared.

In the second phase, operating on the vertices of the wedges previously shaped and holding firm the parts of the sheet cylinder destined to remain circumferential, a bending action of the wedge from the interior towards the external is developed, holding and appropriately guiding the sheet of the dragging element until the acquisition of the final rhomboidal form is obtained. The shearing of the successively flanged parts is appropriately designed, in a way that allows, during the second phase of deforming the wedge, their rotation and preventing them from bulging. Finally the thus shaped shell is masked on a system equipped to execute the piercing of the pointed interior side.

The characteristics of the basket for laundry washing machines are clear from the executed description and from the annexed drawings. The method described as an example has the great advantage of not producing any stretching of the sheet that constitutes the basket inclusive of the

dragging elements; the solidity is thus greater and minor are the corrosion risks. From the executed description the practical advantages of the basket object of the present invention are also clear. In particular they are represented:

- in that no mechanical elements, or buffer plates or conveyors that favour the entrance and the containing of the washing liquid inside the dragging element are necessary;
- in that there is a double drawing by the dragging elements, and as a result a double falling of the washing liquid on the garments to be washed contained inside of the basket;
- in that dragging elements fully fulfil their functions independently of the rotation sense of the basket, without the necessity of particular provisions;
- in that the movement of garments to be washed is made more effective due to the particular form of the dragging elements.

To these advantages the extreme realisation simplicity is to be added inasmuch, as mentioned, the basket may be obtained with simple deformation operations of a metal sheet or other material, and the costs are extremely reduced, as in the process of fabrication of the described basket an operation is eliminated, that should be carried out manually.

It is clear that numerous variants can be supplied by the skilled-man, to the basket for laundry washing machines described as an example, without however departing from the novelty principles inherent in the invention.

From the multiple possibilities, that illustrated with reference to Figure 6, parts A and B is cited, on the grounds of which the opening of the interior space of the dragging element is completely obstructed through a suitable wall 50 and at least one opening 57 is realised on the lateral surfaces 58 of the basket, in correspondence with the same dragging element. Such variant allows for the drawing of a greater quantity of washing liquid independently of the rotation sense of the basket inside the dragging element, resting however the fact that other washing liquid is also drawn externally respects the dragging element, in the hollows 27 and 28.

The advantage of such realisation if compared to the prior art, in particular that represented by the European Patent Application Nr. 244 365, consists in the fact that the wall 50 that obstructs the opening of the interior space may be snap secured, or inserted longitudinally, with an operation being both very simple and easily carried out. In baskets proposed up to the present such a solution would not have been possible, as welding of the wall that obstructs the space would have been necessary (or another fixing system) or even the

actual dragging element would have to be welded inside the cylindrical wall of the basket. On the contrary according to such variant, as illustrated in part B of the same figure 6 the wall 50 may be snap secured, due to the presence of corners 62 and 63 of the throat, that coincide with the recesses 64 and 65 obtained on the lateral profiles of the wall 50. The material with which it is possible to realise such wall 50 will be advantageously different from that of the basket: it could for example be of plastic, resistant to the temperature changes, being of costs undoubtedly minor if compared to those of stainless steel.

It is clear that the opening 57, that allows for the drawing of the water independently by the rotation sense of the basket, can be obtained in a simple and cheap way during the pressing of the two lateral walls 58 of the basket.

As illustrated in figure 7, alternatively to obtaining the openings 57 on the lateral walls of the basket, openings 68 or eventually small buffer plates 69 that consent the drawing of the washing liquid inside of the dragging element, could be directly provided for on a plastic wall 51, analogous to that described in the previous variant. The two cited variants can also be implemented in union with baskets equipped with dragging elements without lateral recesses 60 and 61, i.e. that contain washing liquid only in their interior space. It would in fact be sufficient to bend the sheet in such a way that the opening of the space has rounded corners, at a substantially acute angle; due to such corners it would then be possible to snap insert walls that partially or completely obstruct the opening of the interior space.

According to a further possible variant, the dragging element 20 could provide numerous series of holes, for example on the lateral walls, in order to consent the dropping of the gathered liquid also at a basket rotation speed equal to 50-60 revolutions per minute.

It is however clear that numerous other variants can be made by the man skilled in the art, to the basket for laundry washing machines described as an example, without departing from the novelty principles of the invention.

Claims

1. Basket for laundry washing machines, of the type that rotates around a horizontal axis and comprising dragging elements disposed in a longitudinal sense on its internal cylindrical wall, said dragging elements being able to contain in their interior washing liquid drawn from a washing tub and comprising at least one series of holes able to cause the dropping of the liquid gathered inside of same dragging

elements on the garments to be washed contained in the basket, characterised in that at least one of said dragging elements is conformed in such a way that the washing liquid is drawn and contained both in its interior and between its external surface and the internal surface of the basket.

2. Basket for laundry washing machines, according to claim 1, characterised in that the washing liquid is drawn and contained both inside of said dragging element and between its external surface and the internal surface of the basket without any additional mechanical means (11), integral to the external and/or internal surface of the basket and/or of the dragging element (20) being necessary.
3. Basket for laundry washing machines, according to claim 1 or 2, characterised in that the washing liquid contained inside (21) the said dragging element (20) is drawn from outside the basket and that the washing liquid contained externally regards the said dragging element (20), or between its external surface and the internal surface of the basket, is drawn from the interior of the basket.
4. Basket for laundry washing machines, according to at least one of previous claims, characterised in that the washing liquid is loaded inside the said dragging element (20) through an opening (40) defined by two longitudinal walls (23, 24) of the said dragging element (20) and by two lateral walls (58) of the basket, said washing liquid being contained inside the said dragging element (20) in a space (21) defined by the two longitudinal walls (23, 24) of the said dragging element (20) and by the two lateral walls (58) of the basket.
5. Basket for laundry washing machines, according to claim 4, characterised in that the longitudinal corners (62, 63) of said opening (40) have a rounded profile, substantially of an acute angle.
6. Basket for laundry washing machines, according to claim 1 or 2, characterised in that the structure of the said dragging element (20) allows for obtaining simultaneously a double dropping of washing liquid from two different zones, one internal (21) and one external (27 or 28) of said dragging element (20) without any additional mechanical means (11), integral to the external and/or internal surface of the basket and/or of the dragging element (20) being necessary.

7. Basket for laundry washing machines, according to claim 1 or 2, characterised in that the said dragging element (20) has a vertical section of a substantially rhomboidal form.
8. Basket for laundry washing machines, according to claim 7, characterised in that at least one of the two longitudinal walls (23, 24) of the said dragging element (20) is structured in such a way to define a concave hollow (27, 28) in proximity of the point from which the said one wall departs from the cylindrical wall (18) of the basket and has in particular a development substantially in the form of an S or an up-turned S.
9. Basket for laundry washing machines, according to claims 1 and 5, characterised in that it comprises at least one opening (57) on at least one of the two lateral walls (58) of the basket, in correspondence with the said dragging element (20), and means (50, 51) that obstruct at least partially the opening (40) of the interior space (21) of the said dragging element (20).
10. Basket for laundry washing machines, according to claim 9, characterised in that said means (50, 51) that obstruct at least partially the opening (40) of the interior space (21) of the said dragging element (20) are inserted and/or snap secured on the cylindrical wall (18) of the basket.
11. Basket for laundry washing machines, according to at least claims 9 or 10, characterised in that said means that completely (50) or partially (51) obstruct the opening (40) of the interior space (21) of the said dragging element (20) are made of a material able to resist without deforming the different temperatures of the utilised washing liquid in the laundry washing machine, in particular of a different material compared to that of the basket and/or to dragging elements.
12. Basket for laundry washing machines, of the type that rotates around a horizontal axis and comprising dragging elements disposed in a longitudinal sense on its internal cylindrical wall, said dragging elements being able to contain in their interior washing liquid drawn from a washing tub and comprising at least one series of holes able to cause the dropping of the liquid gathered inside of same dragging elements on the garments to be washed contained in the basket, and an opening defined by the two longitudinal walls of the dragging element and by the two lateral walls of the basket, characterised in that in at least one of the said dragging elements the longitudinal corners of said opening have a rounded profile, of a substantially acute angle.
13. Basket for laundry washing machines, according to the preceding claim, characterised in that said opening may be obstructed partially, in order to allow the loading of the washing liquid inside the said dragging element, with fixable and/or snap insert means on the cylindrical wall of the basket.
14. Basket for laundry washing machines, according to claim 13, characterised in that said opening may be obstructed completely with fixable and/or snap insert means on the cylindrical wall of the basket, and that, in order to allow the loading of the washing liquid inside the dragging element, at least one opening on at least one of the two lateral walls of the basket is provided, in correspondence with the said dragging element.
15. Method for obtaining the basket for laundry washing machines according to at least one of previous claims, characterised in that the said dragging element (20) is completely obtained through the deformation of the sheet material that is destined to constitute the cylindrical wall of the basket.
16. Method, according to the previous claim, characterised in that said deformation is obtained in at least two successive phases, in particular in a first of said phases to the dragging element a substantially wedge shaped form is provided and in a second of said phases said dragging element of a substantially wedge shaped form is bent from the interior towards the external, containing and guiding the sheet until a final form of a substantially rhomboidal form is obtained.
17. Method, according to at least one of previous claims, characterised in that during at least one of said phases a containing and/or blocking action is realised of the parts of said sheet material destined to remain circumferential.
18. Method, according to at least one of previous claims, characterised in that the basket inclusive of dragging elements is obtained without any stretching operations of the sheet material of which it is constituted.

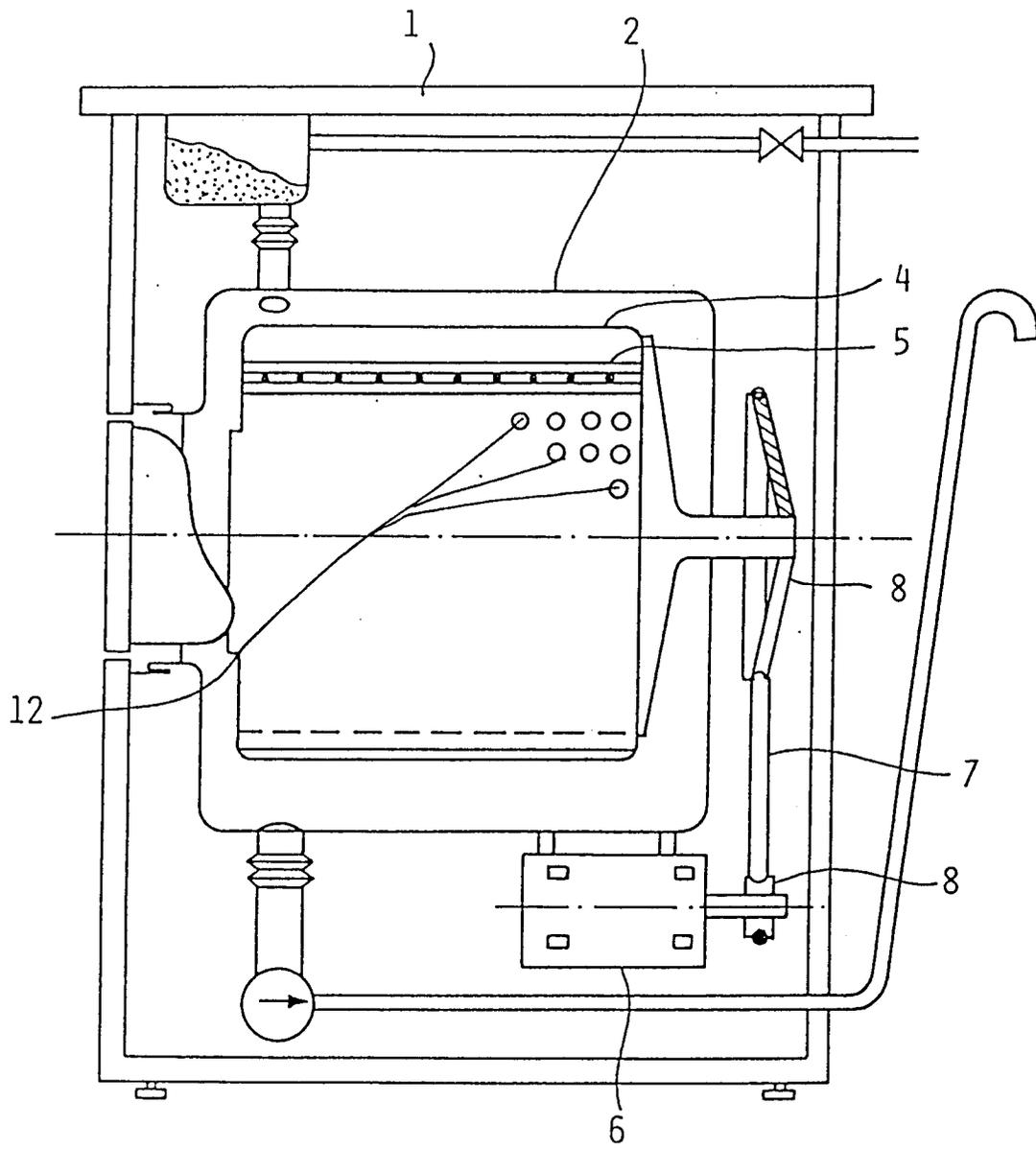


FIG. 1

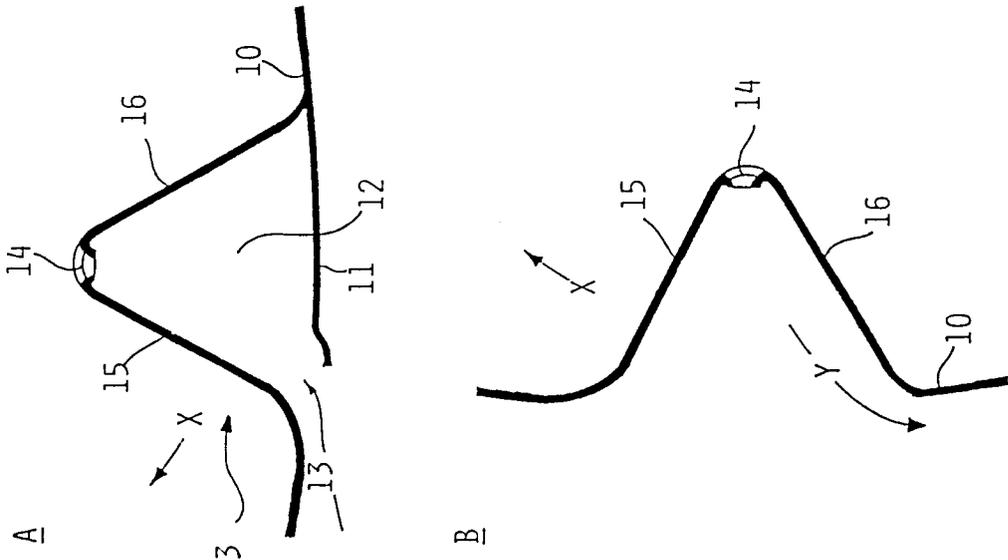


FIG. 2

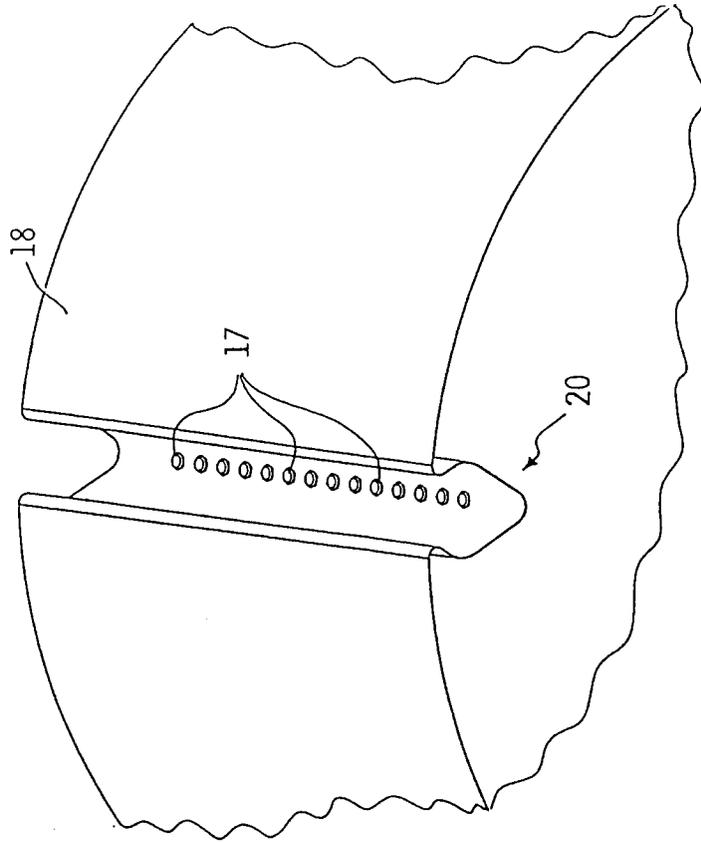


FIG. 3

FIG. 4

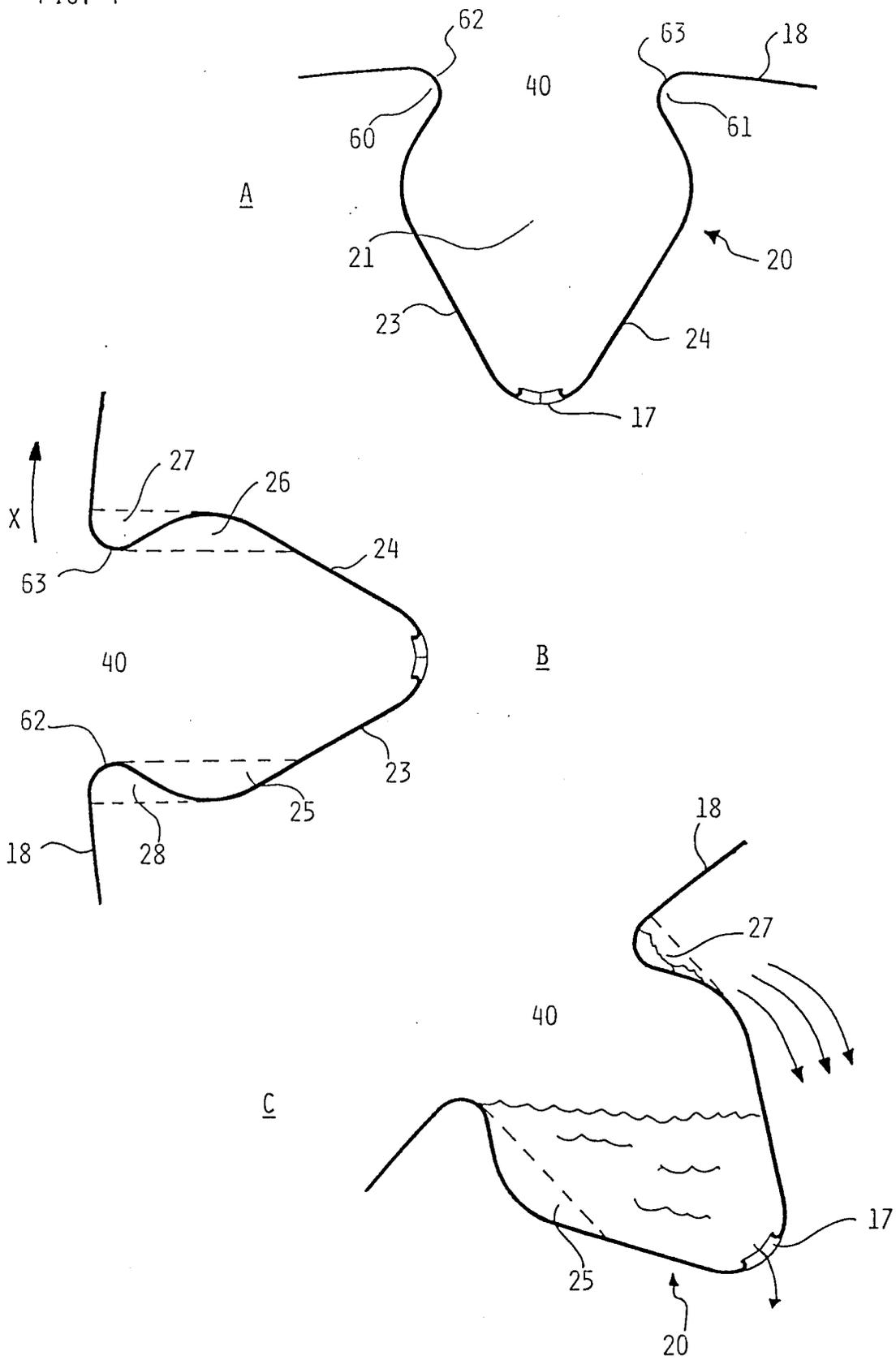


FIG. 5

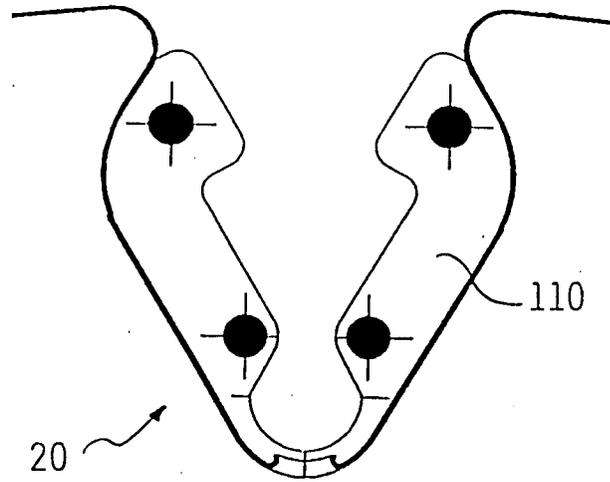


FIG. 7

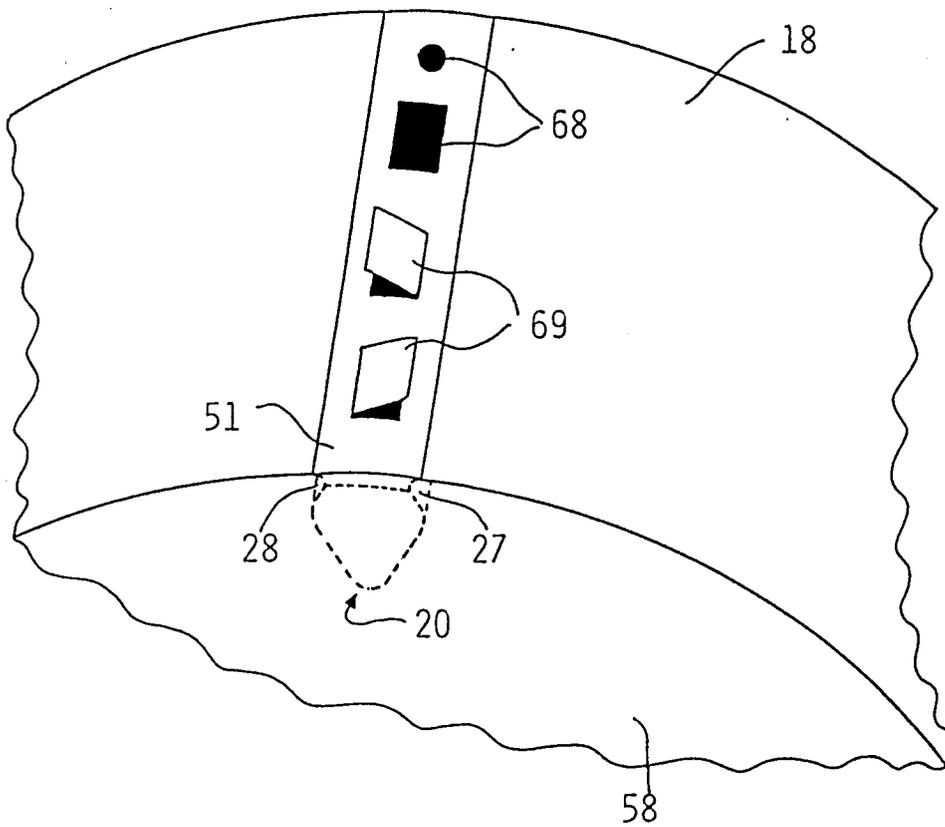
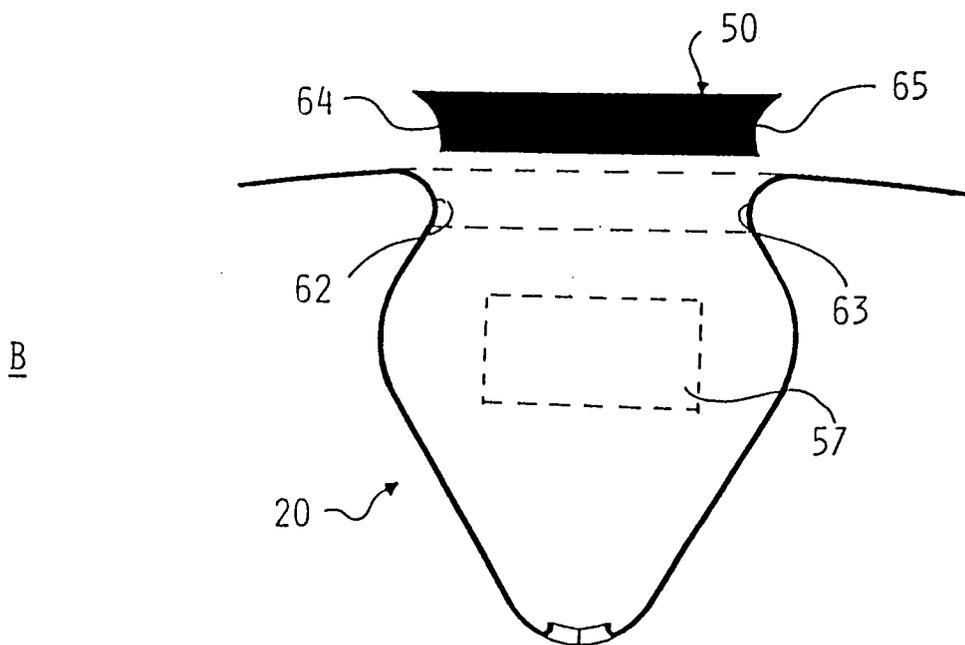
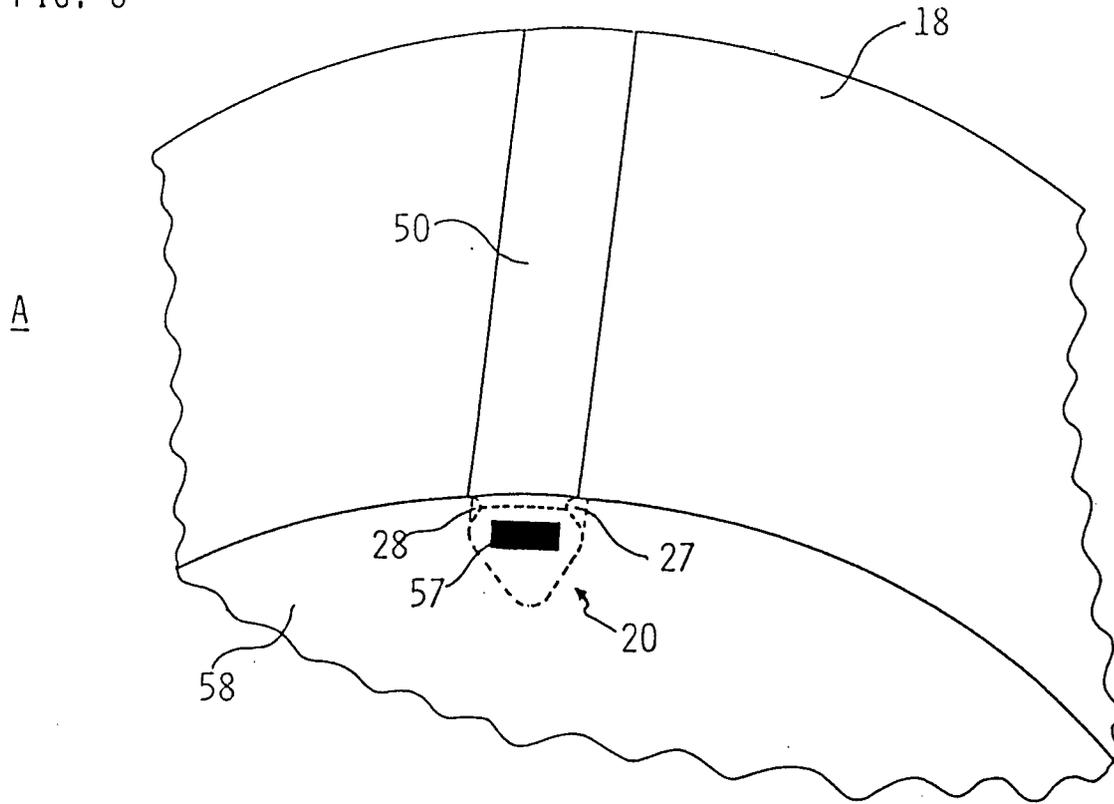


FIG. 6





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 10 8754

| 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.5) |
| X | FR-A-1 054 949 (A. GRANDMOUGIN) * the whole document * --- | 1-8, 12, 15-18 | D06F23/02 |
| X | DE-C-179 891 (OTTO SCHULZE) * the whole document * --- | 1, 3, 7-9, 11 | |
| A | EP-A-0 244 365 (MERLONI ELETTRODOMESTICI S.P.A.) * page 5, line 25 - page 6, line 16; figures 4,5 * --- | 5, 12, 13, 15-18 | |
| A, D | EP-A-0 245 721 (BOSCH-SIEMENS HAUSGERÄTE GMBH) * figures 2,7 * ----- | 1, 3, 9, 11-14 | |
| A | | 1 | |
| | | | TECHNICAL FIELDS SEARCHED (Int. Cl.5) |
| | | | D06F |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 24 SEPTEMBER 1992 | Examiner COURRIER G.L.A. |
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