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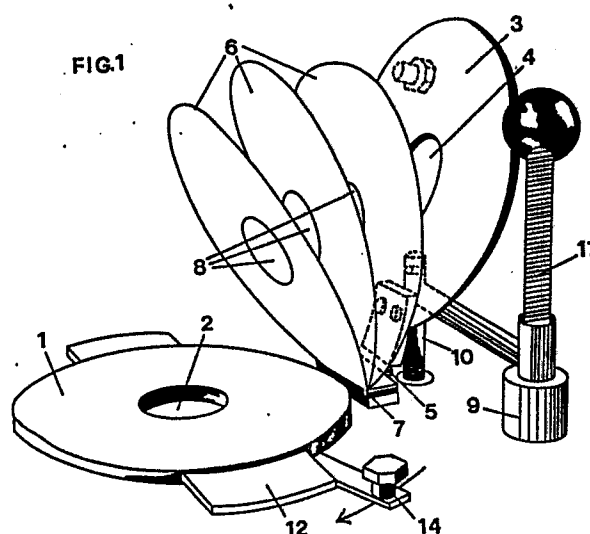
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54 **A device for manually preparing small bags with open**

57 A device for manually preparing small container bags for sugared almonds, widely spread in separate volutes of tulle veils (L), due to the presence of a plurality of separating discs (6) preferably transparent, with central holes (8), through which the veil-pushing piston (9) with basculating axis (10), out of one piece with the working plane, forms the housing of the sugared almonds, being closed by a small ribbon in correspondence to the squeezing area of the veils, determined by a lever mechanism (14) placed above said container (11) provided with holes.



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"A DEVICE FOR MANUALLY PREPARING SMALL BAGS WITH OPEN SPREAD VEILS, CONTAINING SUGARED ALMONDS"

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5 The present invention concerns a device for the manual preparation of small bags containing sugared almonds, consisting in veils of tulle or similar, completely open and spread with folds variously placed.

10 It is already known that the small sugared almonds' bags, prepared for marriages, baptisms, first communions, confirmations and similar, must show, for being appreciated by the customers, a structure of the upper ends of the veils used being extremely wide-spread, so as to symbolize the open corolla of a luxiriant flower.
15

Consequently, said small bags have always been manually prepared requesting a long working time, which is at least 5 to 6 minutes for each piece, particularly due to the necessary
20 end operation of spreading the tulle.

Recently, furthermore, a semi-automatic electrically-fed machine has been realized for preparing said small bags, provided with a pedal operated winding machine for providing
25 a twisted thread that will be applied in squeezing for closing said small bags.

Said machine comprises a lower disc with a central hole that receives the number of veils containing the sugared almonds

and also having an approximately radial continuity solution for the passing of said twisted thread for wutting with an appropriate tool out of one piece with the working plane.

5 Said above mentioned semi-automatic machine shows the following disadvantages:

- the closing of said small bags is performed with above mentioned thread and therefore must be completed by the addition of a coloured ribbon that proves to be essential,
10 according to the customers' tastes, with the additional cost of said thread and further working time.

- Each small bag, coming out of said machine, has all tulle veils in overlaying volutes, along coincident curves, so
15 as to request a further long manual operation of spreading of the same, bringing the total working time to the same values that the one of a complete manual realization.

- The costs are highered by the electric energy and by the
20 twisted thread, the use thereof being obviously not necessary.

It is the aim of the present invention to realize a cheap,
high-efficiency device for the manual preparation of small
25 bags, characterized in the total, automatic spreading of the veils.

The aim set forth is reached by means of the device according to the present invention, comprising a base disc with a cen-

tral hole and with a housing for the small bag to be filled with the sugared almonds, on which disc a second one will be placed also provided with a hole in correspondence with the hole of the first disc, and hinged to the working plane, whereby according to the present invention, one or more separating discs are provided between said discs, said separating discs being out of plastic material, of waxed canvas, or other suitable material, preferably transparent, that will maintain the tulle veils separated during the formation of the end part of the filling with the sugared almonds, so as to allow the realization of single volutes for each veil that is autonomous and therefore not coupled with the other veils thus presenting the end product widely spread like a corolla without any further manual operation.

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The device according to the present invention is completed by means for the squeezing of the small bag in correspondence of the housing of the coloured closing ribbon and by a veil-pushing means with basculating axis pivoted on the working plane.

20

The considerable advantages of the device according to the present invention are the following:

- very short times, about 20 to 40 seconds, for the preparation of each complete small bag.
- A total spreading of the veils with different volutes, without the need of any additional manual operation.

25

- Elimination of the electrical feeding;
- elimination of additional elements, like twisted threads and similar.

5 The present invention will be described more in detail here-
inbelow according to the drawings showing a preferred embo-
diment thereof.

Figure 1, shows a scheme, in axonometric view, of the comple-
10 te device in open position.

Figure 2, shows an axonometric view of the device in working
position.

15 Figure 3, shows in particular an exploded view of elements
of the veil squeezing mechanism.

Figures 4 and 5 respectively show a small bag prepared with
not yet opened veils (showing the need of a further manual
20 intervention), and a completely open small bag as it gets
out of the device according to the present invention.

The present invention concerns a device for the manual pre-
paration of small bags with open veils, containing sugared
25 almonds, of the kind comprising a lower disc 1 with a central
hole 2 on which upper disc 3 is resting with a corresponding
hole 4, movable around hinge 5, between which, according to
the present invention, multiple discs 6 hinged in 7, to the
working plane, are dinged and also provided with a central
30 hole in 8, for the separation of the various tulle veils L

or similar that are manually housed by the operator between said discs so that after the forming of the housing for the sugared almonds, performed following to the pressure of the veil-pushing piston 9, by rotation brought around axis 10, until it corresponds to the hole 4 of said upper disc 3, and after the squeezing operation performed by the operator by means of a simple angular movement of lever 14 shows by the arrow, will prove to be enough to realize a knot on a part of a coloured ribbon, placed at the beginning between said discs so as to obtain a small bag prepared with all wide-spread veils.

Infact, when said piston 9 vertically moves through said holes 4, 8 and 2 respectively of said discs 3, 6 and 1, all veils L placed between said multiple discs 6 are forced into the container portion of the small bag, getting down into the hollow cylinder 11, placed below said lower plane 1, and at the same time sliding, due to traction, between said separating discs 6, and each of said veils L is placed in some folds which, obviously, are not corresponding to the folds of the other veils so that, when each small bag is extracted, all the volutes form an extremely spread corolla as shown in figure 5.

For what concerns the mechanism of squeezing of the veils shown in figure 3, the same comprises counterposed blades 12, housed between said disc 1 provided with a hole and a

a lower disc 13, provided with an outwardly turned lever 14 and with a plurality of eyelets 15 in different positions and angles according to the needs, for the housing of bushings of ball bearings, so as to determine, following to the angular movement of said lever 14 by the operator, the linear sliding, one against the other, of said blades 12, the semi-circular ends thereof forming, once laid one on the other, circular holes of small diameter around which the coloured ribbon, provided between the discs 1 and 3, determines by squeezing the closing of the veils L.

The realization of the housing for the sugared almonds is determined, according to the present invention, by the vertical penetration, performed by the operator, of piston 9 through holes 4, 8 and 2 up to the annular stop 16 provided on the bottom of the container 11, so that the veils L are pulled into the hole with a following sliding of the upper portions thereof between said discs 6, which cause the forming of the volutes with separate folds.

The return spring 17 lifts the piston 9 at the end of the pressure stress to the resting position thereof.

A further feature of the object of the present invention is a central hole 18, formed by the annular stop 16 on the bottom of the container 11, into which a rod provided by the operator in holes 4, 8 and 2, may penetrate through

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veils L so as to allow the realization of the small sugar-
ed almonds' bag around said rod at an average height for
particular requests.

CLAIMS

1. A device for manually preparing small bags with spread veils containing sugared almonds, comprising a lower disc (1) with
5 a central hole (2), onto which a lower disc (3) is resting with a corresponding hole (4) movable around a hinge (5), characterized in a plurality of discs (6) placed between said discs (1) and (3) hinged in (7) to the working plane and also provided with a central hole (8), said discs being
10 provided for separating the various tulle or similar veils (L) being manually placed by the operator between said discs and characterized in a means for the forming of the housing for the sugared almonds, being out of one piece with the working plane, and furthermore characterized in means for
15 squeezing the veils (L) for the further application of a closing ribbon.
2. A device according to claim 1 characterized in that each
20 veil (L) slides separately from the other veils thus forming a spread structure.
3. A device according to claim 1, characterized in that the
25 means for forming the housing of the sugared almonds consists in a piston (9) connected to a basculating axis (10), out of one piece with the working plane, and provided with a return spring (17), wherein said piston (9) penetrates between said holes (4), (8) and (2) of discs (3), (6) and (1) up to the stop (16) on the bottom of container (11).

4. A device according to claim 1, characterized in that the means for the squeezing of the veils (L) comprises counterposed blades (12) housed between said disc (1) provided with a hole, and a lower disc (13) provided with an outwardly turned lever (14) and with a plurality of eyelets (15) with different positions and angles according to the needs, for the housing of bushings and ball bearings so as to determine, following to the angular movement of said lever (14), performed by the operator, the linear sliding, one against the other, of said blades (12), the semicircular ends thereof forming, once laid one on the other, circular holes of small diameter around which the coloured ribbon, provided between the discs (1) and (3), determines by squeezing the closing of the veils (L).
5. A device according to claim 1, characterized in a central hole (18) formed by the annular stop (16) on the bottom of container (11), into which a rod provided by the operator in holes (4), (8) and (2), may penetrate through veils (L).

FIG.1

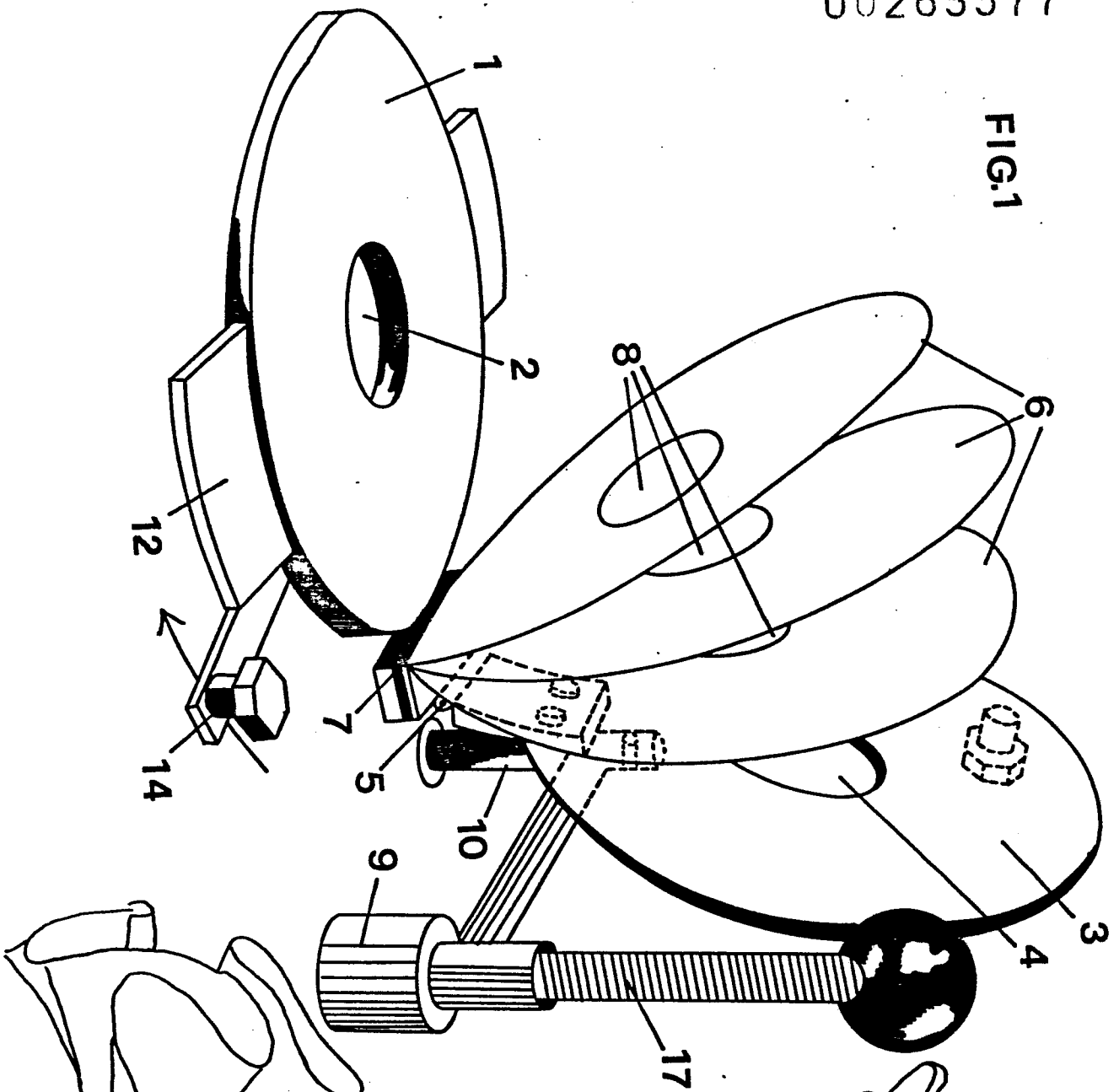


FIG.4

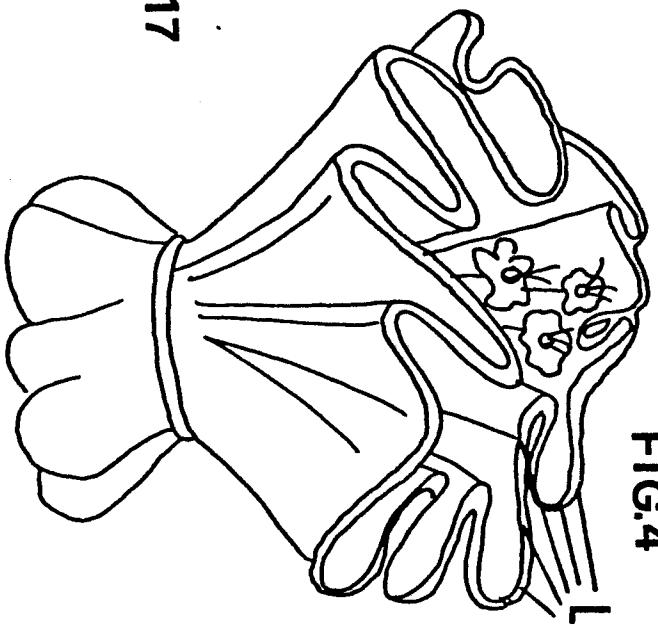
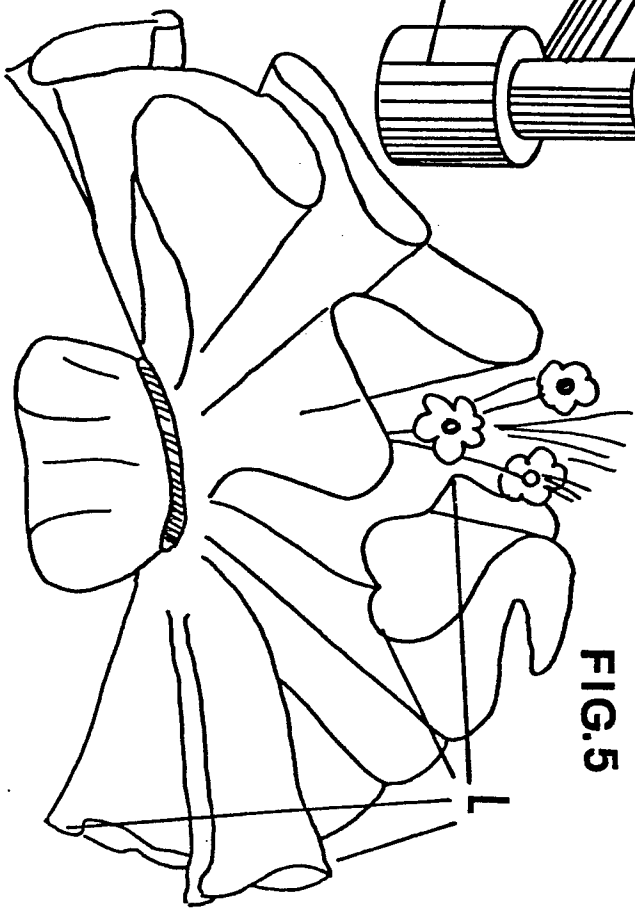


FIG.5



6.

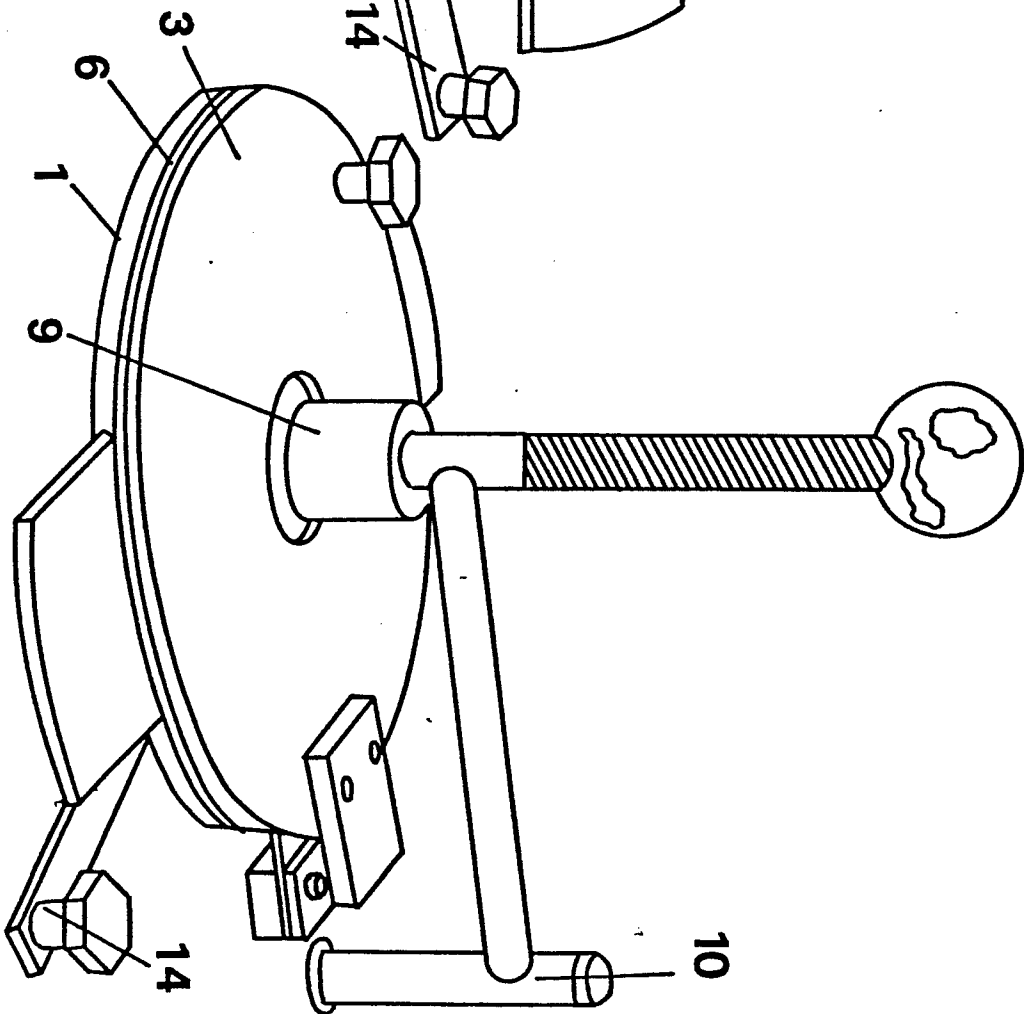
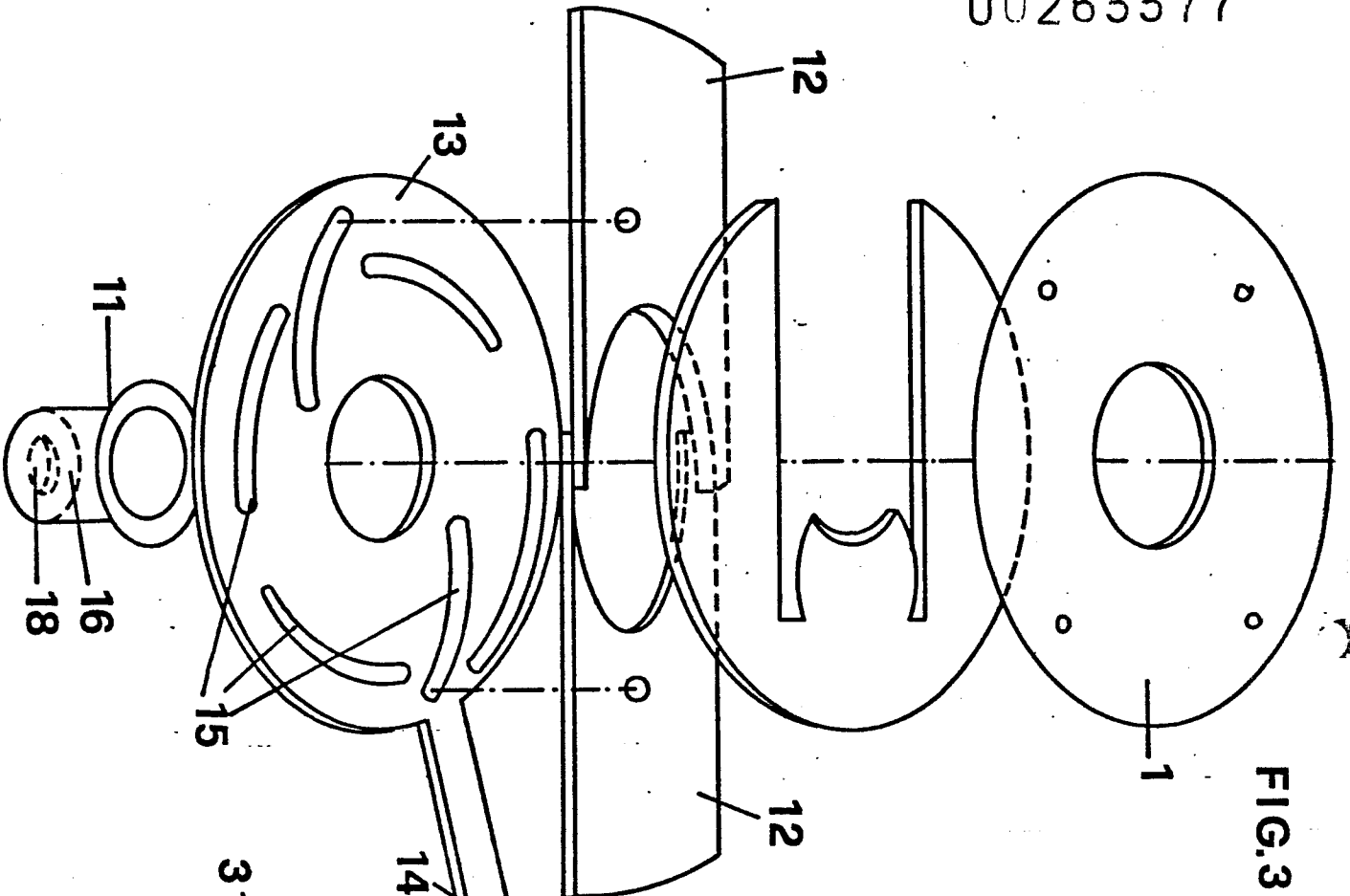


FIG. 2

FIG. 3



European Patent
Office

EUROPEAN SEARCH REPORT

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Application Number

EP 86 83 0341

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.4)
A	FR-A-2 010 787 (ICI) * Page 2, lines 22-38; figure * -----	1	B 65 B 67/00
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 65 B B 31 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18-01-1988	Examiner JAGUSIAK A.H.G.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>..... & : member of the same patent family, corresponding document</p>			

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