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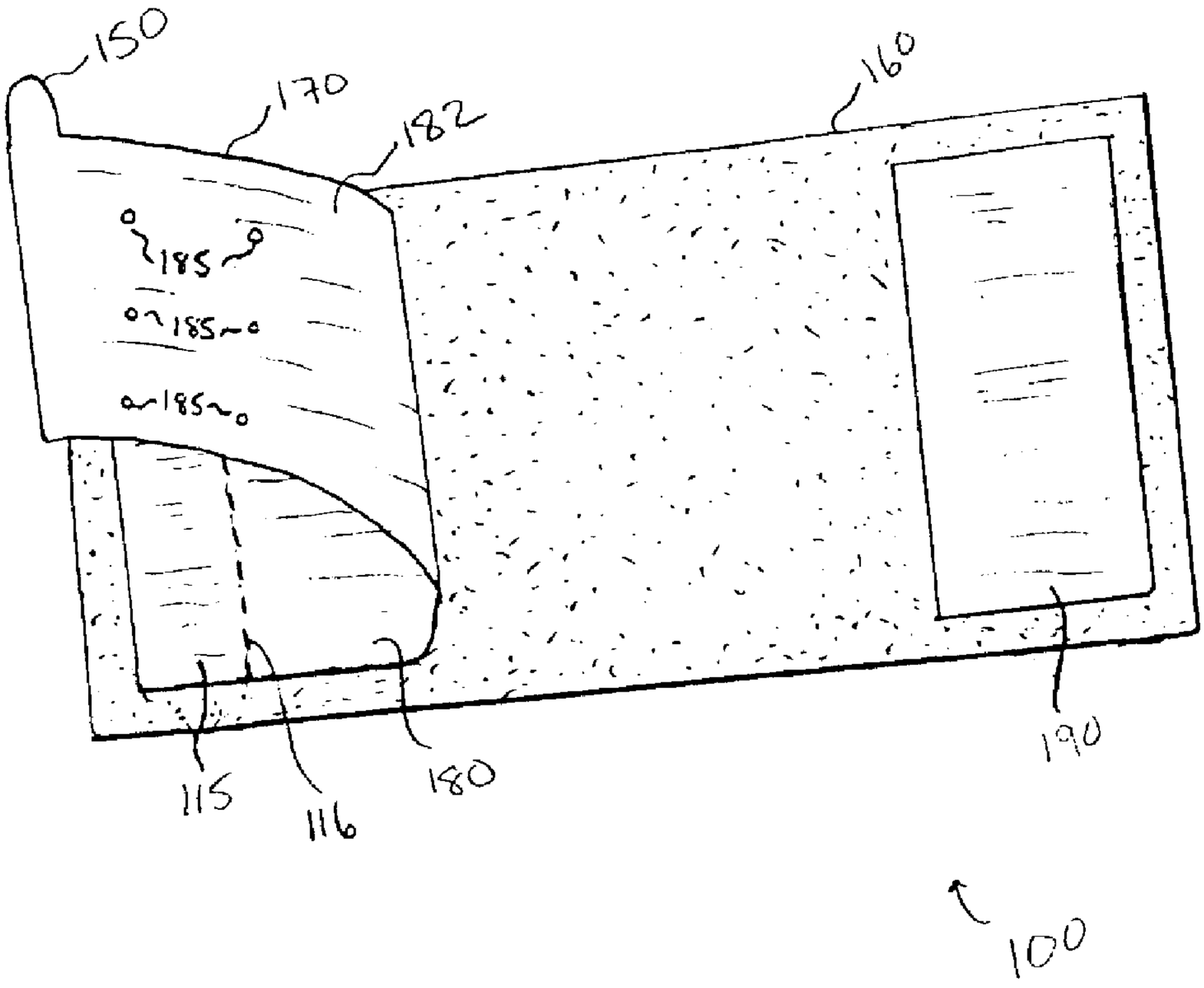
(54) **ETIQUETTE AUTOCOLLANTE REUTILISABLE**

(54) **RESEALABLE LABEL**



(57) A self-adhesive label for a container, such as a pharmaceutical bottle, comprises three sections. The first and third sections adhere the label to the bottle. The second section is contiguous with the first section, and is attached to the third section by means of a perforation. This second section is the "peel-away" section and contains printed information on both its front and rear surfaces. The second section has a non-adhesive rear surface and contains a tab for ease of gripping. The second section may be torn along the perforation by use of the grip tab, to enable viewing of the information printed on the rear surface of the second section of the label. The second section can then swing free of the bottle, yet remains attached to the first section. After reading the information contained on the rear surface of the second section, the consumer can than reseal this portion of the label to its original position on the bottle. This is possible due to the presence of relatively minute spots of adhesive on the rear surface of the second label section which will reseal the label to the bottle until such a time as the consumer wishes to reopen the label.

ABSTRACT

A self-adhesive label for a container, such as a pharmaceutical bottle, comprises three sections. The first and third sections adhere the label to the bottle. The second section is contiguous with the first section, and is attached to the third section by means of a perforation. This second section is the "peel-away" section and contains printed information on both its front and rear surfaces. The second section has a non-adhesive rear surface and contains a tab for ease of gripping. The second section may be torn along the perforation by use of the grip tab, to enable viewing of the information printed on the rear surface of the second section of the label. The second section can then swing free of the bottle, yet remains attached to the first section. After reading the information contained on the rear surface of the second section, the consumer can than reseal this portion of the label to its original position on the bottle. This is possible due to the presence of relatively minute spots of adhesive on the rear surface of the second label section which will reseal the label to the bottle until such a time as the consumer wishes to reopen the label.

Attorney Docket No. 20490-019

RESEALABLE LABEL

Field of the Invention

The present invention relates to a self-adhesive label with a "peel-away" section which is resealable. The self-adhesive label can be used on containers or bottles of all kinds, but is especially useful for bottles containing pharmaceutical products. The peel-away section contains printed information on both its front and rear surfaces. When the self-adhesive label is used on a bottle containing a pharmaceutical product, the resealable section can be peeled away from the bottle by the consumer to reveal printed information on its rear surface and then can be resealed to its original position on the bottle.

Background of the Invention

One of the problems faced when designing labels for pharmaceutical products is the size limitations of the label. The area of the label is finite, as it depends on the physical constraints of the bottle upon which it is to be applied.

FDA regulations dictate the information that must be printed on such labels. It is therefore a problem to find enough area on the label to print all of the required information. FDA regulations also require the use of permanent adhesives in the labeling of pharmaceutical products. Therefore, labels which use removable adhesive containing the required information cannot be

used.

One method used to overcome this problem is to provide a package insert. The package insert consists of a separate sheet of paper which is printed on and then folded to fit inside the bottle or box containing the bottle. The package insert contains additional printed information that will not fit on the permanent label which is adhered to the bottle. Such a package insert requires additional printing and folding processes. While this method is effective, it adds greatly to the complexity and cost of the final product. Also, there is a possibility that the package insert will be lost by the consumer, as it is not adhered to the bottle. This may be a problem since the package insert contains important information about the pharmaceutical product contained inside the bottle.

Another method used to overcome the problem of size limitations of the label is to have an expanded content label. The expanded content label consists of a sheet of paper which is printed on and then folded and re-folded several times. It is then adhered to the bottle. This method also requires additional printing and folding processes which add greatly to the complexity and cost of the final product, while at the same time seriously compromising the security of its labeling. Also, once the expanded content label is opened by the consumer, there is no way to reattach the label to the bottle. This may be a nuisance to the consumer, as well as a danger, if the label is removed, since it may contain important consumer information and/or warnings.

Numerous self-adhesive labels are known in the prior art. For example, U.S. 5,056,827 (Sasso), U.S. 5,472,756 (Sechet), and U.S. 5,172,936 (Sullivan et al.) all disclose self-adhesive labels. However, none of these patents discloses a self-adhesive label which is applied to a pharmaceutical bottle which overcomes the foregoing problems.

It is therefore an object of the present invention to overcome the disadvantages of the prior art.

Summary of the Invention

A self-adhesive label is disclosed which substantially overcomes the problems of the prior art. The inventive self-adhesive label consists of three adjacent sections. The first and third sections are adhesively-backed and are situated at the ends of the label. The second section is located between the first and third sections and has a substantially non-adhesive rear surface. The second section is contiguous with the first section and it attached to the third section by means of a perforation. The first and third sections (end sections) adhere the label to a pharmaceutical bottle, or other container, while the second section is a "peel-away" section. The end sections are imprinted on their front surface with important information about the pharmaceutical product contained inside. The second section is imprinted with important information on both its front and rear surfaces. The rear surface of the second section, while not coated with an adhesive, does have relatively minute isolated areas of adhesive.

Desirably, the second section includes a tab to aid in peeling it away from the bottle or other container.

To view the information imprinted on the rear surface of the second section of the label, the tab attached to the second section is grasped, and the second section is separated from the third section along the perforation. The second section can then swing free of the bottle, revealing the information imprinted on its rear surface, yet remains attached to the first section. After reading the information contained on the rear surface of the label, the consumer can than reseal this section of the label to its original position on the bottle. This is possible due to the presence of relatively minute spots of adhesive on its rear surface which enable resealing of the label to the bottle.

Brief Description of the Drawings

Fig. 1a shows a self-adhesive label in accordance with an illustrative embodiment of the invention.

Fig. 1b shows the self-adhesive label of Fig. 1a applied to a pharmaceutical bottle.

Fig. 2 shows a detailed view of the grip tab used in the label of Fig. 1a.

Fig. 3 shows the label of Fig. 1a in which a portion of the label has been removed from its release-liner.

Fig. 4 shows a self-adhesive label in accordance with an alternate embodiment of the invention as attached to a pharmaceutical bottle.

Fig. 5 illustrates the process for producing the label of Fig. 1a.

Detailed Description of the Preferred Embodiments

Fig. 1a illustrates a self-adhesive label 100 in accordance with an embodiment of the present invention. The self-adhesive label 100 comprises an upper adhesive layer 110 having an adhesively-backed rear surface 120 superimposed on a siliconized release-liner 160.

The adhesive layer 110 is produced by die cutting into a web which has been imprinted with useful information. However, the die is not permitted to pass through the release-liner 160 underneath. Thus, the adhesive layer 110 is formed with a display surface 180 which is imprinted with important information for the pharmacist and consumer. Information such as the type of pharmaceutical product in the bottle, the lot and batch number of the pharmaceutical product in the bottle, and the bar code used to identify the pharmaceutical product, may be imprinted on the display surface 180 of the self-adhesive label 100. The display surface 180 may be laminated to protect the printing on the display surface 180 of the self-adhesive label 100.

In the illustrated embodiment of the present invention, the adhesive layer 110 consists of three adjacent sections. The first section 115 is adhesively-backed and is situated at a first end of the label 100. The adhesive on the rear surface of the first section 115 ends in a line 116 shown in phantom in Fig. 1a. The

second section 170 has a non-adhesive rear surface and is contiguous with the first section 115 along the line 116. The third section 190 is adhesively-backed and is situated at the opposite end of the label 100. The third section 190 is attached to the second section 170 by means of a perforation 130.

The first and third sections 115 and 190 are end sections and adhere the label 100 to a pharmaceutical bottle or other container. The end sections 115 and 190 are imprinted with important information about the pharmaceutical product contained inside.

The second section 170, located between the first and third sections 115 and 190 and connected to the third section 190 by means of a perforation 130, is the "peel-away" section. It contains printed information on both its front surface 180 and its rear surface (182 shown in Fig. 3). The second section 170 has a non-adhesive rear surface and contains a tab 150 for ease of gripping. The printing on the rear surface 182 of the second section 170 is done in a separate printing process from the printing process performed on the front surface.

To view the information printed on the rear surface 182 of the second section 170 of the label 100, the tab 150 attached to the second section 170 is grasped, and the second section 170 is separated from the third section 190 along the perforation line 130. The second section 170 can then swing free of the bottle, yet remains attached to the first section 115 along the connection line 116. After reading the information contained on the rear surface 182 of the second section 170, the consumer can then reseal this

portion of the label to its original position on the bottle. This is possible due to the presence of relatively minute spots of adhesive 185 on the rear surface 182 which will reseal the label to the bottle until such a time as the consumer wishes to reopen the label. Fig. 1b shows the label of Fig. 1a applied to a pharmaceutical bottle.

Fig. 2 shows a detailed view of the grip tab 150 used in the label of Fig. 1a. Note that the perforation 130 comprises long slits 134 connected by short segments of unslit stock 132, making the second section 170 easy to separate from the third section 190. The grip tab 150 extends approximately one-half inch vertically from the adhesive layer 110.

Fig. 3 shows the label 100 of Fig. 1a in which the second section 170 of the label 100 has been partially peeled away from the release-liner 160. The label 100 of Fig. 3 shows the end sections 115 and 190 remaining on the release liner 160. This view shows the printing on both the front surface 180 and the rear surface 182 of second section 170, as well as the isolated spots of adhesive 185 on the rear surface 182. The second section 170 remains attached to the first section 115 along connection line 116.

In an alternate embodiment of the inventive label, illustrated in Fig. 4, both the first section 115' and the second section 170' of the label 100' are elongated. Fig. 4 shows the inventive label applied to a pharmaceutical bottle, and partially removed to show imprinting on both the front surface 180' and rear surface 182' of

the second section 170'. The first section 115' and second section 170' are elongated to wrap around the pharmaceutical bottle or other container almost two complete times before ending in the perforation line 130' and the third section 190'. The first section 115' is elongated to wrap almost completely around the pharmaceutical bottle, ending at connection line 116'. The second section 170', beginning at connection line 116', is elongated to wrap around the pharmaceutical bottle ending at the perforation 130' and the third section 190'. Both the front surface 180' and rear surface 182' of the elongated second section 170' are imprinted with important information about the pharmaceutical contained inside the bottle. The elongated second section 170' contains relatively minute spots of adhesive 185' on its rear surface 182'. This allows the consumer to reseal this portion of the label in its original position on the bottle. This embodiment allows for considerably more printing area on the front surface 180' of the elongated first section 115', and on the front surface 180' and rear surface 182' of the elongated second label section 170', without any additional steps of printing or folding.

Fig. 5 illustrates the process for producing the inventive label 100. The display surface 180 of the label 100 is imprinted at the first print stations 5. The adhesive layer 110 is separated from the release liner 160 at de-lamination point 10. The rear surface 182 of the label is then imprinted at point 15. Identifying indicia are printed directly on the adhesive backing (120 of Fig. 1a) of the label 100 at point 15. The adhesive

backing 120 is then deactivated on the rear surface 182 of second section 170. This is performed at point 20, as shown in Fig. 5. The adhesive is deactivated by printing a deadening varnish in an appropriate pattern directly onto the adhesive layer 120. Minute spots of adhesive are then applied, as appropriate, to the deactivated adhesive on the rear surface 182 of second section 170 at point 25. Alternatively, the deadening varnish is applied in a pattern such that isolated spots of adhesive are not deactivated. Either of these methods allows the second section 170 to be resealed to the bottle after the label is opened by the consumer. The adhesive layer 110 and release liner 160 are then relaminated together at point 30, and the labels are cut to size. The process can be easily adapted to produce the label 100' of Fig. 4.

It should be noted that use of the rear surface 182 of the second section 170 for printing instructions or other material, an unused and heretofore wasted resource in prior-art labels, leaves more room on the front of label section 170. This additional space may be used to imprint a bar-code, a manufacturer's trademark, etc., or the label may be printed using a larger type and/or in a less crowded fashion.

Note that in the illustrated embodiments, the grip tab 150, as shown in Fig. 2, is originally formed with an adhesive backing which is later deactivated at the same time as label section 170. Since the tab 150 does not adhere to the release-liner 160, it extends vertically from the surface of the release-liner 160. This orientation makes it easier for the consumer to grip the tab 150 in

order to facilitate detachment of the peel-away, resealable section 170 from the underlying release-liner 160.

The inventive self-adhesive label 100 can be easily placed on a bottle during production by an automated process on a packaging line. When bottles to be labeled are placed on a conveyor belt, a web of self-adhesive labels 100 are used. As a bottle approaches, the web is advanced over a sharply angled "peeler plate" which causes the leading edge of the self-adhesive label to "pop off" the release-liner and catch the bottle as it passes. As the bottle continues on the conveyor belt, the web of labels advances allowing the label to completely wrap around the bottle. The inventive self-adhesive label is used advantageously on stock bottles containing pharmaceutical products. It is evident that the self-adhesive label may also be used on other kinds of bottles, such as oil bottles, cosmetic bottles or food containers.

The above-described embodiments of the invention are intended to be illustrative only. Numerous alternative embodiments may be devised by those skilled in the art without departing from the spirit and scope of the following claims.

CLAIMS:

1. A self-adhesive label for application to a bottle or other surface, comprising first, second and third sections, each of which has a front surface and a rear surface, said first section being located at a first end of said label and having an adhesive on its rear surface for permanently adhering said label to said bottle or other surface, said second section being contiguous with said first section and having an adhesive disposed on its rear surface such that said second section is resealable, and said third section being located at a second end of said label and having adhesive on its rear surface for permanently adhering to said bottle or other surface, said third section being connected to said second section by a perforation.

2. The self-adhesive label according to claim 1 wherein said first and third sections of said label are imprinted on their front surfaces, and said second section is imprinted on its front and rear surfaces.

3. The self-adhesive label according to claim 1 wherein said second section includes a tab to facilitate detachment of said second section from said third section along said perforation.

4. The self-adhesive label according to claim 1 wherein said first and second sections are elongated sufficiently such that said label wraps around itself and said third section ends adjacent to said connection line.

5. The self-adhesive label according to claim 1 wherein the adhesive of said second section is patterned such that it is resealable.

6. The self-adhesive label according to claim 1 wherein the adhesive of said second section comprises spots of adhesive.

7. The self-adhesive label according to claim 1 wherein said first, second and third sections are comprised of a single-ply, self-adhesive layer.

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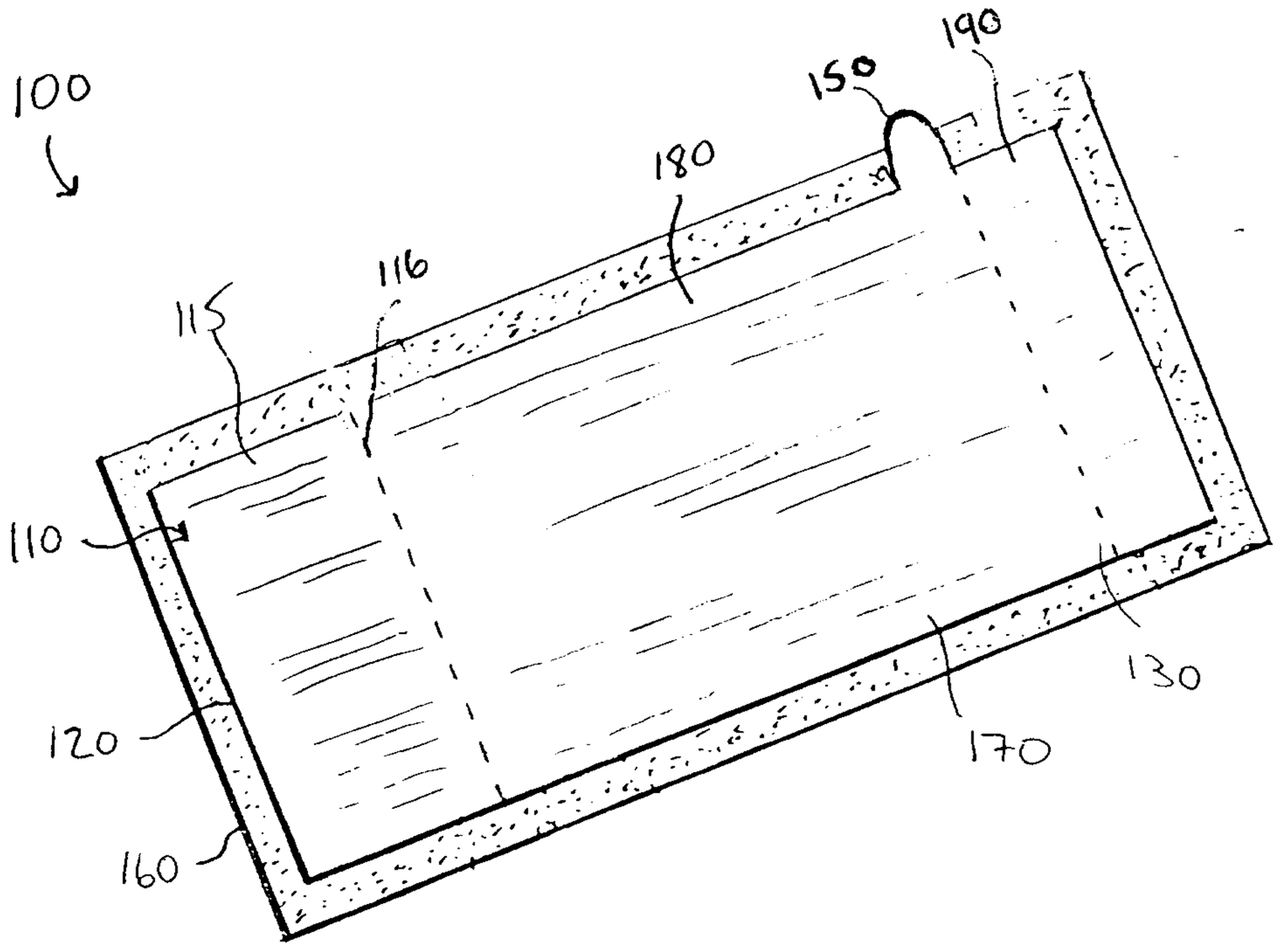
PATENT AGENTS

FIG. 1a



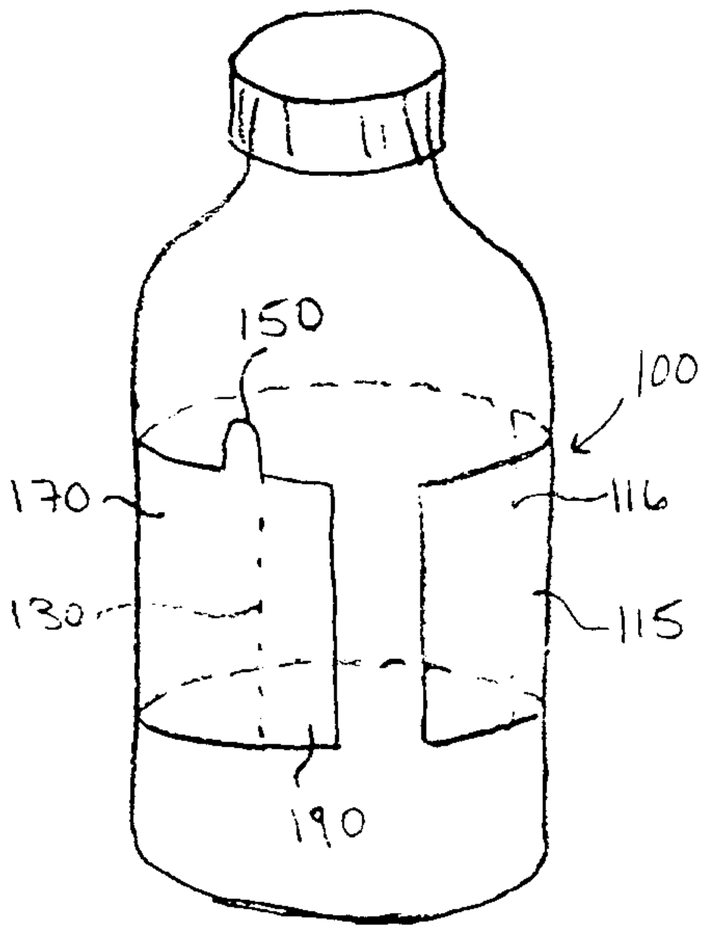


FIG. 1b

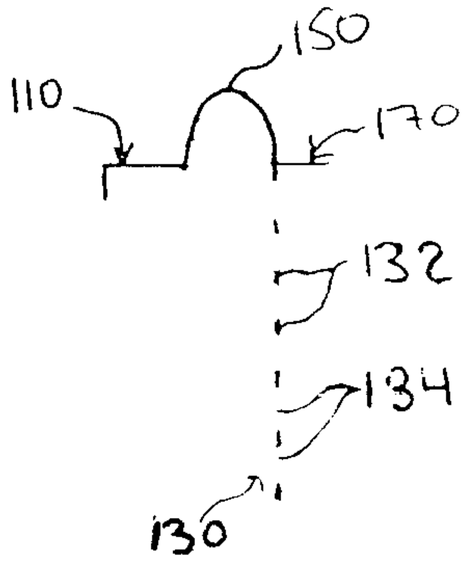


FIG. 2

FIG. 3

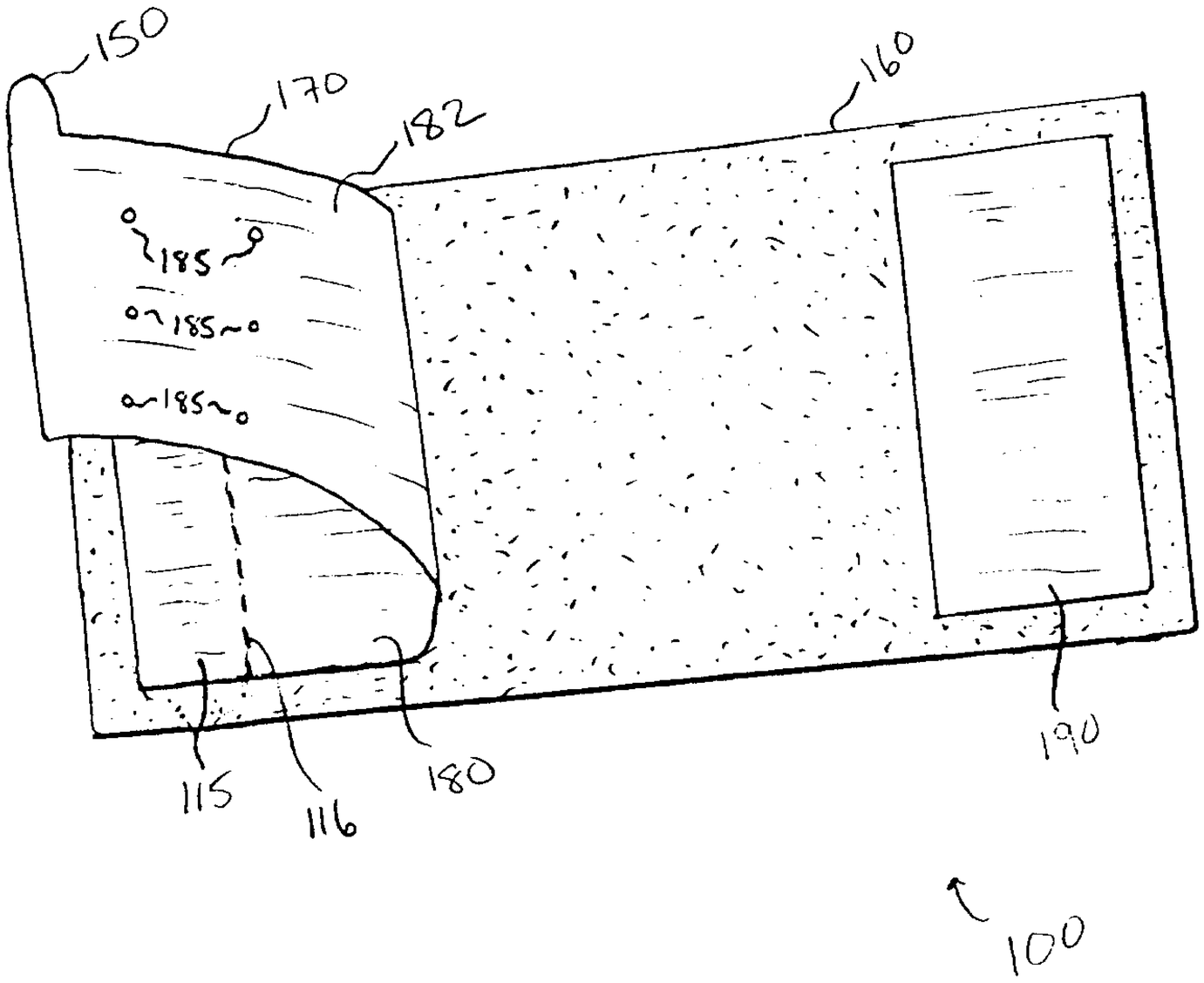
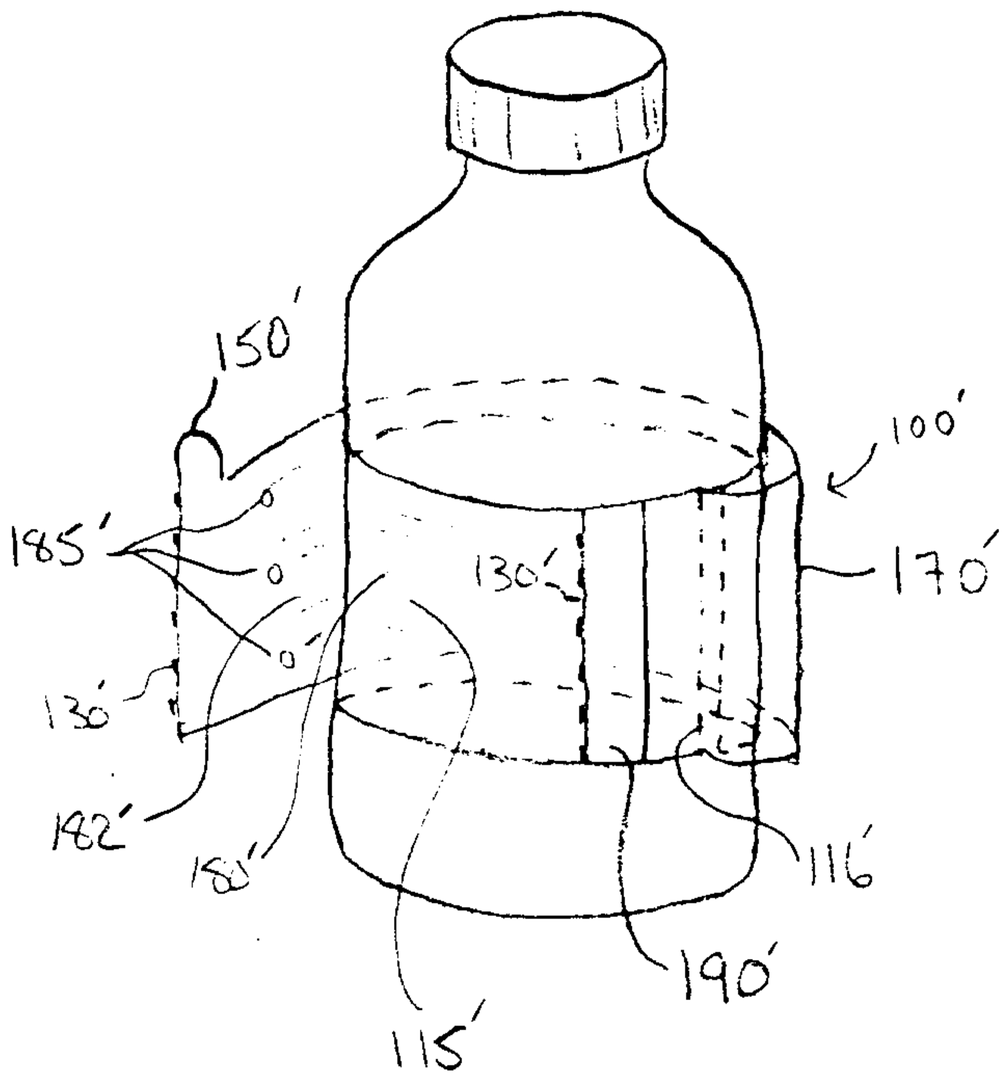

150
170
182
160
185
185
185
115
116
180
190
100

FIG. 4


150'
185'
136'
182'
180'
130'
100'
170'
116'
190'
115'

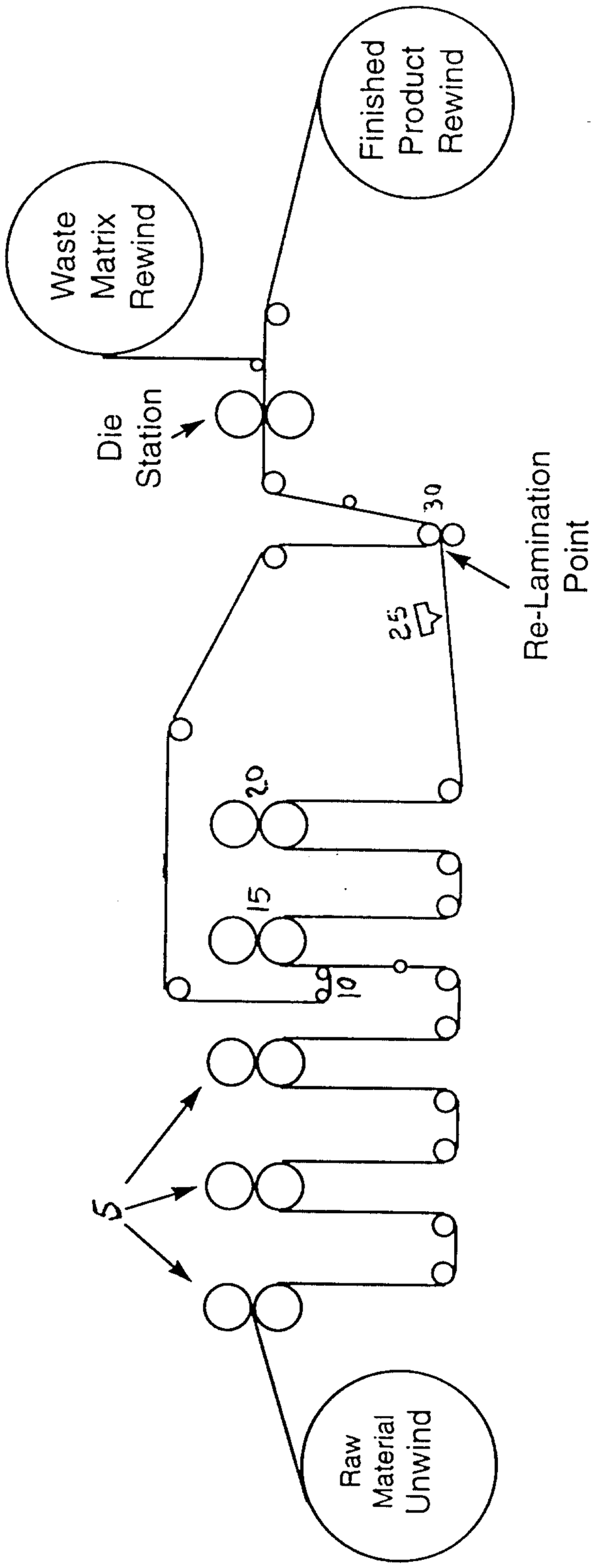

Finished Product Rewind
Waste Matrix Rewind
Die Station
30
Re-Lamination Point
25
20
15
10
5
Raw Material Unwind

FIG. 5