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(54) Titre : ETIQUETTE IMPRIMEE POUR EMBALLAGES

(54) Title: PRINTED LABEL STRUCTURE FOR PACKAGING ARRANGEMENTS

(57) **Abrégé/Abstract:**

A cover-forming laminated structure interconnecting a plurality of containers, such as the base members of blister packages each of which is adapted to contain a hydrophilic contact lens in a sterile aqueous solution. More specifically, disclosed is an array of such containers which are interconnected by a single laminated multi-layered material constituting a covering label for the containers, wherein the material may be severed intermediate each of the containers along weakening lines formed by micro-perforations provided therein so as to provide a separate packaging arrangement. The material is imprinted over the surface extent thereof covering the plurality of containers with a specific pattern of indicia and legends configured with the intent of thwarting diverters upon separation of any of the packaging arrangements from the array, through visual evidence afforded by an inspection of the printing pattern.



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ABSTRACT OF THE DISCLOSURE

A cover-forming laminated structure interconnecting a plurality of containers, such as the
5 base members of blister packages each of which is adapted to contain a hydrophilic contact lens in a sterile aqueous solution. More specifically, disclosed is an array of such containers which are interconnected by a single laminated multi-layered material
10 constituting a covering label for the containers, wherein the material may be severed intermediate each of the containers along weakening lines formed by micro-perforations provided therein so as to provide a separate packaging arrangement. The material is
15 imprinted over the surface extent thereof covering the plurality of containers with a specific pattern of indicia and legends configured with the intent of thwarting diverters upon separation of any of the packaging arrangements from the array, through visual
20 evidence afforded by an inspection of the printing pattern.

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**PRINTED LABEL STRUCTURE
FOR PACKAGING ARRANGEMENTS**

BACKGROUND OF THE INVENTION

5 **1. Field of the Invention**

The present invention relates to a cover-
forming laminated material structure interconnecting a
plurality of containers, such as the base members of
blister packages each of which is adapted to contain a
10 hydrophilic contact lens in a sterile aqueous solution.
More specifically, the invention pertains to an array of
such containers which are interconnected by a unitary
multi-layered laminated material constituting a covering
label for the containers, wherein the laminate may be
15 severed intermediate each of the containers along
weakening lines provided therein so as to provide a
separate packaging arrangement. The laminate is
imprinted over the surface extent thereof on either one
side of an outer layer covering the plurality of
20 containers with a specific pattern of indicia and
legends configured with the intent of thwarting
diverters upon separation of any of the packaging
arrangements from the array, through visual evidence
afforded by an inspection of the printing pattern.

25 The packaging of hydrophilic contact lenses in
a sterile aqueous solution is well known in the contact
lens manufacturing technology. Particularly, packaging
arrangements of that type generally consist of so-called
blister packages adapted to be employed for the storage
and dispensing of the hydrophilic contact lenses for use
30 by a medical practitioner or a consumer who intends to
wear the contact lenses. Such hydrophilic contact

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1 lenses, which may be disposable after a single wear or
short-term use, are inexpensively manufactured from
suitable hydrophilic polymeric materials; for example,
5 copolymers of hydroxyethylene methacrylate containing
from about 20% to 90% or more of water, depending upon a
polymer composition. These contact lenses are generally
stored in a sterile aqueous solution, ordinarily
consisting of an isotonic saline solution, in order to
prevent dehydration and to maintain the lenses in a
10 ready-to-wear condition.

A container of the foregoing type, normally
comprises a base member which is molded from a suitable
injection-molded or thermoformed plastic material; for
instance, such as polypropylene, and incorporates a
15 cavity adapted to house the contact lens in the aqueous
solution, and which is sealingly closed by a label-
forming cover, preferably in the form of a flexible
multi-layered laminated material structure to provide a
so-called blister package. This type of packaging
20 arrangement has found widespread use in view of the
inherently advantageous storing properties thereof and
easy-to-dispense nature of the package by simply peeling
the laminated material from the base member enabling a
user to gain ready access to the contact lens which is
25 contained in the cavity of the base member. For
example, a blister package which is adapted to provide a
sterile sealed storage environment for a disposable,
essentially single-use hydrophilic contact lens, which
is normally worn for about 8 to 16 hours within a 24-
30 hour period, wherein the lens is immersed in a sterile
aqueous solution within the package is described in U.S.

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Patent No. 4,691,820 to Martinez; which is commonly assigned to the assignee of the present application.

In the above-mentioned U.S. patent, the blister package for storing and dispensing a hydrophilic contact lens includes an injection-molded or thermoformed plastic base portion or member incorporating a molded cavity which is surrounded by an outstanding planar flange extending about the rim of the cavity. A flexible cover sheet, such as a laminated foil is adhered to the surface of the flange so as to sealingly enclose the cavity in a generally liquid-tight manner. The surface of the covering foil may constitute a label and be imparted suitable printing indicia informative of the product stored in the blister package, the name and address of the manufacturer, and also incorporate various decorative designs and logos as desired; and also provide for changeable information, such as lot numbers, expiration dates and the like in addition to the foregoing, such as may be required by FDA (Food and Drug Administration) regulations.

The foregoing blister packages are generally sold as individual or single units and the imprinted information provided thereon is complete for each blister package.

However, when it is intended to sell arrays or multiples of such detachably interconnected blister packages, each containing respectively a single hydrophilic contact lens, the opportunity may arise for a diverter to pass off the relatively inexpensive

1 disposable product contained in each of the respective
detached blister packages as a more expensive single
unit item. In essence, such single-use or disposable
contact lenses could be conceivably passed off as more
5 expensive reusable contact lenses, potentially causing
significant economic losses to the manufacturer and
sellers, while also raising the possibility of potential
legal liabilities in the event that the product is not
properly used or worn for extended periods of time so as
10 to result in physical harm to a user.

At this time, this potential problem of
unlawful or illegal conversion arises through the
development of a new and unique conception packaging
arrangements of the blister package type, particularly
15 for the containment of hydrophilic contact lenses in a
sterile aqueous solution, wherein a plurality of base
members each having a cavity for containing a
hydrophilic contact lens in a sterile aqueous solution
are adapted to be positioned in a contiguous array and
20 sealing covered by a single or unitary flexible cover
sheet, the latter of which is preferably in the form of
a multi-layered flexible foil laminate. In this
instance, the laminated foil is provided with weakening
lines intermediate each of the respective base members
25 so as to enable individual segments of the foil member
to be detached along the weakening lines and in
conjunction with the therewith associated base member to
be separated from the array when it is desired to gain
access to the contact lens contained therein. This type
30 of arrayed multiple interconnected blister package
structure enables the compact packaging of a plurality

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of such arrays, each possessing a specified number of contact lens-containing base members interconnected by a single flexible cover sheet, within the confines of a suitable container, such as a rigid paperboard carton. In the carton there may be compactly stored a plurality of nested superimposed arrays of blister packages; for example, each array having five interconnected blister packages each having a single disposable contact lens housed therein. The carton may store six superimposed arrays of blister packages, for a total of thirty; or in effect, a 30-day supply of contact lenses for respectively one eye of a user. A packaging arrangement for contact lenses of that type which is in the form of arrays of interconnected blister packages is known.

The blister packages which are formed by means of this structure comprise a plurality of contiguously arranged thermoformed or injection-molded base members each containing a cavity for housing a hydrophilic contact lens in a sterile aqueous solution, and wherein the resultant array of such base members; for example, five (5) base members, is adapted to be sealingly covered and interconnected by a single multi-layered flexible laminated foil which also forms a common label.

In the foregoing disclosure, the multi-layered laminated foil includes an outer layer of a plastic film material of a suitable polyolefin, preferably but not necessarily polyester, which is adhesively bonded to the surface of a supporting metallic foil, such as aluminum, or alternatively, in lieu of the foil may be coated with a layer of silicon oxide, and in which the outer layer is

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double-sided printed; in effect, on both opposite surfaces. The surface of the outer plastic film layer which faces towards and is adhered to the metallic foil (or silicon oxide) is imprinted with suitable indicia and legends which
5 may consist of permanent information regarding the manufacturer and the product, logos, instructive material, and decorative and advertising indicia relative the product in the blister package; whereas the opposite or exterior surface of the outer plastic film material layer may include
10 suitable changeable information, such as expiration dates, lot numbers, fitting parameter, and other data specific to the packaged product. The interior surface of the outer plastic film material layer may be imprinted through the intermediary of suitable lithographic printing, either in
15 single color or multi-colors and also provided with an appropriate printed background; whereas the changeable information specific to the product which is imprinted on specific areas of the outwardly facing surface of the outer film layer, may be printed thereon through thermal transfer
20 printing.

Although the above-mentioned U.S. patent to Martinez, and the copending patent applications have to a considerable extent advanced the technology relative to the manufacture of blister packages for housing hydrophilic contact lenses,
25 potential financial and legal problems can be encountered with regard to the possibility of diverters separating individual blister packages from the interconnected arrays thereof, and unlawfully passing these off as more expensive products in an unauthorized or unlawful sale of such items.

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SUMMARY OF THE INVENTION

In order to thwart and aid in suppressing such potential misuse in the passing off and, in essence, converting the blister packages which are interconnected in an array by the unitary laminated foil structure, into separable and discrete blister packages, the invention contemplates the application of a novel printing pattern on the surface of the multi-layered laminated foil structure which forms a common label and covering lid for a plurality of base members, in which the printed pattern consisting of permanent data, such as indicia and suitable legends generally representative

1 of the manufacturer, manufacturer's logo, miscellaneous
product information and/or instructions of use and
decorative and advertising indicia is imprinted in such
a manner as to be spread over the surface of the
5 laminated foil structure across the array of the
containers or base members housing the contact lenses.
Upon separation of the laminated foil along the
weakening lines formed therein in order to provide
individual detached segments each forming a blister
10 package possessing one base member, this specially
configures printed label aspect will provide visual
evidence, such as by illustrating a discontinuity in the
printing pattern, that the package arrangement being
sold may have been unlawfully converted. In essence,
15 the printed pattern representing permanent information
is spread out in a manner such that any particular
legend or indicia generally extends across the weakening
lines formed in the laminated foil between adjacent base
members of arrayed blister packages, thereby providing
20 visual indication that separation from an array has been
implemented, and the sale of such an item may be
questionable in nature.

Required basically on each separate label for
each blister package is information regarding the
25 identifying of the manufacturer, the lot, batch and
power of the particular contact lens contained therein,
as necessitated by FDA (Food & Drug Administration)
regulations. The expiration date, lot, batch fitting
parameter and lens power information is independent of
30 the permanent information which is printed as a common
label spread out over the array of blister packages, and

1 is variable in informative nature in conformance with
the contents of a particular packaged item. Thus, when
a single package is separated, it bears only the lot,
batch and fitting parameter or power number, and no
5 longer bears the complete identity of the manufacturer,
and thus is no longer in conformance with the FDA
regulations.

Another aspect of the present invention
resides in the unique formation of micro-perforations in
10 the multi-layered laminated material structure producing
the weakening lines enabling separation of individual
blister packages from the array, in which such
perforations in one embodiment are formed in a novel
manner by cutting only partially into the laminate at
15 the side thereof which is adapted to be adhesively
fastened or bonded to the base members; or permanent to
an alternate embodiment entirely through the laminate
from the opposite side thereof.

Accordingly, it is an object of the present
20 invention to provide a novel laminated material
structure for interconnecting and producing a label for
a plurality of containers, such as base members of
blister packages, wherein a predetermined pattern of
printing is spread over the surface of the laminate
25 structure so as to produce visual evidence of separation
and detachment of segments of the laminate structure and
therewith associated blister packages from the remaining
array to thwart a potential diverter of the product in
the blister packages.

30 Another object of the present invention
resides in the provision of an array of blister packages

1 of the type described in which the printing pattern
imparted to the surface of the single multi-layered
laminated material structure interconnecting the various
blister packages and forming a common label for the
5 array extends across weakening lines formed in the
laminate whereby, upon separation of the laminate into
individual segments along the weakening lines, this
supplies visual evidence that the detached segment is a
portion of an array of blister packages having a
10 specific kind of product.

Yet another object of the present invention is
to provide a novel slitting concept for the forming of
the weakening lines in the multi-layered laminated
material through the intermediary of micro-perforations
15 penetrating at least partially through the thickness of
the laminate to enable separation thereof into segments
of individual blister packages, without affecting the
integrity of the packages.

20 BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing objects and other advantages and
features of the invention may now be more readily
ascertained from the following detailed description of a
preferred embodiment thereof, taken in conjunction with
25 the accompanying drawings; in which:

Figure 1 illustrates, in a perspective view,
an array constituted of a plurality of blister packages
detachably interconnected by a single label-forming
laminated material, each package containing respectively
30 one contact lens immersed in a sterile aqueous solution;

1 Figure 2 illustrates a perspective view of one
of the blister packages of Fig. 1, shown as having been
separated from the array of blister packages;

5 Figure 3 illustrates the base member of the
blister package of Fig. 2, with the cover sheet having
been peeled off therefrom to enable access to a contact
lens contained in a cavity formed in the base member of
the blister package;

10 Figure 4 illustrates a perspective view, on an
enlarged scale, the laminated material covering for the
array of blister packages of Fig. 1, showing the
imprinting on the outer layer of the laminate;

15 Figure 5 illustrates, on an enlarged scale, a
sectional view through an exemplary laminated material,
taken along line 5 - 5 in Fig. 4, showing a micro-
perforation extending therethrough;

20 Figure 6 illustrates, generally
diagrammatically, a partially through-extending micro-
perforation as imparted to the laminated material in
order to produce weakening lines therein enabling
separation of the foil into segments therealong;

25 Figure 7 schematically illustrates a side view
of an apparatus for imparting the micro-perforations as
in Fig. 6 to the laminated material to produce the
weakening lines;

30 Figure 8 illustrates a typical perforating
blade employed in the apparatus of Fig. 7; and

 Figure 9 illustrates another blade structure
for producing the micro-perforations in the laminate as
shown in Fig. 5.

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DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

Referring now in more specific detail to the drawings, and in particular to Figures 1 to 3, there is illustrated an array of blister packages constructed pursuant to the present invention.

In essence, Fig. 1 illustrates the array of packaging arrangements 10 as consisting of a plurality of interconnected blister packages 12, wherein each blister package 12, as represented in further detail in Figs. 2 and 3 of the drawings, includes a base member 14 consisting of a planar essentially rectangularly-shaped flange 16 having an integral depending wall portion 18 at one edge thereof. Offset towards an opposite edge 20 of the flange 16, a cavity 22 is formed in the flange which may be of an essentially semispherical configuration, generally in conformance with the curvilinear shape of a contact lens (not shown) although numerous other changes readily lend themselves to the invention, adapted to be stored therein in a sealed condition while immersed in a suitable sterile aqueous solution. The height of the wall portion 18 depending from the planar flange 16 is somewhat analogous to the height or depth of the cavity 22 containing the contact lens.

Hereby, the base member 14 of each so-called blister package 12 is constituted from an injection-molded or thermoformed plastic sheet material; for instance, such as polypropylene, in a manner similar to that described in U.S. Patent No. 4,691,820 to Martinez; which is assigned to the common assignee of the present application.

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Positioned to extend over the base members 14 of the plurality of blister packages 12, in this case forming an array 10 of five (5), is a unitary label-forming and imprinted flexible cover sheet 24, as shown in detail in Figs. 4 through 6, having a series of parallel spaced weakening lines 26, such as perforations, discontinuous slits or the like, as described more specifically hereinbelow, provided to extend between each of the adjacently located base members 14, so as to enable suitable detachment from the array 10 of individual or single blister packages 12 each containing a single contact lens without affecting the integrity of the packages, as shown in Fig. 2, by tearing off a segment along a weakening line 26, in accordance with the need of a user. The flexible laminated material cover sheet 24 is adhesively fastened to suitable regions of the surface of the flanges 16 of the blister packages 12 facing the cover sheet, such as by heat sealing, so as to at least encompass each cavity 22 containing a contact lens immersed in the sterile aqueous solution, and to provide a sealing containment for each contact lens in its respective cavity. Other sealing locations may also be provided at locations as desired between the surface of the flexible cover sheet 24 facing the surface of the flange 16 so as to provide adequate regions of adherence therewith, while permitting various edge portions between these components 16, 24 to remain unattached to facilitate a finger-gripping engagement for separating or peeling off the severed segment of cover sheet from the detached base member 14 in order to gain access to the contact lens which is contained in the respective cavity 22 thereof.

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The flexible cover sheet 24 is preferably constituted of a laminated foil structure possessing a polyester film on at least one external surface thereof adapted to contact the facing surface of the flange 36 so as to enable adhesive or heat-sealing bonding therewith, as mentioned hereinabove. However, in lieu of the foil there can be employed other materials, such as a layer of silicon oxide (SiO_2) while the polyester fiber may be replaced by a suitable polyolefin. The laminate constituting the flexible cover sheet 24 may be of a multi-layered laminate construction having suitable double-sided imprinting provided on the outer layer of polyester.

More specifically, the multi-layered laminate 24 is constituted of a plurality of layers of various materials which are adhesively secured or bonded to each other, as shown in detail in Figs. 4 through 6 of the drawings, by way of example.

Reverting to Fig. 5, the multi-layered laminate 24 includes an upper layer 30 constituted of a substantially transparent or translucent polyestric film material, for instance polyester, which has been previously lithographically imprinted via conventional

1 lithography on its lower surface 32 with suitable
indicia which may be in solid or colored halftones,
including reversely printed legends as required, and
which may also include a further color or print layer
5 therebeneath forming a colorated or contrasting
background, for instance, such as white or any other
suitable color. Inasmuch as the indicia of halftones
and the background beneath the polyester film web 30 are
printed on interior surface 32, upon viewing from the
10 outside towards the outer surface of the polyester film
web 24, as shown in Fig. 4 of the drawings, in view of
the transparency of the polyester film, visibly spread
over the surface of the laminate 24 spanning the entire
length of the array 10 are the various indicia and
15 legends which may be representative of the company name,
logo, various decorative and advertising matters and
printed information which is to be permanently provided
for products of this type in general, as desired.
Additionally, suitable print fields 32a, 32b and 32c may
20 be clearly ascertained and viewed from the exterior of
the film layer 30. Imprinted onto the surface of the
foil laminate 24 in superposition on the various print
fields 32a, 32b and 32c, is the necessary information as
required by FDA regulations specific to the lot, batch
25 number, fitting parameter and lens power applicable to
the product contained in the blister package. A foil
web 34, preferably consisting of aluminum, or
alternatively a barrier layer of silicon oxide among
other suitable materials, extends adjacent the lower
30 surface 32 of the polyester film and is adhesively
secured or bonded thereto through the interposition of

1 an adhesive layer constituted of a dry bonding adhesive
36, which may be polyurethane.

The other side or surface of the aluminum foil
web 34 (or silicon oxide) may also be coated with a
5 further adhesive layer 38 similar to that of adhesive
layer 36, and which is also constituted of polyurethane.
This adhesive is intended to provide an adhesive
connection or bond between the lower surface of the
aluminum foil web 34 and a further plastic film layer 40
10 which may be constituted of polypropylene, and which
provides for a good sealing adherence or bonding to the
plastic material of the injection-molded or thermoformed
plastic container or base members 14; for instance,
through heat sealing thereto or the like.

15 Prior to the forming of the adhesive bond
between the surface 32 of the upper polyester film layer
30 and the adhesive 36 in order to laminate the layer 30
to the aluminum foil web 34, (or silicon oxide layer),
suitable imprinting is implemented. This printing as
20 mentioned hereinbefore, is imparted to the lower surface
32 of the polyester film 30 in that indicia and legends,
as mentioned hereinbefore, are applied through
lithographic printing in suitable orientation such that
upon adhesive securing or bonding thereof to the foil
25 34, the imprinted indicia will be viewable through the
layer 30 from the top of the laminate 24 in the
correctly represented pattern thereof.

Pursuant to the inventive concept, in order to
thwart potential diverters, the pattern of the
30 permanently printed information on the lower surface 32
of the polyester film layer 30 is spread across the

1 length of the laminated foil 24 extending the full
length of the array 10 such that specific information,
such as manufacturer's addresses and names, logos,
product information of a permanent nature and the like
5 overlap the weakening lines 26 formed in the flexible
laminated foil 24; in effect, extend on both sides
thereof above adjacent base members forming contiguously
arranged blister packages 12 in conjunction with the
overlying label-forming laminated foil, whereby
10 separation of any particular blister package by
detaching along a weakening line will provide visual
information to a user that, possibly, the product has
been unlawfully converted so as to represent a similar,
but essentially more expensive product, such as a
15 reusable rather than disposable contact lens. The
pattern of printing of information a permanent nature
which is not easily accessible from the exterior of the
laminated foil, inasmuch as this printing is on the
interior surface 32 of the outer plastic film material
20 30 which is adhesively fastened or bonded to the foil
web 34, can only be tampered with by destroying the foil
web. Thus, when separated, the individual package will
no longer be in conformance with applicable FDA
regulations inasmuch as the complete identity of the
25 manufacturer will no longer be on the separated blister
package. This, in effect, will then quite readily
provide a conversion-resistant contact lens blister
package 12, in which the specially imprinted and
configured label in the form of the laminated foil is
30 intended to securely thwart converters.

1 The changeable information with regard to the
product contained in each blister package, such as lot
numbers, expiration dates and contact lens power, may be
separately printed within the printing areas 32a, 32b
5 and 32c on the external surface of the plastic film web
30.

 A further aspect of the invention, as shown in
Figs. 6 through 9 of the drawings relates to the
formation of micro-perforations 50 in the flexible
10 laminated foil 24 so as to form the weakening lines 26
enabling separation of portions 24a of the flexible
laminated foil together with the thereto adhered base
member 14, each jointly constituting an individual
blister package 12 from the remaining array 10.

15 The novel micro-perforations may be imparted
to the lower plastic film material layer normally
constituted of polypropylene which is adapted to be
sealed to the base member of each blister package of the
array 10. The micro-perforations, which as shown in
20 Fig. 6, may be imparted to the lower portion of the
flexible foil laminate extend through the lower
structure of the foil label without cutting into the
outer polyester film layer 30.

 The micro-perforation concept is employed
25 inasmuch as the polypropylene layer 40 below the foil
web 34, wherein the polypropylene layer is bonded to the
base members 14 is essentially very strong and
stretchable material, and is difficult to tear. In
contrast therewith, the outer polyester layer 30 which
30 is located on top of the foil web 34 is strong, but is
inherently relatively brittle in nature. The forming of

1 partially inwardly-extending slits to produce the micro-
perforations forming the weakening lines 26 will not cut
through the thickness of the laminated foil, as clearly
shown in Fig. 6 of the drawings. However, as shown in
5 Fig. 5, the micro-perforations may also extend through
the entire thickness of the laminate from the exterior
thereof, as imparted thereto by the knife, illustrated
in Fig. 9 of the drawings.

As schematically illustrated in Figs. 7 and 8,
10 there is disclosed an apparatus 60 including a cutting
disc 62, or in effect, a plurality of cutting discs
spaced commensurate with the number of parallel
weakening lines 26 which have to be formed in the
laminate 24 to provide such weakening lines across the
15 width or length of the array 10 intermediate the base
members 14. As illustrated in Fig. 8, this disc 62 may
be a conventional cutting blade possessing 40 blades to
the inch. Ordinarily, the blades may be urged against
an anvil by means of an air cylinder which pushes the
20 blades into the lower face of the laminated material 24,
i.e. through layer 40 and into web 34. The pressure in
the air cylinder may govern the depth of the cut
producing the micro-perforations, to a depth generally
one-half the thickness of the laminate material 24, and
25 an off-line destructive test may be employed to adjust
the air pressure as the blades dull during continued use
in order to maintain control over the depth of the cut.

Alternatively, as illustrated schematically in
Fig. 9 of the drawings, there can be employed a flying
30 knife 70 which is aligned on a cylindrical drum along the
longitudinal axis of the cylinder and which cooperates

1 with a suitable cylindrical anvil. As the label-forming
laminate 24 passes through the drum, the longitudinal
knife cuts through the thickness of the laminate, as in
Fig. 5. This knife may be designed to perforate four
5 label-forming laminate segments in sequence and then
skip over a fifth inasmuch as the fifth cut would
represent a complete severance of the label which is to
be formed for the array 10 from the spooled supply of
label material.

10 In essence, the present invention as described
hereinabove sets forth a novel concept in imprinting
labels constituted of laminated material webs forming
sealing covers for arrays of blister packages; and also
provides a novel concept in forming micro-perforations
15 in the laminated material.

The foregoing structure is easily and
completely packageable in cartons in a high-volume mass-
production process. Moreover, the invention facilitates
the user-friendly handling and storage of large numbers
20 of contact lenses by physicians and patients in a highly
organized and convenient manner.

While there has been shown and described what
are considered to be preferred embodiments of the
invention, it will, of course, be understood that
25 various modifications and changes in form or detail
could readily be made without departing from the spirit
of the invention. It is, therefore, intended that the
invention be not limited to the exact form and detail
herein shown and described, nor to anything less than
30 the whole of the invention herein disclosed as
hereinafter claimed.

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The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A laminated material structure comprising a unitary label and covering for an array of a plurality of contiguously arranged containers, said laminated material structure being separable into a plurality of segments each forming a sealing cover for respectively one of said containers, said material structure having an outer layer imprinted with a specified pattern of indicia and legends extending over the surface spread of the array such that separation of one or more segments of said material structure and therewith associated container from said array provides visual evidence of separation from said array upon inspection of said printing pattern.

2. A laminated material structure as claimed in Claim 1, wherein said outer layer comprises a plastic film material having a surface adhesively fastenable to a facing surface of a web, said pattern of specified indicia and legends being imprinted on the surface of said film material facing said web.

3. A laminated structure as claimed in Claim 2, wherein weakening lines are formed in said laminated material structure to facilitate separation into said segments, said pattern of indicia and legends being printed on the material structure extending over said weakening lines such that predetermined regions of said printing are divided at said weakening lines to form indication of discontinuities in said printing pattern upon separation of said segments.

4. A laminated structure as claimed in Claim 3, wherein said weakening lines comprise micro perforations cut to at

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least a depth into said laminated material opposite the side to which said outer layer of plastic film material is adhesively fastened to said web.

5. A laminated structure as claimed in Claim 4, wherein said perforation extend through said laminated material.

6. A laminated structure as claimed in Claim 2, wherein said plastic film material layer is constituted of a polyolefin.

7. A laminated structure as claimed in Claim 2, wherein said web is constituted of aluminum or of a silicon oxide layer.

8. A laminated structure as claimed in Claim 2, wherein said plastic film material layer is imprinted on both surfaces thereof, an outer surface of said film layer opposite said imprinted surface being imprinted with further indicia at specific regions over each respective container.

9. A laminated structure as claimed in Claim 8, wherein said further indicia is imparted to the outer surface of said plastic film material layer by thermal transfer printing.

10. A laminated structure as claimed in Claim 4, wherein said web has a further plastic film material layer adhesively fastened to the surface of said web opposite the surface having the outer plastic film material layer adhesively fastened thereto.

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11. A laminated structure as claimed in Claim 10, wherein said further plastic film material layer is constituted of oriented polypropylene.

12. A laminated structure as claimed in Claim 10, wherein said containers are constituted of plastic material, and a releasable heat seal is formed between each said container and said further plastic film material layer.

13. A laminated structure as claimed in Claim 10, wherein said micro-perforations extend through said further plastic film material layer into said web.

14. A laminated structure as claimed in Claim 1, wherein each said container comprises an injection molded or thermoformed plastic base member of a blister package having a cavity for the sealed containment of a hydrophilic contact lens in a sterile aqueous solution.

15. A laminated structure as claimed in Claim 14, wherein said cavity of each said base member is in sealing engagement with a superimposed segment of said laminated structure.

16. A laminated structure as claimed in Claim 3, wherein said weakening lines each comprise microperforations extending at least partially through said laminated material structure to enable separating said structure into said segments along said weakening lines, said segments each forming a cover for respectively one said container.

17. A laminated structure as claimed in Claim 1, wherein said array of contiguously arranged containers comprises a linear array consisting of a specified number of said

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containers, said laminated material structure having a generally rectangular configuration covering said array.

18. A laminated structure as claimed in Claim 1, wherein said printing pattern of indicia and legends is configured to form a protective printing pattern inhibiting misrepresentation of product in said containers by a converter.

19. A laminated structure as claimed in Claim 1, wherein said printing pattern is applied to said outer layer by lithographic printing.

20. A packaging arrangement for the sealed containment of a plurality of hydrophilic contact lenses each in a sterile aqueous solution; comprising:

(a) a plurality of molded plastic base members contiguously positioned in an array, each said base member having a cavity for containing one contact lens immersed in said aqueous solution, each said base member including a flange extending outwardly about the periphery of said cavity, and a flap extending from said flange; and

(b) a laminate comprising a unitary flexible cover sheet extending superimposed over said plurality of base members and detachably sealed to the surface of said flanges at least about the rim of each said cavity, said cover sheet comprising an outer layer imprinted to define a specified pattern of indicia and legends extending over the surface thereof, said laminate being separable into segments each forming a

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cover for respectively one therewith associated base member, whereby separation of at least one said segment from the remaining laminate provides visual evidence of separation from said array upon inspection of said printing pattern.

21. A packaging arrangement as claimed in Claim 20, wherein said outer layer comprises a plastic film material having a surface adhesively fastenable to a facing surface of a web, said pattern of specified indicia and legends being imprinted on the surface of said film material facing said web.

22. A packaging arrangement as claimed in Claim 21, wherein weakening lines are formed in said laminated structure to facilitate separation into said segments, said pattern of indicia and legends being printed on the structure extending over said weakening lines such that predetermined regions of said printing are divided at said weakening lines to form indication of discontinuities in said printing pattern upon separation of said segments.

23. A packaging arrangement as claimed in Claim 22, wherein said weakening lines comprise microperforations cut to extend at least partially through said laminate material opposite the side to which said outer layer of plastic film material is adhesively fastened to said web.

24. A packaging arrangement as claimed in Claim 21, wherein said plastic film material layer is constituted of a polyolefin.

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25. A packaging arrangement as claimed in Claim 21, wherein said web is constituted of aluminum or of a silicon oxide layer.

26. A packaging arrangement as claimed in Claim 21, wherein said plastic film material layer is imprinted on both surfaces thereof, an outer surface of said film layer opposite said first imprinted surface being imprinted with further indicia at specific regions over each respective container.

27. A packaging arrangement as claimed in Claim 26, wherein said further indicia is imparted to the outer surface of said plastic film material layer by thermal transfer printing.

28. A packaging arrangement as claimed in Claim 23, wherein said web has a further plastic film material layer adhesively fastened to the surface of said web opposite the surface having the outer plastic film material layer adhesively fastened thereto.

29. A packaging arrangement as claimed in Claim 28, wherein said further plastic film material layer is constituted of oriented polypropylene.

30. A packaging arrangement as claimed in Claim 28, wherein said containers are constituted of plastic material, and a releasable heat seal is formed between each said container and said further plastic film material layer.

31. A packaging arrangement as claimed in Claim 28, wherein said micro-perforations extend through said further plastic film material layer into said web.

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32. A packaging arrangement as claimed in Claim 20, wherein each said container comprises an injection molded plastic base member of a blister package for the sealed containment of the hydrophilic contact lens in the sterile aqueous solution.

33. A packaging arrangement as claimed in Claim 32, wherein said cavity of each said base member is in sealing engagement with a superimposed segment of said laminate.

34. A packaging arrangement as claimed in Claim 22, wherein said weakening lines each comprise micro-perforations extending into said laminate to enable separating said laminate into said segments along said weakening lines, said segments each forming a cover for respectively one said container.

35. A packaging arrangement as claimed in Claim 20, wherein said array of contiguously arranged containers comprises a linear array consisting of a specified number of said containers, said laminate having a configuration covering said array.

36. A packaging arrangement as claimed in Claim 20, wherein said printing pattern of indicia and legends is configured to form a protective printing pattern inhibiting misrepresentation of product in said container by a diverter.

37. A packaging arrangement as claimed in Claim 20, wherein said printing pattern is applied to said outer layer by lithographic printing.

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38. A laminated structure as claimed in claim 2, wherein said plastic film material layer is constituted of polyester.

39. A packaging arrangement as claimed in claim 21, wherein said plastic film material layer is constituted of polyester.

FIG. 1

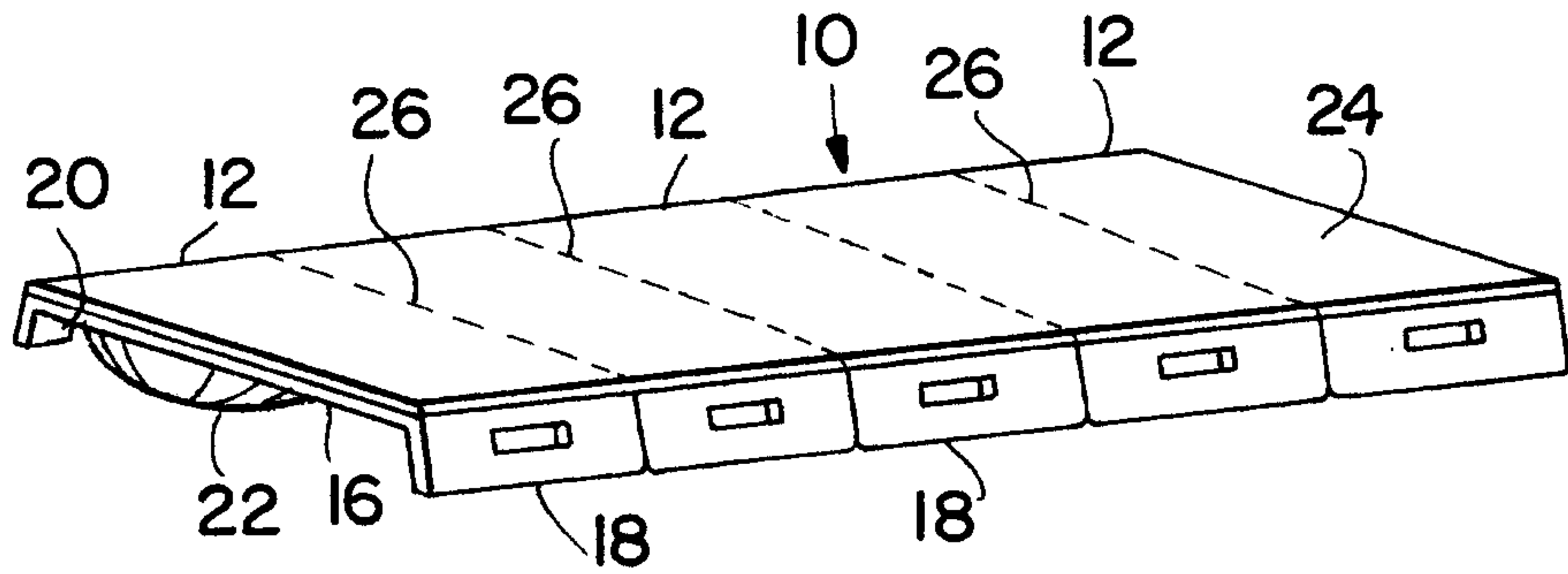


FIG. 2

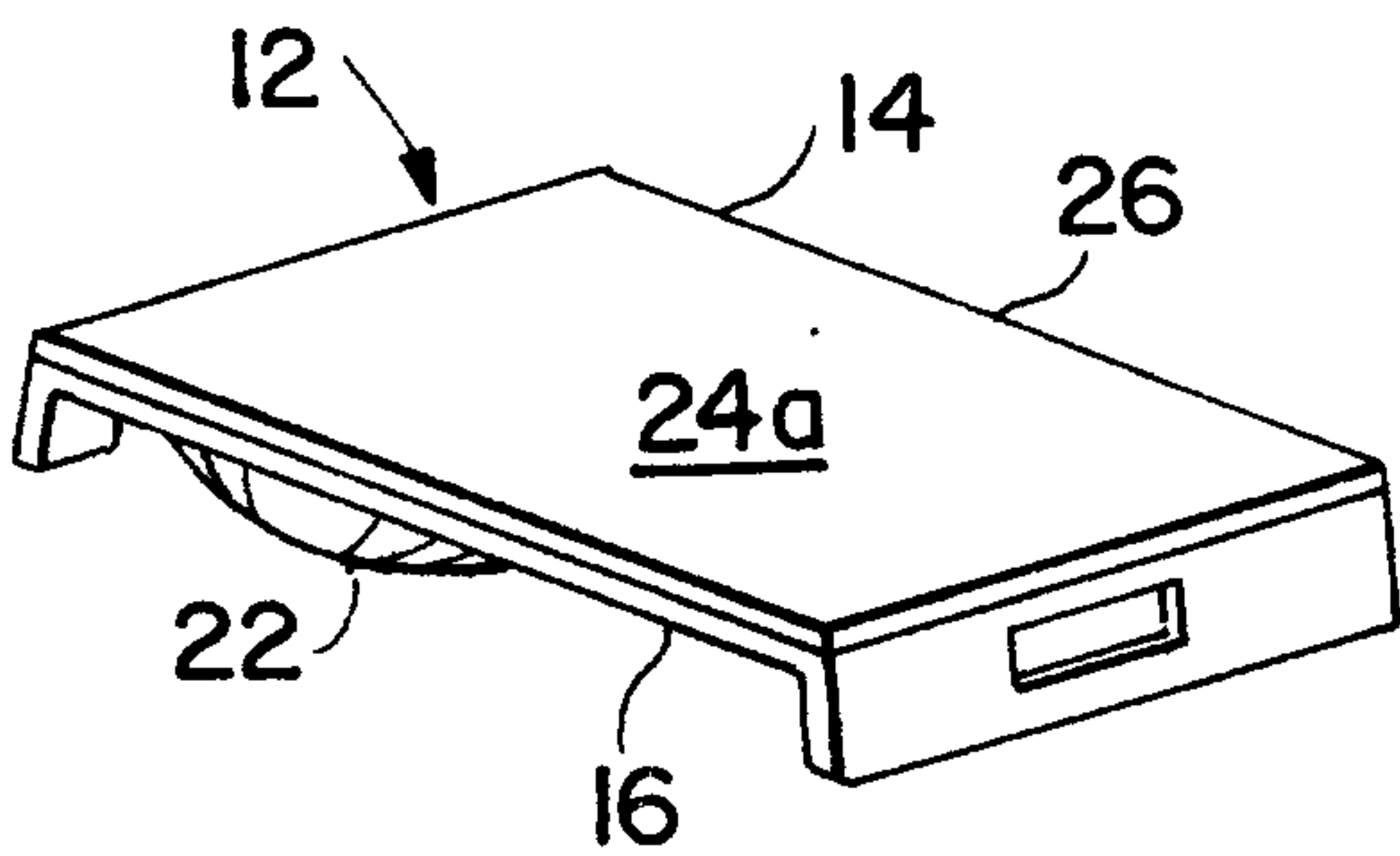


FIG. 3

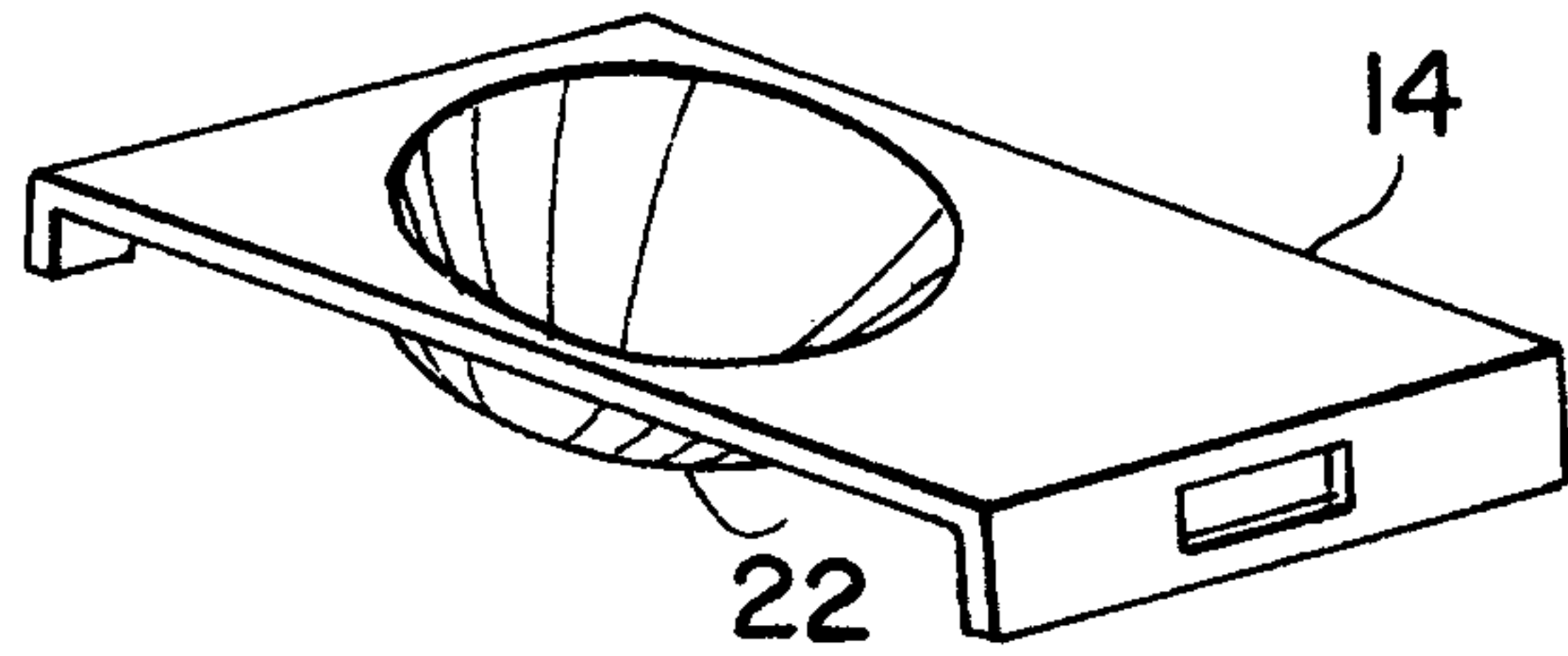
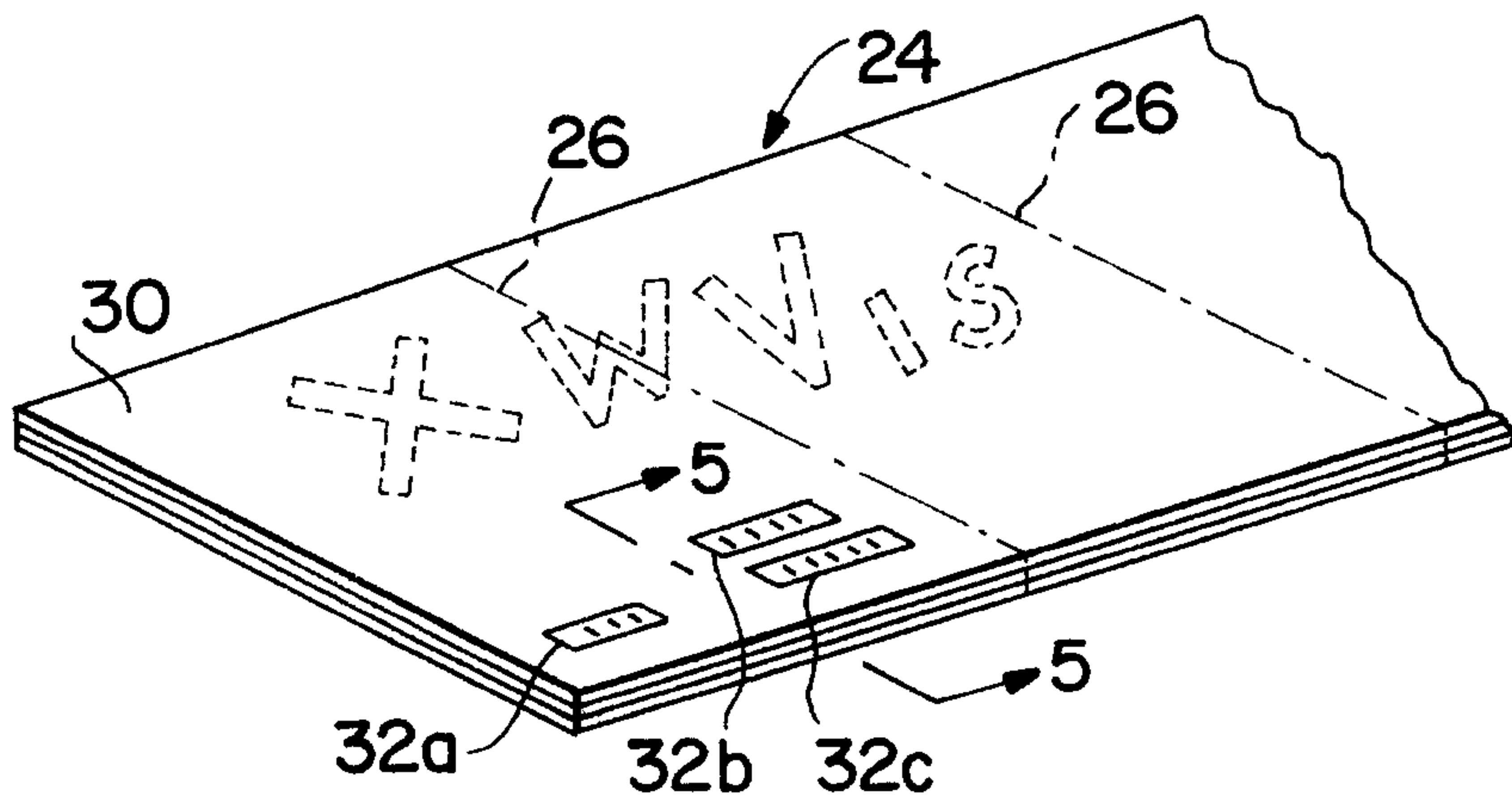


FIG. 4



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FIG. 5

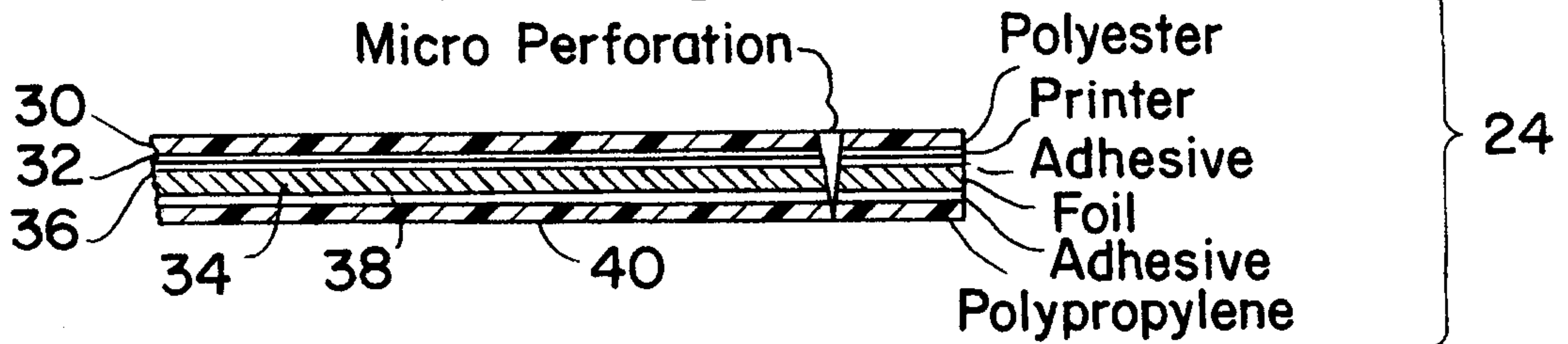


FIG. 6

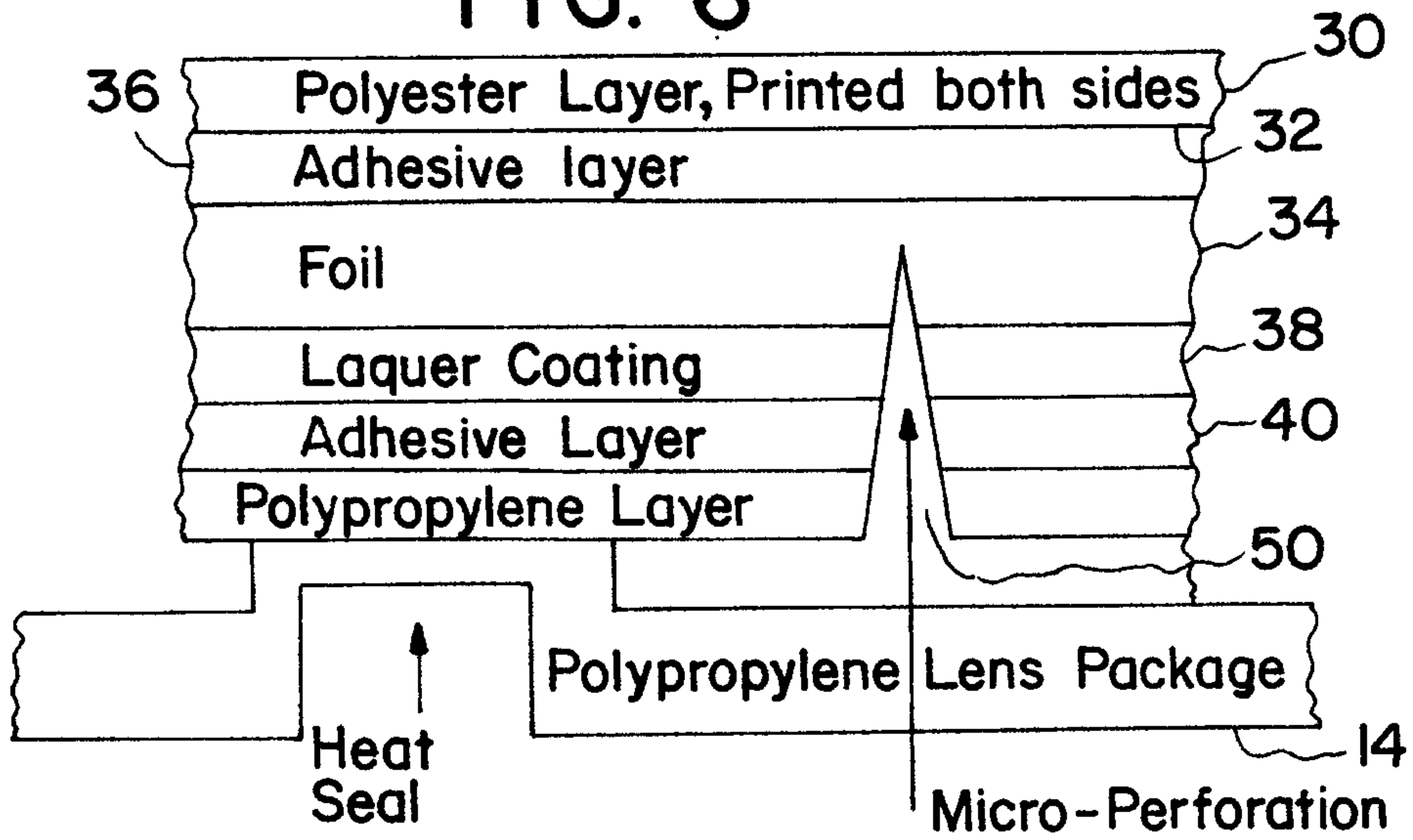


FIG. 8

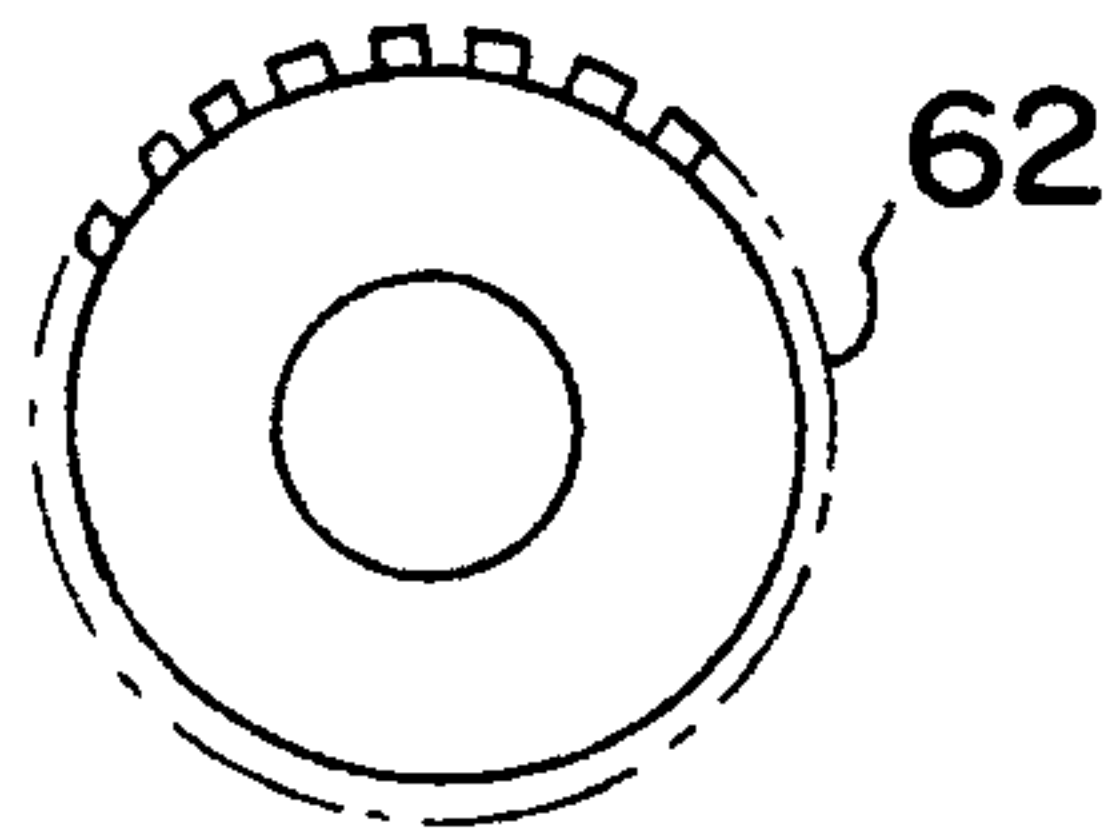
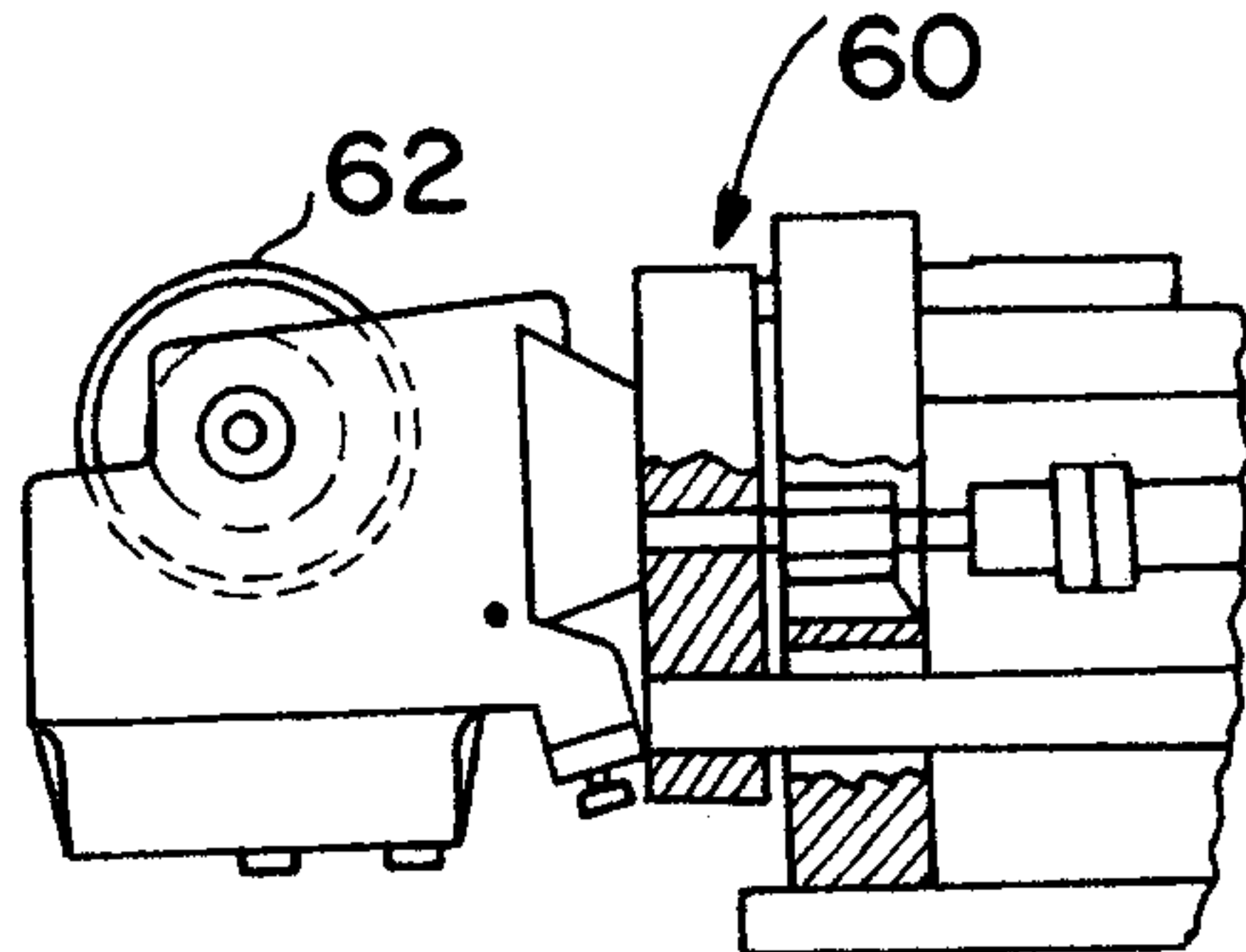


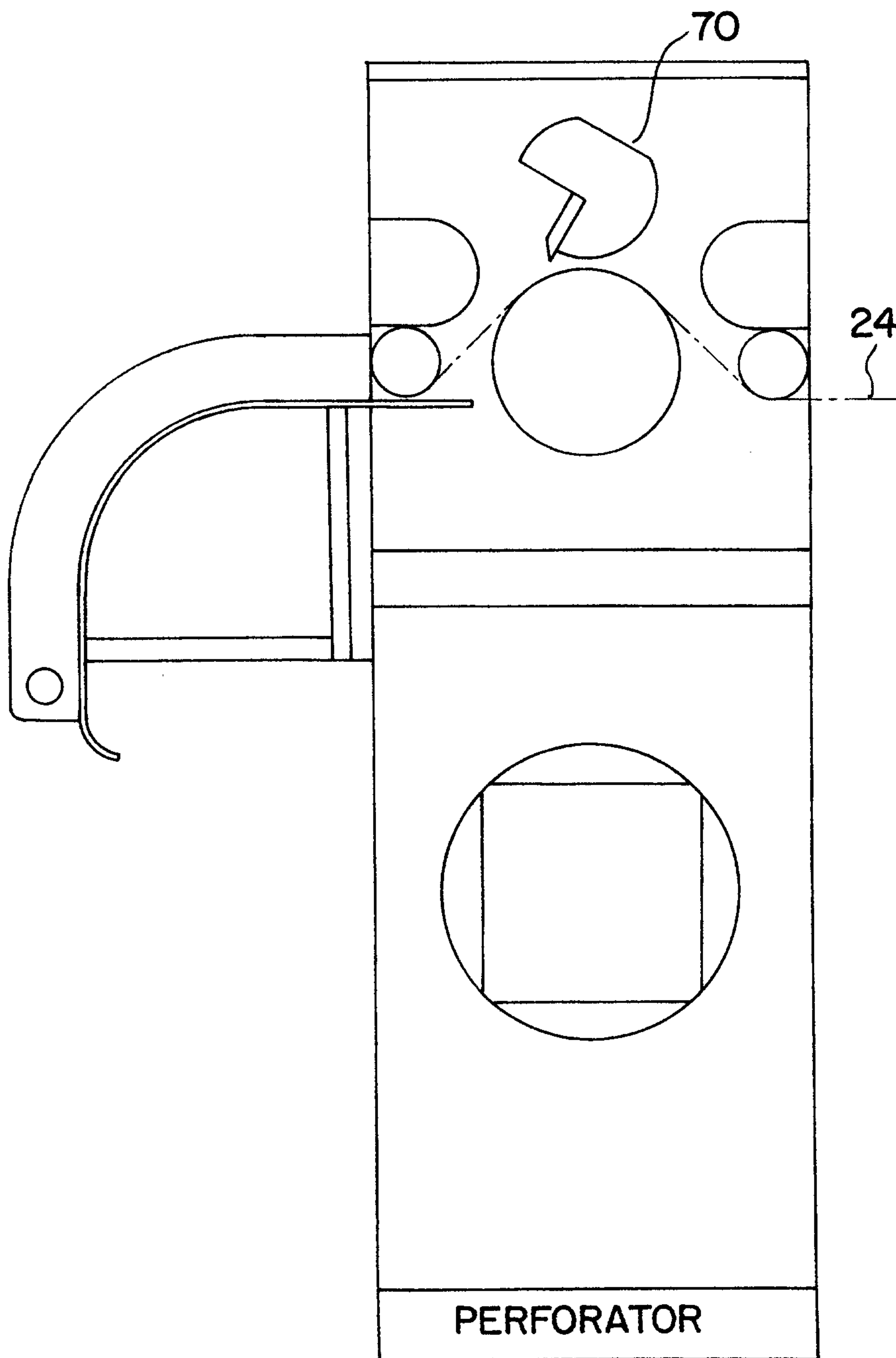
FIG. 7



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FIG. 9



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