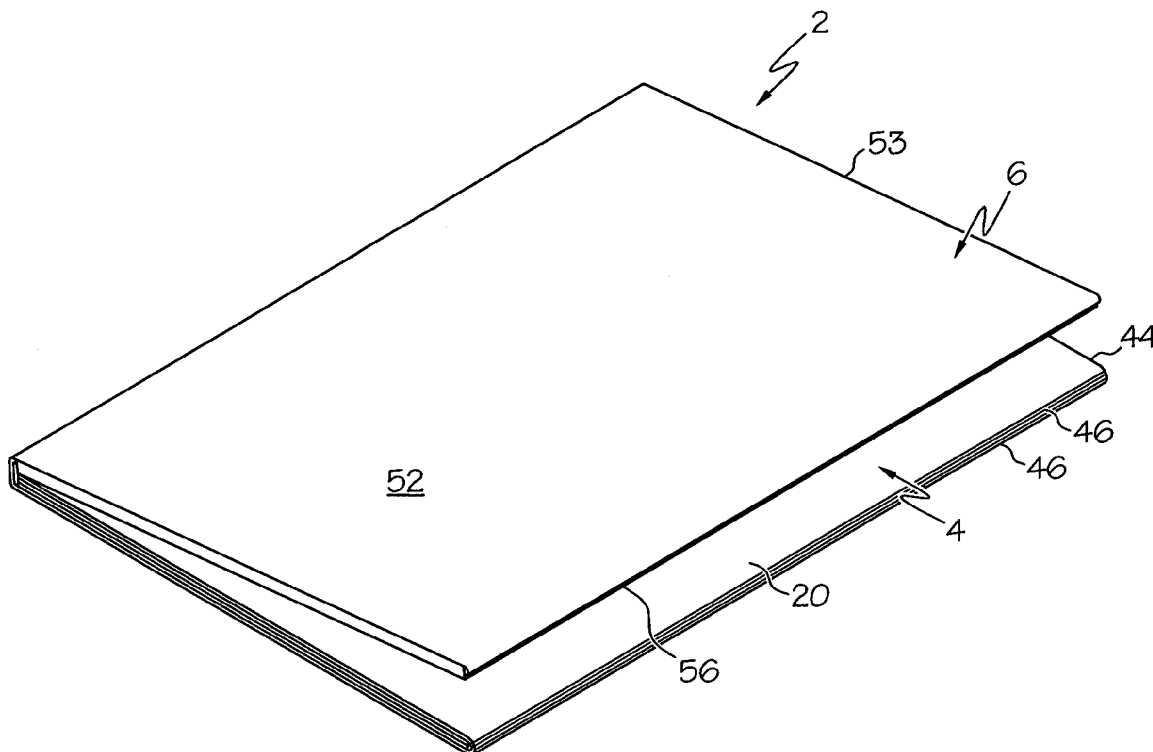




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(19) **United States**(12) **Patent Application Publication****Wynalda, JR. et al.**(10) **Pub. No.: US 2009/0194442 A1**(43) **Pub. Date: Aug. 6, 2009**(54) **MEDIA DISC CONTAINER WITH SLIDE-IN POCKET**(76) Inventors: **Robert M. Wynalda, JR.,**
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5, 2008.**Publication Classification**(51) **Int. Cl.**
B65D 85/57 (2006.01)(52) **U.S. Cl.** **206/308.1**(57) **ABSTRACT**

A media storage container has a sleeve defining a media disc holding pocket that holds the disc in an unstressed configuration. Compressible shoulders disposed at the neck of the pocket retain the media disc within the pocket. In one configuration, the container has a base that defines the pocket and a cover that pivots between open and closed configurations. In other configurations, the base having the disc pocket is carried within a sleeve. The media disc may be loaded and unloaded through an opening in the top or the side of the base. The base may optionally define a window that allows one or both of the major disc surfaces to be viewed and engaged by the user's finger without allowing the disc to be removed through the window.



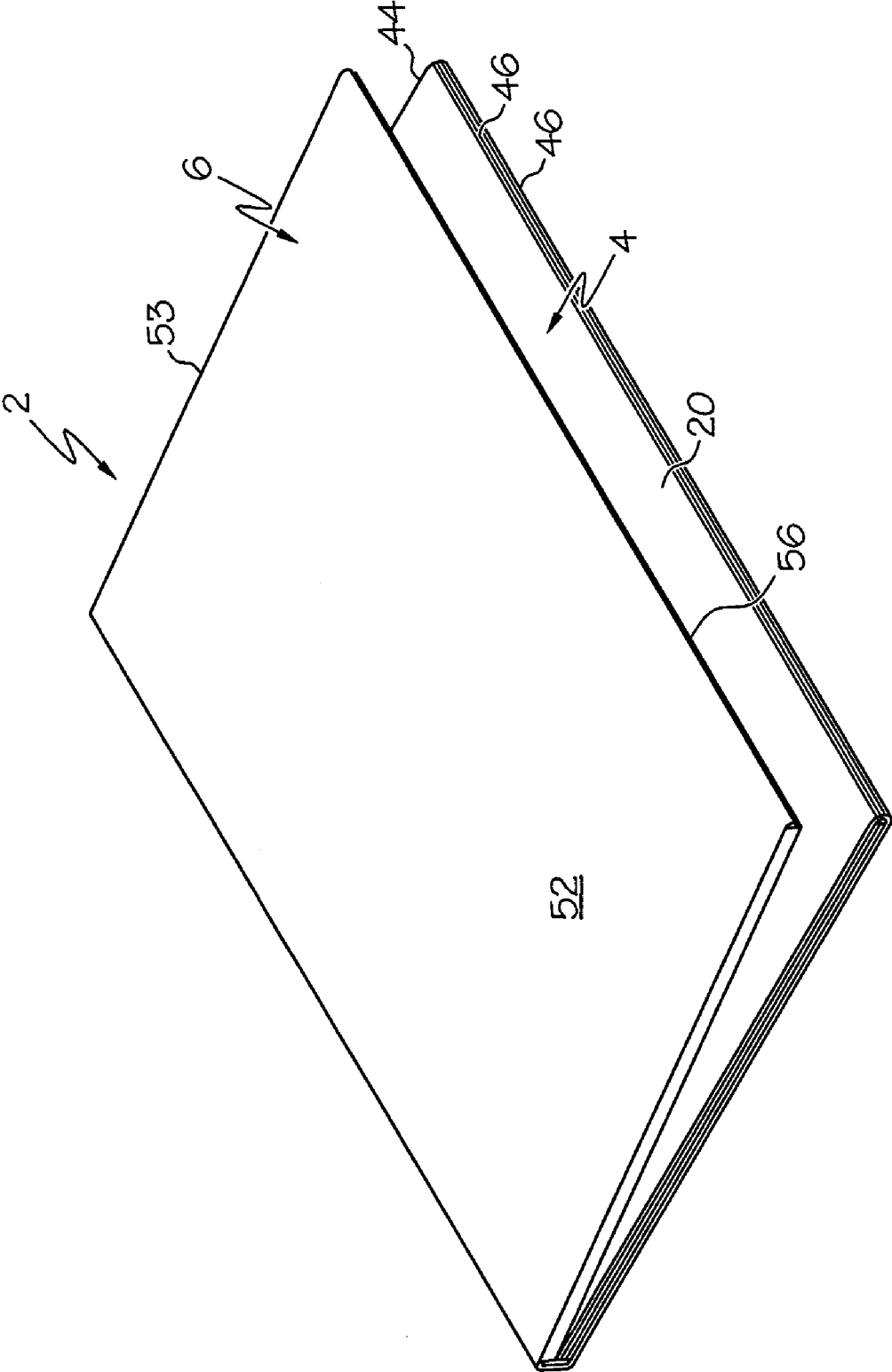


FIG. 1

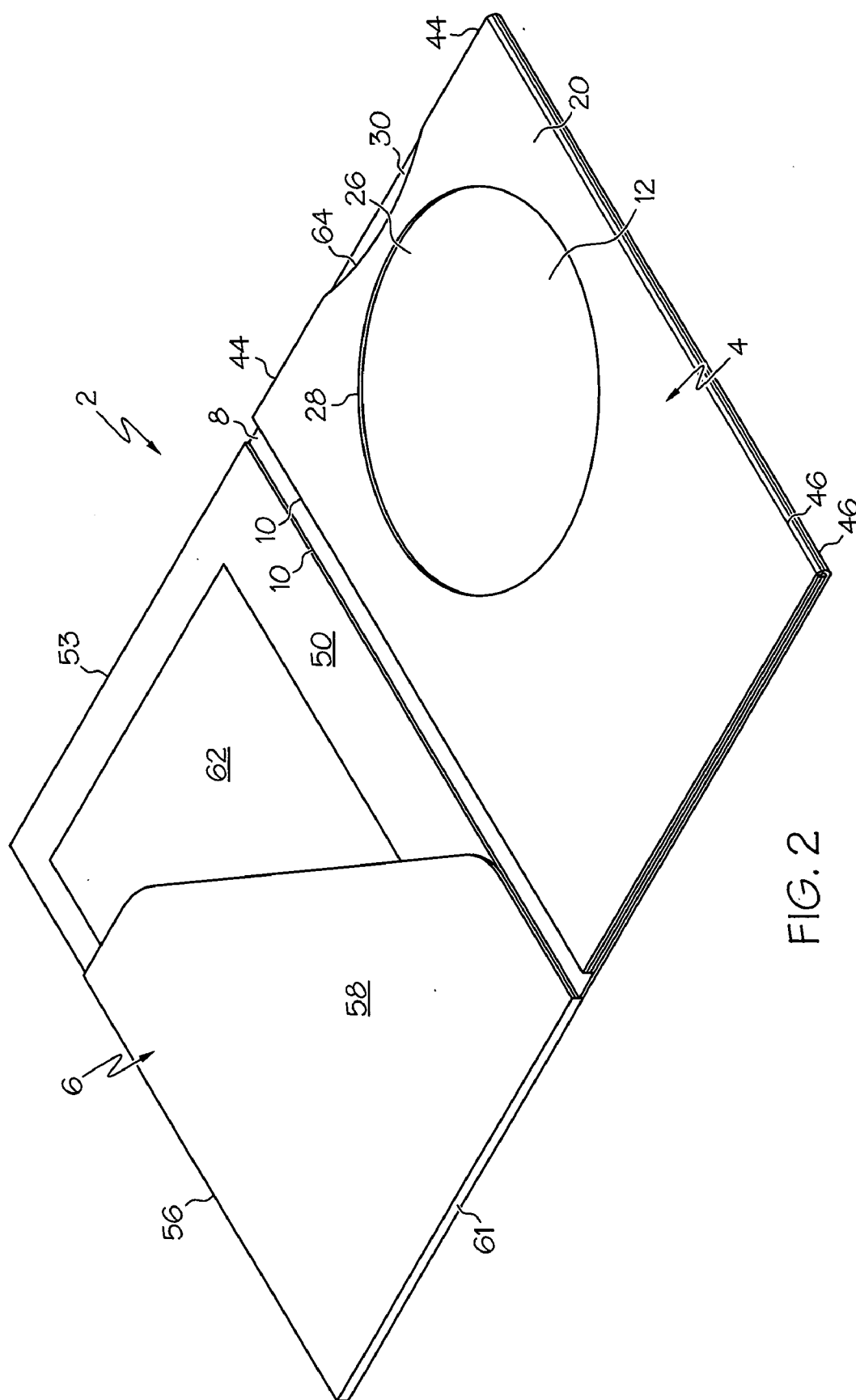


FIG. 2

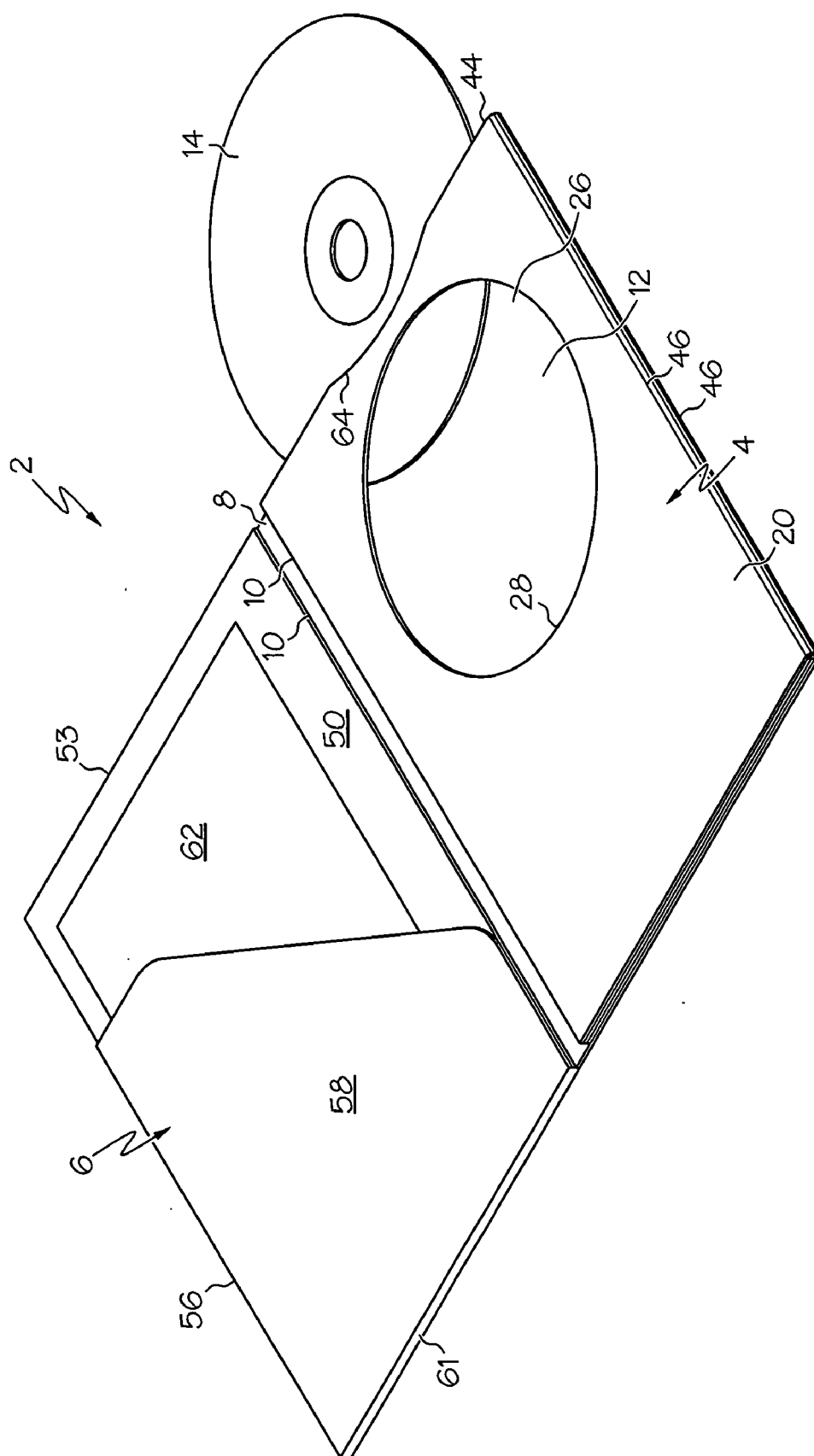
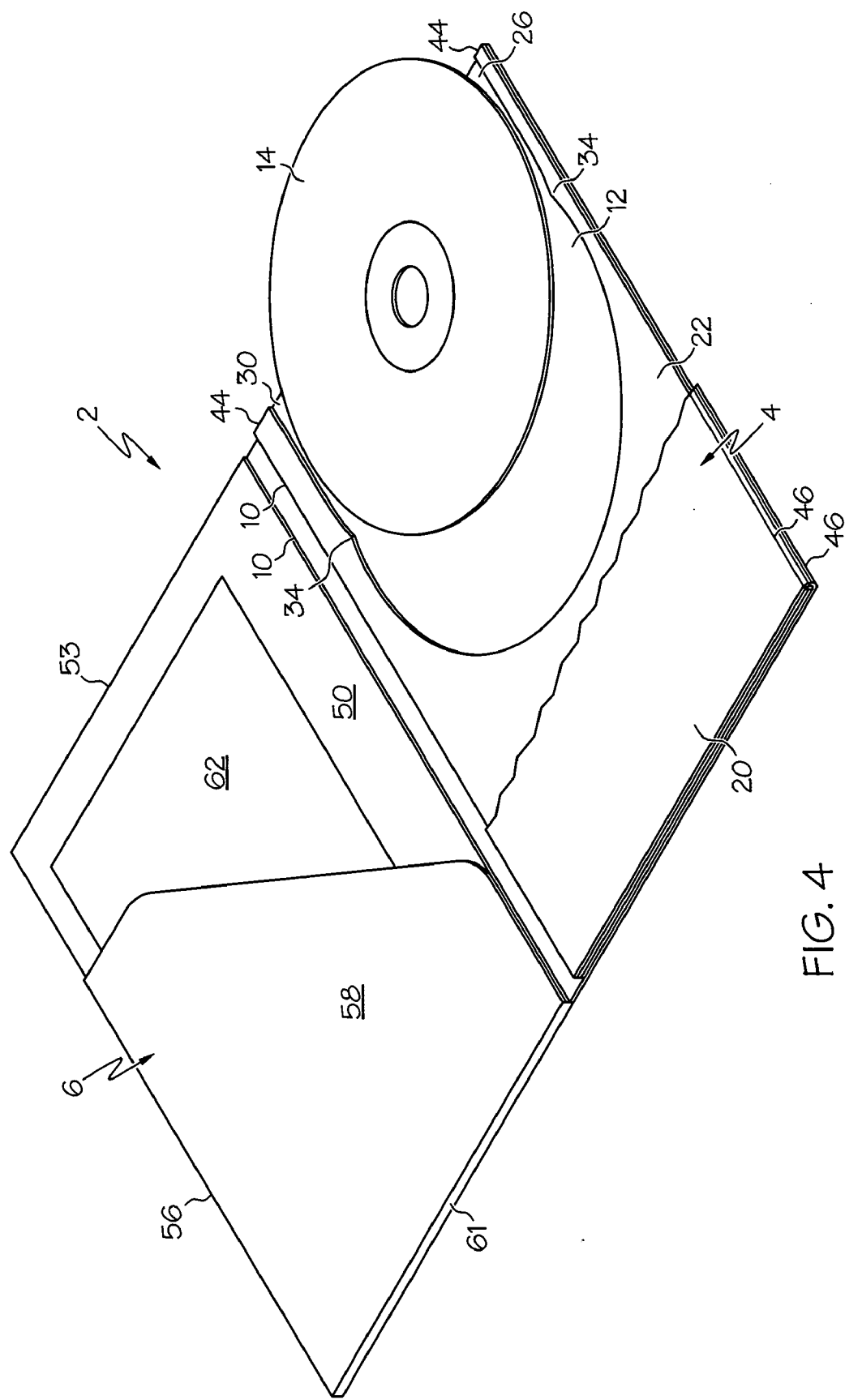


FIG. 3



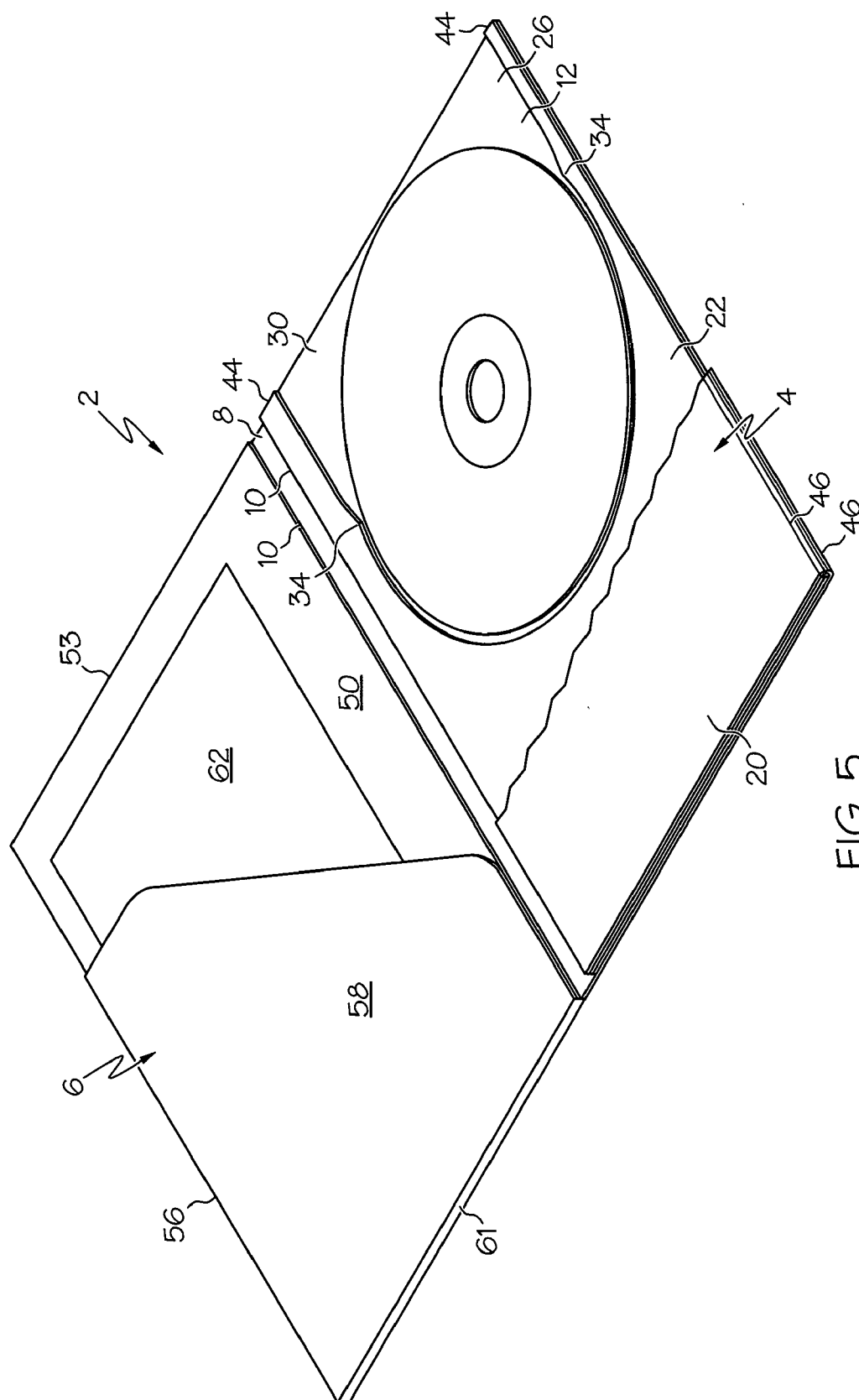


FIG. 5

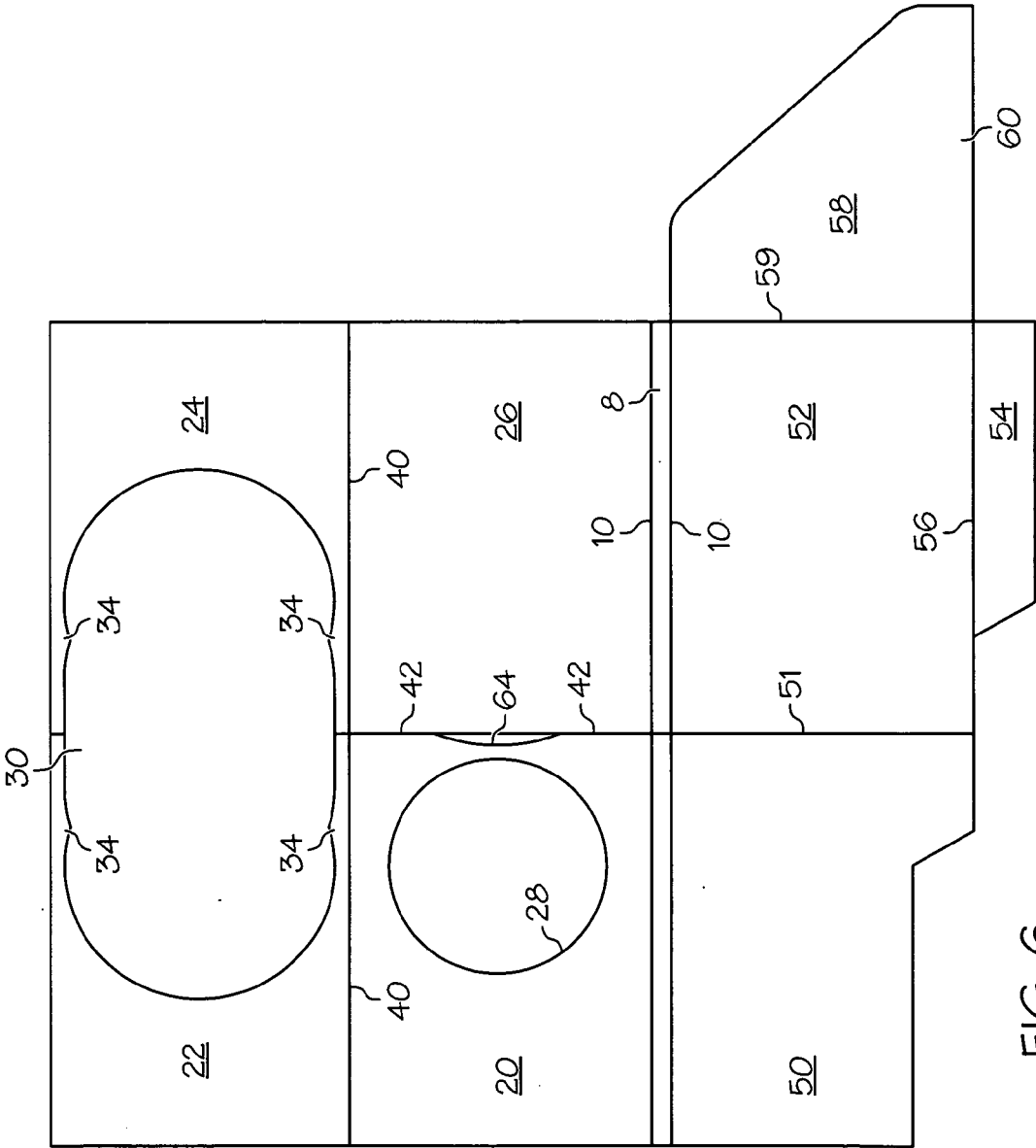


FIG. 6

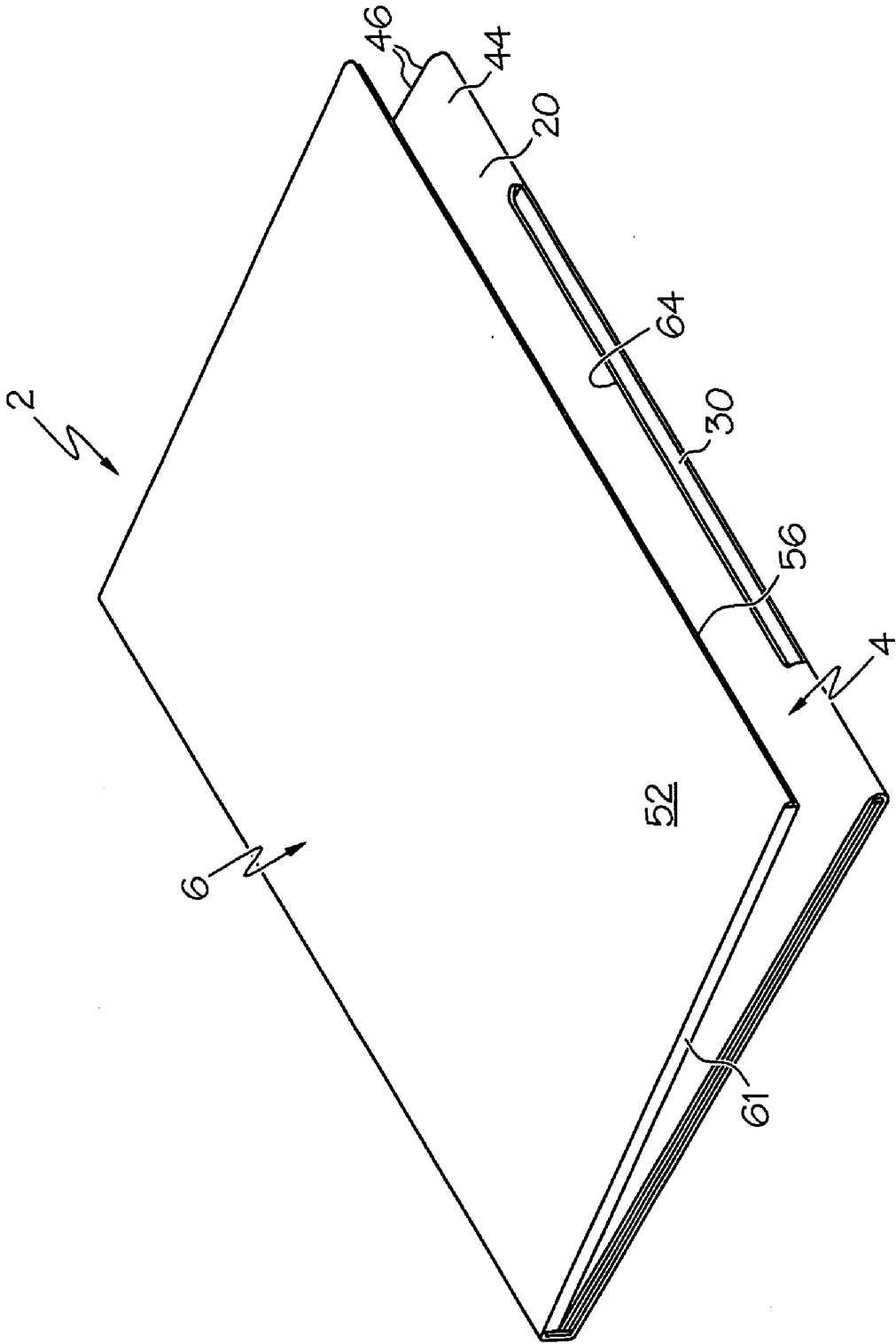
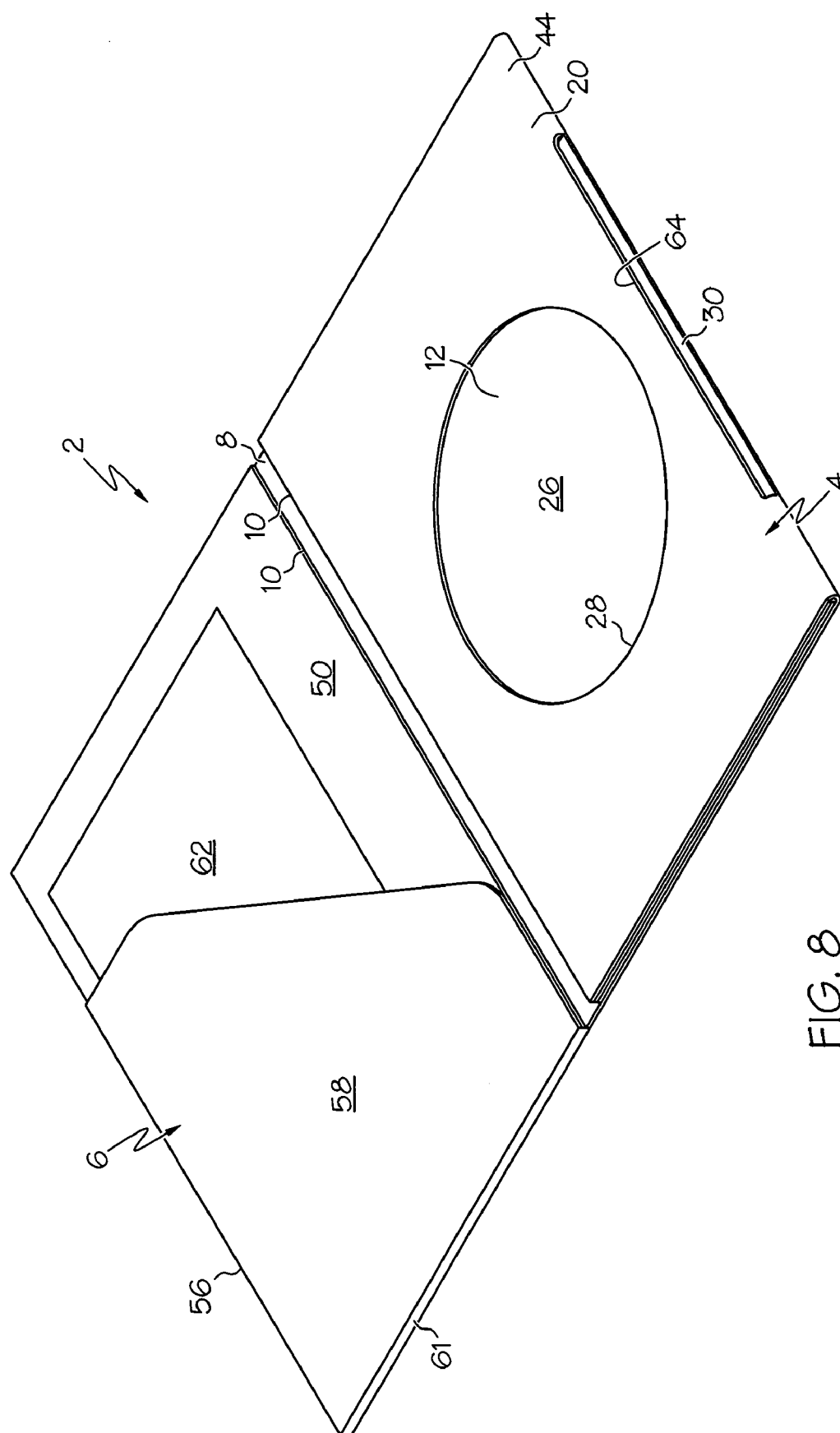
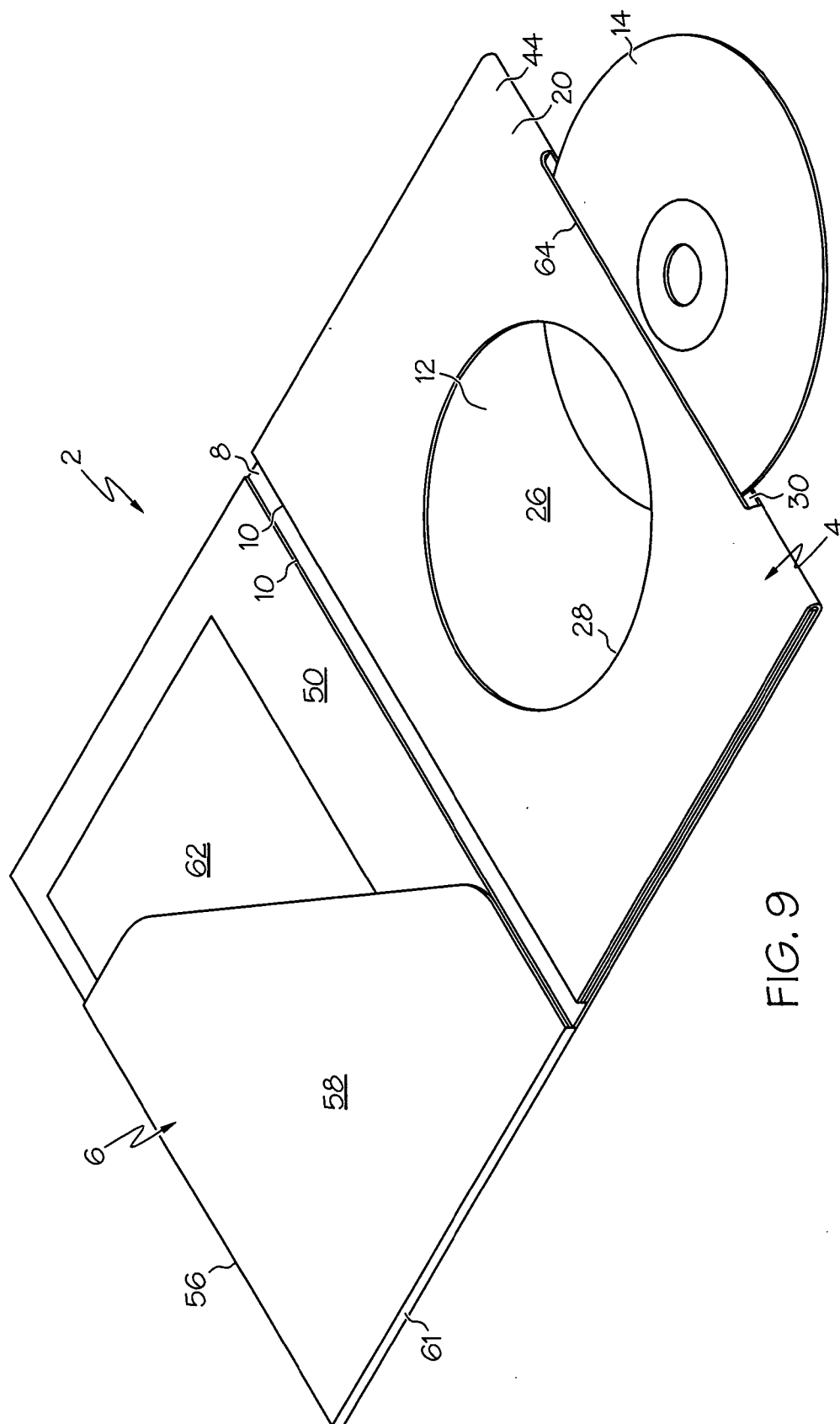


FIG. 7



F/G. 8



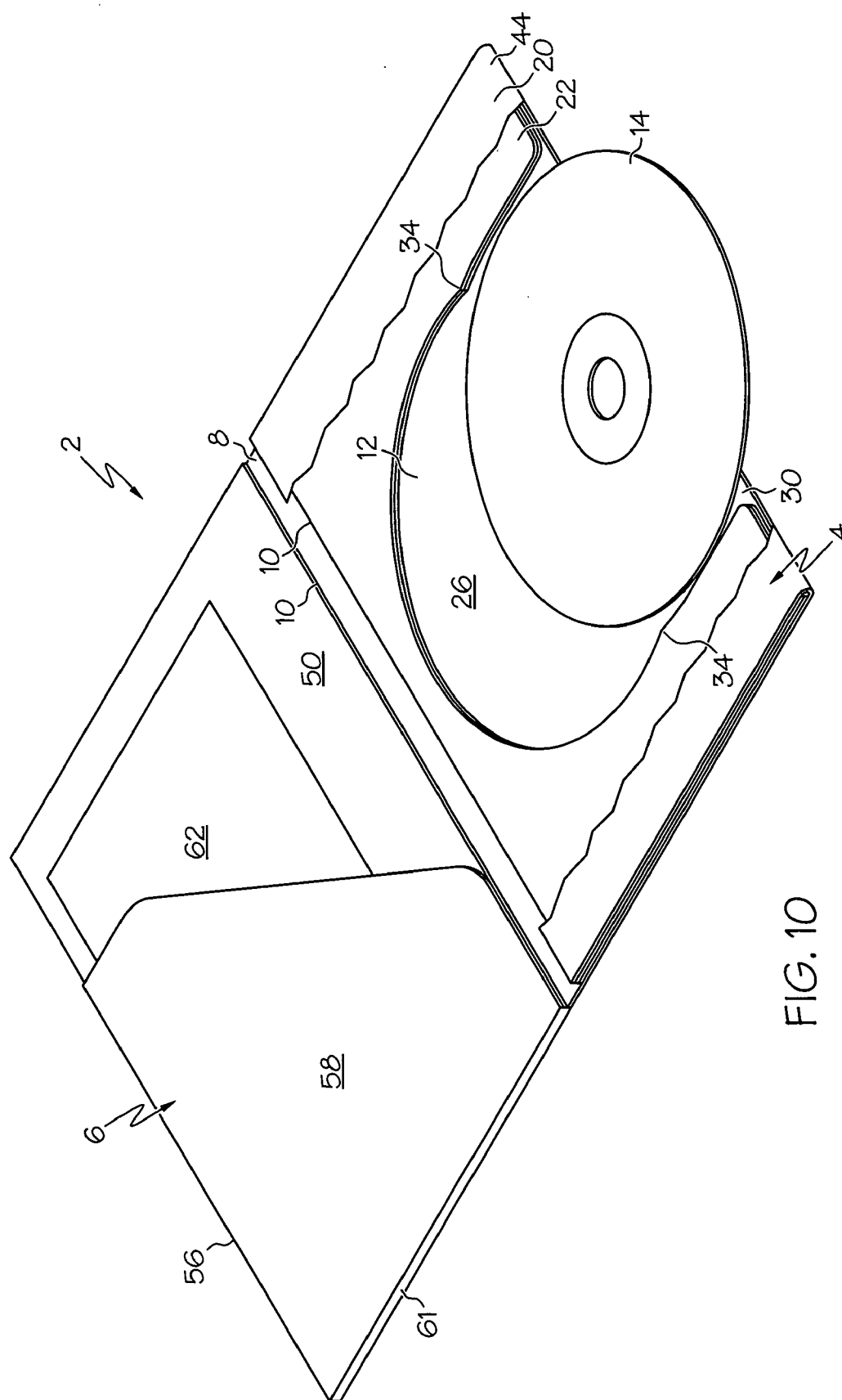


FIG. 10

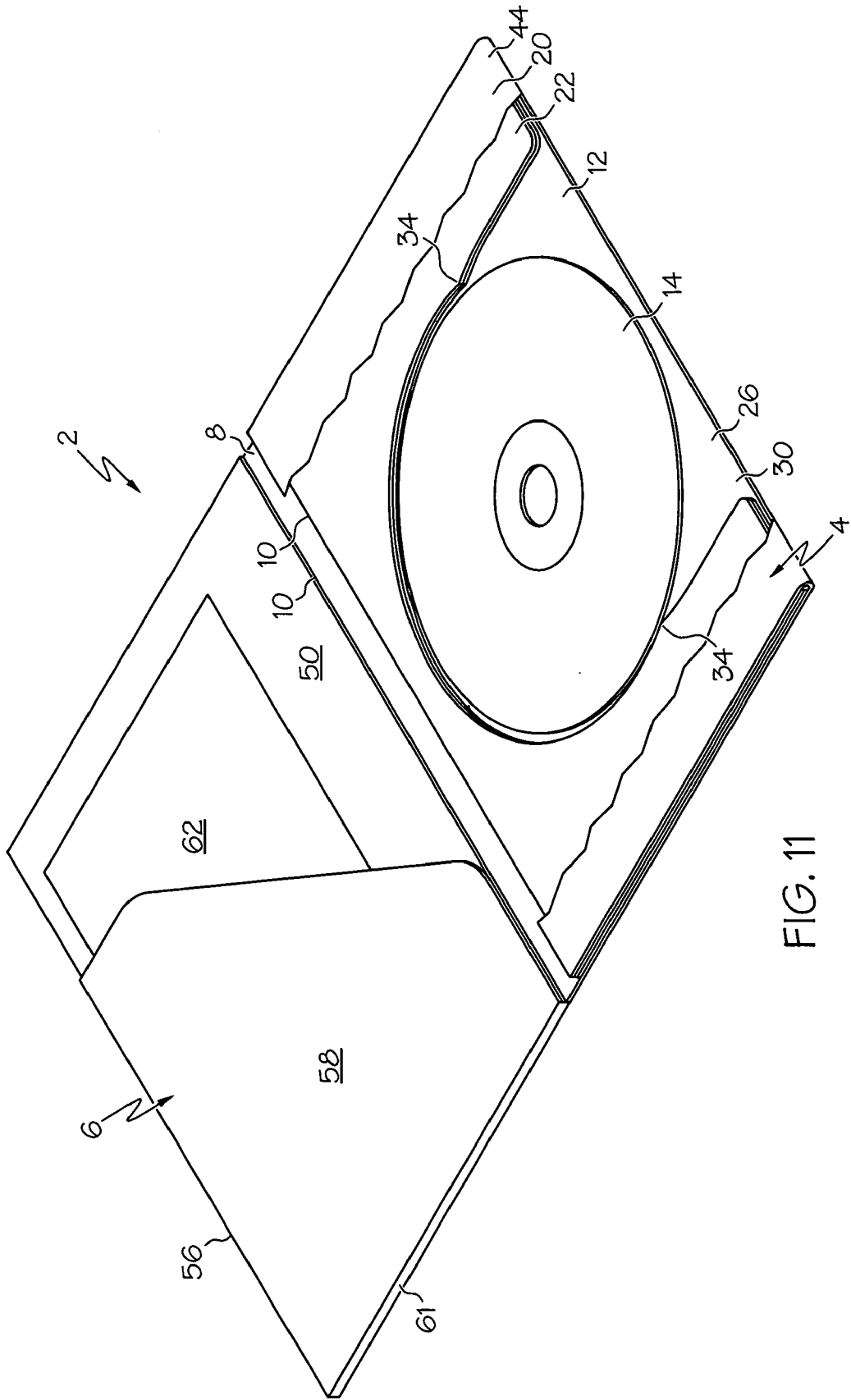


FIG. 11

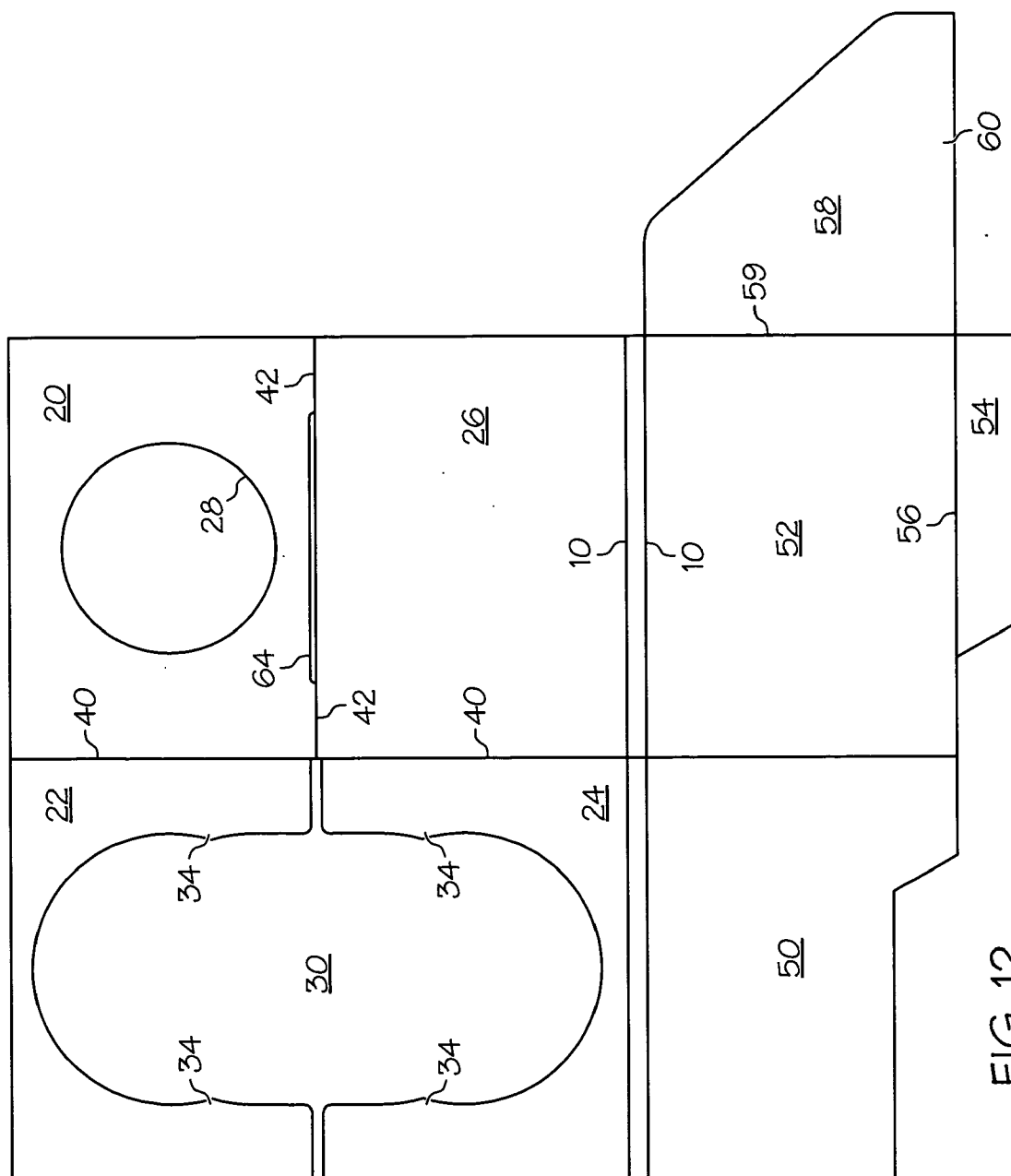


FIG. 12

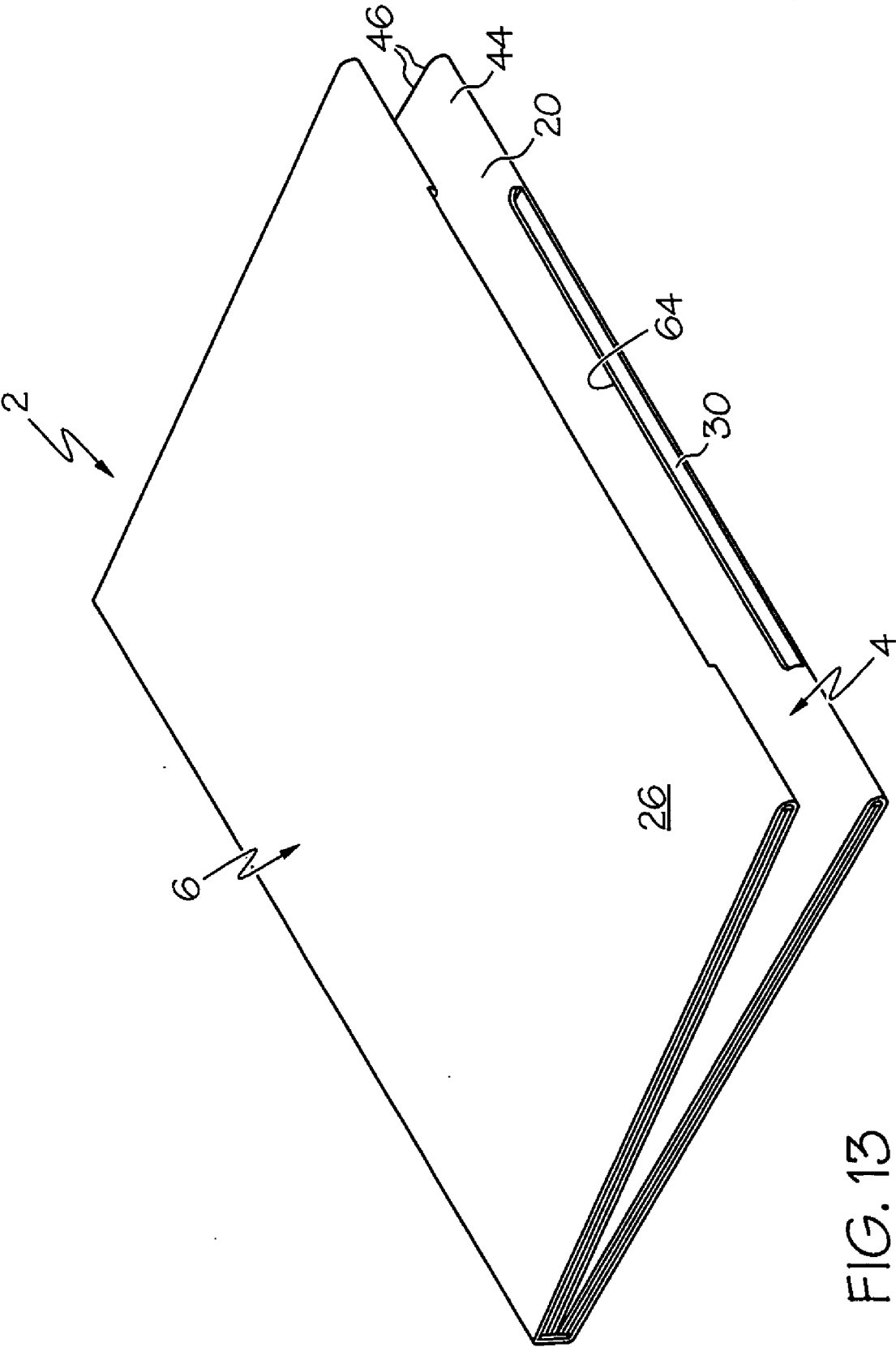


FIG. 13

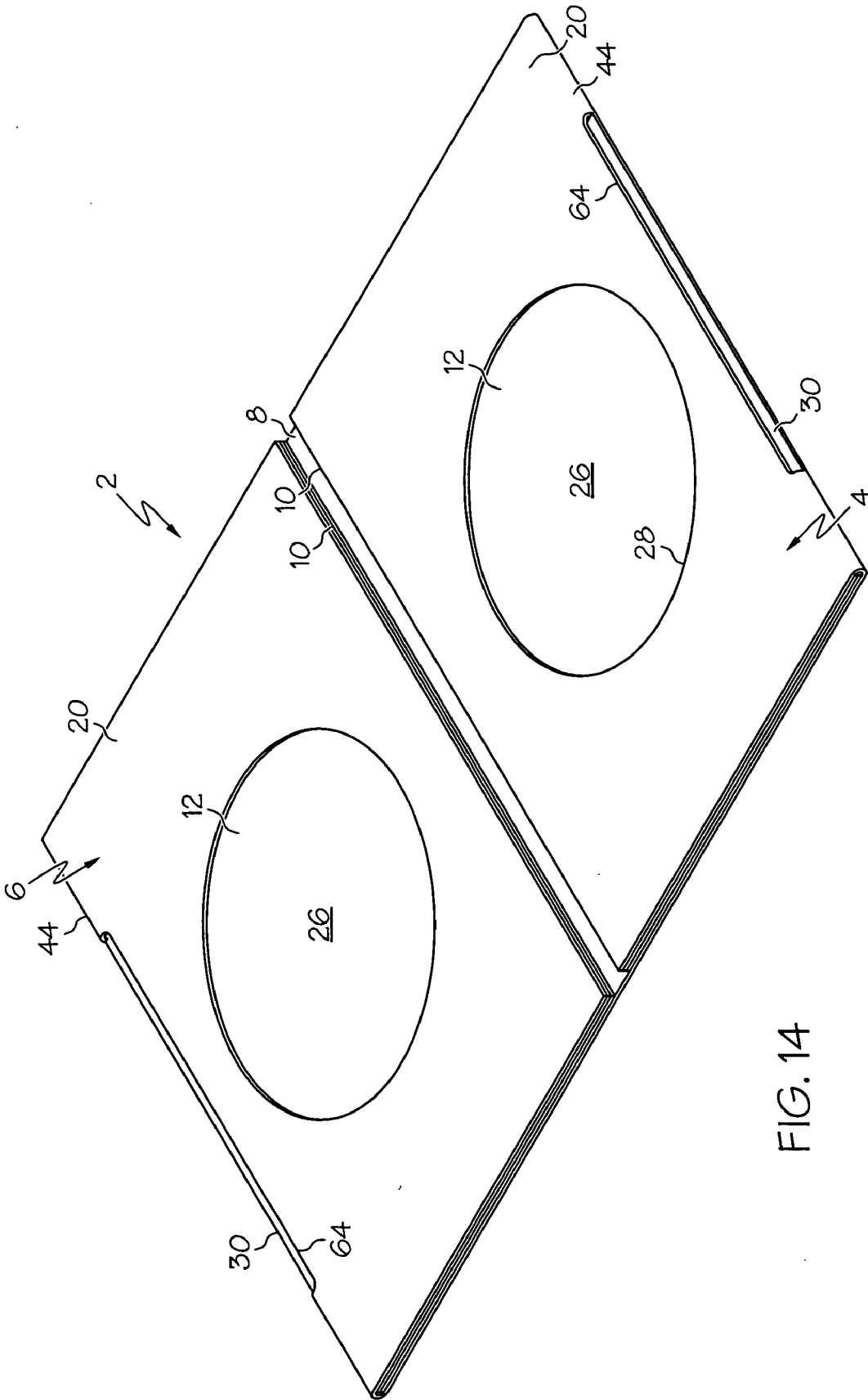


FIG. 14

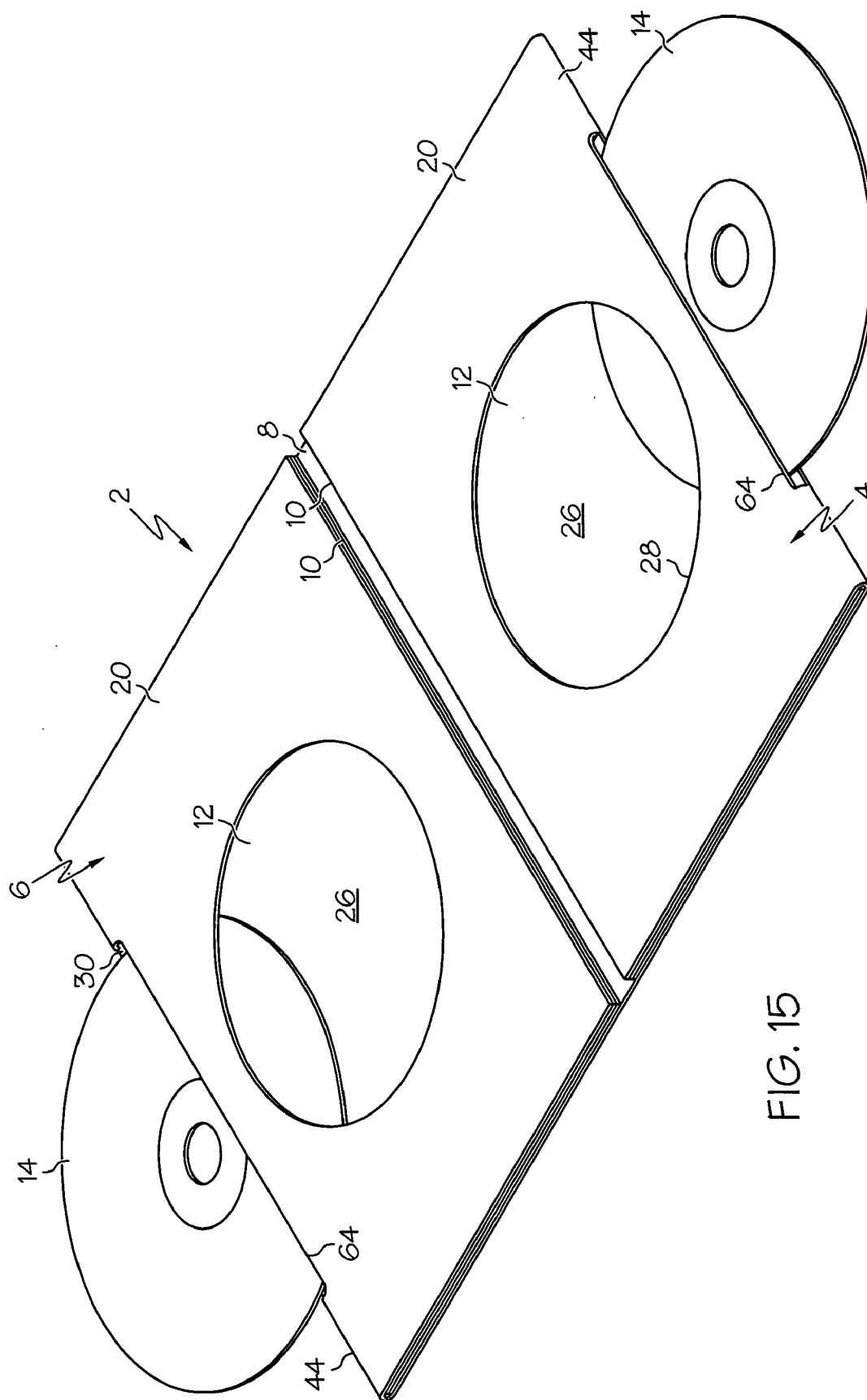
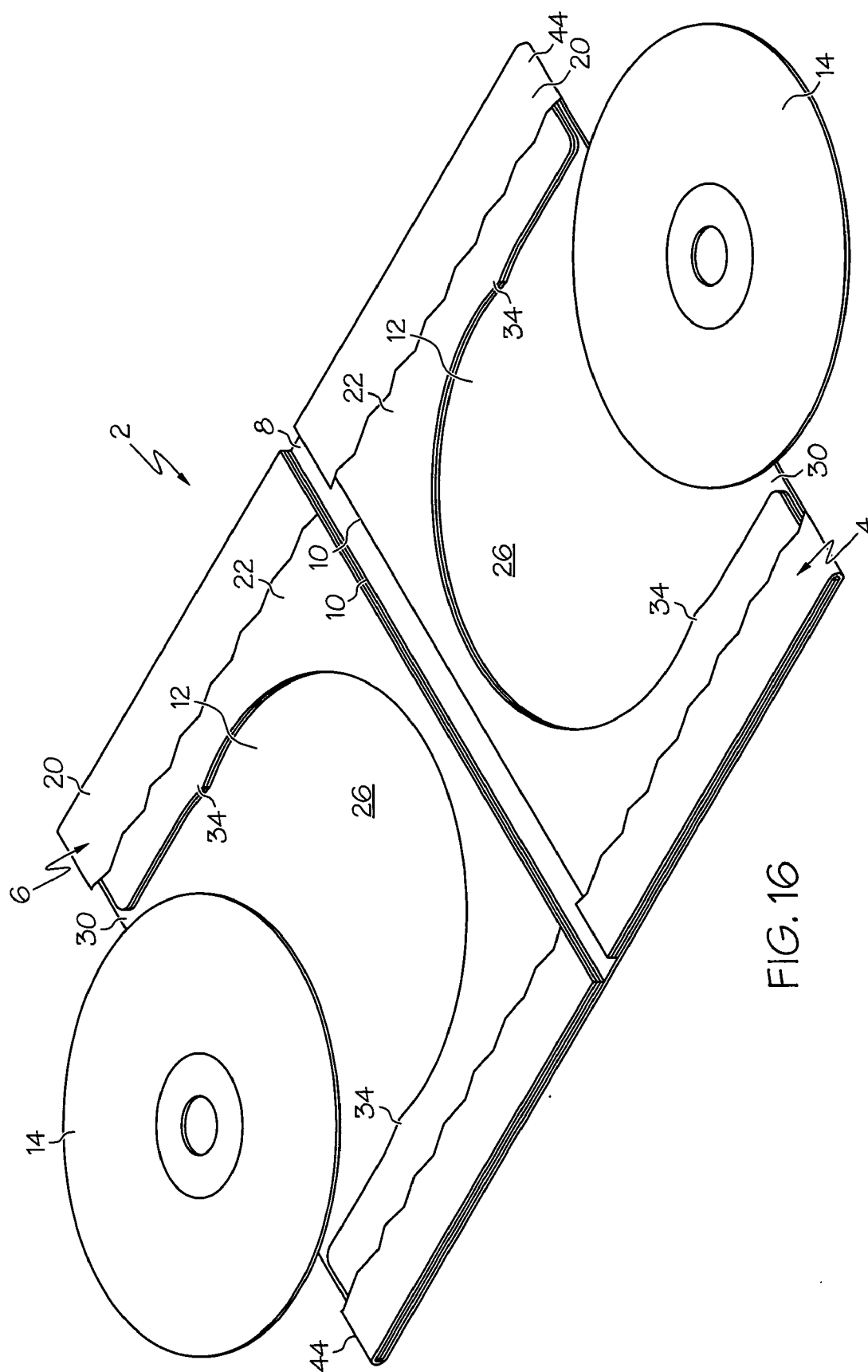


FIG. 15



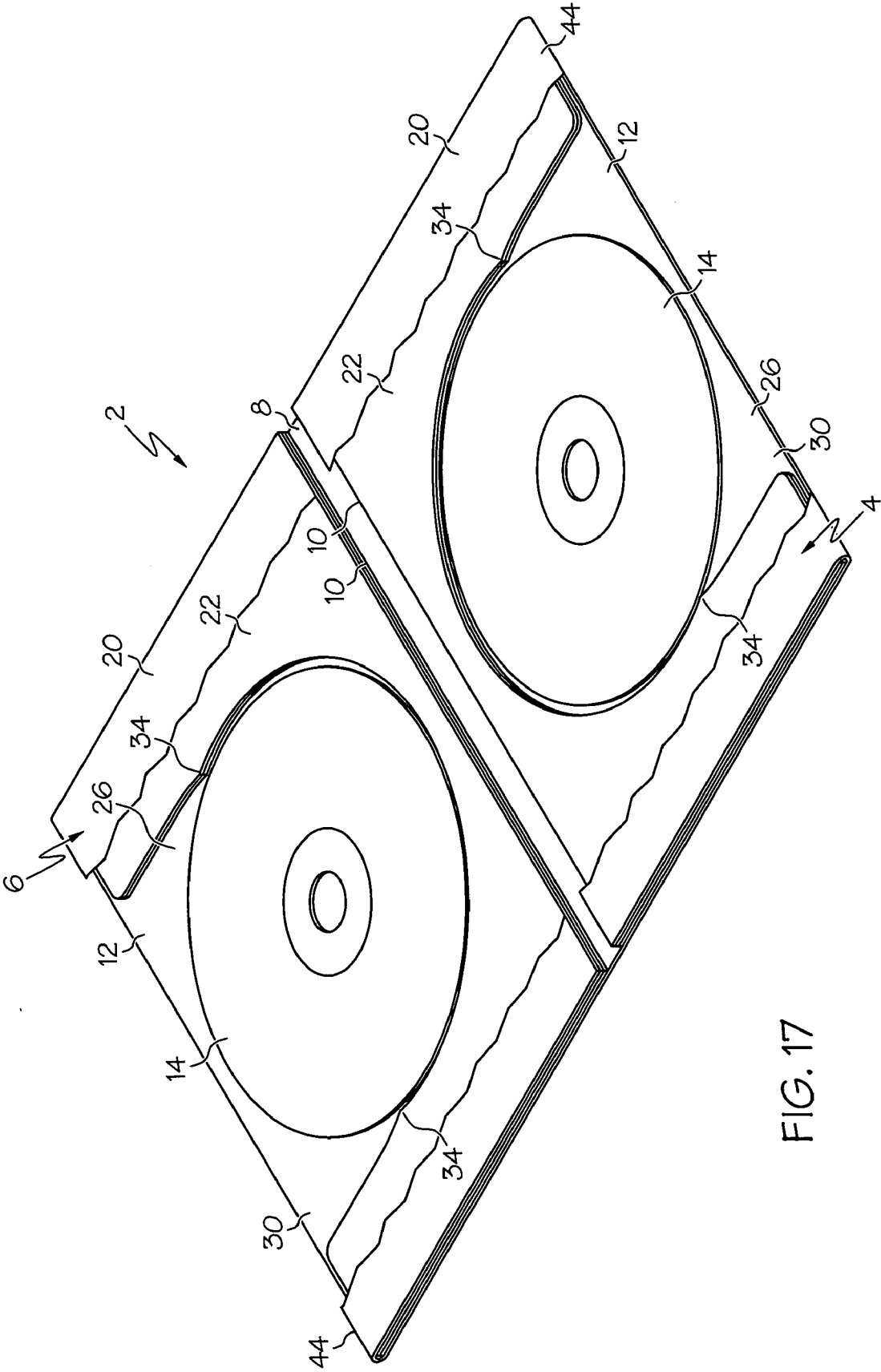


FIG. 17

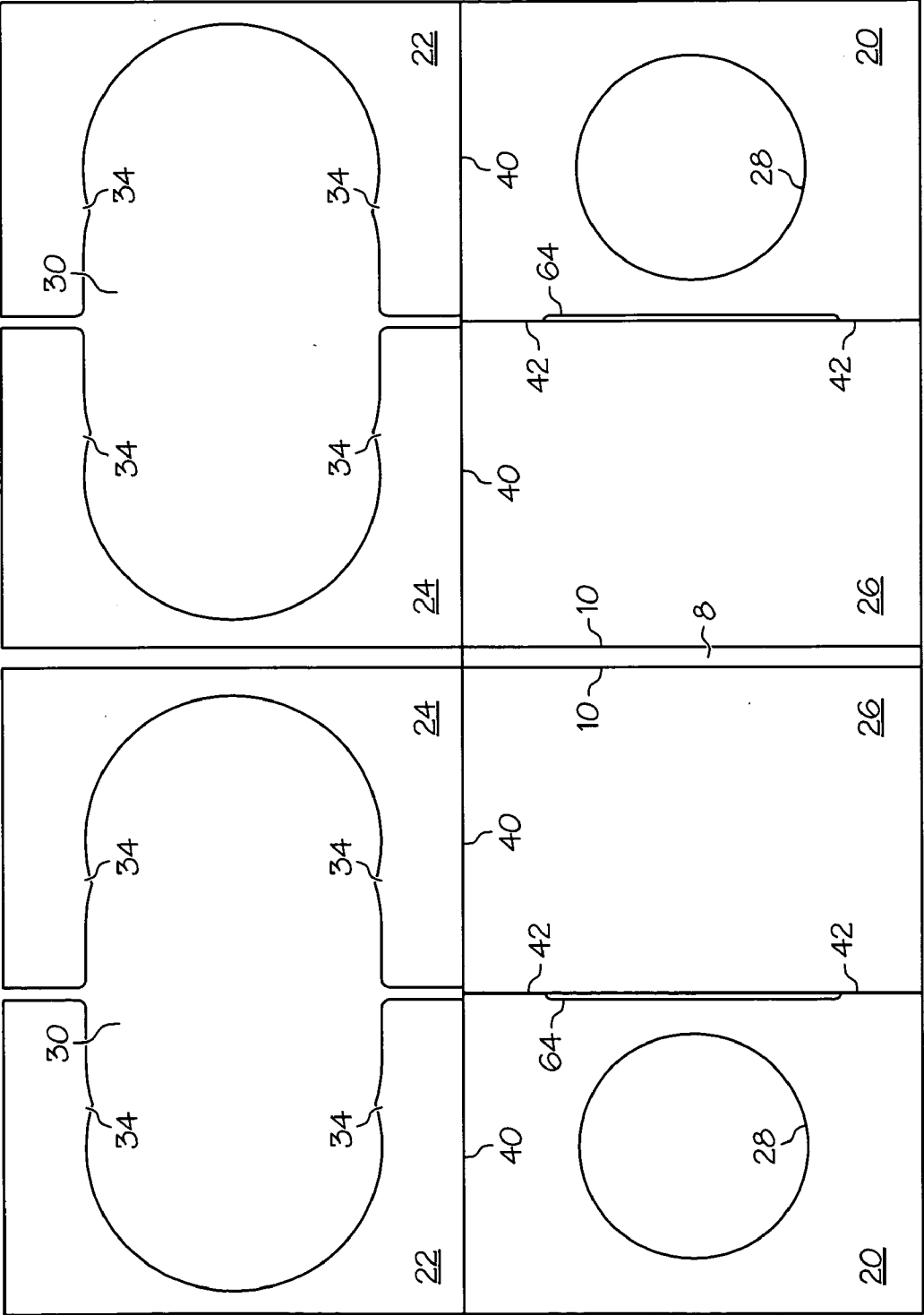


FIG. 18

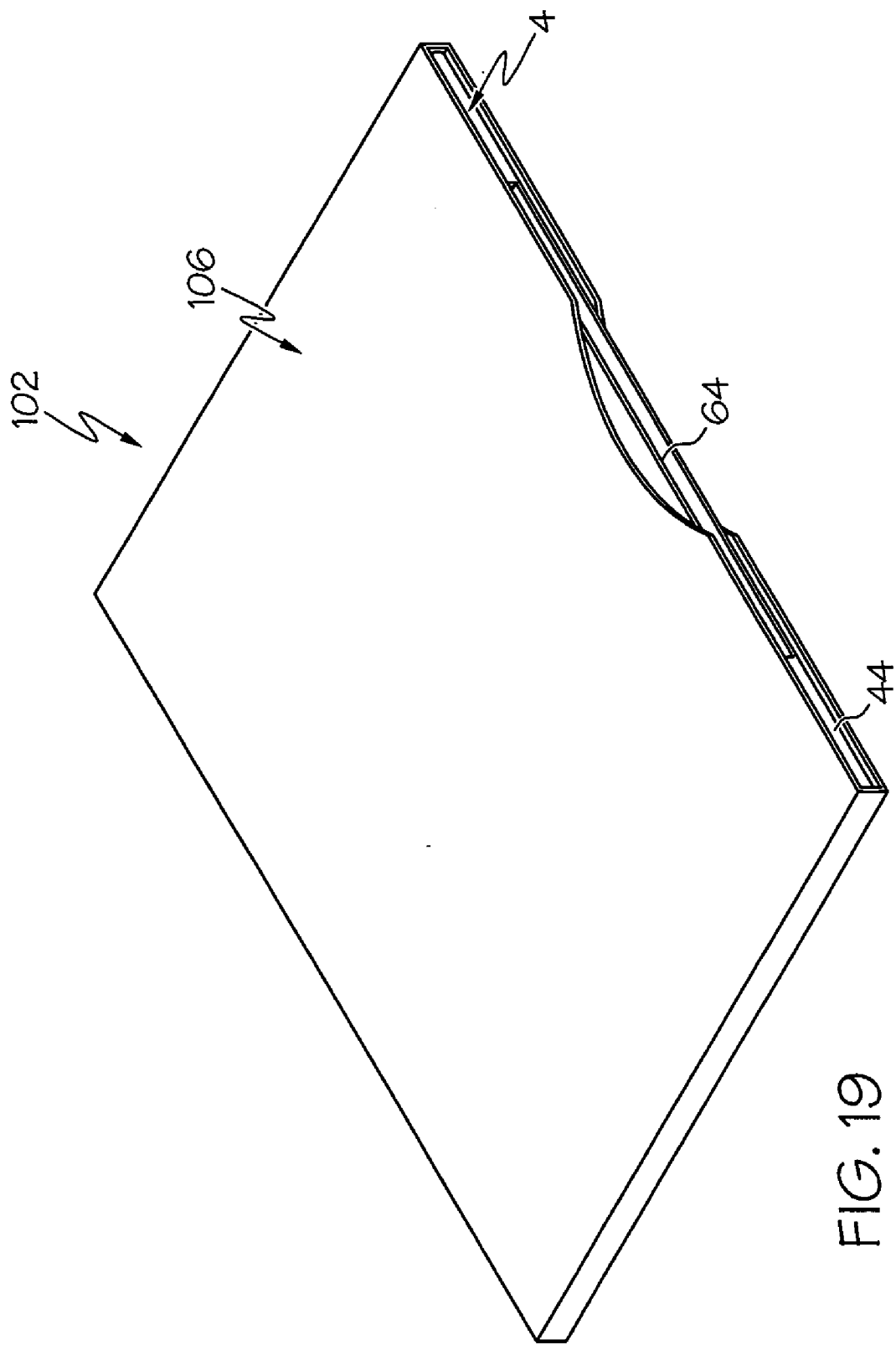


FIG. 19

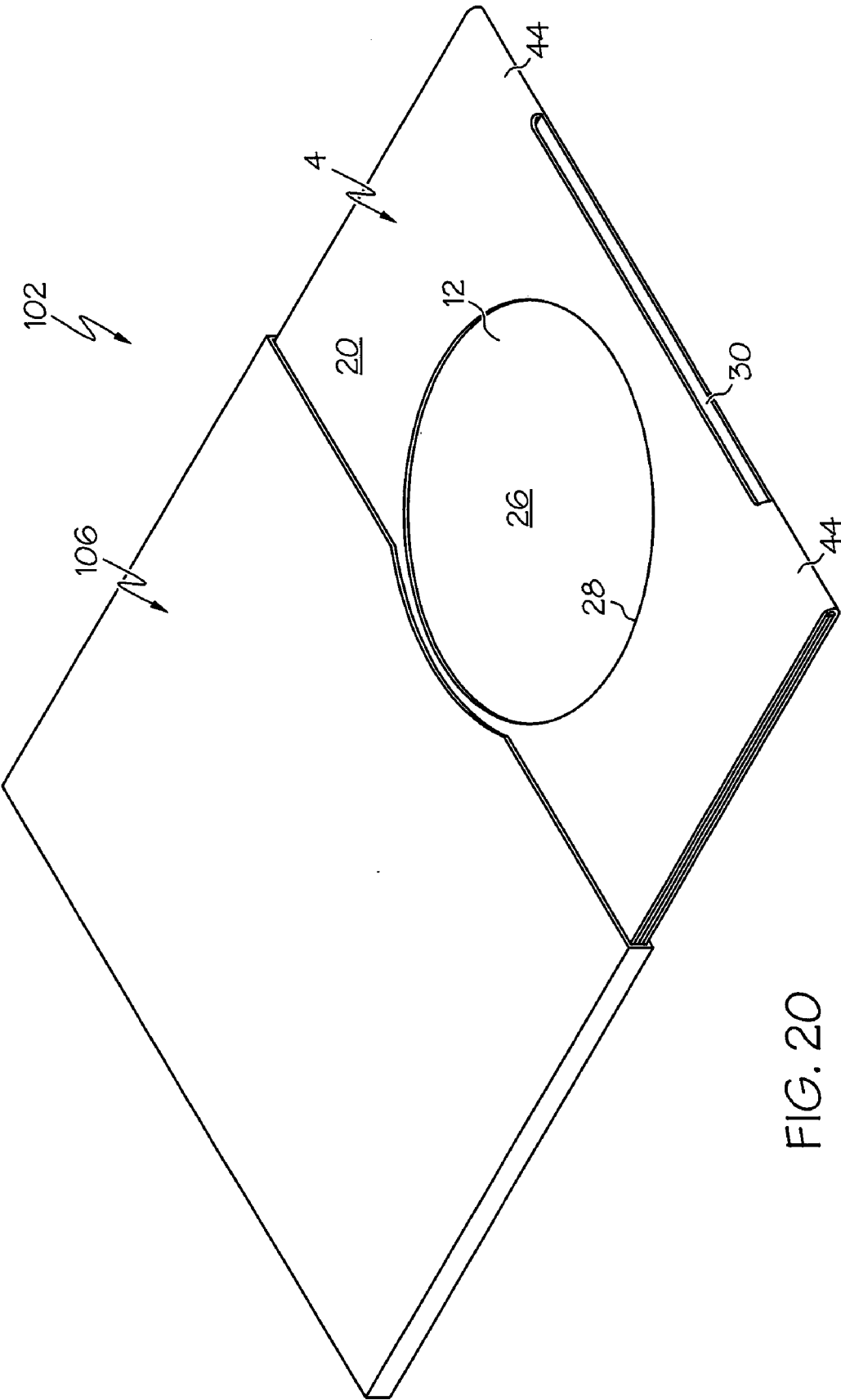
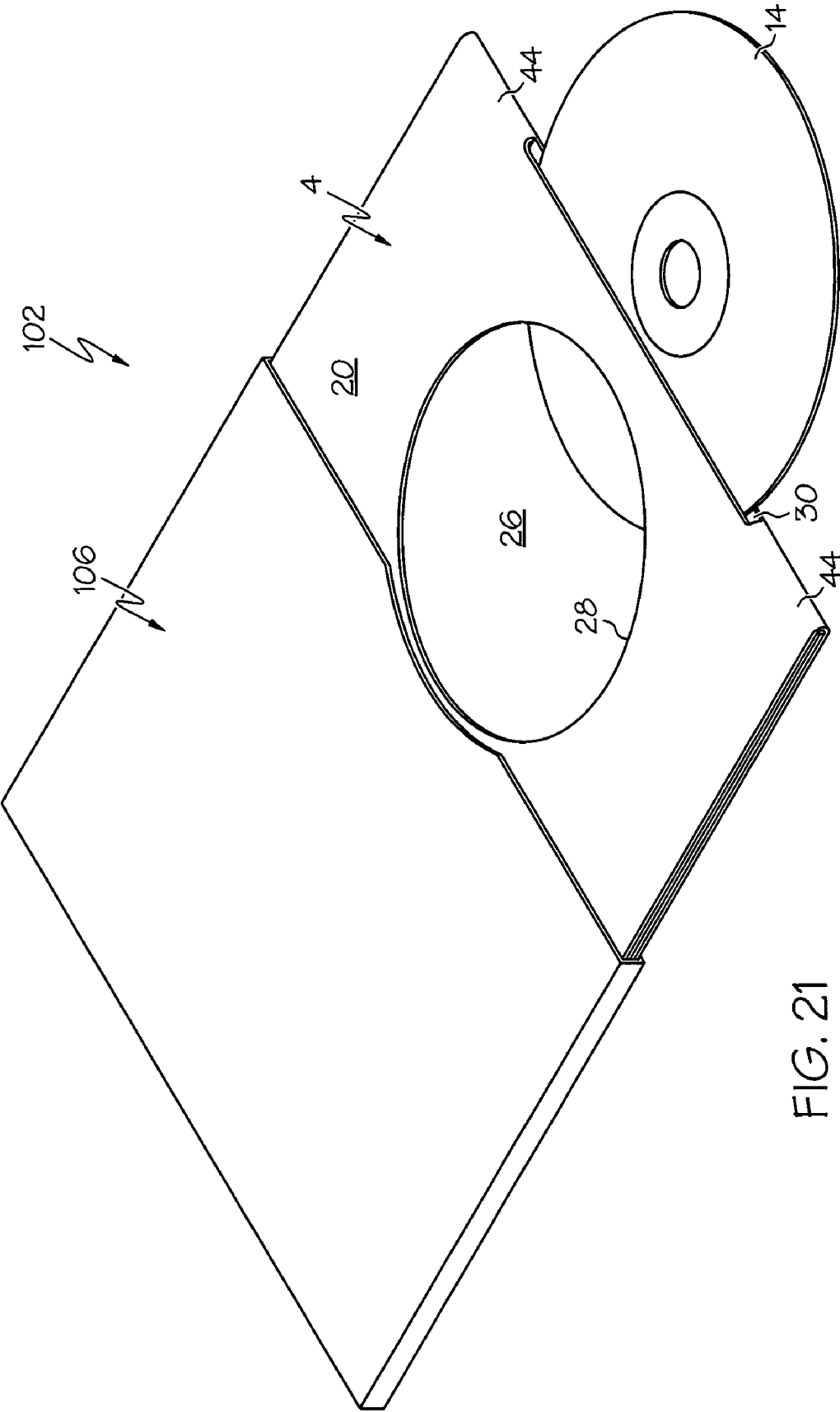
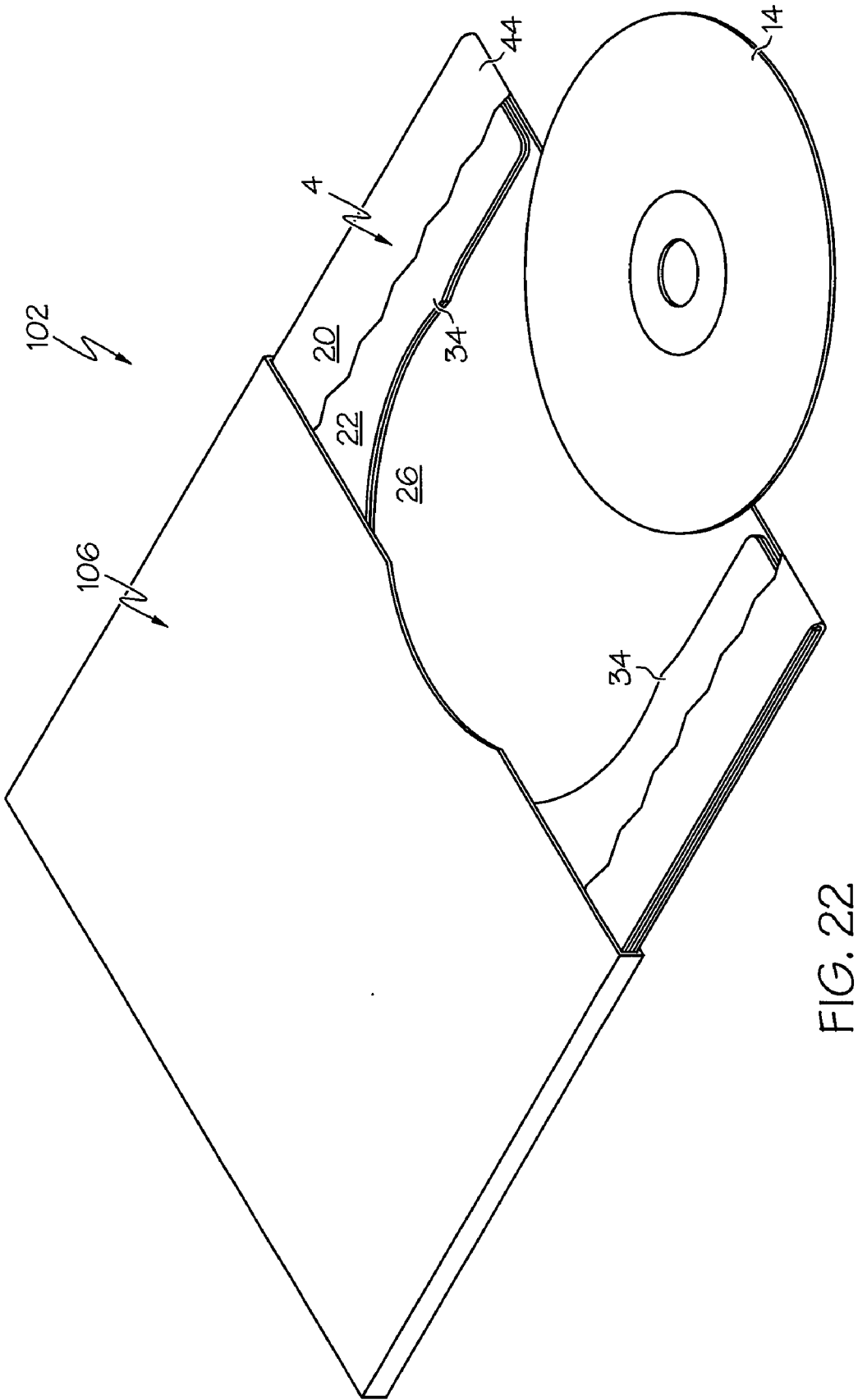


FIG. 20





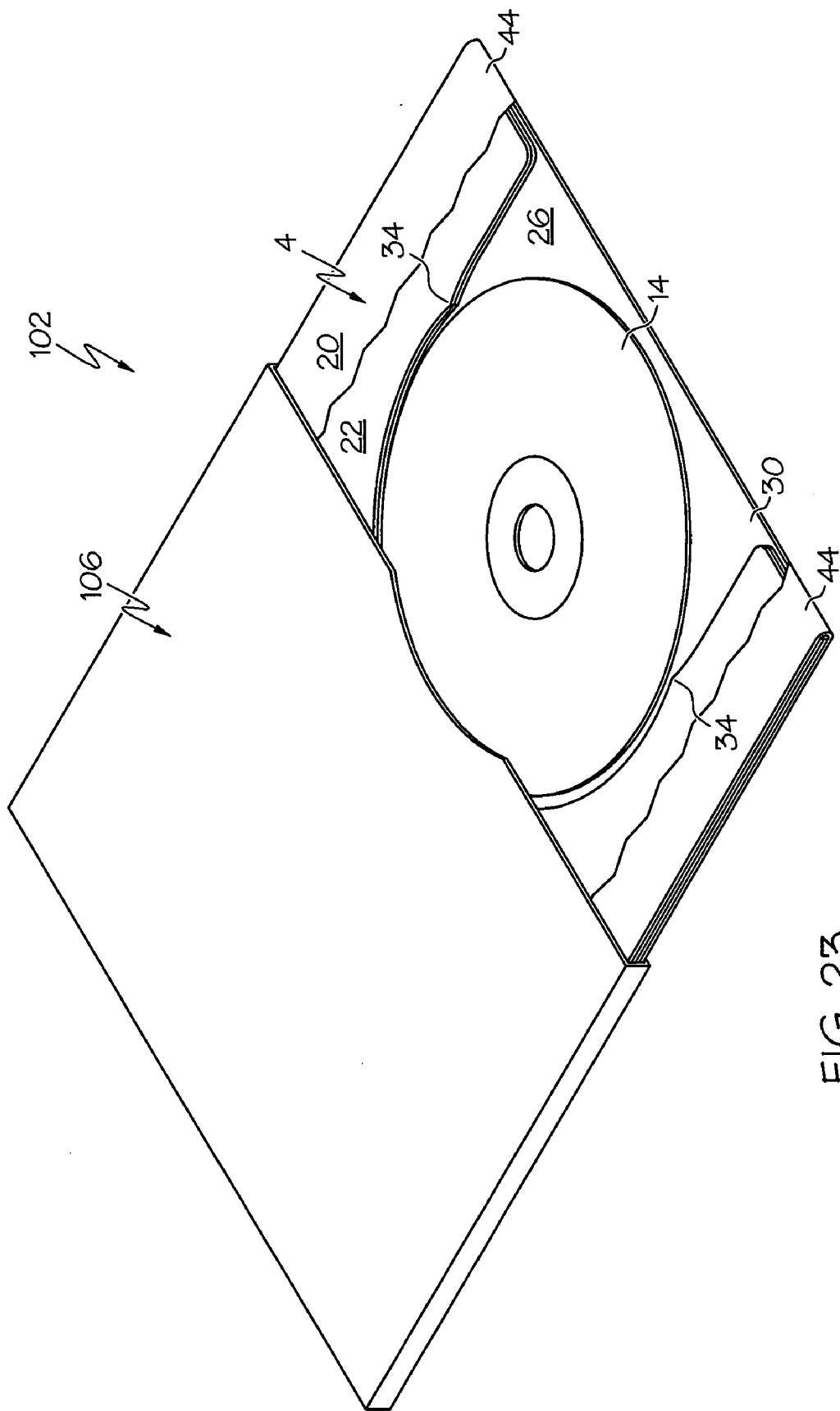


FIG. 23

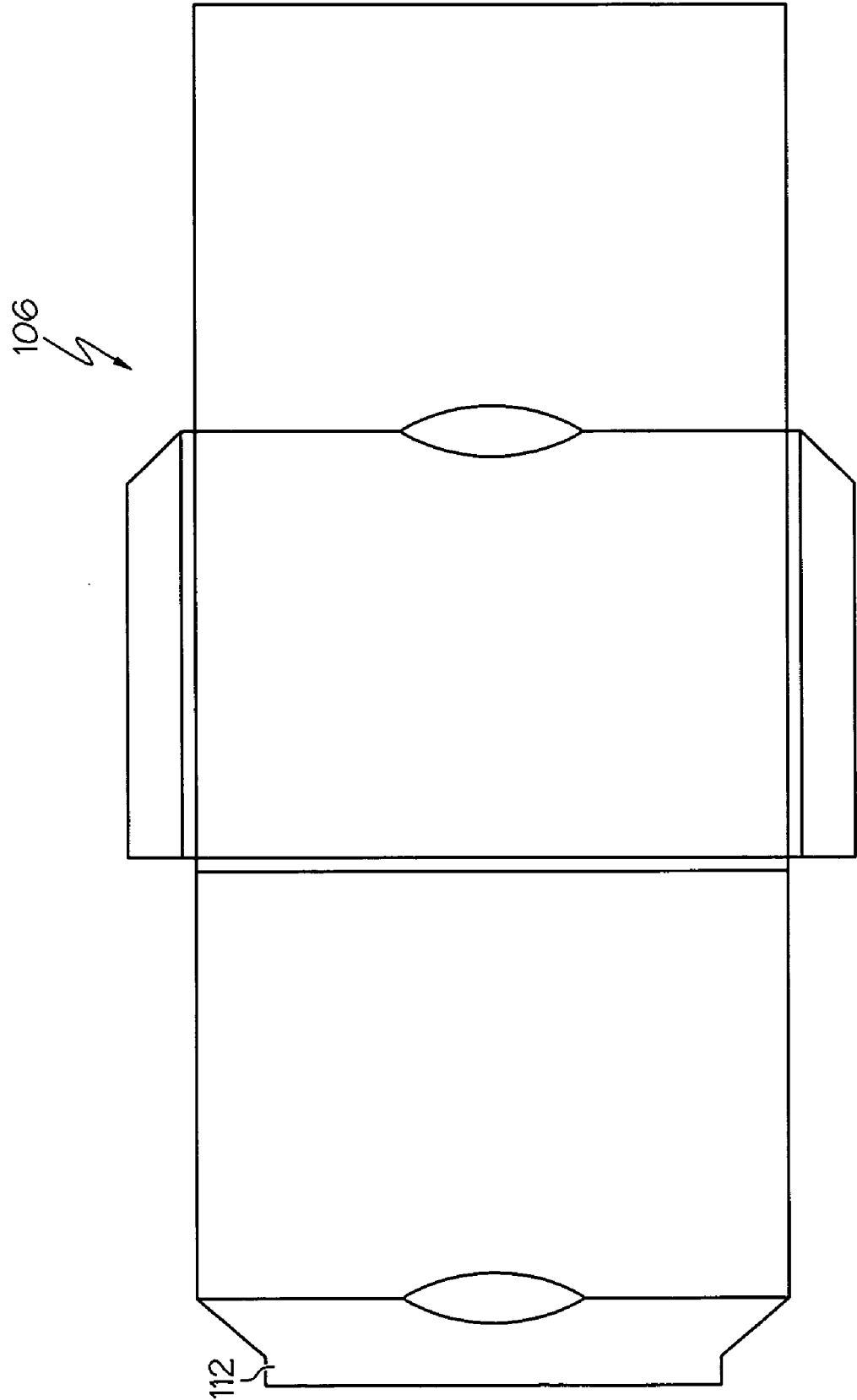


FIG. 24A

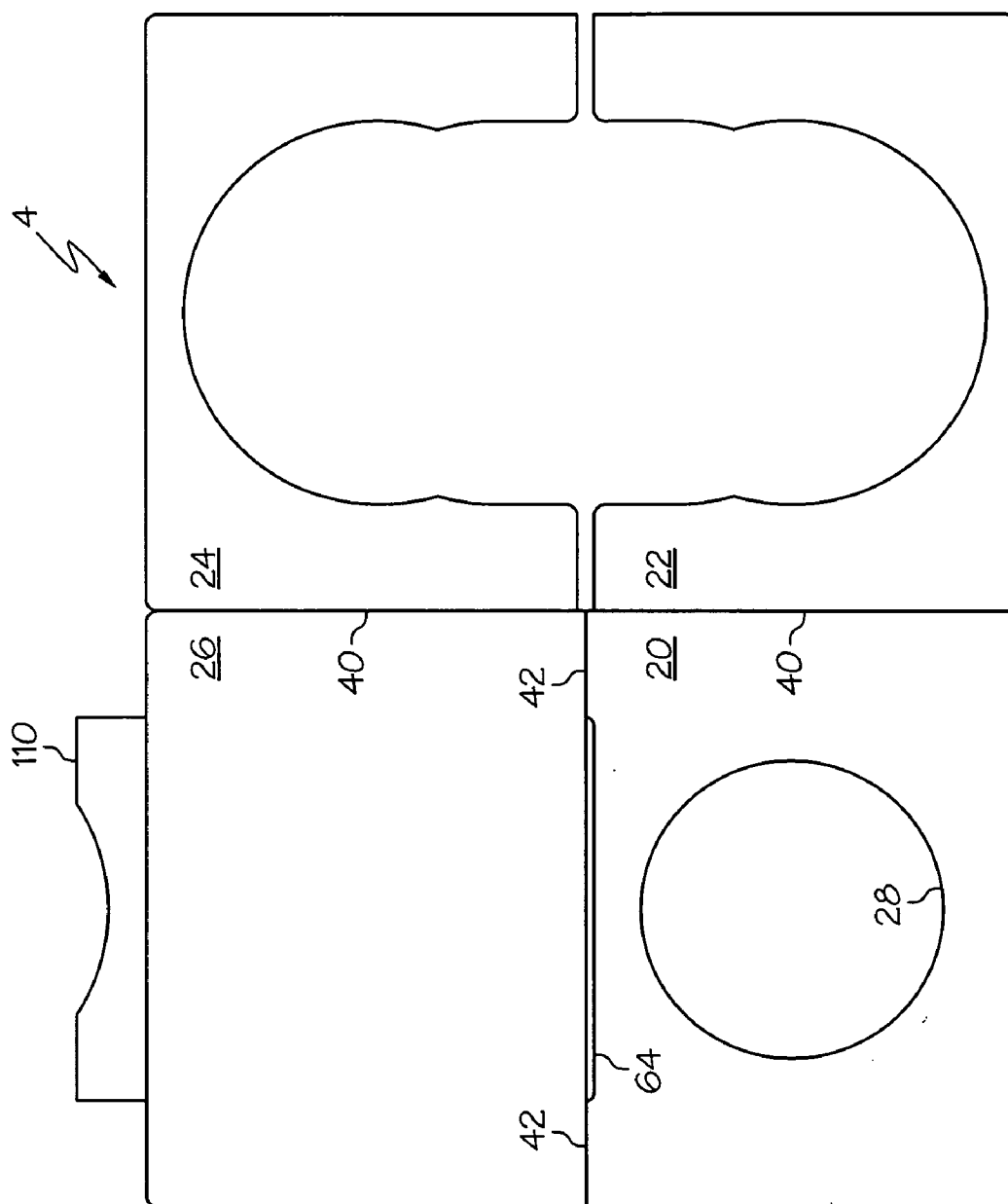


FIG. 24B

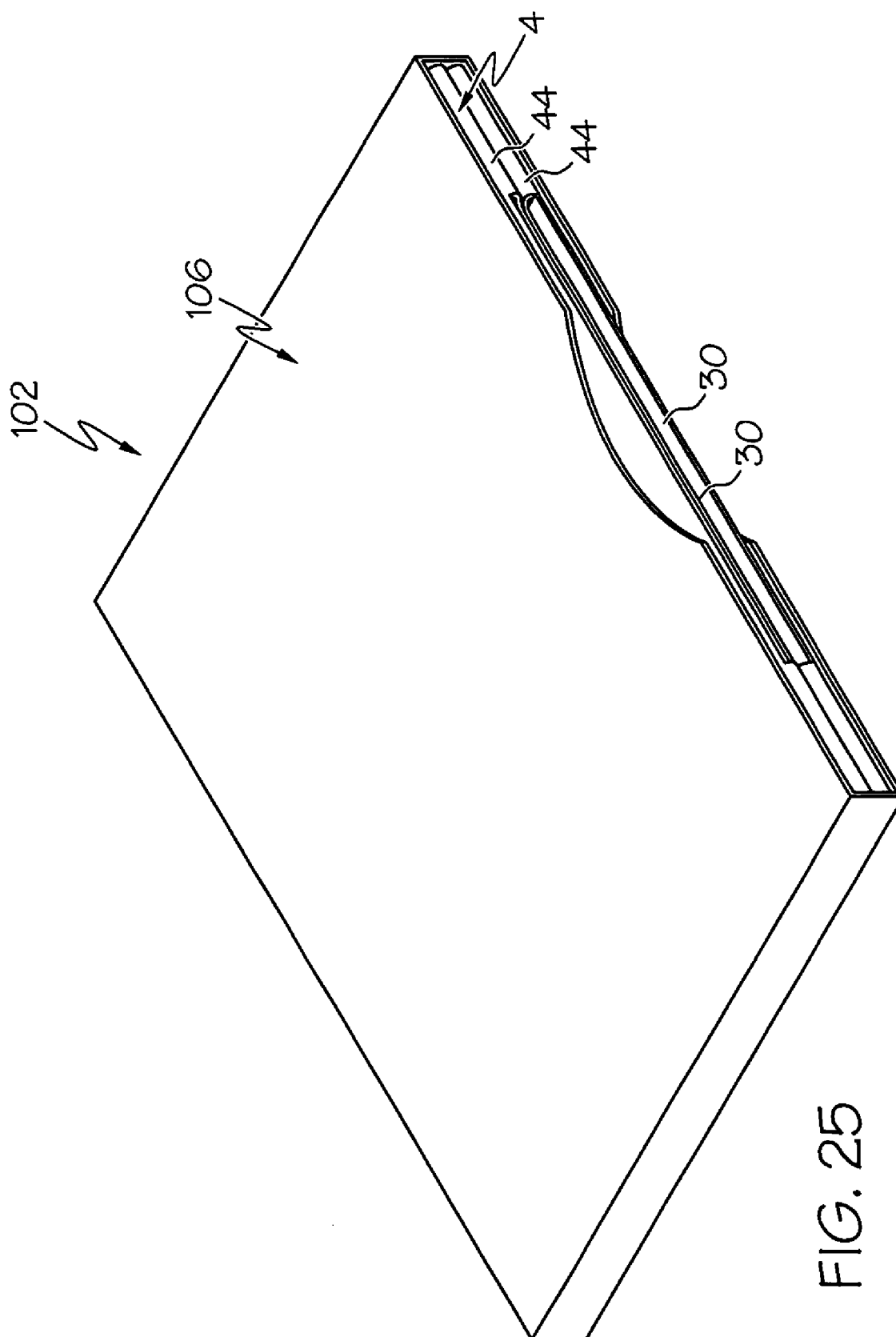


FIG. 25

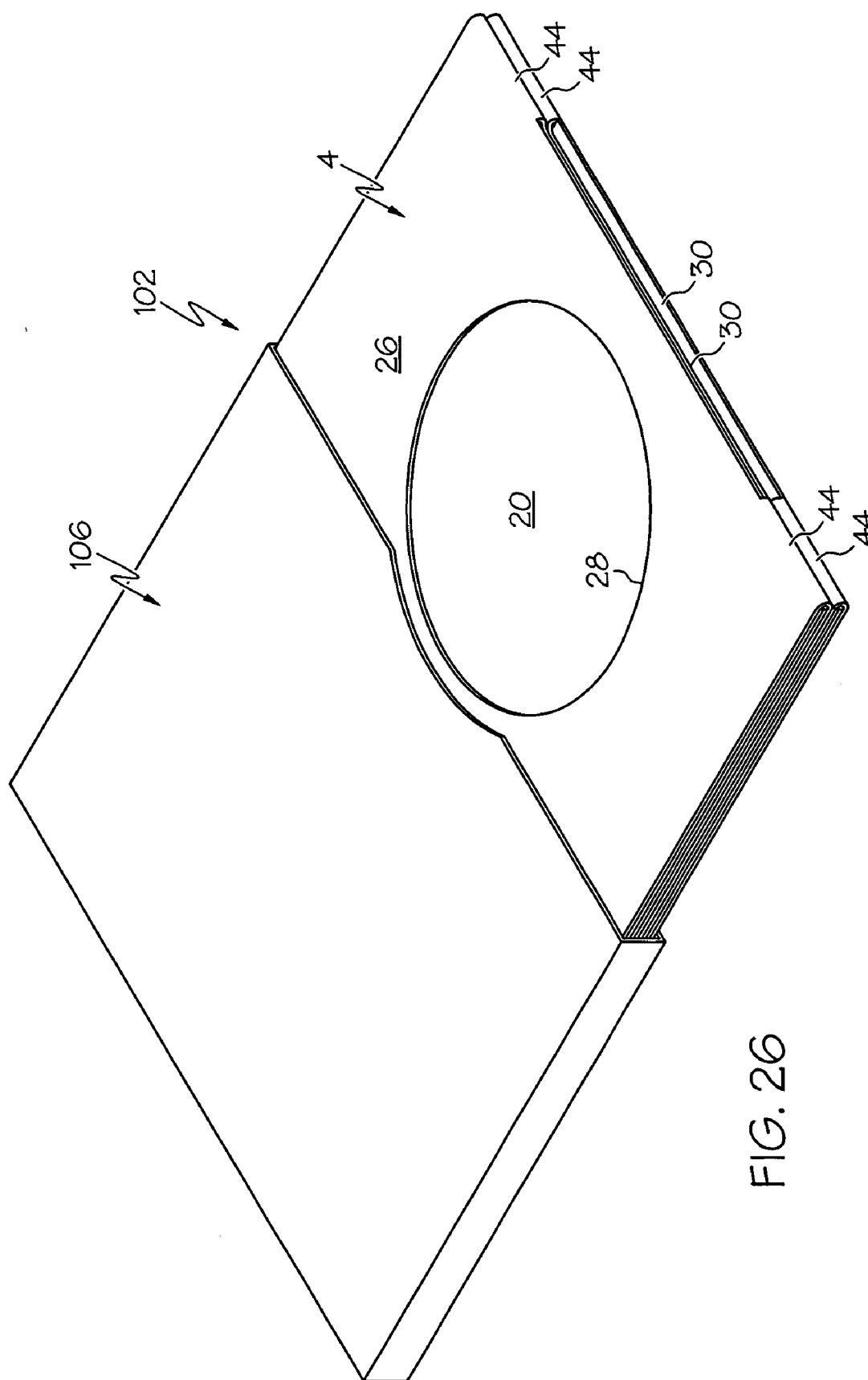
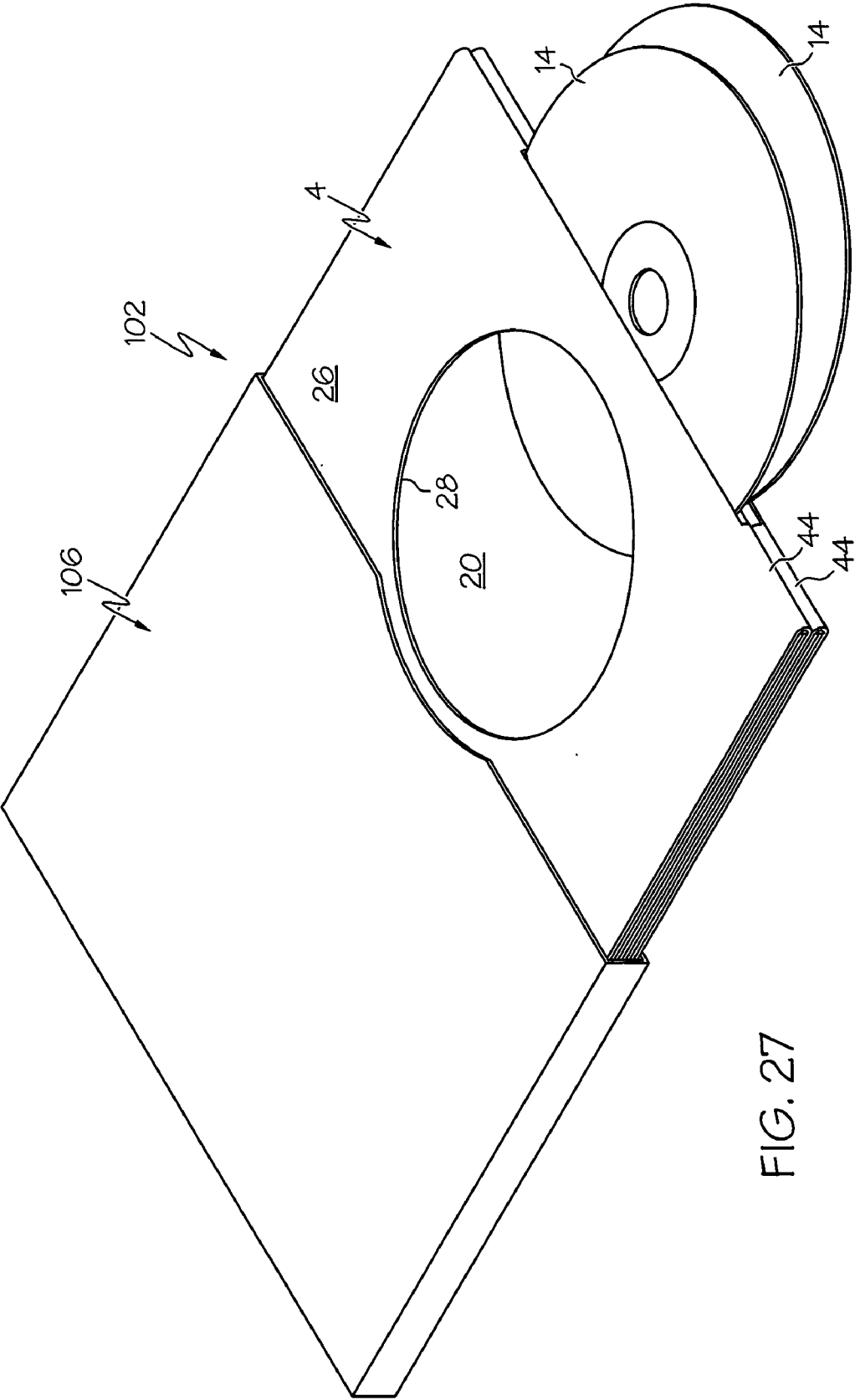


FIG. 26



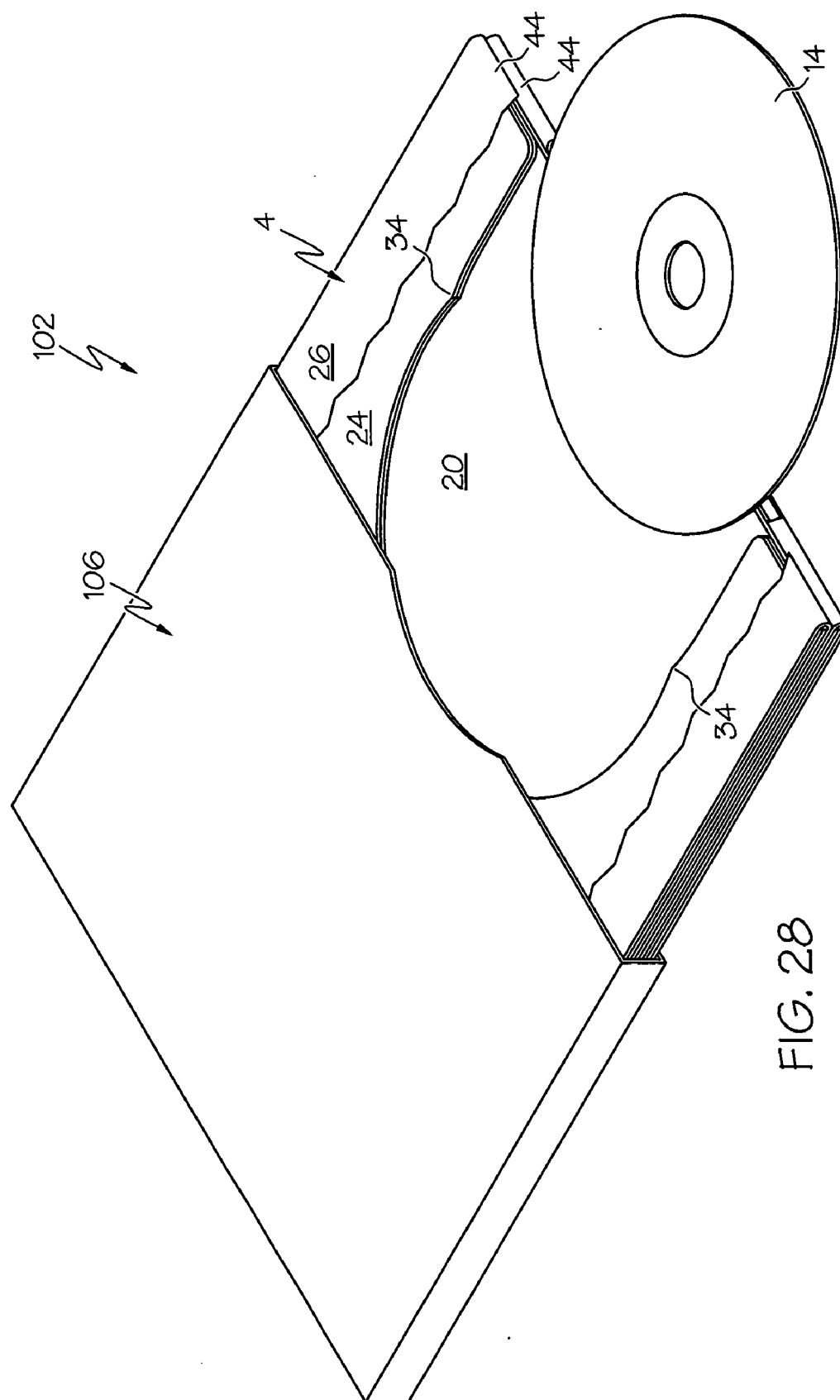


FIG. 28

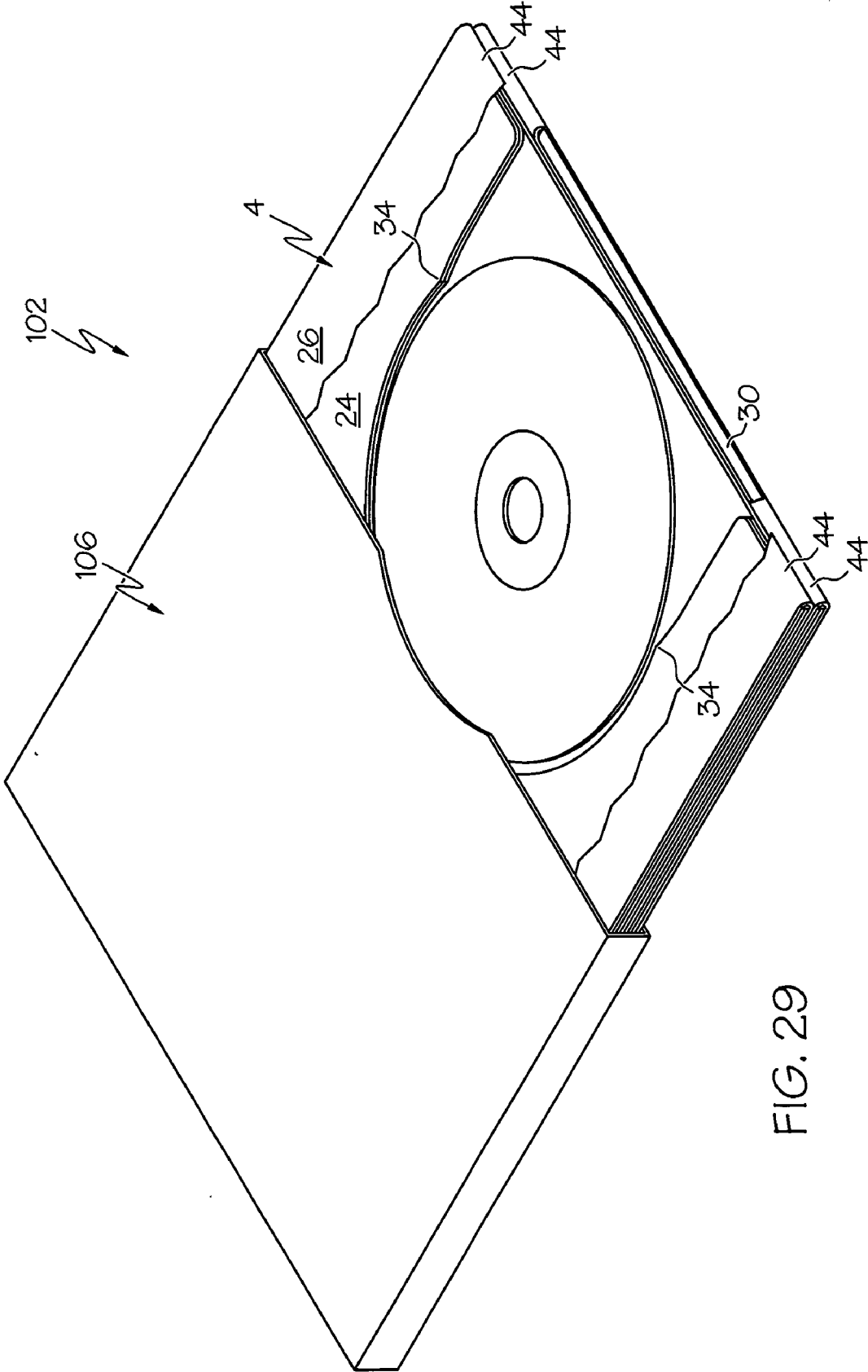
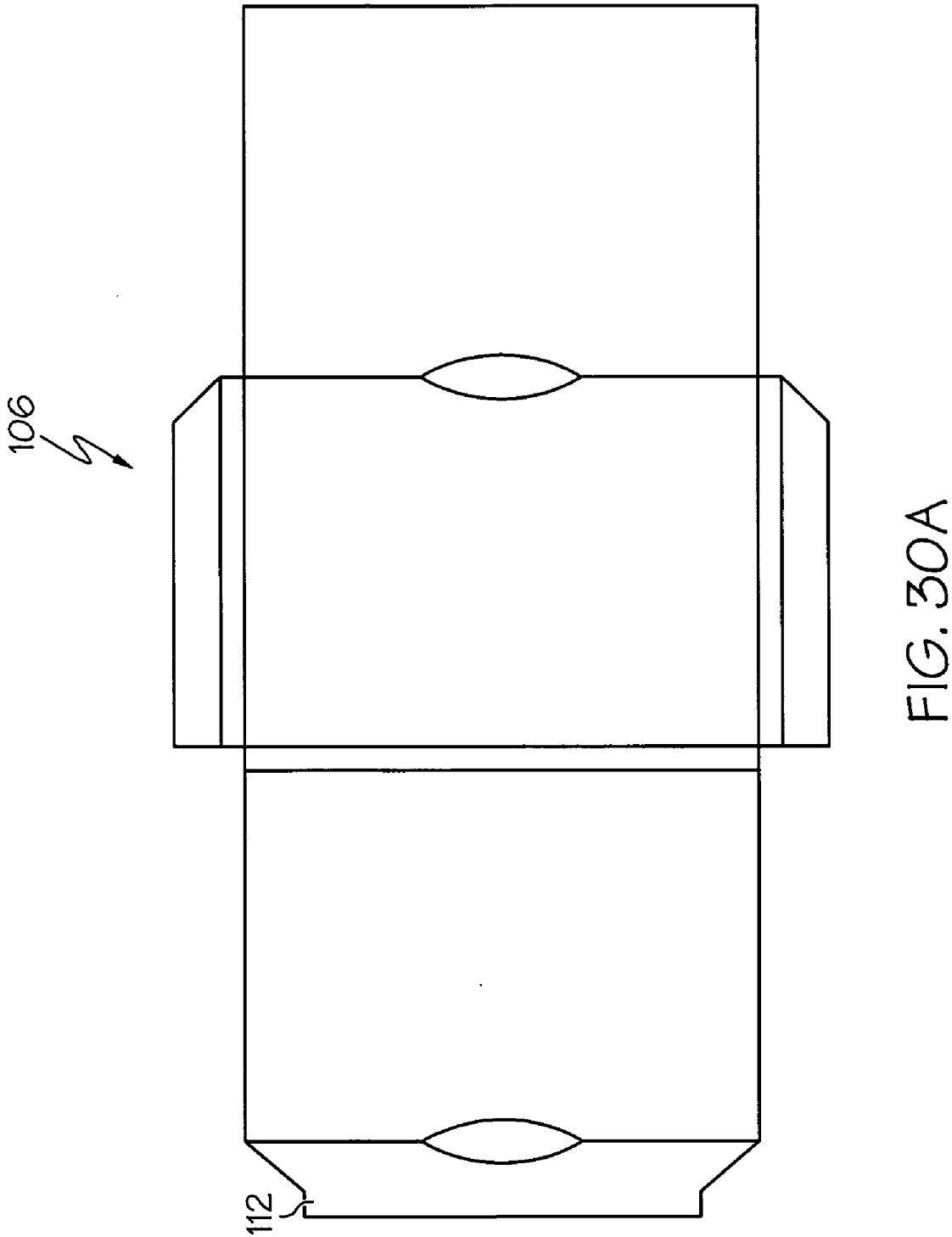


FIG. 29



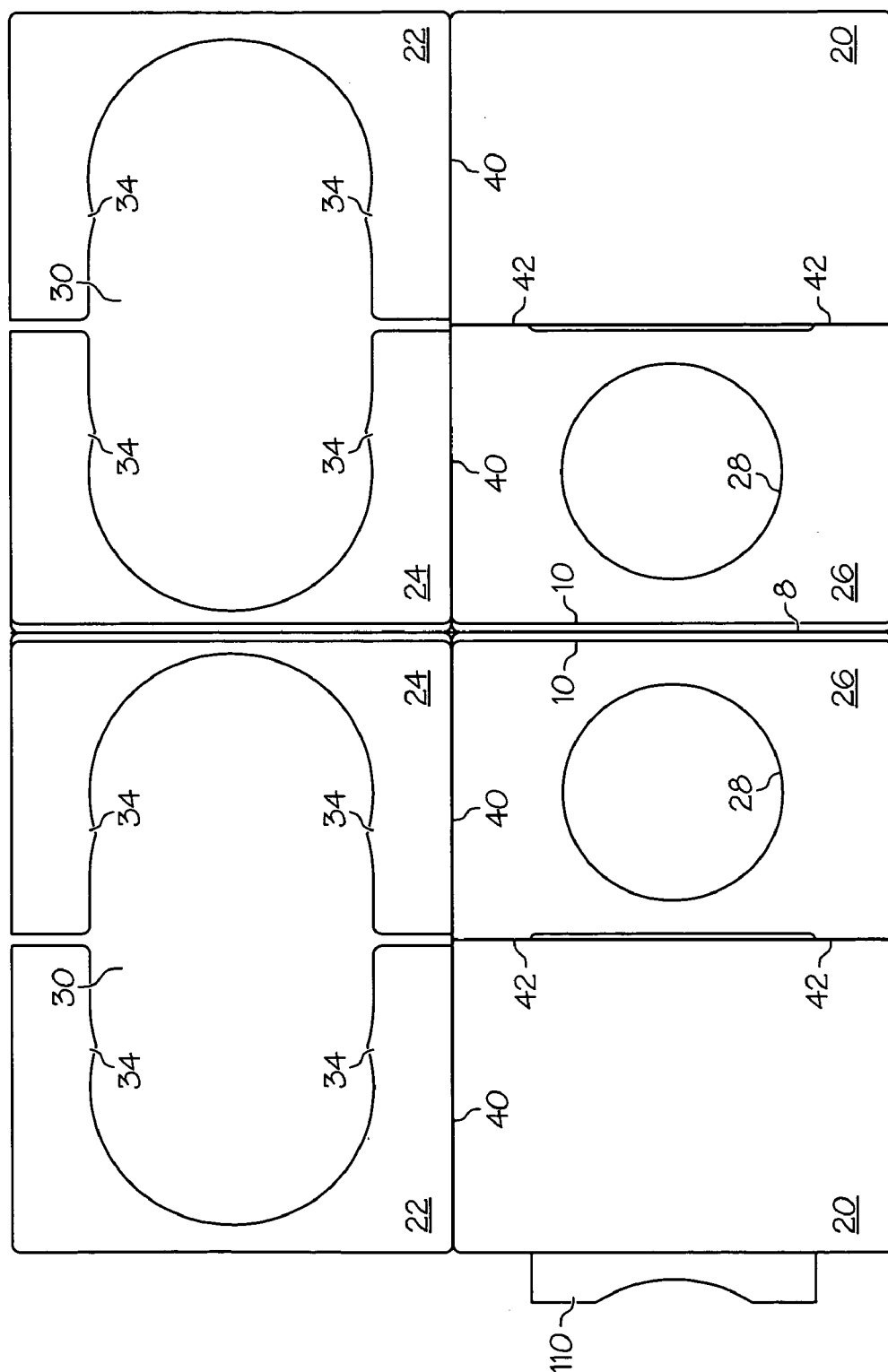


FIG. 30B

MEDIA DISC CONTAINER WITH SLIDE-IN-POCKET

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Patent application Ser. No. 61/026,402 filed Feb. 5, 2008; the disclosures of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Technical Field

[0003] The present invention relates generally to media storage containers and, more particularly, to media storage containers adapted to store and display one or more disc-shaped items of recorded media. Specifically, the invention relates to a paper-based media disc storage container having one or more disc pockets that are loaded by sliding the discs through slots defined at an edge or edges of the container. Shoulders disposed at the neck of each pocket retain the disc in the pocket in a loose, unstressed condition. The containers are assembled by folding a plurality of panels in a manner that provides smooth exposed edges to the user of the container.

[0004] 2. Background Information

[0005] Various media disc storage containers are known in the art. Some of the most common storage containers for recorded media are plastic book-like containers having a lid connected to a base with a hinge. In most plastic containers and some containers made from recycled paper, the media disc is held by a hub in the base of the container. In other containers, the disc is disposed in a close-fitting storage chamber that is defined between a base and a lid that is hinged to the base in a clamshell fashion. The disc is removable when the lid is opened.

[0006] Some retailers and customers desire a media storage container manufactured entirely from recycled paper and recyclable paper. Many of these paper-based containers are used as disc mailers. One problem common to these paper-based containers is the need to retain the disc within the container. Another problem is the need to easily load and unload the disc from the container. One type of paper-based media disc storage container is in the form of an envelope where the top of the envelope is closed with a fold-over flap. This flap must be pivoted open in order to remove the disc from the container. Another type of paper-based media disc storage container is in the form of an envelope that allows the disc to freely slip out of the envelope. These containers are undesirable because the user can easily drop the disc from the container causing damage to the disc. U.S. Pat. Nos. 5,096,064 and 5,422,875 disclose arrangements that prevent a disc from readily falling out of an enclosure. Those who package media disc desire unique packaging configurations that securely hold media discs while providing interesting presentations of the media discs to the users. Large uninterrupted smooth surfaces are desired for graphics and information related to the media disc.

BRIEF SUMMARY OF THE INVENTION

[0007] The invention provides a media storage container having a sleeve defining a media disc holding pocket that holds the disc in an unstressed configuration. Compressible shoulders disposed at the neck of the pocket retain the media disc within the pocket.

[0008] In one configuration, the container has a base that defines the pocket and a cover that pivots between open and closed configurations. The media disc is loaded and unloaded through an opening in the top of the base. The base may optionally define a window that allows one or both of the major disc surfaces to be viewed and engaged by the user's finger without allowing the disc to be removed through the window.

[0009] In other configurations, the pocket is loaded through an opening defined by the sidewall, or the bottom wall of the base.

[0010] In other configurations, the pocket or an additional pocket may be defined by the cover.

[0011] In other configurations, multiple pockets may be defined by the base or cover so that the container may hold multiple discs.

[0012] These configurations may be fabricated from a single blank that is folded about living hinges and secured together with adhesive or other connectors.

[0013] Other configurations of the media disc container may include a pocket that slides between extended and retracted positions within an outer sleeve.

[0014] The configurations described above may be formed with smooth outer edges to provide an attractive appearance and a desirable feel to the container. The smooth outer edges also help the pocket from delaminating.

[0015] These configurations are provided individually and in combination with one another to form additional configurations. Examples of the invention are described below.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0016] FIG. 1 is a perspective view of a first configuration of a media disc storage container with the cover mostly closed over the inner surface of the base.

[0017] FIG. 2 is a perspective view of the media disc storage container with the cover open.

[0018] FIG. 3 is a view similar to FIG. 2 showing a media disc being inserted through the opening into the pocket.

[0019] FIG. 4 is a view similar to FIG. 3 showing the inner panel of the base removed with the media disc about to engage the shoulders of the intermediate base panels.

[0020] FIG. 5 is a view similar to FIG. 4 showing the media disc disposed in the pocket under the shoulders.

[0021] FIG. 6 is a top plan view of a blank that may be folded into the container configuration of FIG. 1.

[0022] FIG. 7 is a perspective view of a second configuration of a media disc storage container with the cover mostly closed over the inner surface of the base.

[0023] FIG. 8 is a perspective view of the media disc storage container with the cover open.

[0024] FIG. 9 is a view similar to FIG. 8 showing a media disc being inserted through the opening into the pocket.

[0025] FIG. 10 is a view similar to FIG. 9 showing the inner panel of the base removed with the media disc about to engage the shoulders of the intermediate base panels.

[0026] FIG. 11 is a view similar to FIG. 10 showing the media disc disposed in the pocket under the shoulders.

[0027] FIG. 12 is a top plan view of a blank that may be folded into the container configuration of FIG. 7.

[0028] FIG. 13 is a perspective view of a third configuration of a media disc storage container with the cover mostly closed over the inner surface of the base.

[0029] FIG. 14 is a perspective view of the media disc storage container with the cover open.

[0030] FIG. 15 is a view similar to FIG. 14 showing two media discs being inserted through the openings into the pockets.

[0031] FIG. 16 is a view similar to FIG. 15 showing the inner panels of the cover and base removed with the media disc about to engage the shoulders of the intermediate panels.

[0032] FIG. 17 is a view similar to FIG. 16 showing the media discs disposed in the pockets under the shoulders.

[0033] FIG. 18 is a top plan view of a blank that may be folded into the container configuration of FIG. 13.

[0034] FIG. 19 is a perspective view of a fourth configuration of the media disc storage container showing a disc holding base disposed in its retracted position with respect to an outer sleeve.

[0035] FIG. 20 is a perspective view of the fourth configuration with the base in its extended position.

[0036] FIG. 21 is a view similar to FIG. 20 showing a media disc being inserted through the opening into the pocket.

[0037] FIG. 22 is a view similar to FIG. 21 showing the inner panel of the base removed with the media disc about to engage the shoulders of the intermediate base panels.

[0038] FIG. 23 is a view similar to FIG. 22 showing the media disc disposed in the pocket under the shoulders.

[0039] FIG. 24A is a top plan view of a blank that may be folded into the sleeve for the fourth configuration of the container.

[0040] FIG. 24B is a top plan view of a blank that may be folded into the base for the fourth configuration of the container.

[0041] FIG. 25 is a perspective view of a fifth configuration of the media disc storage container showing a disc holding base disposed in its retracted position with respect to an outer sleeve.

[0042] FIG. 26 is a perspective view of the fifth configuration with the base in its extended position.

[0043] FIG. 27 is a view similar to FIG. 26 showing two media discs being inserted through the openings into the pockets.

[0044] FIG. 28 is a view similar to FIG. 27 showing the inner panel of the base removed with the media disc about to engage the shoulders of the intermediate base panels.

[0045] FIG. 29 is a view similar to FIG. 28 showing the media disc disposed in the pocket under the shoulders.

[0046] FIG. 30A is a top plan view of a blank that may be folded into the sleeve for the fourth configuration of the container.

[0047] FIG. 30B is a top plan view of a blank that may be folded into the base for the fourth configuration of the container.

[0048] Similar numbers refer to similar parts throughout the specification.

DETAILED DESCRIPTION OF THE INVENTION

[0049] First, second, and third configurations of the media disc storage container are indicated generally by the numeral 2 in the FIGS. 1-18. Container configurations 2 generally include a base 4 and a cover 6 connected to base 4 by a hinge wall 8 and a pair of living hinges 10. Cover 6 moves between open and closed positions with respect to base 4 by pivoting about hinges 10. In these exemplary configurations, container 2 defines a pocket 12 that is configured to hold at least one disc-shaped item of recorded media 14 such as a DVD or a CD. Container 2 may be manufactured from a paperboard material having a smooth outer surface. The paperboard may have a core sandwiched between a pair of smooth outer liners.

[0050] Base 4 includes an inner panel 20, first 22 and second 24 intermediate panels, and an outer panel 26. In alter-

native configurations, first 22 and second 24 intermediate panels may be provided as a single intermediate panel. In the exemplary configuration, inner panel 20 defines a window 28 that allows a portion of disc 14 to be viewed when cover 6 is open. Disc 14 may not be removed through window 28. If desired, outer panel 26 also may define a similar window.

[0051] Intermediate panels 22 and 24 define pocket 12 and the opening 30 through which disc 14 is loaded into and unloaded from container 2. Opening 30 may be disposed at the top wall of container 2 as shown in the first configuration or at the sidewall as shown in the second and third configurations. Opening 30 also may be disposed in the bottom wall opposite the top wall or a pair of openings 30 may be provided to allow the media disc to be loaded and unloaded from different sides. Pocket 12 is generally U-shaped. Pocket 12 includes a semi-circular bottom portion and an elongated channel portion. Opposed compressible shoulders 34 are disposed at the end of the channel portion to define a neck that separates the bottom portion from the channel portion. Pocket 12 is configured to hold disc 14 in an unstressed configuration such that disc 14 is not pinched.

[0052] Shoulders 34 are configured to prevent disc 14 from readily falling out of container 2. Shoulders 34 are spaced apart a distance that is substantially equal to or slightly less than the outer diameter of disc 14 such that disc 14 frictionally engages shoulders 34 when disc 14 is first loaded into container 2. Shoulders 34 are tapered on both the pocket side and the opening side with the peak being rounded. The inward pocket side of each shoulder 34 may be a continuation of the round bottom of pocket 12 having the same diameter as the bottom of pocket 12. Shoulders 34 thus do not pinch disc 14 when disc 14 is disposed in pocket 12. The portions of intermediate panels 22 and 24 that form shoulders 34 may be adhered together while shoulders 34 may not be adhered to panels 20 and 26. Shoulders 34 are thus free to be compressed between panels 20 and 26 when disc 14 is pushed between shoulders 34. The loading of disc 14 slightly deforms or compresses at least one of shoulders 34 as disc 14 passes between shoulders 34. Once disc 14 is loaded, shoulders 34 resiliently return to some degree back toward their original form to retain disc 14 in pocket 12. Because shoulders 34 are made from the paper-based material of panels 22 and 24, they are not fully resilient when compressed, but will resiliently rebound from a compressed condition to function again. In one configuration, only one of intermediate panels 22 and 24 has shoulders 34. This makes shoulder 34 thinner and easier to compress.

[0053] The bottom of pocket 12 is circular and has a diameter slightly larger than disc 14 so that disc 14 is evenly seated against the bottom of pocket 12 when disc 14 is disposed in pocket. Opening 30 is slightly wider than the diameter of disc 30.

[0054] Base 4 is formed by folding intermediate panels 22 and 24 onto the inner surfaces of panels 20 and 26 about hinges 40. Hinge 40 is formed by indenting the material between the panels. In the first configuration, the outer surfaces of the paperboard of hinges 40 are not cut so that the outer surface of the paperboard liner remains intact to provide a pair of stacked smooth rounded edges 46 along the side of container 2. The major portions of panels 22 and 24 may be directly adhered to panels 20 and 26. Panels 20 and 22 are then folded about hinge 42 onto panels 24 and 26 to form base 4. Hinge 42 is formed to provide a smooth rounded edge 44 on each side of opening 30 for the comfort and safety of the user. The outer liner of hinge 42 remains intact when the fold is formed to form edge 44. When two intermediate layers are

used, base **4** is defined by four thicknesses of material. Each panel may have a thickness that is slightly greater than half the thickness of disc **14** such that pocket **12** has a depth slightly greater than the thickness of disc **14**. Disc **14** may thus freely rotate within pocket **12** and is not pinched or stressed while disc **14** is disposed in pocket **12**.

[0055] Cover **6** of the first and second configurations is defined by three thickness of material. Container **2** thus has at least seven layers of thickness when closed and is rigid enough to protect disc **14** if processed through the US mail. In the first and second configurations, cover **6** has an intermediate panel **50** that is folded down about hinge **51** against the inner surface of an outer panel **52**. The outer surface of hinge **51** is not broken to provide a smooth edge **53** to container **2**. An edge flap **54** is also folded over against the inner surface of outer panel **52** to define a smooth edge **56** for cover **6**. Edge flap **54** is not adhered to the inner surface of panel **52**. A booklet flap **58** is folded up about hinge **59** over the outer surface of intermediate panel **50** and the outer surface of edge flap **54**. The outer surface of hinge **59** is not broken to provide a smooth edge **61** to container **2**. The inner surface of the outer edge **60** of booklet flap **58** is adhered to the outer surface of edge flap **54** to define an open pocket to hold a literature booklet **62** related to disc **14**. Edge flap **54** may extend along the entire length of panel **52** to provide smooth edge **60** to the entire length of cover **6**.

[0056] Panel **20** may define a finger access cutout **64** that allows the user to grip the top of disc **14** when disc **14** is loaded in pocket **12**.

[0057] In the third configuration of container **2** shown in FIGS. **13-18**, the cover has a configuration that mirrors base **4**. The third configuration of container **2** provides a pair of pockets **12** accessible from the sides of container **2**. The reference numerals used to describe base **4** above are used to describe the elements of the cover in the third configuration. The third configuration also may be configured to provide access through the top of container **2** similar to the configuration of FIGS. **1-6**. In this configuration, booklet **62** may be loosely disposed between base **4** and cover **6**.

[0058] Fourth and fifth configurations of the media disc storage container are indicated generally by the numeral **102** in the FIGS. **19-30**. Container configurations **102** generally include a base **4** that is movable between retracted and extended positions with respect to an outer sleeve **106**. In order to prevent base **4** from falling out of sleeve **106**, base **4** includes a lock flange **110** that slides under a corresponding lock flange **112** disposed in sleeve **106** when base **4** is moved to the extended position. Lock flanges **110** and **112** are cantilevered so that they may freely engage. In these exemplary configurations, container **102** defines one or more pockets **12** that are each configured to hold at least one disc-shaped item of recorded media **14** such as a DVD or a CD.

[0059] In the fourth configuration of FIGS. **19-24**, base **4** is similar to base **4** of the second configuration with the addition of flange **110**. In the fifth configuration, base **4** is similar to the combined base and cover (two connected bases **4**) of the third configuration with the exception being that windows **28** are defined by the outer panels **26**. In this configuration, the outer surfaces of panels **20** may be adhered together.

[0060] In both of the fourth and fifth configurations, bases **4** may be moved to their retracted positions to allow the user to view the outer surfaces of bases **4** and to view a portion of

disc **14** before removing discs **14** from bases **4**. In each of these configurations, the outwardly disposed sidewall of base **4** is provided with smooth edges **44**.

[0061] Certain terms have been used for brevity, clearness, and understanding. No unnecessary limitations are to be implied therefrom beyond the requirement of the prior art because such terms are used for descriptive purposes and are intended to be broadly construed.

[0062] Moreover, the description and illustration of the invention are exemplary and the invention is not limited to the exact details shown or described.

1. A paperboard media disc storage container comprising:
a paperboard first base having an outer panel, an inner panel, and at least one intermediate panel disposed between the inner and outer panels;

the base having a top wall, a bottom wall, and a pair of sidewalls;

the base defining a pocket having an opening defined in one of the top, bottom, and sidewalls of the base; the opening and pocket being adapted to receive a media disc;

the intermediate panel defining a pocket sidewall having a bottom portion and an elongated channel portion that terminates at the opening to the pocket; the intermediate panel having a pair of opposed shoulders disposed at the end of the elongated channel at the beginning of the rounded portion; and

the shoulders being integrally formed from the material of the intermediate panel; each shoulder being compressible and resilient such that a media disc can frictionally engage and compress the shoulders as the disc is passed between the shoulders.

2. The container of claim 1, further comprising a cover connected to the base with a living hinge; the cover movable between open and closed positions.

3. The container of claim 2, wherein the inner panel of the base defines a window; the cover overlying the window when the cover is in the closed position.

4. The container of claim 3, wherein the outer panel of the base define a window.

5. The container of claim 1, wherein a smooth edge is defined between the outer surface of the inner panel and the outer surface of the outer panel on both sides of the pocket opening.

6. The container of claim 1, wherein the shoulders are not adhered to the inner and outer panels.

7. The container of claim 6, wherein the bottom of the pocket has a diameter; each shoulder having a curved inward portion having the same diameter has the bottom of the pocket.

8. The container of claim 7, wherein each shoulder has a tapered outward surface facing the elongated channel.

9. The container of claim 1, further comprising a sleeve having a locking flange; the base having a corresponding lock flange; the base movably disposed in the sleeve between retracted and extended positions; the locking flanges engaging each other when the base is disposed in the extended position to prevent the base from being entirely removed from the sleeve.

10. The container of claim 1, further comprising a second base connected to the first base when a living hinge; the second base having the same structure as the first base.

* * * * *