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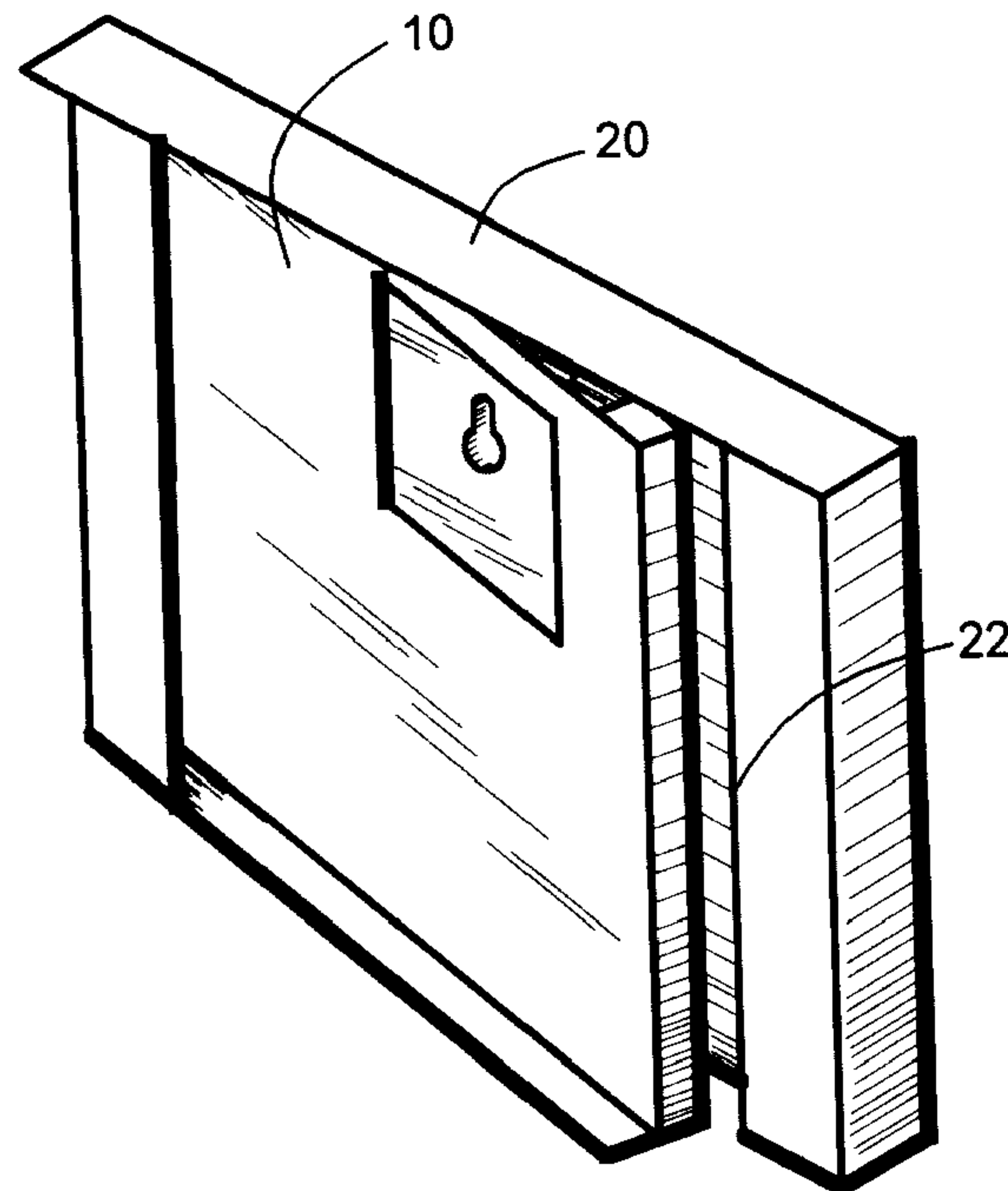
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(54) Titre : CADRE DE RANGEMENT MURAL POUR BOITIERS DE DISQUES COMPACTS

(54) Title: CD CASE FRAMER



(57) Abrégé/Abstract:

A wall or vertically mounted frame for holding and displaying single compact disc case comprising of a swing out holder pivoted to a fixed housing.



ABSTRACT OF THE DISCLOSURE:

A wall or vertically mounted frame for holding and displaying single compact disc case comprising of a swing out holder pivoted to a fixed housing.

CD Case Framer

The present invention relates to wall or vertically mounted frame specifically to a device that securely holds and displays a single compact disc case.

5 Compact disc or CD cases are commonly a transparent plastic containers that protect and keep individual CD's. They are labeled with front cover arts depicting their content. And since CD's are becoming a common home and office items, their cases whether empty or not are commonly stacked without giving attention to their cover arts.

10 CD racks or towers are space savers that are used to efficiently store CD cases. They do this by stacking CD's with only the title edge visible.

Prior art patentees created several types of CD frames or holders and disclose types of wall mounted or free standing racks which can hold several or CD cases in the
15 following Patents;

U.S. patent 6,116,432 to Rohner (2000)
U.S. patent 6,073,764 to Haas (2000)
U.S. patent 5,518,125 to Colosimo (1996)
20 U.S. patent 5,437,376 to Larsen (1995)
U.S. patent 5,351,835 to Hallgren (1994)
U.S. patent 5,341,942 to James, Jr. (1994)
U.S. patent 5,372,263 to Niekel (1994),
U.S. patent 5,040,687 to Whittington (1991)
25 U.S. patent 4,867,306 to Factor (1989)

Prior arts just mentioned have paid attention to displaying the CD case cover arts but they were typically modular racks or having plurality of frames and therefore serving the purpose of framing or displaying multiple CD cases. They make use of profiled bars or rails, hook-and-loop, contact adhesives, etc. to mount or hold few to several compact disc cases.

Aside from ordinary CD's, CDR's or recordable CD's, and CDRW's or rewritable CD's are now getting popular and becoming commonplace. Many people record and create their own music or programs and store their digital photos on these new kind of CD's. To make a distinction from the commercial music and software CD's, I think, many people wants to display separately their favorite or personal CD's in a special place at home or office. They feel proud to show these to friends and visitors in the same way they feel about certificates and diplomas hung on the wall.

This is where the idea behind my CD case framer comes in because my CD case framer specifies single CD case holder. It features a secure method of framing a CD case by using a swing out holder pivoted to a fixed housing.

Accordingly, the objects and advantages of my CD case framer of the present invention are:

(a) to be able to display a single favorite or personal CD case without having to display and mix them with all the rest of CD's or completely fill the typical CD tower, rack, frame or holder;

(b) to be able to securely hang or vertically mount a CD case without having to use permanent or semi permanent fixing devices on a CD case like adhesives, hook-and-loop, etc. thus preserving the CD case in its original form and making it convenient to stow it back to their storage racks or boxes whenever the owner wants;

(c) to provide a CD case framer which can be displayed in a way not possible with multiple or modular frames. For example, displaying CD cases on narrow walls, in between picture frames, souvenirs, memorabilia, etc;

(d) to be able to create various patterns by using several of these CD case framers. Example is an art mosaic consisting of several CD case framers mounted edge to edge vertically, horizontally, diagonally, etc., to cover a specific wall area or to form any artistic shapes.

The invention as exemplified by a preferred embodiment, is described with reference to the drawings in which:

FIG 1 is an isometric front view of a swing out holder;
FIG 2 is an isometric back view of a swing out holder;
FIG 3 is an isometric front view of a fixed housing;
FIG 4 is a cut out view of a bracket showing a spring acting on the edge of the compact disc case;
FIG 5 is a side view detail of pivot unit;
FIG 6 shows a CD case framer in close position without a CD case;
FIG 7 shows a CD case framer in open position;
FIG 8 shows a CD case framer in open position and on the process of receiving or withdrawing a CD case; and

FIG 9 is a CD case framer in close position loaded with a CD case.

Referring to the drawings in FIGS 1 to 5, the embodiment of the invention shown,

5 A swing out holder 10 (FIG 1) is a plane of suitable thickness wall having a perpendicular foot plate 11. Left side bracket 12 forms a vertical channel with holder 10 wall. A spring 13 is fastened within the perpendicular side of bracket 12 (FIG 4). On the back side of swing out holder 10 (FIG 2) are two predisposed coaxial pivot rings 14. A stopper 15 serves as a support leg. An access window 16 is a cutout on swing out holder plane.

15 A fixed housing 20 (FIG 3) is a plane of suitable thickness bounded by four walls. A top wall 21 and a right side wall 22 are relatively higher than their corresponding opposite walls. Also, wall 22 is thicker than the rest of the walls to give aesthetic balance with the swing out holder. Mounted on housing 20 are two predisposed pivot pins 23 fixed on a block. A mounting cutout 24 on the housing plane is for 20 wall and vertical mounting means.

In the assembled form, pivot rings 14 fit housing pivot pins 23 (FIG 5) only in one way and forms a complete CD case frame. Even in the assembled form, cutout 24 is accessible because of access window 16 (FIG 6).

25 Multiple assembly made up of individual frames can be made by joining the edges vertically, horizontally and/or combination of both to form a larger frame.

Referring to the drawings in FIG 4 to 9, the stages of operation of the invention shown,

Holder 10 should be in the "swing out" position. This is done by depressing bracket 12 perpendicularly towards housing 20 (FIG 6). This simple lever action (FIG 5) will raise the right side part of holder from 10 to 10' higher than wall 22 (FIG 7). A CD K is slid sideways along holder 10 with CD bottom K3 riding over plate 11 (FIG 8). CD K is slid further sideways until it is stopped by bracket 12. Bracket 12 contains CD's left most side K2. Then, CD right side K1 is depressed perpendicularly towards the housing 20. CD case framer is now in loaded and close position (FIG 9). CD case is now secured on all sides and force of spring 13 makes a contact pressure between the CD case edge and the right side wall 22. Stopper 15 maintains a level distance between swing out holder and housing. This makes the CD case level and flushed with housing top and right side walls.

To unload CD K from CD case framer, bracket 12 is depressed perpendicularly towards housing 20. This lever action will bring CD side K1 out thereby clearing wall 22. CD K is now accessible for dismounting from holder 10 and withdrawal is assisted by the force of spring 13. The overall length of the swing out holder 10 is shorter than the length of the CD case K to permit convenient holding of CD side K1 during the process of unloading (FIG 4).

An optimum position of pivot and the allowable depth of inward travel of holder 10 (FIG 5) will give enough clearing distance of holder 10 from wall 22 to adequately remove a CD from the holder.

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A wall or vertically mounted frame for holding and openly displaying the front face of a single compact disc case, comprising:
a swing out CD case holder engaged by means of a predisposed pivot so that said holder is an asymmetrical lever within the plane of a fixed housing serving as a base of a fulcrum allowing said holder a maximum swivel angle of twelve circular degrees.
2. A frame as claimed in claim 1 wherein said holder is a plane of suitable thickness, having a width that covers the whole effective width of a standard single compact disc case and a length shorter than the effective length of said case so when that said case is laid directly over this plane, the right most side of it can be grasped and slid out sideways without touching this plane.
3. A holder plane as claimed in claim 2 wherein coaxial pivot rings are predisposed on the backside of that plane thereby forming a fulcrum of a simple lever when fitted to coaxial pivot pins.
4. Pivot rings as claimed in claim 3 wherein axial line of said rings is perpendicular to the length of the holder plane, off centered to the said plane, and positioned more to the right side of the backside of that plane making it an unbalanced lever.

5. A holder plane as claimed in claims 2 and pivot rings axial line as claimed in claim 4 wherein a stopper is predisposed at the end of the longer arm of the lever that will serve as a leg to maintain the said plane parallel with any surface established by the pivot axis.
6. A holder plane as claimed in claim 2 wherein a bracket is fitted on the front left side of the said plane thereby forming a channel with that plane to enclose the left most side of a compact disc case.
7. A holder plane as claimed in claim 2 wherein the bottom side of the front plane has a perpendicular plate that will make a surface contact with the bottom edge of a compact disc case.
8. A bracket as claimed in claim 6 and plate as claimed in claim 7 wherein a spring is fitted within the said bracket that will act against a standard single compact disc case edge when that compact disc case is slid into that bracket over along the holder plane and said plate.
9. A frame as claimed in claim 1 and holder plane as claimed in claim 2 wherein a fixed housing is also a plane of suitable thickness bounded by four walls, having inner space dimensions so that a swing out holder with a standard single compact disc case over it can fit inside the said housing with enough clearance for free lever movement.

10. A housing plane as claim in claim 9 wherein a top side and a right side walls are higher than the bottom side and left side walls by not less than the effective thickness of the standard single compact disc case.
11. Pivot rings as claimed in claim 3 and housing plane as claimed in claim 9 wherein coaxial pivot pins which are fitted in a block are positioned to such a height within the fixed housing so that when the right side of the swing out holder is raised by lever action, the said right side will be able to clear the fixed housing right side wall by an adequate distance to be able to grasp and slide out sideways a compact disc case from the said holder.
12. A housing plane as claimed in claims 9, top and right side walls as claimed in claim 10 and pivot pin height as claimed in claim 11 wherein the depth to which the left side of the swing out holder will dip in order for the opposite right side to clear the right side wall is equal to the optimum base height of all the fixed housing walls.
13. A housing plane as claimed in claim 9 having cutout provision for wall mounting means and stand alone leg.
14. A holder as claimed in claim 2 and cutout as claimed in claim 13 wherein the swing out plane has a cutout so that when the swing out holder is fitted on the fixed housing, the cutout provision for wall mounting means and stand alone leg is accessible.

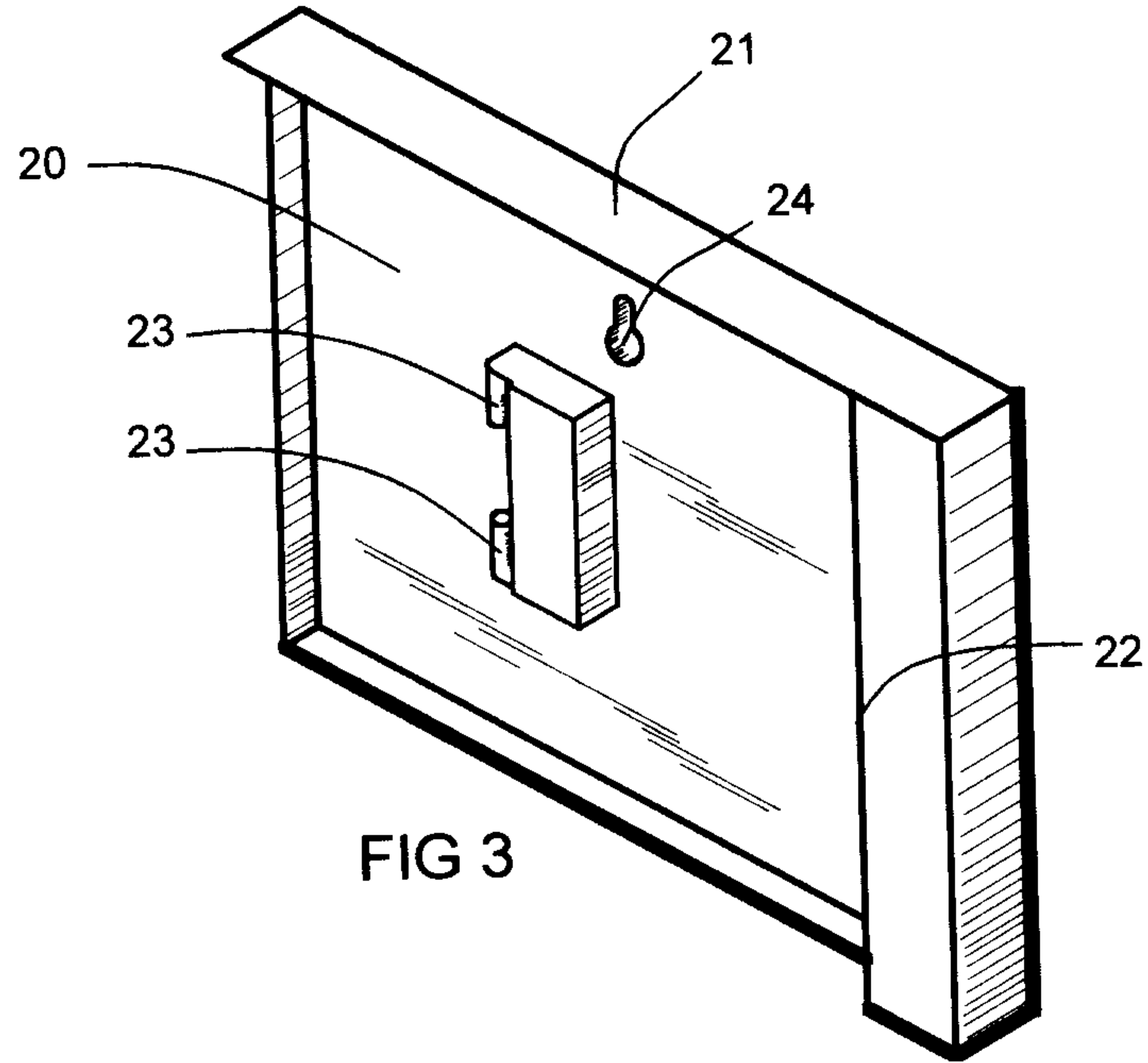
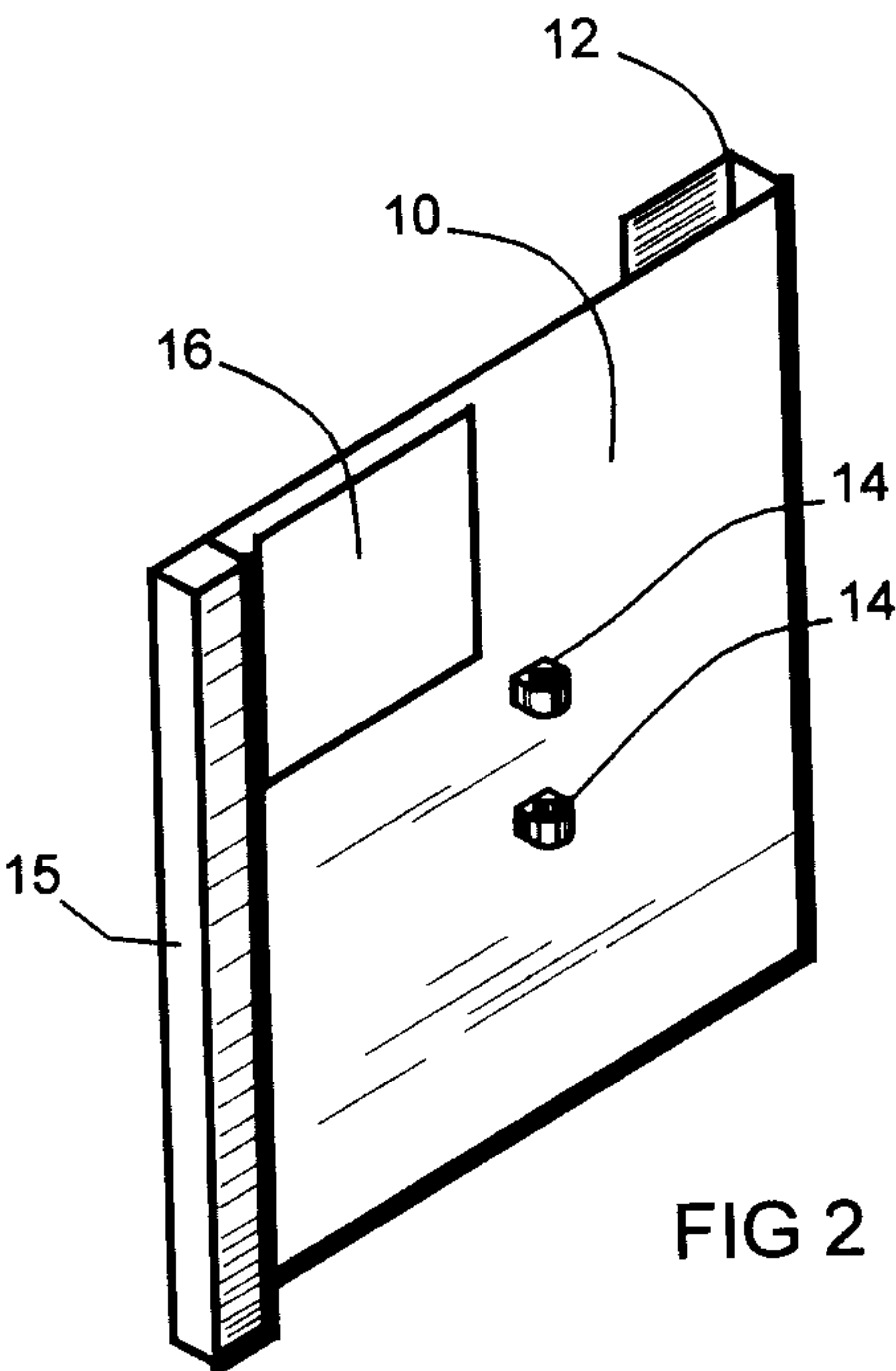
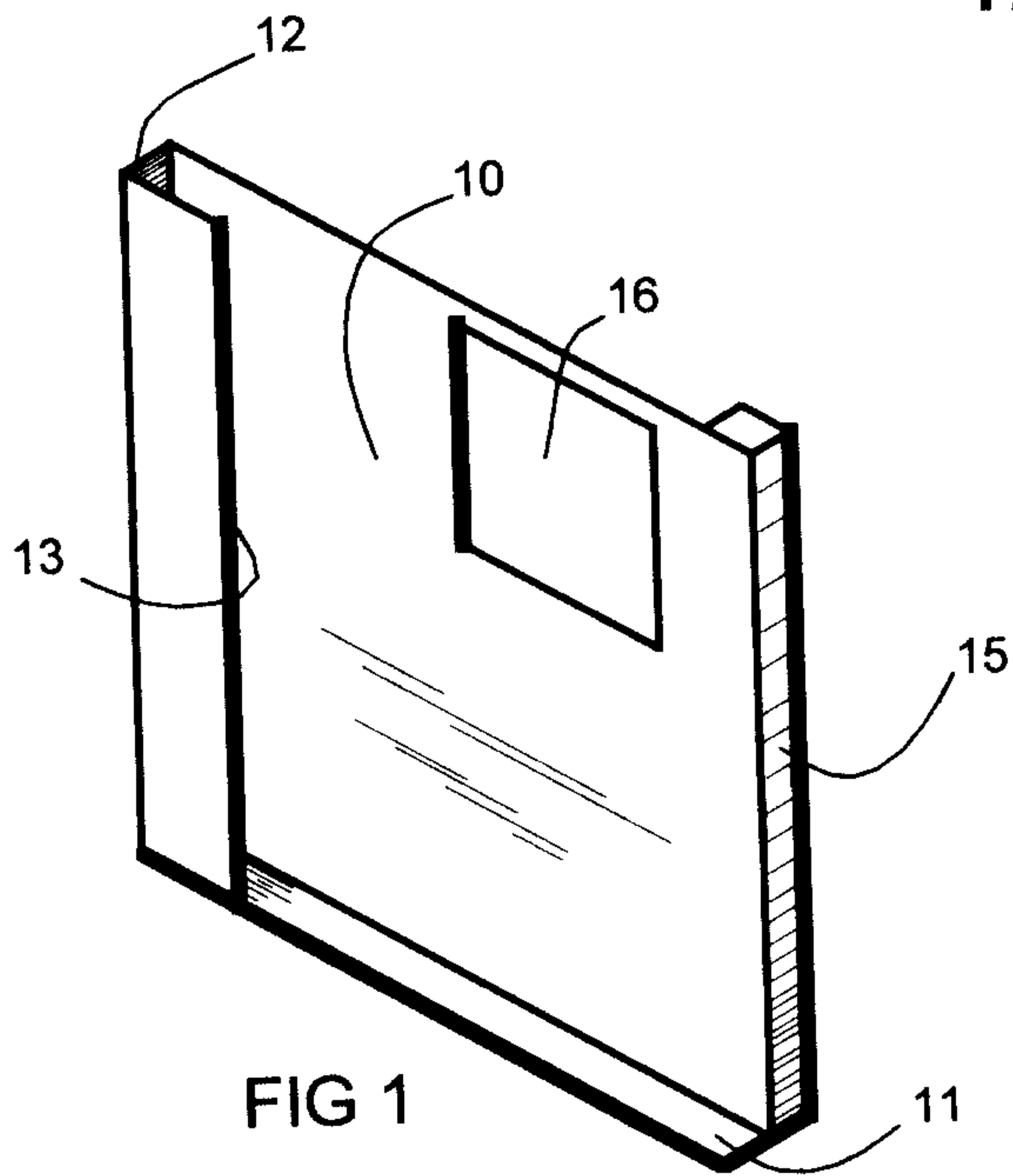
15. The frame of claim 1 wherein such frames can be attached edge to edge vertically and horizontally to form a multiple assembly.

16. A wall or vertically mounted frame for holding and displaying a single compact disc case, comprising:

a swing out holder having left side bracket fitted with spring and perpendicular bottom plate that holds a standard single compact disc case, said holder having predisposed coaxial pivot rings that correspondingly fit the coaxial pivot pins of a fixed housing so that said holder becomes a simple lever within that housing, and said housing having confining walls to further secure the compact disc case and fitted with a cutout for wall and vertical mounting.

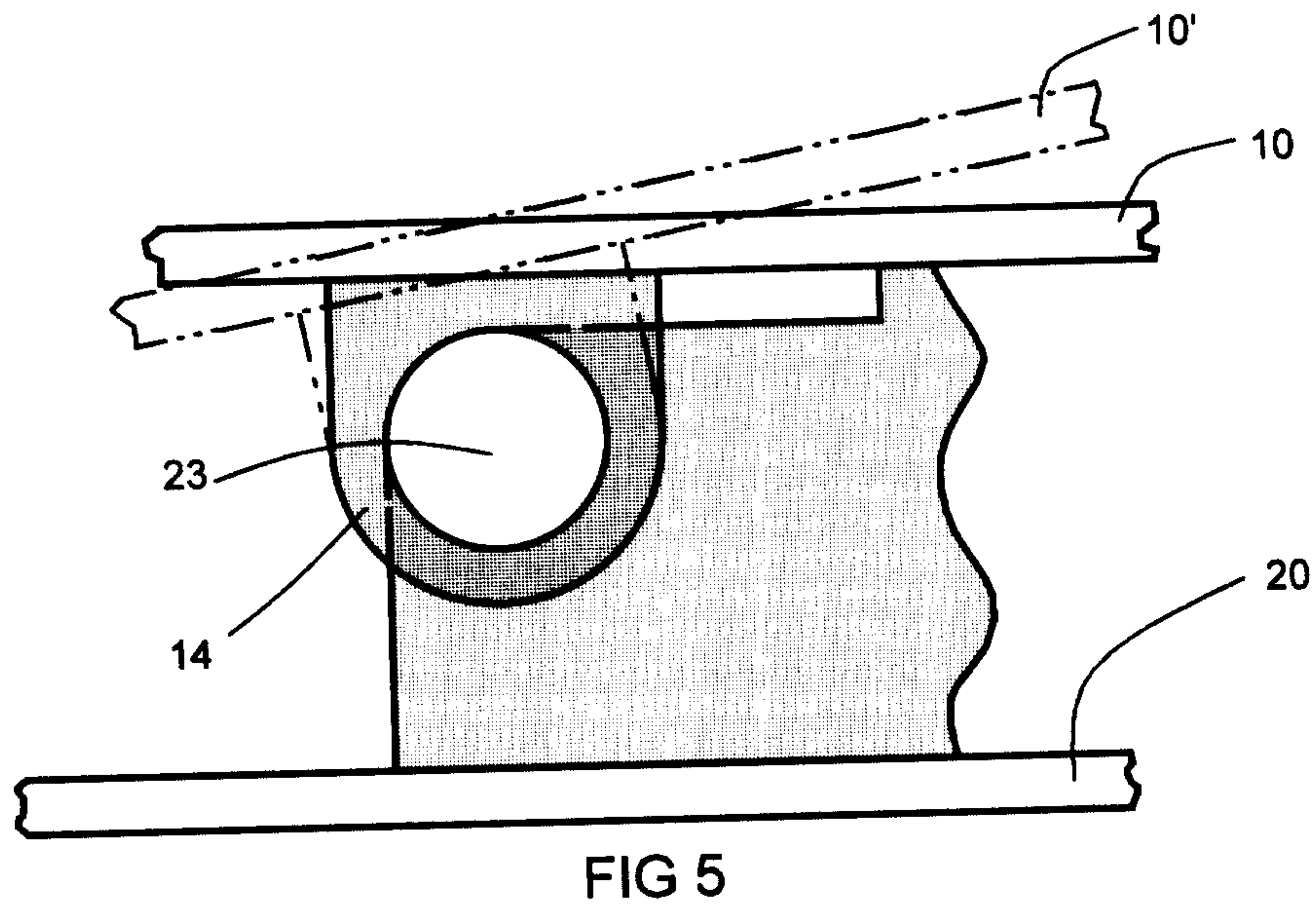
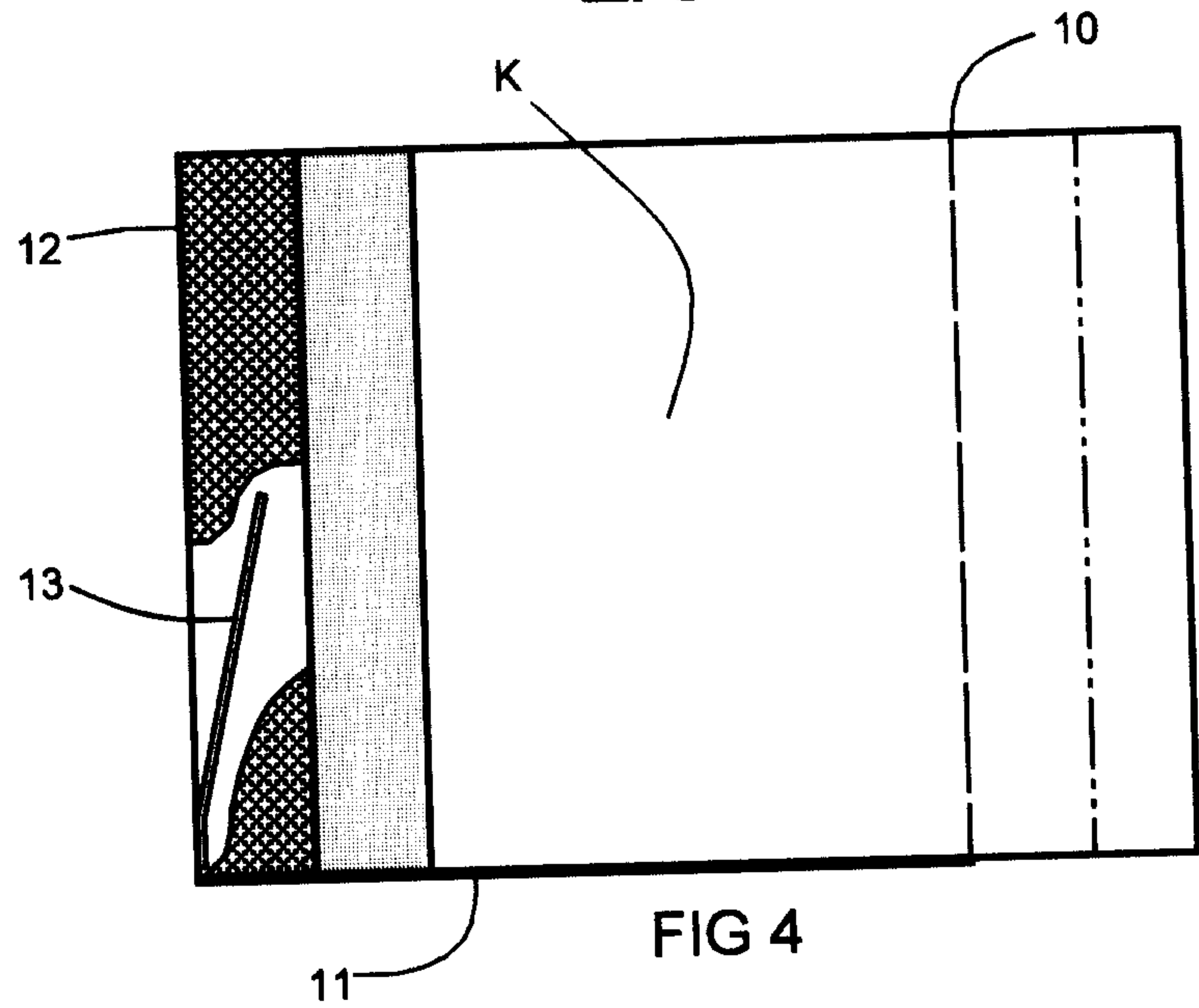
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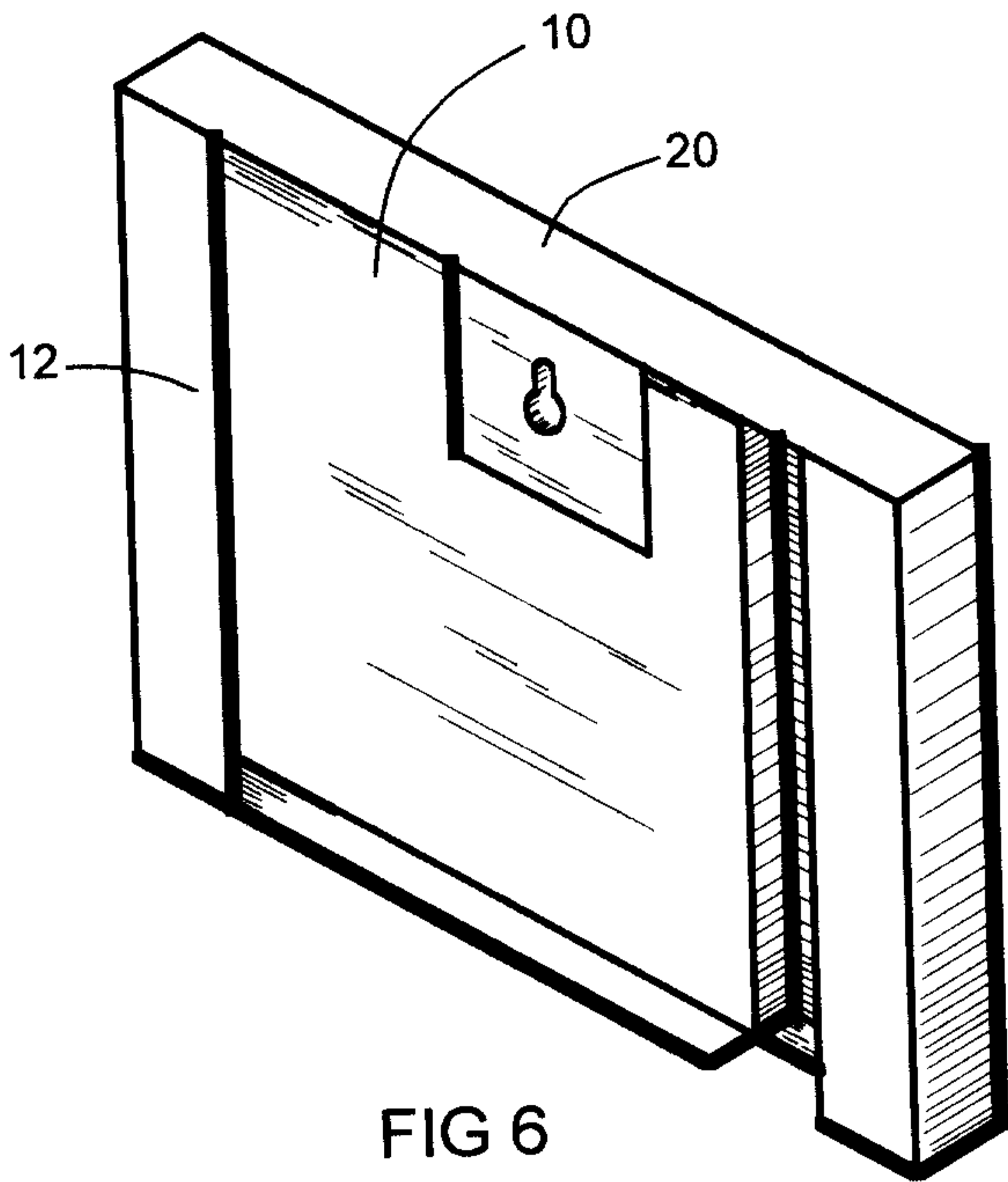


FIG 6

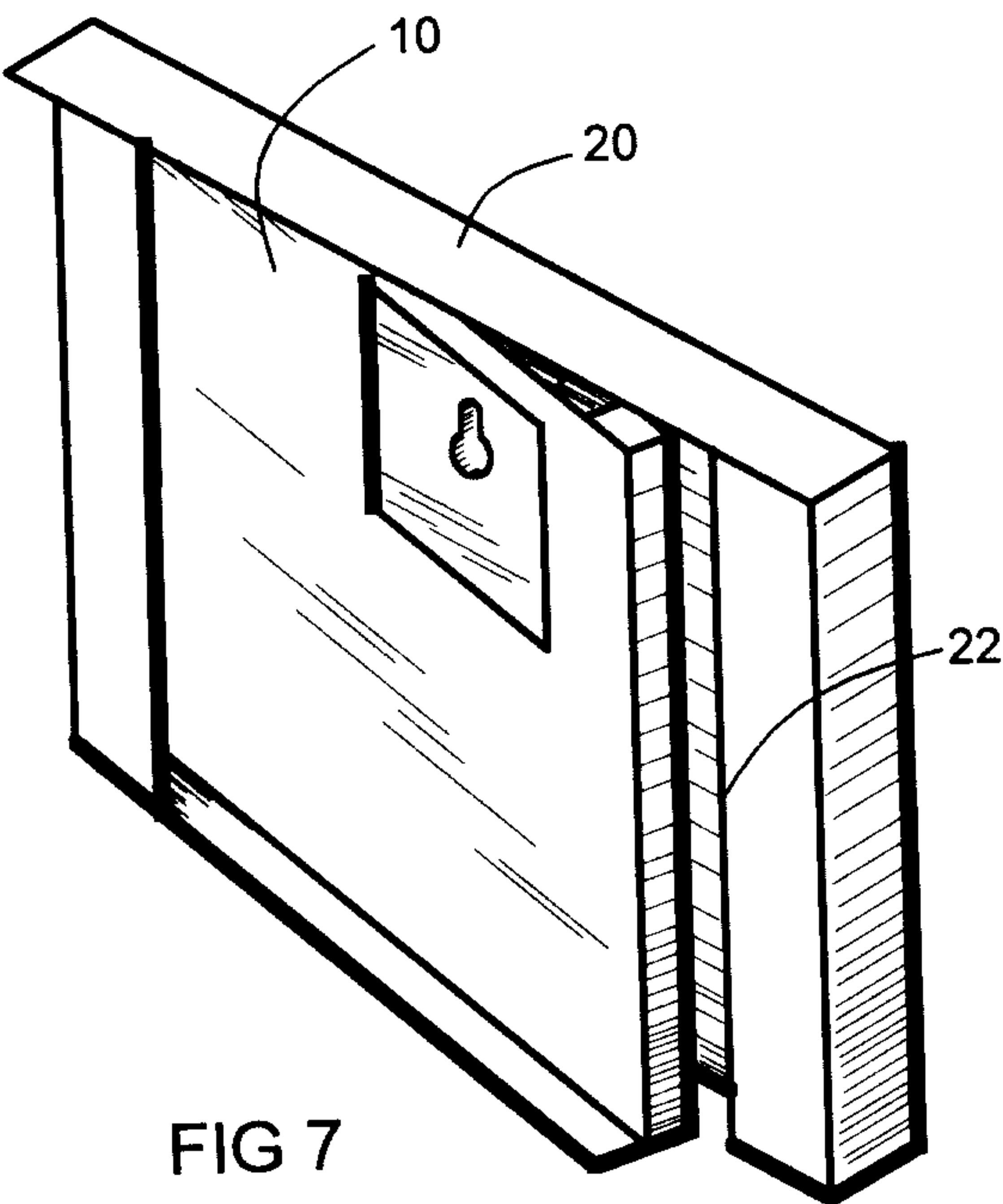


FIG 7

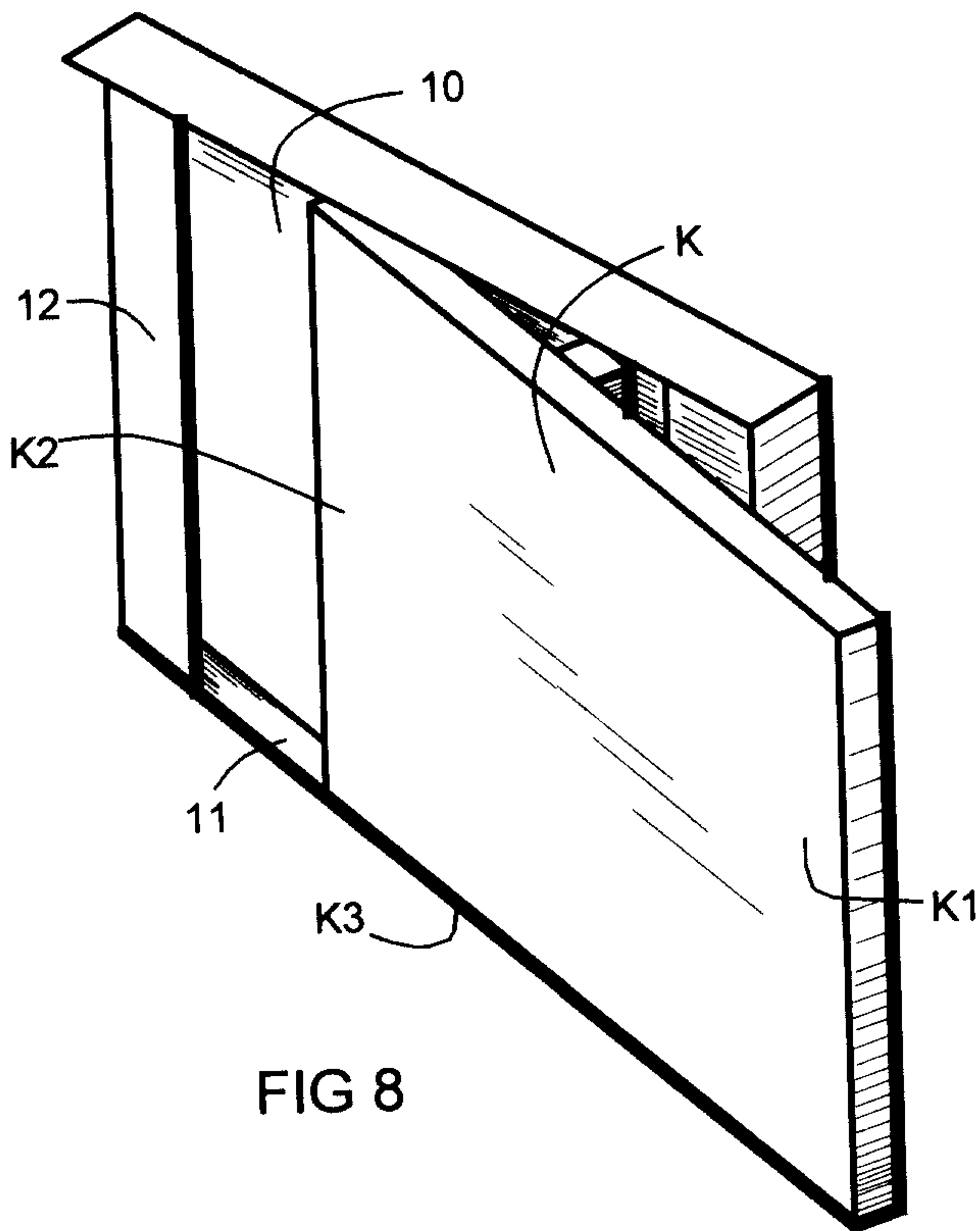


FIG 8

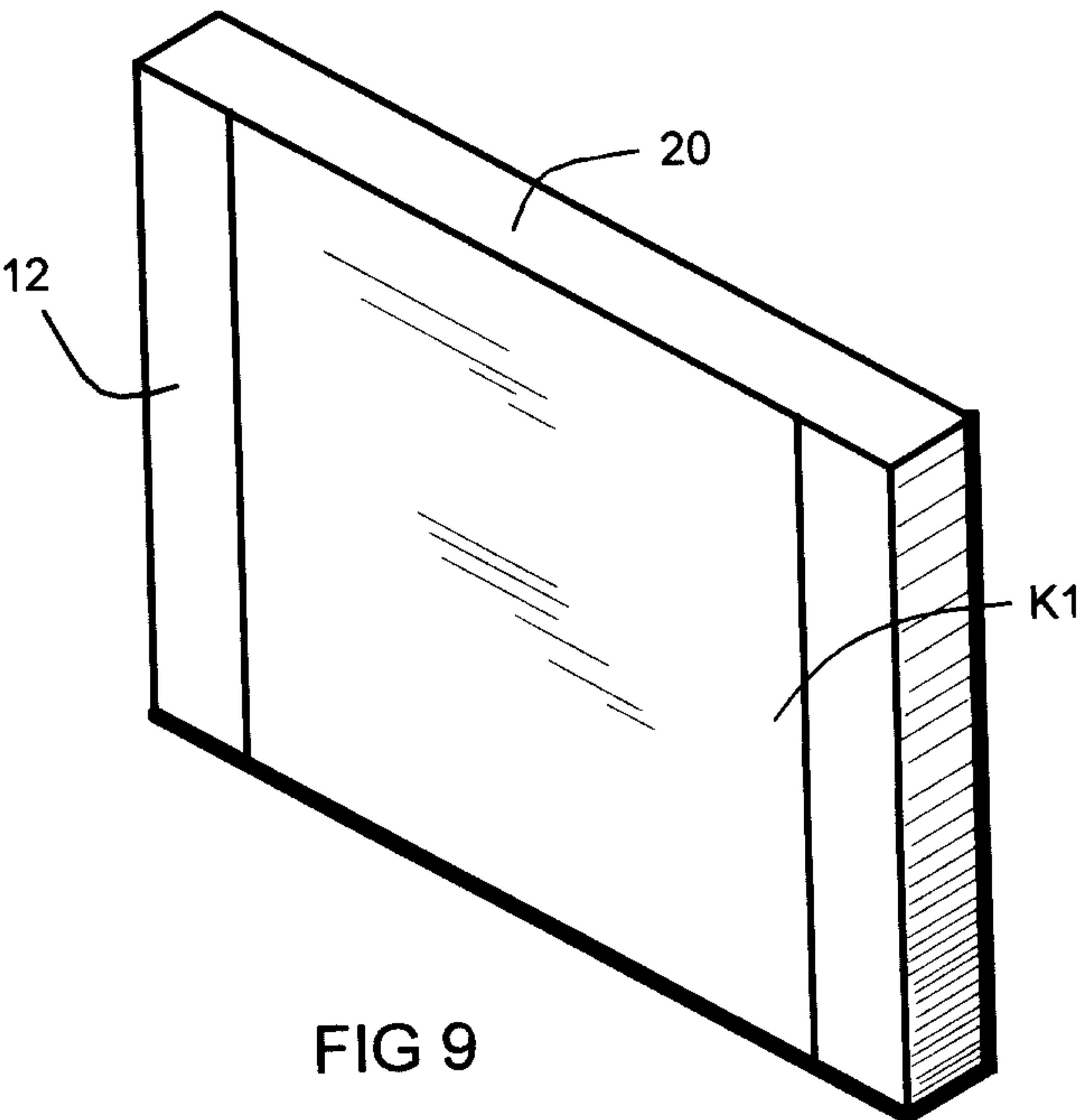


FIG 9

