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(54) **DISPLAY CABINET WITH FAUX FRONT CONCEALING PANEL**

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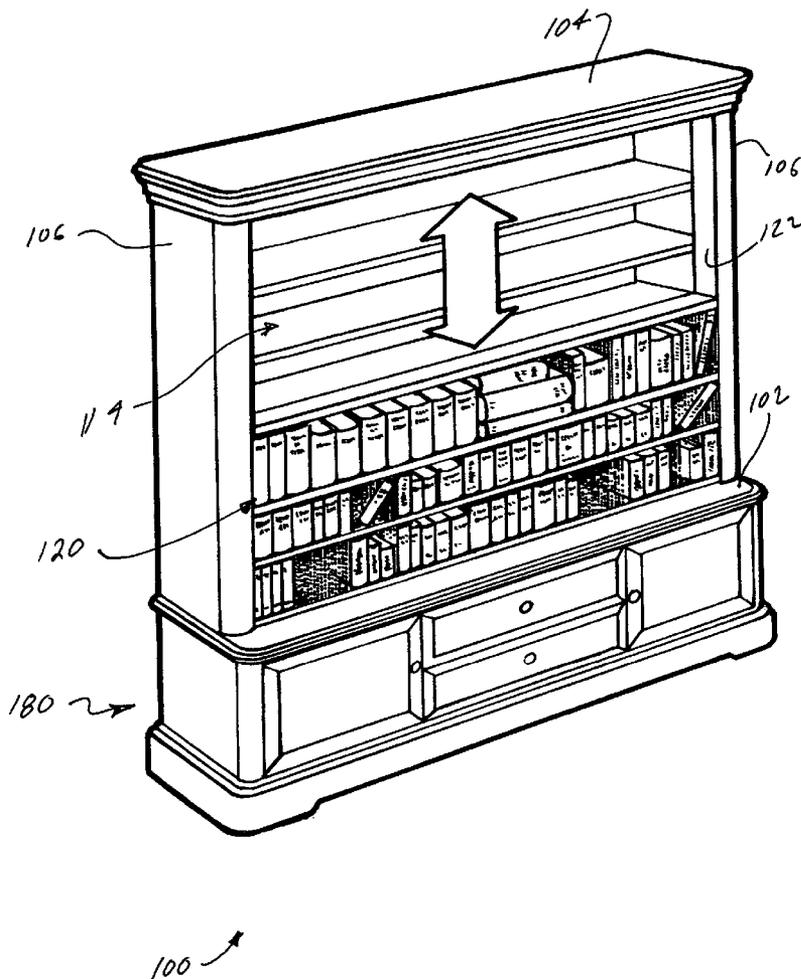
(57) **ABSTRACT**

A cabinet has a base, a top spaced above the base, a pair of opposing cabinet sides extending between the base and the top, and a cabinet space defined between the cabinet sides, the base, and the top. A display space that houses a display device is defined in the cabinet space. A faux front concealing panel is slidably connected with the cabinet and adapted to conceal and reveal the display. The panel has an outward face that presents a visual impression of a bookcase with various books. A transport mechanism is connected between the panel and the cabinet, facilitates sliding the panel, and may hold the panel in a preselected position. Lighting may illuminate the storage space and may include a switch operatively connected with the panel, so the lighting is off when the panel is open.

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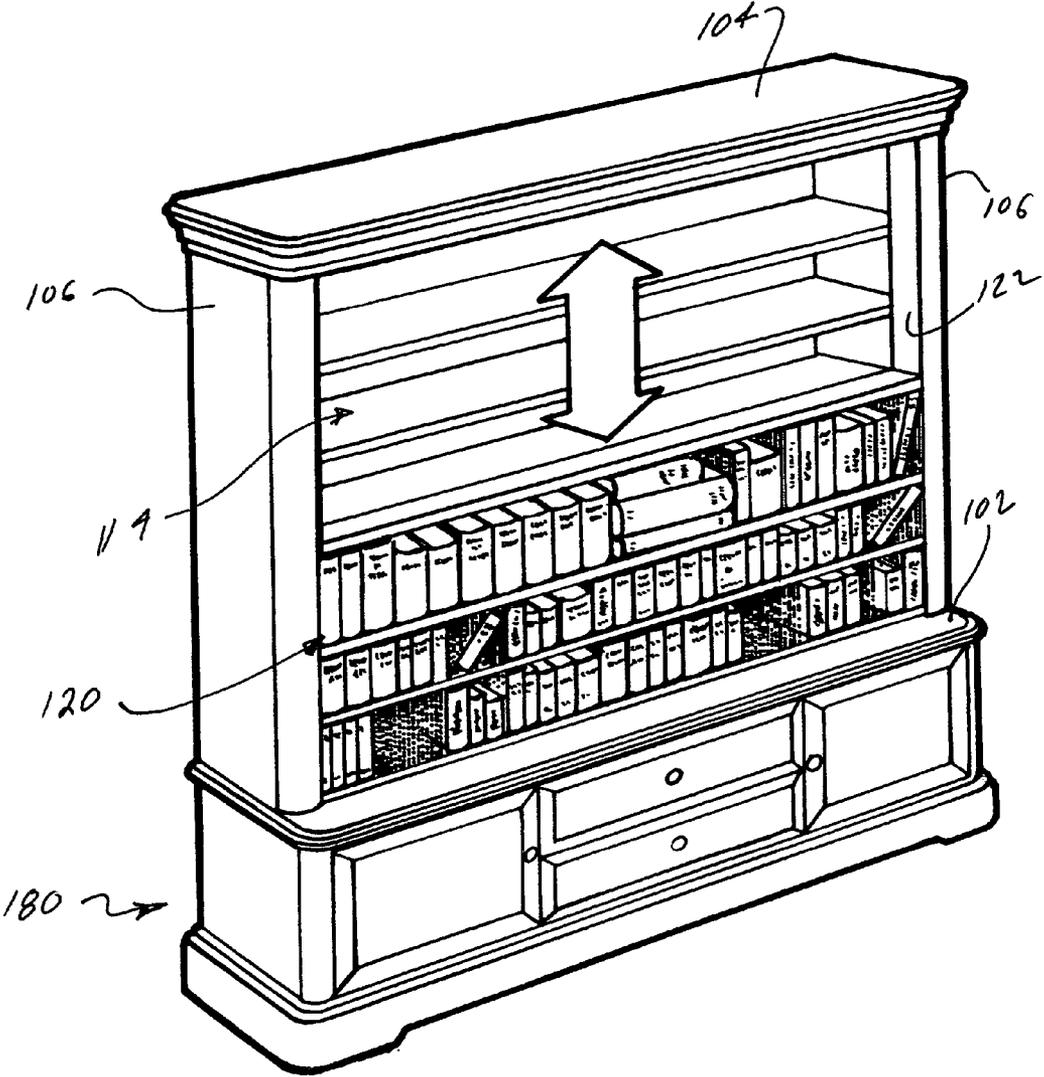
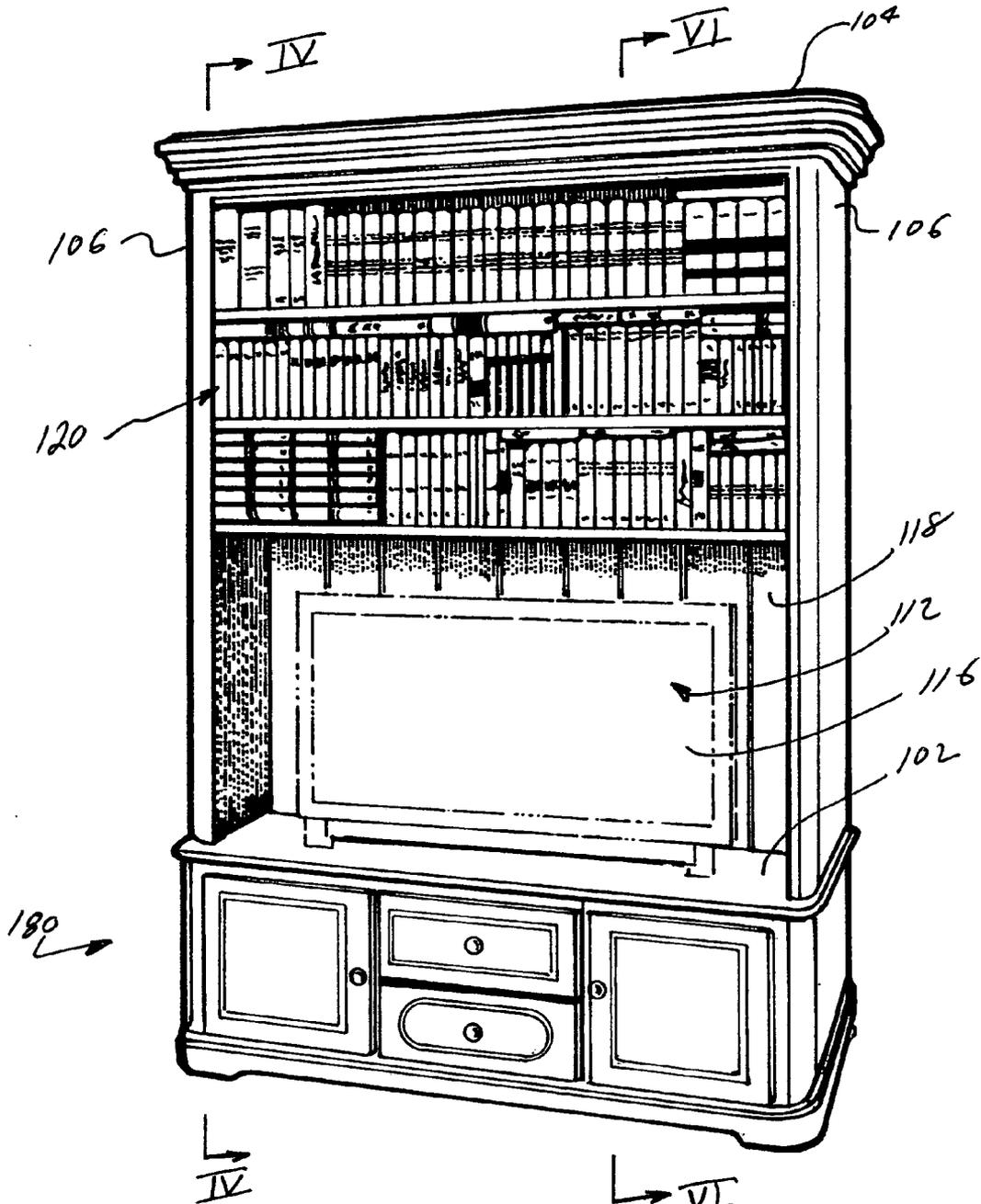
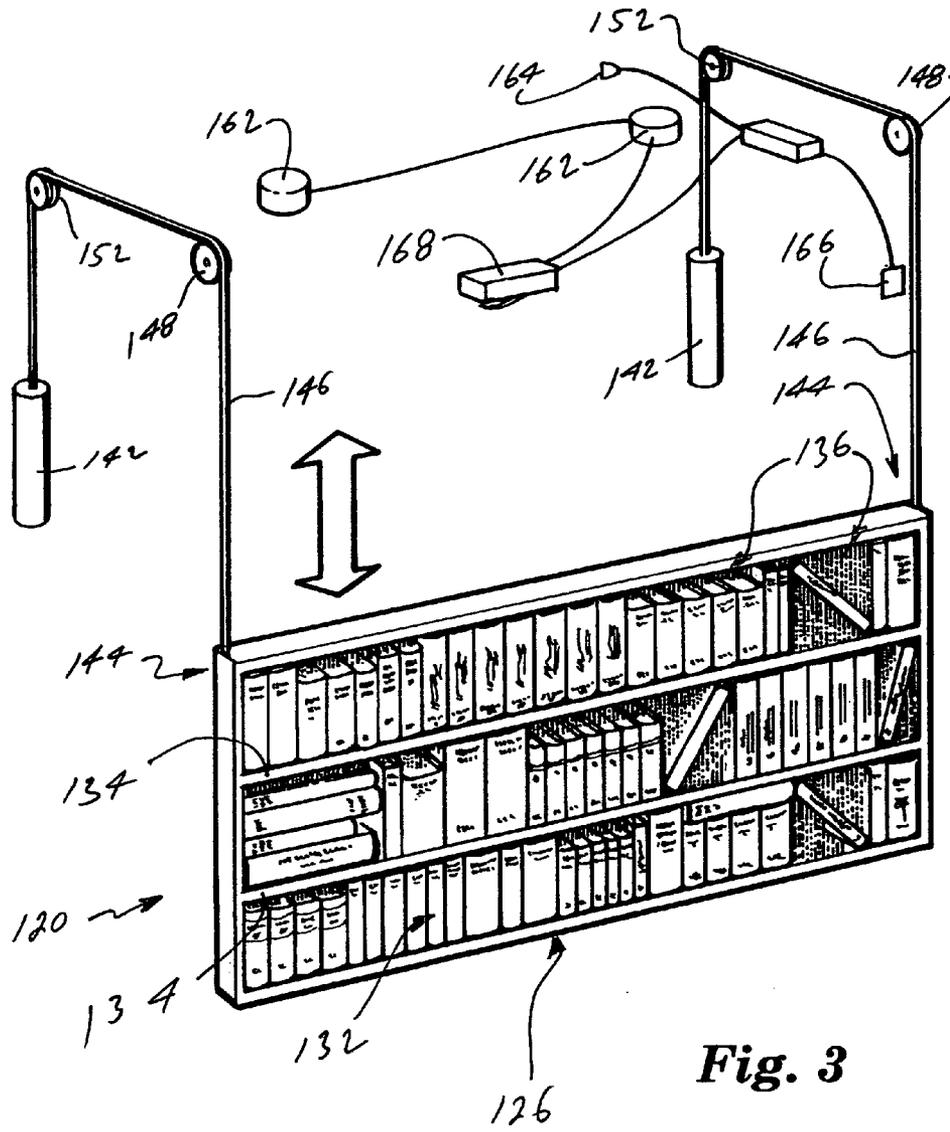


Fig. 1

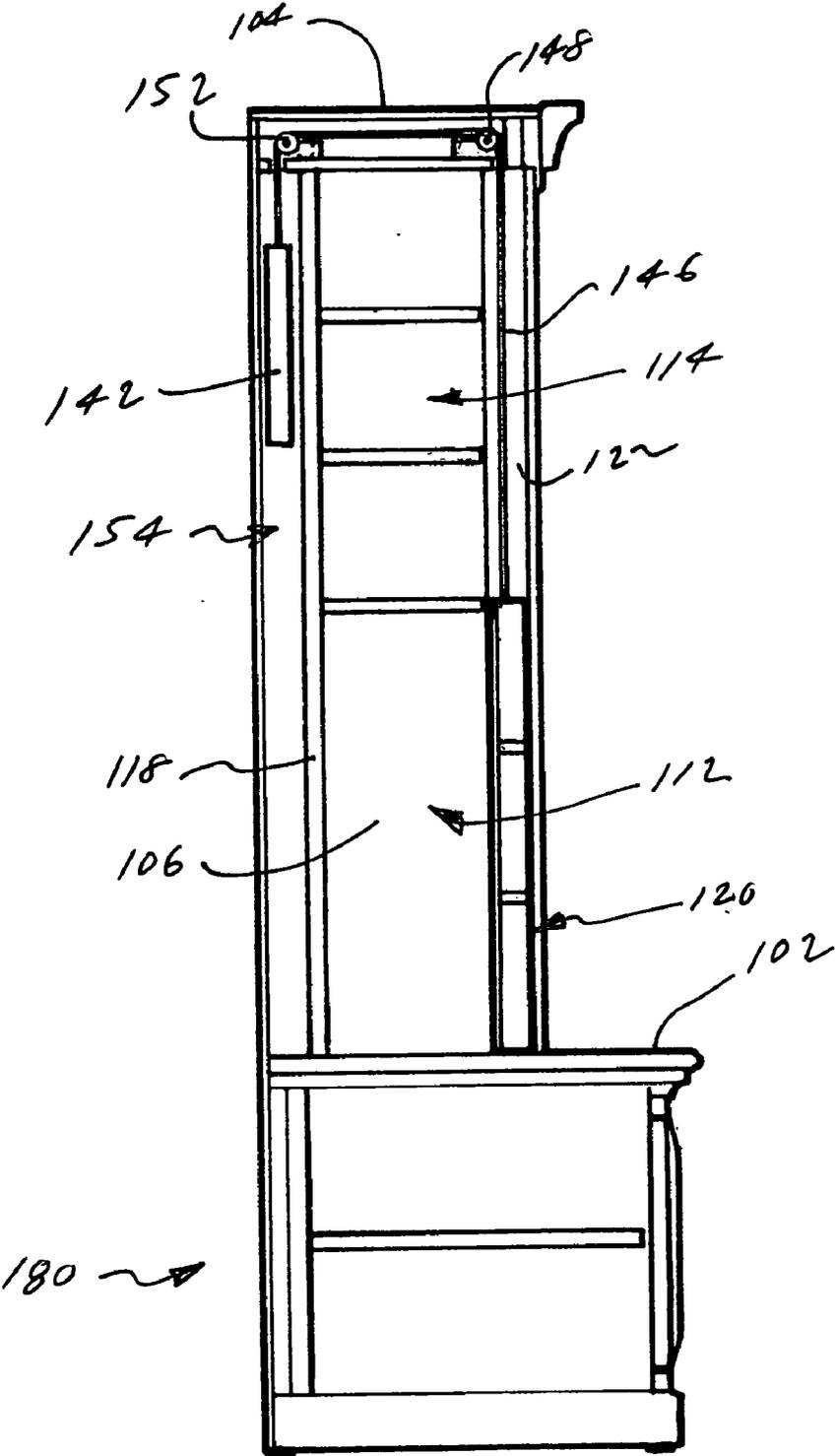
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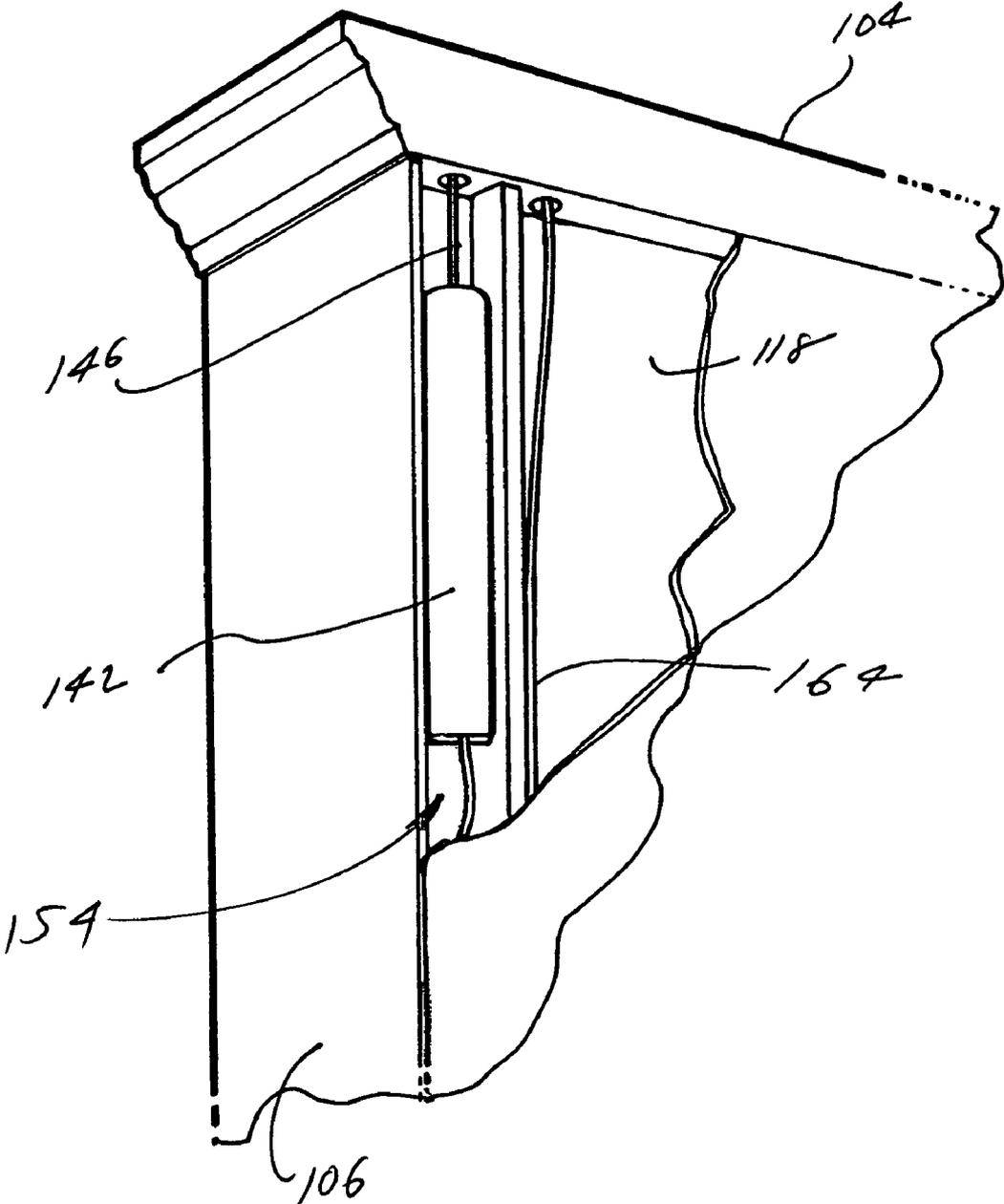
**Fig. 2**



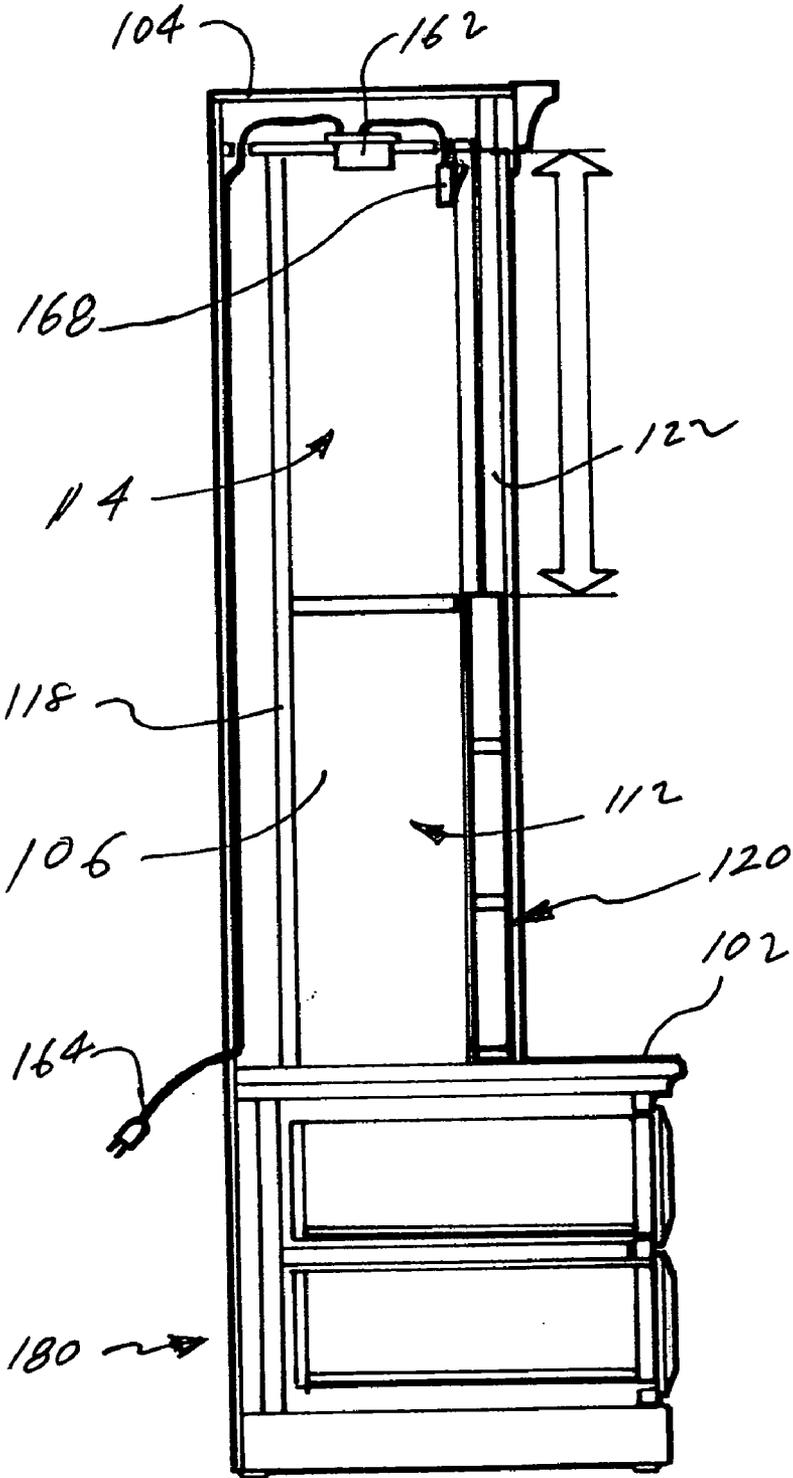
**Fig. 3**



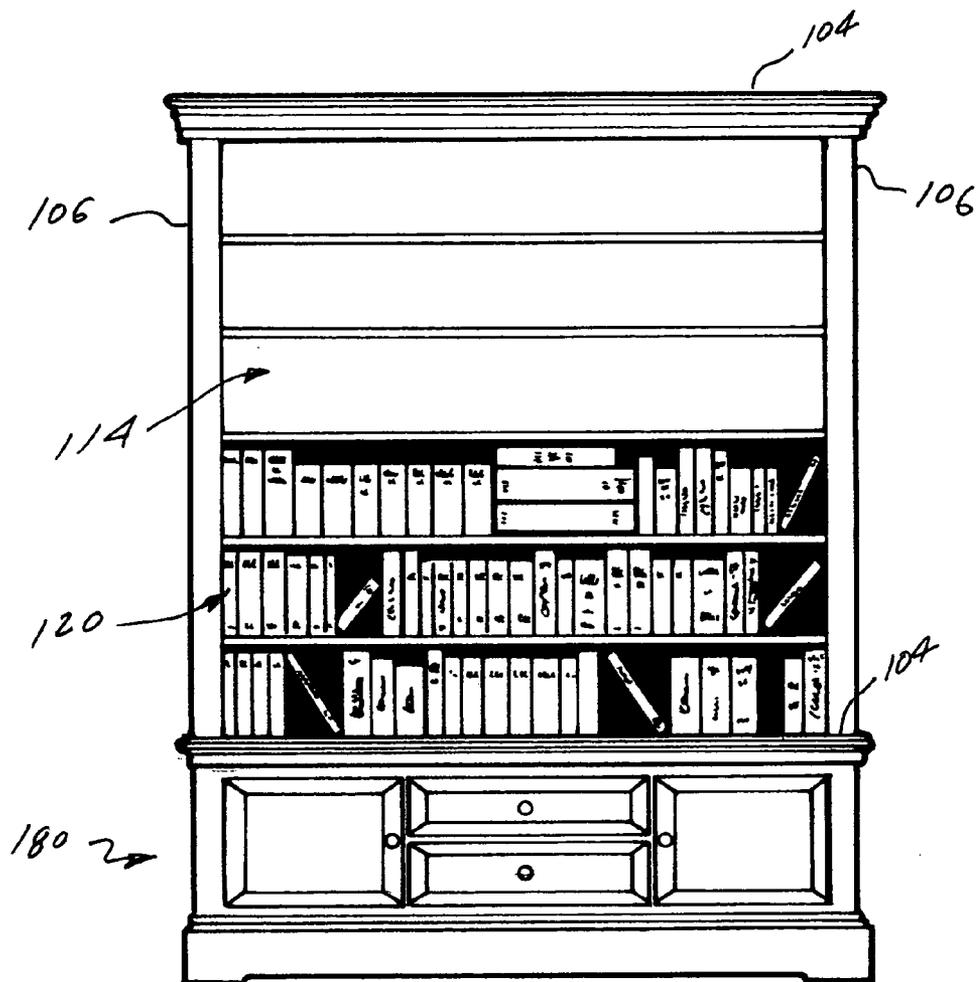
**Fig. 4**



**Fig. 5**

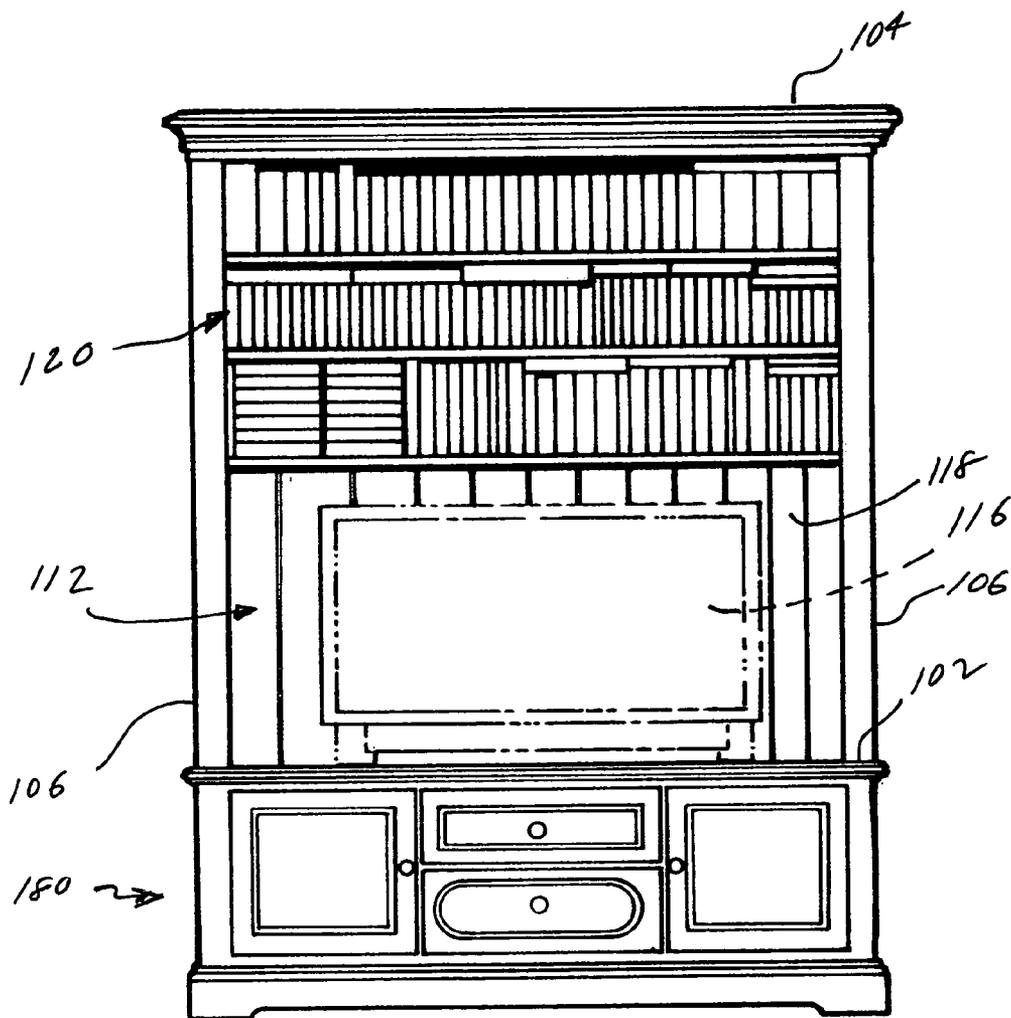


**Fig. 6**



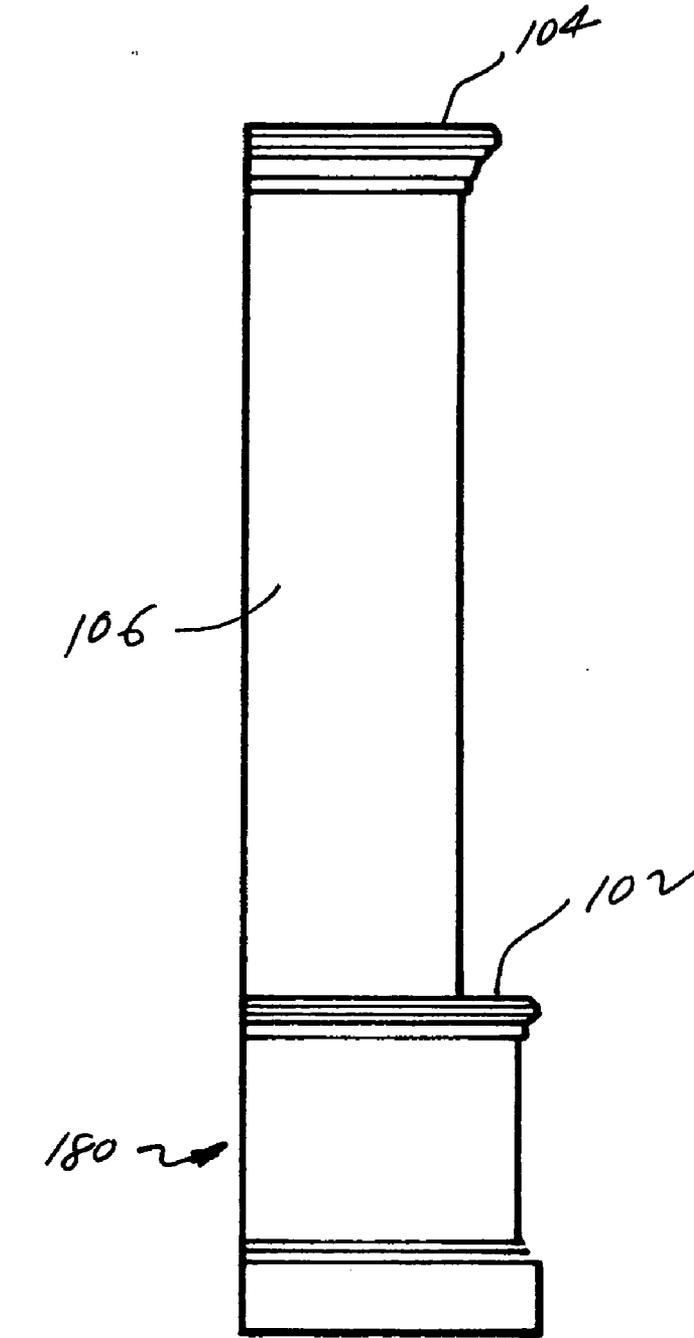
**Fig. 7**

100 →



**Fig. 8**

100 ↗



**Fig. 9**

100 ↗

**DISPLAY CABINET WITH FAUX FRONT CONCEALING PANEL**

**CROSS-REFERENCE TO RELATED APPLICATIONS**

[0001] Not Applicable.

**BACKGROUND OF THE INVENTION**

[0002] The invention relates to furniture cabinets that are directed to housing a video display device. More specifically, a display cabinet with a faux front concealing panel of the invention is directed to concealment of the display device with a sliding panel. The sliding panel is adapted to conceal the display device and present an impression of a book case.

[0003] Video display devices, including thin panel LCD and plasma screens, compact LCD and front projection displays, are well accepted and commonly seen in many home and office settings. These displays are also typically a visually large and imposing element, if not in fact physically large, in whatever room environment they may be located. Thus, one's attention may be inappropriately drawn to the display, merely by its presence, even when it is not active. These displays may also present an undesired contrast in the aesthetics of a room environment in which they are located; clashing with the room decor.

[0004] While a large video display device must be readily seen in use, it is not always a desired visual element in many room environments when not in use. Thus, one may appreciate a desire to conveniently access and conversely conceal a display device in a manner in which the display does not impose upon its environment when not in use.

**BRIEF SUMMARY OF THE INVENTION**

[0005] Accordingly, a display cabinet with a faux front concealing panel of the invention provides a cabinet with a display space, that houses a display device. The cabinet also has a faux front concealing panel that conveniently conceals and reveals the display by sliding manipulation of the panel.

[0006] More specifically, a faux front display cabinet of the invention may have a base, a top spaced above the base, and a pair of opposing cabinet sides that extend between the base and the top. A cabinet space is defined between the cabinet sides and between the base and the top. A display space is defined in the cabinet space and extends partially between the base and the top. The rest of the cabinet space may define a storage space. A concealing panel covers the display space in a closed position and is connected with the cabinet to slide from the closed position to an open position in which the display space is revealed. At least a portion of the storage space is concealed by the open panel. The panel also has an outward face that presents a visual impression of a bookcase with various books. A panel transport mechanism is connected between the panel and the cabinet and facilitates sliding the panel between the closed and the open positions. The transport mechanism also holds the panel in a preselected position.

[0007] In other aspects of the invention, the concealing panel slides vertically between the base and the top. The panel transport mechanism includes a counterbalance to the concealing panel. And, the display cabinet may further

include lighting that illuminates the storage space. The lighting may include a switch that is operatively connected with the concealing panel, so the lamp is not illuminated when the concealing panel is open.

[0008] These and other features, and benefits of the invention will be recognized by one having ordinary skill in the art and by those who practice the invention, from this disclosure, including the specification, the claims, and the drawing figures.

**BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING**

[0009] FIG. 1 is an upper, front, and left perspective view of a display cabinet with concealing panel of the invention, showing the panel closed;

[0010] FIG. 2 is a front right perspective view thereof, showing the panel opened;

[0011] FIG. 3 is a schematic diagram of transport and lighting mechanisms therein;

[0012] FIG. 4 is a vertical cross section view along line IV-IV of FIG. 2, showing a portion of the transport mechanism thereof;

[0013] FIG. 5 is a fragmentary right and back perspective view thereof, showing a portion of the transport mechanism;

[0014] FIG. 6 is a vertical cross section view along line VI-VI of FIG. 2, showing a portion of the lighting mechanism thereof;

[0015] FIG. 7 is a front elevation thereof, showing the panel closed;

[0016] FIG. 8 is another front elevation thereof, showing the panel opened; and

[0017] FIG. 9 is a left side elevation thereof, the right side elevation substantially being a mirror image thereof.

**DETAILED DESCRIPTION**

[0018] A preferred and exemplary embodiment 100 of a display cabinet with faux front concealing panel 120 according to the invention is generally shown in the drawing and discussed below. The cabinet may be provided with a base 102 and a top 104 that is spaced above and aligned with the base. A pair of opposing cabinet sides 106 may extend from the base to the top. A cabinet space is defined between the base, the top, and the opposing sides.

[0019] The cabinet space further defines a display space 112 and a storage space 114. The display space is adapted to house a video display device 116, which may include thin panel LCD and plasma screens, LCD and DLP rear projection displays, and front projection displays. While some of these displays may be provided with housings that are configured as what is commonly known as a table top 104 unit and others may be provided with table top stands, still others may be configured for wall mounting. Thus, the display space 112 specifically, and the cabinet generally, preferably includes a back wall 118 or panel that includes adaptation to support a wall mount variety display.

[0020] The storage space 114 is specifically shown in the drawing as a shelving or bookcase variety space. While the storage space may be expected to commonly be configured

with various shelving, this visualization of the storage space is not a limitation on the invention. The storage space may also be configured as an open space adapted to presentation of a picture or other article of interest, for example. Further, the display space **112** is shown at the bottom of the display cabinet in the drawing, with the storage space **114** above the display space. This arrangement is an aesthetic result as opposed to a structural or utility result, in that the concealing panel **120** has a thickness and a visual presentation that add visual mass. Thus, the panel **120** is aesthetically more natural or appealing at the bottom of the display cabinet in its closed position [FIG. 1]. The display cabinet would be aesthetically top heavy or unbalanced with the panel **120** closed at the top **104**[FIG. 2].

[0021] Further, while the cabinet space extends the full height from the base **102** to the top **104**, the display space **112** extends only partially between the base and the top, and more specifically will typically extend only about half the cabinet space height or less, as a basic matter of geometry. Considering that covering the display space with the panel **120** in a closed position and that revealing the display space, more directly a housed display **116**, are desired, then the height of the display space is limited to at most half of the cabinet space height. If the display space height is greater than half the cabinet space height, then the display space **112** will remain partially covered with the panel **120** in the open position or the panel must at least partially leave the display cabinet **100** to fully reveal the display space.

[0022] The concealing panel **120** is connected with the cabinet at the front of the cabinet and in sliding engagement. The panel **120** slides between a closed position in which the display space **112** is concealed and an open position in which the display space is revealed [FIGS. 1 and 2, respectively]. The storage space **114** is, conversely, revealed with the panel closed and concealed with the panel open [FIGS. 1 and 2, respectively]. Various configurations of tracks and guides and the like will occur to one having ordinary skill in the art for connecting the panel **120** and the cabinet **100**. A U-channel track **122** capturing each side edge of the panel has been found to be an easy and effect solution for the invention. Each of the panel **120** and its track may be fabricated of any suitable structural material, using various methods that are appropriate for the material selected.

[0023] More specifically as to the faux front, the concealing panel **120** has a front face **126**[FIG. 3] that presents a visual impression of a bookcase with various books as shown in the drawing. One having ordinary skill in the art understands that visual depth is a significant element to making a convincing bookcase faux front. Thus, providing visual depth to the faux front is preferably provided with actual thickness of the panel **120**. An array of book spine replicas **132** and shelf edge replicas **134** is disposed upon the panel front face. While a particular arrangement of shelf edges and of book spines is not important, an arrangement that has a familiar appearance is more readily convincing. Thus, spaces or gaps **136** with some actual depth may be located above and beside selected spine replicas with the spine replicas appearing as single volumes, as volume sets, as orderly shelved volumes, and as sloppily shelved volumes.

[0024] The concealing panel **120** then has not only visual depth and mass, it has actual depth or thickness as just

discussed above and has actual mass. A counterbalance system is, therefore, preferably provided to ease lifting of the panel from a lower or closed position as shown, to an upper or opened position [FIGS. 1 and 2, respectively]. While various alternative counter balance systems may include spring balance, lever counter balance, and rack and pinion, a counter weight and pulley system is implemented in the example display cabinet **100**.

[0025] A counter weight **142** is connected by various known methods with each end **144** of the concealing panel **120** by a flexible tie **146** that is routed over at least one pulley **148**[FIGS. 3-5]. To minimize bulk in the counter balance system at the front of the display cabinet **100**, a second pulley **152** may be used to locate the weight at the back of the cabinet. A weight pocket **154** is preferably defined at the cabinet back and provides a defined travel for the weight. The pulleys are any of various suitable pulleys that are commonly available and known. The tie may be one of various known and available cords and the like, including wrapped and braided fiber cords of metal, plastic, and natural fiber, for example.

[0026] Illumination of the storage space **114** is desirably included by installation of known can-style lamps **162** at the cabinet top **104**, although alternative lamp styles may also be used. As is schematically shown [FIGS. 3 and 6], a cord and plug **164** or other power provision may typically be included in the illumination. Of course a user operating switch **166** to activate and deactivate the illumination is also provided. As a caution to avoid heating the storage space when the concealing panel **120** overlays the storage space, a second switch **168** is preferably installed adjacent the panel path, so the panel actuates the switch and cuts power to the lamps when the panel **120** is open. While the second switch **168** is schematically shown in the drawing as a bump switch [FIG. 3] at the top of the panel path, the second switch **166** may alternatively be located along the panel travel path to engage the display lights **120**[FIG. 6].

[0027] The exemplary embodiment of a display cabinet **100** with faux front concealing panel **120** according to the invention is noted as being shown in the drawing in a hutch configuration context with a storage chest **180** extending down from the base **102** to a supporting floor. Thus, the display cabinet and specifically the display cabinet base may be supported by a chest. As the drawing discloses, a provided storage chest may be configured with a variety of door and drawer storage. An advantage of the illustrated inclusion of a chest is that the chest may provide a convenient location for housing various multimedia or entertainment support equipment for a display **116** that is housed in the display cabinet. Such multimedia equipment may include audio and video tuners and amplifiers and other signal processing and presentation devices.

[0028] One having ordinary skill in the art understands that the display cabinet **100** and the chest **180** are furniture that may be assembled of various components, including the above discussed side panels **106**, concealing panel **120**, top **104**, and base **102**. Each component may be fabricated of any suitable material, employing methods appropriate to the material selected. Further, the components may be interconnected with various suitable methods or connectors. Materials technology and fabrication methods appear to develop and change fairly continually. One having ordinary skill in

the art has knowledge of suitable materials and of effective methods for furniture fabrication, each of which is ancillary to the present invention of a configuration of a display cabinet 100 with faux front concealing panel 120.

[0029] One having ordinary skill in the art and those who practice the invention also understand from this disclosure that various modifications and improvements may be made without departing from the spirit of the disclosed inventive concept. Various relational terms, including left, right, front, back, top, and bottom, are used in the detailed description of the invention and in the claims only to convey relative positioning of various elements of the claimed invention.

What is claimed is:

1. A display cabinet that is adapted to house a video display device, the display cabinet having a front and an opposing back and having a concealing panel that is adapted to selectively conceal the display device, the cabinet comprising:

- a base;
- a top spaced above the base, the top being generally aligned with the base;
- a pair of opposing cabinet sides extending upward from the base to the top, the cabinet sides supporting the top;
- a display space defined between the pair of opposing cabinet sides, the display space extending partially from the base toward the top;
- a storage space defined between the pair of opposing cabinet sides, the storage space extending from the top to the display space;
- a concealing panel extending between the opposing sides, the concealing panel having a height that extends partially between the base and the top, the panel being slidable between a closed position in which the display space is concealed behind the panel and an open position in which the display space is revealed, the storage space being at least partially concealed by the panel in the open position and being revealed by the panel in the closed position;
- a panel transport mechanism that is connected between the panel and the cabinet, that is adapted to facilitate sliding the panel between the closed and the open positions, and that is adapted to hold the panel in a preselected position.

2. The display cabinet defined in claim 1 wherein the concealing panel slides vertically between the base and the top and wherein the panel transport mechanism includes a counterbalance to the concealing panel.

3. The display cabinet defined in claim 1 further comprising a lighting mechanism that is adapted to illuminate the storage space, the lighting mechanism including a lamp and a switch with the lamp being operatively connected with the switch and the switch being operatively connected with a source of electrical power, the switch further being operatively connected with the concealing panel and being adapted so the lamp is not illuminated when the concealing panel is located in the opened position.

4. The display cabinet defined in claim 3 wherein the display cabinet defines a slide path along which the concealing panel slides between the closed and the opened positions, wherein the switch is positioned along the slide

path, and wherein the concealing panel engages the switch when the concealing panel is in the opened position, whereby the lamp is not illuminated when the concealing panel is located in the opened position.

5. The display cabinet defined in claim 3 wherein the concealing panel has a front face that faces way from the display cabinet back and wherein the front face presents a visual impression of a bookcase with various books.

6. The display cabinet defined in claim 5 wherein a distance is defined from the base to the top and wherein the display space is no greater than half the distance.

7. The display cabinet defined in claim 1 wherein the concealing panel has a front face that faces way from the display cabinet back and wherein the front face presents a visual impression of a bookcase with various books.

8. A display cabinet that is adapted to house a video display device, the display cabinet having a front and an opposing back, having a left side and an opposing right side, and having a concealing panel that is adapted to selectively conceal the display device, the cabinet comprising:

- a base;
- a top spaced above the base, the top being generally aligned with the base;
- a pair of opposing cabinet sides extending upward from the base to the top, the cabinet sides supporting the top;
- a display space defined between the pair of opposing cabinet sides, the display space extending partially from the base toward the top;
- a storage space defined between the pair of opposing cabinet sides, the storage space extending from the top to the display space;
- a concealing panel extending between the opposing sides and extending partially between the base and the top, the panel being slidable between a closed position in which the display space is concealed behind the panel and an open position in which the display space is revealed, the storage space being at least partially concealed by the panel in the open position and revealed by the panel in the closed position;
- a transport mechanism that is connected between the concealing panel and the cabinet, the transport mechanism including a counterbalance whereby the transport is adapted to facilitate sliding the concealing panel between the closed and the open positions, and that is adapted to hold the concealing panel in a preselected position.

9. The display cabinet defined in claim 8 further comprising a lighting mechanism that is adapted to illuminate the storage space, the lighting mechanism including a lamp and a switch with the lamp being operatively connected with the switch and the switch being operatively connected with a source of electrical power, the switch further being operatively connected with the concealing panel and being adapted so the lamp is not illuminated when the concealing panel is located in the opened position.

10. The display cabinet defined in claim 9 wherein the display cabinet defines a slide path along which the concealing panel slides between the closed and the opened positions, wherein the switch is positioned along the slide path, and wherein the concealing panel engages the switch when the concealing panel is in the opened position,

whereby the lamp is not illuminated when the concealing panel is located in the opened position.

11. The display cabinet defined in claim 9 wherein the concealing panel has a front face that faces way from the display cabinet back and wherein the front face presents a visual impression of a bookcase with various books.

12. The display cabinet defined in claim 11 wherein the display space extends between the base and the top and extends no more than half way from the base to the top.

13. The display cabinet defined in claim 8 wherein the concealing panel has a front face that faces way from the display cabinet back and wherein the front face presents a visual impression of a bookcase with various books.

14. A display cabinet that is adapted to house a video display device, the display cabinet having a front and an opposing back and having a concealing panel that is adapted to selectively conceal the display device, the cabinet comprising:

- a base;
- a top spaced above the base, the top being generally aligned with the base;
- a pair of opposing cabinet sides extending upward from the base to the top, the cabinet sides supporting the top;
- a display space defined between the pair of opposing cabinet sides, the display space extending partially between the base and the top;
- a storage space defined between the pair of opposing cabinet sides, the storage space extending between the display space and at least one of the base and the top;
- a concealing panel extending between the opposing sides and that has a height extending partially between the base and the top, the panel being slidable between a closed position in which the display space is concealed behind the panel and an open position in which the display space is revealed, the storage space being at

least partially concealed by the panel in the open position and being revealed by the panel in the closed position, the concealing panel further having a front face that faces way from the display cabinet back and that presents a visual impression of a bookcase with various books;

a panel transport mechanism that is connected between the panel and the cabinet, that is adapted to facilitate sliding the panel between the closed and the open positions, and that is adapted to hold the panel in a preselected position.

15. The display cabinet defined in claim 14 wherein the concealing panel slides vertically between the base and the top and wherein the panel transport mechanism includes a counterbalance to the concealing panel.

16. The display cabinet defined in claim 14 further comprising a lighting mechanism that is adapted to illuminate the storage space, the lighting mechanism including a lamp and a switch with the lamp being operatively connected with the switch and the switch being operatively connected with a source of electrical power, the switch further being operatively connected with the concealing panel and being adapted so the lamp is not illuminated when the concealing panel is located in the opened position.

17. The display cabinet defined in claim 16 wherein the display cabinet defines a slide path along which the concealing panel slides between the closed and the opened positions, wherein the switch is positioned along the slide path, and wherein the concealing panel engages the switch when the concealing panel is in the opened position, whereby the lamp is not illuminated when the concealing panel is located in the opened position.

19. The display cabinet defined in claim 16 wherein a distance is defined from the base to the top and wherein the display space is no greater than half the distance.

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