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(54) **FLAT-PANEL DISPLAY MOUNTING SYSTEM FOR PORTABLE COMPUTER**

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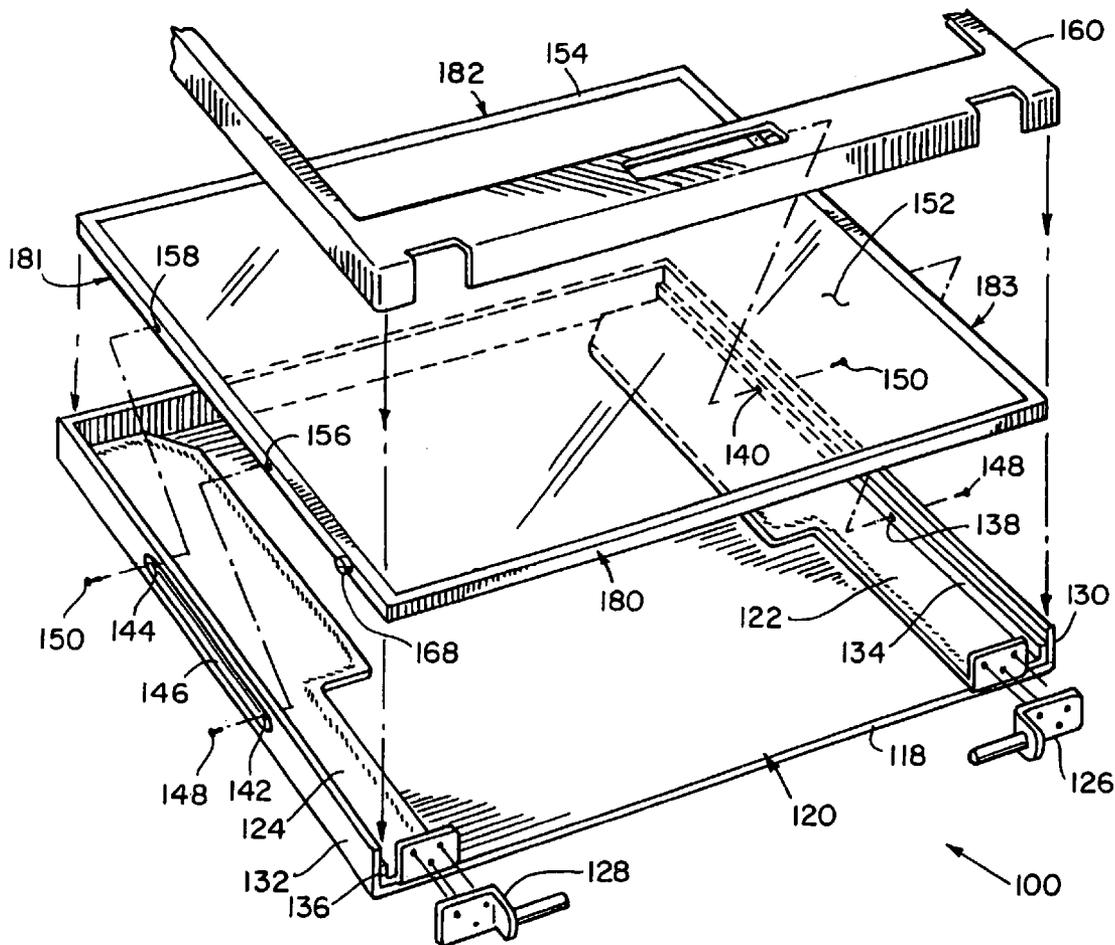
(57) **ABSTRACT**

A flat-panel display with fixtures in its sidewalls to enable support by lateral mounting members is disclosed. The advantage of this approach, in which the fixtures are essentially rotated around to the sides of the flat-panel display, is the reduction in the portion of the portable computer's top cover that is not the active display. In practice, this results in an increase in the size of the display that may be housed in the same-sized top cover. In order to accommodate the lateral mounting of the flat-panel display, metal brackets are used. These brackets extend from the base unit hinges and cradle the display. This adds torsional rigidity, but also removes the requirement that the back must be structural. Further reductions in the inactive portions of the top cover may be achieved by extending the ends of the display's fluorescent back-light beyond or through the metal rim that surrounds the display.

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Related U.S. Application Data

(60) Continuation of application No. 11/006,254, filed on Dec. 6, 2004, which is a division of application No. 08/822,438, filed on Mar. 21, 1997, now Pat. No. 6,838,810.



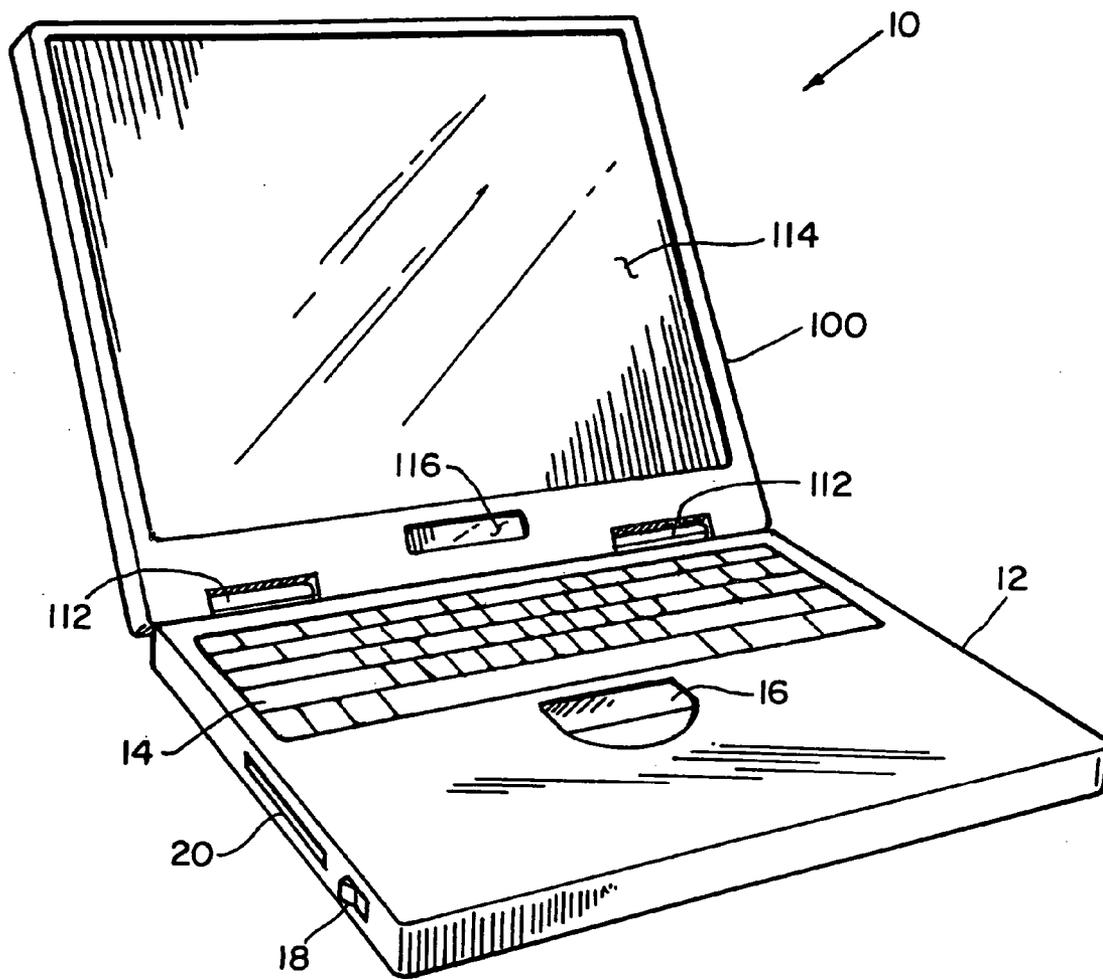
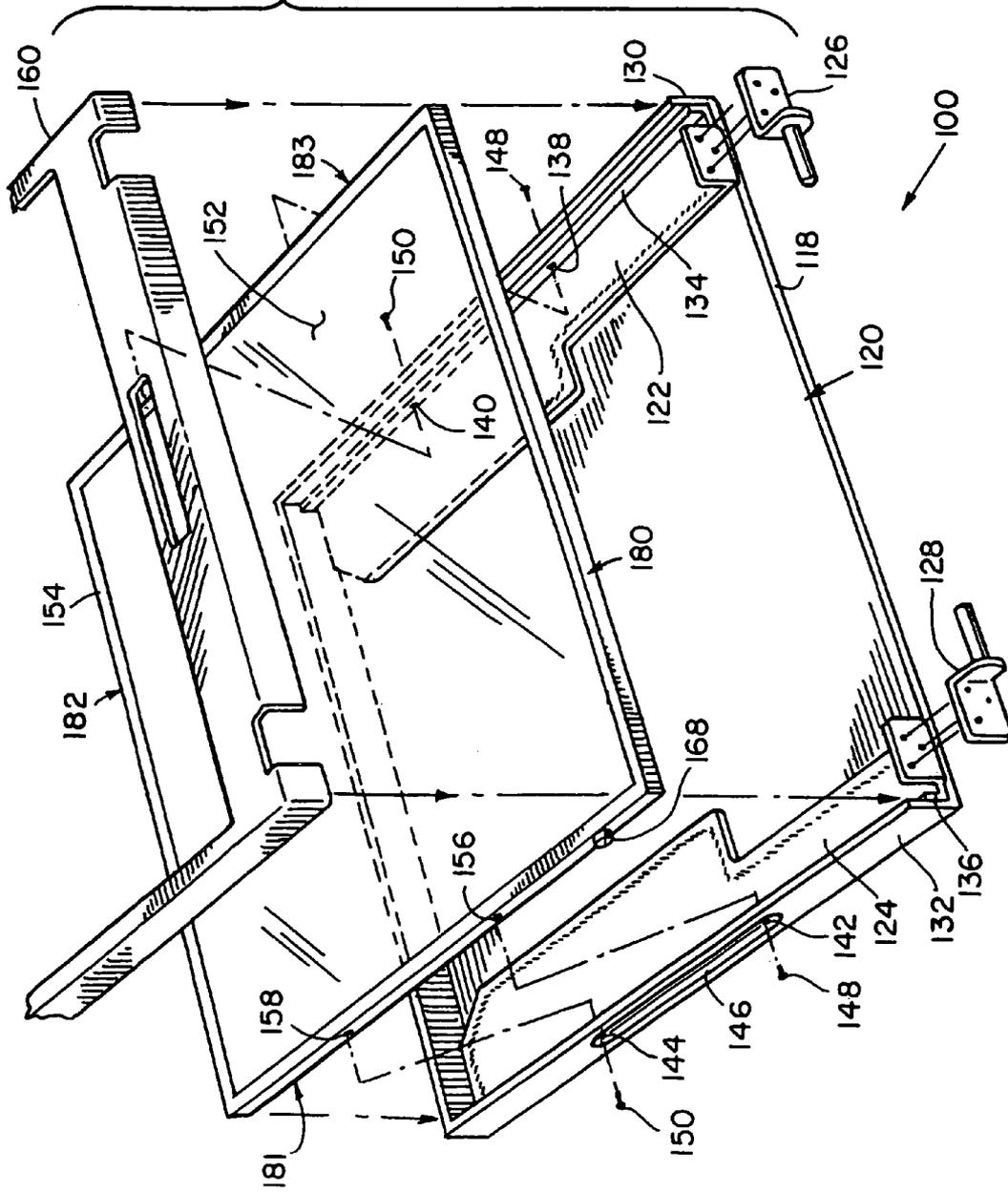


FIG. 1

FIG. 2



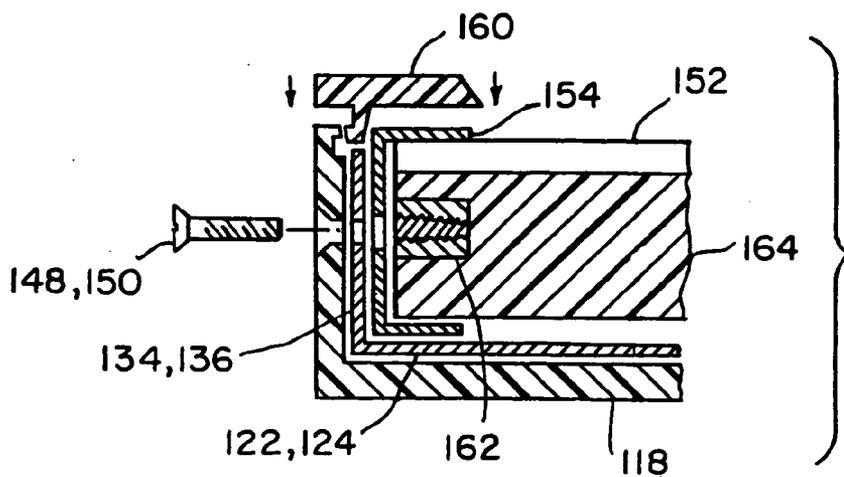


FIG. 3

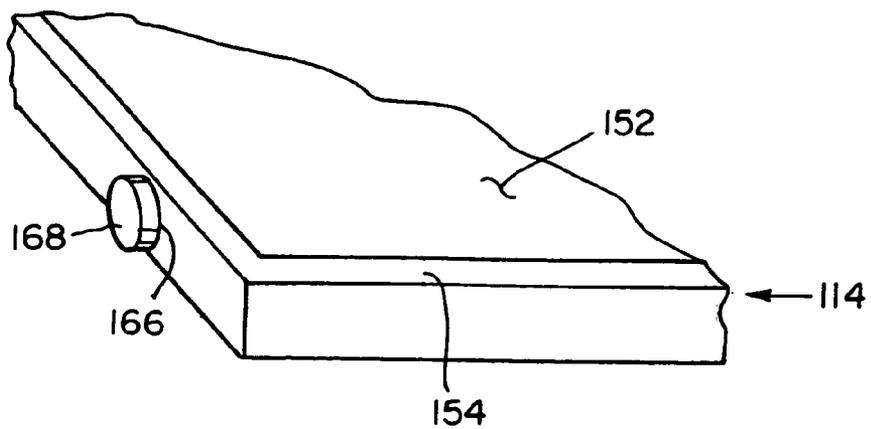


FIG. 4

FLAT-PANEL DISPLAY MOUNTING SYSTEM FOR PORTABLE COMPUTER

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application is a continuation of application Ser. No. 11/006,254, filed Dec. 6, 2004, pending, which is a divisional of application Ser. No. 08/822,438, filed Mar. 21, 1997, now U.S. Pat. No. 6,838,810, issued Jan. 4, 2005.

BACKGROUND OF THE INVENTION

[0002] Portable computers almost universally have a top cover that pivots to open or close over a base unit. The top cover typically houses a flat-panel display, and the base unit has a keyboard and, many times, some form of pointing device.

[0003] In most cases, the flat-panel display is supported in the top cover by securing it to a plastic back or rear portion of the top cover. Usually, the flat-panel display has four or more holes around its periphery; bolts extend orthogonally to the face of the display, through the holes, to engage bosses, which are integral with the back. The plastic back is typically structural in nature, being manufactured from a rigid plastic. When connected together, the flat-panel display and the plastic back provide necessary rigidity to the top cover.

[0004] The selection of the flat-panel display in portable computers is generally driven by two competing concerns. On one hand, with the availability of ever-larger flat-panel displays, there is a desire to incorporate those displays into newer portable computer designs. Running contrary to this, however, is the desire to limit the overall dimensions of the computers to enhance their portability. For example, it is common to design portable computers with outside dimensions limited to approximately 8x11". These dimensions are characteristic of notebook-sized computers.

[0005] Various innovations have come about to increase the active or viewing area of the flat-panel display as a proportion of the total surface area of the top cover to obtain larger displays without increasing the computer's overall dimensions. For example, it is known to fold the driving and other peripheral circuitry around to the back of the flat-panel display. This results in a display panel whose surface area is almost entirely active except for the width of the metal rim that holds the display together and the bolt holes that are used to attach the flat-panel display to the plastic back.

BRIEF SUMMARY OF THE INVENTION

[0006] The problem with prior art configurations is the fact that they fail to recognize that the size of the top cover need not be large enough to accommodate the bolt holes. According to the present invention, the flat-panel display is provided with fixtures in the display's sidewalls to provide for its support by lateral mounting members. The advantage of this approach, in which the bolt holes are essentially rotated around to the sides of the flat-panel display, is the reduction in the portion of the portable computer's top cover that is not an active display. In practice, this results in an increase of six millimeters or more in the size display that may be housed in the same-sized top cover.

[0007] In specific embodiments, the lateral mounting members comprise bolts that engage bosses in the flat-panel display.

[0008] Further reductions in the inactive portions of the top cover may be achieved by extending the ends of the display's fluorescent back-light beyond or through the metal rim that surrounds the display. This allows the rim to be even thinner.

[0009] Also according to the invention, in order to accommodate the lateral mounting of the flat-panel display, metal brackets are used. These brackets extend from the base unit hinges and cradle the display. This adds torsional rigidity, but also removes the requirement that the back must be structural. As a result, the back can simply be a thin, molded cosmetic rear cover for the computer's top cover.

[0010] In specific embodiments, the lateral mounting members, or bolts, pass through the brackets and the plastic back to engage the bosses, thus binding the elements to each other.

[0011] The above and other features of the invention including various novel details of construction and combinations of parts, and other advantages, will now be more particularly described with reference to the accompanying drawings and pointed out in the claims. It will be understood that the particular method and device embodying the invention are shown by way of illustration and not as a limitation of the invention. The principles and features of this invention may be employed in various and numerous embodiments without departing from the scope of the invention.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0012] In the accompanying drawings, reference characters refer to the same parts throughout the different views. The drawings are not necessarily to scale; emphasis has instead been placed upon illustrating the principles of the invention. Of the drawings:

[0013] **FIG. 1** is a perspective view of a portable computer according to the present invention;

[0014] **FIG. 2** is an exploded view of the top cover of the portable computer according to the invention;

[0015] **FIG. 3** is a cross-sectional view of the inventive top cover; and

[0016] **FIG. 4** is a partial perspective view of a corner of an inventive flat-panel display.

DETAILED DESCRIPTION OF THE INVENTION

[0017] **FIG. 1** illustrates a personal computer **10** constructed according to the principles of the present invention. Generally, the computer **10** has a top cover **100** that is connected by hinges **112**, or otherwise pivotally attached, to a base unit **12**. The top cover **100** houses a flat-panel display **114** and a second, much smaller, status display **116**, which typically provides information concerning remaining battery life, disk drive operation, and other house-keeping functions. The base unit **12** has keyboard **14** and a pointing device **16**, a touch pad in the illustrated embodiment. A power switch **18** and disk drive door **20** are located on the side of the base unit **12**.

[0018] The overall dimensions of the particular embodiment illustrated when closed are about 8.5 inches wide by 12

inches long, which dimensions also apply to the top cover **100** and base unit **12** separately. The total closed height is over two inches, with the height of the top cover **100** being approximately 0.5 inches.

[0019] The unique characteristics of the present invention are evident in the ratio between the total surface area of the top cover **100** and the surface area of the active or viewable area of the display **114**. The active area of the display **114** illustrated is 14.1 inches, diagonally. Consequently, it consumes over 90% of the top cover's total area.

[0020] FIG. 2 illustrates the mounting technique for the display **114** in the top cover **100**. Structurally, the top cover **100** comprises a back **118**. This component is almost universally constructed from plastic and forms the top outer shell of the portable computer **10** when the top cover **100** is closed. The back **118** is rectangular in shape and forms essentially a tub around the other elements of the top cover **100**. The proximal wall **120** of the back **118** is not present, however, to accommodate the hinge connection to the base unit **12**.

[0021] In many prior art designs, the back **118** of the top cover **100** provided significant structural support to the back cover. This fact was evident by the existence of spines or ridges, which are integral with the back, that added rigidity. It is also common to bolt the display **114** to the back by placing bosses in the back during molding. In the present embodiment, only the sidewalls **130**, **132** of the back **118** contribute to the back's bending rigidity, and the back overall has little torsional rigidity.

[0022] Rigidity, especially torsional, is added to the top cover **100** by right and left metal brackets **122**, **124** that are located in the back. The proximal portion of each bracket **122**, **124** connects to respective right and left hinge elements **126**, **128** that are adapted to cooperate with corresponding hinge elements in the base unit **12**. The brackets **122**, **124** are each aligned against respective sidewalls **130**, **132** of the back **118**. The cross-section of each bracket is essentially "L"-shaped, the shorter legs **134**, **136** extending orthogonally away from the planar inner surface of the back **118** and abutting the back's sidewalls **130**, **132**. Two holes **138**, **140** in each bracket are sized to accommodate bolts **148**, **150**, two millimeters in diameter, and the holes **138**, **140** align with corresponding holes **142**, **144** through the sidewalls **130**, **132** of the back **118**. Preferably, the outer surfaces of the back's sidewalls **130**, **132** have slight depressions **146** to recess heads of the bolts **148**, **150**.

[0023] The flat-panel display **114** (not shown) comprises a large active area **152** that is defined by the transparent top window of the display **114**. The top window is clamped to the panel's plastic back (not shown in this figure) by a metal rim **154** that extends around the display's circumference, defining the display's bottom (**180**), left (**181**), top (**182**), and right (**183**) sidewalls **180-183**. Holes **156**, **158**, formed in the metal rim **154**, align with the holes **138**, **140** in the brackets and back when the display is installed. The four bolts **148**, **150** extend through the back **118**, brackets **122**, **124** to engage bosses held in the display **114** (not shown) behind the metal rim **154**.

[0024] A plastic bezel **160** snap fits over the display onto the back. The bezel's rim extends inward hiding the display's metal rim **154**.

[0025] FIG. 3 is cross-sectional view further illustrating the back cover's construction. As discussed previously, each of the four bolts **148**, **150** extends through the back **118** and

corresponding vertical legs **134**, **136** of the brackets **122**, **124**. The bolts **148**, **150** further extend through the metal rim **154** of the display to engage corresponding threaded bosses **162** held in the plastic back **164** of the display. Also shown is the snap-fit arrangement **161** of the plastic bezel **160** to the back **118**.

[0026] FIG. 4 is a detailed view of one of the lower outer corners of the flat-panel display **114** illustrating another innovation of the invention that enables a more compact display. Usually, the length of the fluorescent back-light plus the thickness of the display's metal rim dictate the overall width of the display. The light emitting portion of the fluorescent light must be as wide as the active area of the display, but electrodes on the end of the light are wider than the small peripheral inactive portion of the display.

[0027] According to the present invention, circular cut-outs **166** are formed in the metal rim **154** to allow the ends of the fluorescent back-light **168** to extend slightly beyond the outer surface of the metal rim **154**. As a result, the overall width of the display is no wider than the critical length of the fluorescent back-light **168**. In effect, twice the thickness of the metal rim **154**, since cut-outs **166** are provided for both ends of the back-light **168**, is removed from the overall width of the display **114** without any loss in active area **152**. Defined another way, the inactive portions on both sides of the display **114** are each decreased by the thickness of the metal rim **154** by enabling the ends of the back-light **168** to extend beyond the metal rim.

[0028] In other embodiments of the invention, the bolts **148**, **150** may be replaced with pins that extend through the back **118** and brackets **122**, **124** to engage non-threaded holes in the sidewalls **180-183** of the display **114**, possibly using an interference fit. Alternatively, these pins could be integral with the metal brackets **122**, **124**. In this latter case, it may be desirable to have the display **114** to snap fit with the pins, to facilitate the manufacturing process.

[0029] In still another embodiment, pins extend outward from the display **114**, possibly integral with the metal rim **154** to engage the brackets **122**, **124** with an arrangement. This configuration has an advantage, because there is no need to accommodate holes in the display, which could affect the display's electrical design.

[0030] In still other embodiments, mounting could be accomplished off of the top and bottom sidewalls **180**, **182** of the display **114**. In this case, lateral mounting members that cooperate with these sidewalls would be used to replace the mounting fixtures on the right and left sidewalls **181**, **183**, or in addition to those fixtures.

[0031] While this invention has been particularly shown and described with references to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention as defined by the appended claims.

What is claimed is:

1. A flat-panel display comprising:
 - a top window;
 - a metal rim around a periphery of the top window;
 - a plastic back behind the top window; and

fixtures in the plastic back that are positioned to receive mounting members into a sidewall of the flat-panel display.

2. A flat-panel display comprising:

a top window;

a metal rim around a periphery of the top window having at least one cutout portion formed therein; and

a back-light for the flat-panel display, at least one end of which extends through the at least one cutout portion of the metal rim.

3. The flat-panel display described in claim 2, wherein both ends of the back-light extend through the at least one cutout portion in the metal rim.

4. A flat-panel display assembly for a cover comprising:

a bracket member for mounting the flat-panel display in a cover, the bracket member having at least one first hole formed laterally through a portion thereof and at least one second hole formed therethrough; and

the flat-panel display including a back having at least one hole formed laterally therein, the flat-panel display secured to at least a portion of the bracket member using at least one mounting member extending through the at least one first hole formed laterally through a portion of the bracket member and engaging at least a portion of the at least one hole of the back of the flat-panel display for mounting the flat-panel display to the bracket member.

5. The flat-panel display assembly of claim 4, wherein the bracket member comprises a member having a first portion extending in a first direction and a second portion extending orthogonally in a second direction therefrom.

6. The flat-panel display assembly of claim 5, wherein the at least one first hole is formed in the first portion of the bracket member and the at least one second hole is formed in the second portion of the bracket member.

7. The flat-panel display assembly of claim 6, wherein the cover includes a sidewall.

8. The flat-panel display assembly of claim 7, wherein the bracket member comprises a member having a first portion extending in a first direction for extending in the direction of the sidewall of the cover being spaced therefrom and a second portion extending orthogonally in a second direction therefrom.

9. The flat-panel display assembly of claim 8, wherein the bracket member further includes the at least one first hole located in the first portion and the at least one second hole located in the second portion.

10. The flat-panel display assembly of claim 9, further comprising another mounting member for mounting the flat-panel display in the cover.

11. The flat-panel display assembly of claim 10, wherein the another mounting member is for mounting the flat-panel display in the cover having a portion thereof extending through a hole in the cover and extending into at least a portion of the at least one second hole in the bracket member for mounting the flat-panel display in the cover.

12. The flat-panel display assembly of claim 11, wherein a bezel may be used to cover a portion of the flat-panel display.

13. The flat-panel display assembly of claim 12, wherein the bezel further includes a portion for abutting a portion of the sidewall of the cover.

14. The flat-panel display assembly of claim 13, wherein the bezel further includes a portion for extending into the cover.

15. The flat-panel display assembly of claim 14, wherein the bezel further includes a portion for extending into the cover to be located between the sidewall thereof and the first portion of the bracket member.

16. The flat-panel display assembly of claim 4, wherein the flat-panel display includes a display panel.

17. The flat-panel display assembly of claim 16, wherein the flat-panel display further includes a rim extending around the display panel and the back.

18. The flat-panel display assembly of claim 4, wherein the flat-panel display includes a display panel and a rim extending around the display panel and the back.

19. A flat-panel display assembly for a cover comprising:

a flat-panel display including a back having at least one hole formed laterally therein and a display panel, the flat-panel display secured to at least a portion of a bracket member by using at least one mounting member extending through a first hole formed laterally through a portion of the bracket member and engaging at least a portion of the at least one hole of the back of the flat-panel display for mounting the flat-panel display to the bracket member for mounting the flat-panel display assembly in a cover for a computer.

20. The flat-panel display assembly of claim 19, wherein the bracket member comprises a member having a first portion extending in a first direction and a second portion extending orthogonally in a second direction therefrom.

21. The flat-panel display assembly of claim 20, wherein the first hole is formed in the first portion of the bracket member and at least one second hole is formed in the second portion of the bracket member.

22. The flat-panel display assembly of claim 21, wherein the cover includes a sidewall.

23. The flat-panel display assembly of claim 22, wherein the bracket member comprises a member having a first portion extending in a first direction for extending in the direction of the sidewall of the cover being spaced therefrom and a second portion extending orthogonally in a second direction therefrom.

24. The flat-panel display assembly of claim 23, wherein the bracket member further includes the at least one first hole located in the first portion and at least one second hole located in the second portion.

25. The flat-panel display assembly of claim 24, further comprising another mounting member for mounting the flat-panel display in the cover.

26. The flat-panel display assembly of claim 25, wherein the another mounting member is for mounting the flat-panel display in the cover having a portion thereof extending through a hole in the cover and extending into at least a portion of the at least one second hole in the bracket member for mounting the flat-panel display in the cover.

27. The flat-panel display assembly of claim 19, wherein a bezel may be used to cover a portion of the flat-panel display.

28. The flat-panel display assembly of claim 27, wherein the bezel further includes a portion for abutting a portion of a sidewall of the cover.

29. The flat-panel display assembly of claim 28, wherein the bezel further includes a portion for extending into the cover.

30. The flat-panel display assembly of claim 19, wherein the bezel further includes a portion for extending into the

cover to be located between a sidewall thereof and a first portion of the bracket member.

31. The flat-panel display assembly of claim 19, wherein the flat-panel display further includes a rim extending around the display panel and the back.

32. A flat-panel display assembly in a cover, a mounting system comprising:

a cover including a back and a sidewall extending around at least a portion of the back, the sidewall having at least one hole extending therethrough, the cover configured for housing the flat-panel display therein;

a bracket member having a first hole and a second hole;

the flat-panel display including a back having at least one hole formed laterally therein configured for mounting the flat-panel display in the top cover using mounting members engaging at least a portion of the first hole in the bracket member and at least a portion of the hole of the flat-panel display and engaging the hole in the cover.

33. A flat-panel display in a cover, the mounting system comprising:

a cover including a back and a sidewall extending around at least a portion of the back, the sidewall having at least one hole extending therethrough, the cover configured for housing the flat-panel display therein; and

the flat-panel display including a back having at least one hole formed laterally therein configured for mounting the flat-panel display in the cover using a mounting member engaging at least a portion of the at least one hole of the back of the flat-panel display and engaging the at least one hole in the sidewall of the cover.

34. A flat-panel display in a cover for a computer, a mounting system comprising:

the flat-panel display having a plurality of edges including at least a hole formed laterally therein configured for mounting the flat-panel display in a cover of a portable computer, the cover having a back and a sidewall extending therearound having at least a hole there-through; and

a lateral mounting member extending laterally from the at least one hole in the sidewall of the top cover engaging at least a portion of the hole in the plurality of edges of the flat-panel display.

35. The flat-panel display of claim 34, wherein the flat-panel display has another hole formed laterally therein and another mounting member extending thereinto.

36. The flat-panel display of claim 34, wherein the lateral mounting member comprises a bolt that engages a boss in the flat-panel display.

37. The flat-panel display of claim 34, wherein the back comprises a plastic back, and the cover further comprises pivotal couplings connecting the cover to a base unit, and at least one metal bracket that extends from the pivotal couplings, the lateral mounting member engaging the at least one metal bracket and the plastic back.

38. The flat-panel display of claim 37, wherein the lateral mounting member comprises a bolt that passes through the at least one metal bracket and the plastic back to engage a boss in the flat-panel display.

39. The flat-panel display of claim 37, wherein the plastic back does not substantially contribute to the rigidity of the cover.

40. The flat-panel display of claim 34, wherein

the flat-panel display comprises a display panel, a display rim extending around a perimeter of the display panel, and a display back; and

the lateral mounting member comprises a bolt that engages a boss in the display back of the flat-panel display, behind the display rim.

41. A flat-panel display in a folding top cover of a computer, a mounting system comprising:

lateral mounting members extending from the folding top cover to engage sidewalls of the flat-panel display, wherein the folding top cover comprises a plastic back, pivotal couplings connecting the folding top cover to a base unit, and at least one metal bracket that extends from the pivotal couplings, the lateral mounting members engaging the at least one metal bracket and the plastic back.

42. A flat-panel display in a folding top cover of a computer, a mounting system comprising:

lateral mounting members extending from the folding top cover to engage sidewalls of the flat-panel display, wherein the folding top cover comprises a plastic back, pivotal couplings connecting the folding top cover to a base unit, and at least one metal bracket that extends from the pivotal couplings, the lateral mounting members engaging the at least one metal bracket and the plastic back, and, wherein the lateral mounting members comprise bolts that pass through the at least one metal bracket and the plastic back to engage bosses in the flat-panel display.

43. A flat-panel display in a folding top cover for a portable computer, a mounting system comprising:

lateral mounting members extending from the folding top cover to engage sidewalls of the flat-panel display, wherein the folding top cover comprises a plastic back, pivotal couplings connecting the folding top cover to a base unit, and at least one metal bracket that extends from the pivotal couplings, the lateral mounting members engaging the at least one metal bracket and the plastic back, wherein the plastic back does not substantially contribute to the rigidity of the folding top cover.

44. A flat-panel display in a cover for a base of a computer, a mounting system comprising:

a cover including a back and a sidewall extending around at least a portion of the back, the sidewall having at least one hole extending laterally therethrough, the cover configured for closing over the base of the computer; and

a display including at least one hole formed laterally therein configured for mounting the display in the cover using mounting members engaging at least a portion of the at least one hole of the sidewall of the cover and engaging at least a portion of the at least one hole of the display.

45. The flat-panel display of claim 44, further comprising:

a bezel configured for covering a portion of the display.

46. A flat-panel display in a top cover for a base of a computer, a mounting system comprising:

a display having an active area and having a plurality of sidewalls, the display including a plurality of holes

formed laterally in the plurality of sidewalls, the display configured for mounting in the top cover to cover the base of the computer; and

lateral mounting members extending laterally between the top cover and the display, the lateral mounting members engaging the plurality of holes formed laterally in at the plurality of sidewalls of the display.

47. The flat-panel display in claim 46, wherein the lateral mounting members extend through at least two holes of the plurality of holes in one of a sidewall of the plurality of sidewalls of the top cover.

48. The flat-panel display in claim 46, wherein the lateral mounting members comprise bolts that engage bosses in the display.

49. The flat-panel display in claim 46, wherein the top cover comprises:

a back having a sidewall extending around a portion of the back, pivotal couplings connecting the top cover to a base unit, and at least one bracket having a portion that extends from the pivotal couplings; and

the lateral mounting members engage portions of the at least one bracket and the back.

50. The flat-panel display in claim 49, wherein the lateral mounting members comprise thread fasteners configured for passing through the at least one bracket and the back to engage bosses in the display.

51. The flat-panel display in claim 49, wherein the lateral mounting members comprise pins configured for passing through the at least one bracket and the back to engage bosses in the display.

52. The flat-panel display in claim 49, wherein the sidewall of the back substantially contributes to the rigidity of the top cover.

53. The flat-panel display in claim 46, wherein the display comprises:

a display panel;

a display rim extending around a perimeter of the display; and

a display back.

54. The flat-panel display in claim 53, wherein the lateral mounting members comprise threaded fasteners configured to engage bosses in the back of the display.

55. The flat-panel display in claim 53, wherein the lateral mounting members comprise pins configured to engage bosses in the display back of the display.

56. The flat-panel display in claim 53, wherein the lateral mounting members comprise pins configured to engage the display and a sidewall of the top cover.

57. The flat-panel display in claim 46, further comprising:

a bezel configured for covering a portion of the display.

58. A flat-panel display in a cover for a base unit of a computer comprising:

a display panel including an active area, a back, a plurality of sidewalls forming the circumference of the display panel, and a hole extending laterally into a sidewall of the plurality of sidewalls of the display panel;

a cover including a back and a sidewall extending around a portion of the back, the sidewall having a hole extending laterally therethrough, the cover for closing over a base unit of a computer; and

a lateral mounting member configured for engaging at least a portion of the hole in the sidewall of the cover and engaging at least a portion of the hole of the display panel.

59. The flat-panel display of claim 58, wherein the lateral mounting member comprises a screw.

60. The flat-panel display of claim 58, wherein a plurality of edges of the display panel are located within the sidewall extending around a portion of the cover.

61. The flat-panel display of claim 58, wherein the display panel further comprises:

a rim extending around the circumference of the display panel, the rim having a hole therethrough.

62. The flat-panel display of claim 61, wherein the lateral mounting member comprises a member configured for engaging at least a portion of the hole in the sidewall of the cover, configured for extending through the hole in the rim, and configured for engaging at least a portion of the hole of the display panel.

63. The flat-panel display of claim 58, wherein the lateral mounting member comprises a threaded fastener.

64. The flat-panel display of claim 58, wherein the lateral mounting member comprises a pin.

65. The flat-panel display of claim 58, further comprising:

a bezel configured for covering a portion of the display panel.

66. A flat-panel display in a cover for a base unit of a computer comprising:

a display panel including an active area, a back, a plurality of sidewalls forming the circumference of the display panel, and a plurality of holes extending laterally into the plurality of sidewalls of the display panel;

a cover including a back and a sidewall extending around a portion of the back, the sidewall having a plurality of holes extending laterally therethrough, the cover covering a base unit of a computer; and

a plurality of lateral mounting members configured for engaging at least portions of the plurality of holes in the sidewall of the cover and engaging at least portions of the plurality of holes of the display panel.

67. The flat-panel display of claim 66, wherein the plurality of lateral mounting members comprises threaded fasteners.

68. The flat-panel display system of claim 66, wherein the plurality of holes in a plurality of edges of the display panel are located within the back of the display panel.

69. The flat-panel display of claim 66, wherein the display panel further comprises:

a rim extending around the circumference of the display panel, the rim having a plurality of holes therethrough.

70. The flat-panel display of claim 69, wherein the plurality of lateral mounting members include each member configured for engaging at least a portion of a hole of the plurality of holes in the sidewall of the cover, configured for extending through a hole of the plurality of holes of the rim, and configured for engaging at least a portion of a hole of the plurality of holes of the display panel.

71. The flat-panel display of claim 66, wherein the lateral mounting members comprise threaded fasteners.

72. The flat-panel display of claim 66, wherein the lateral mounting members comprise members engaging a non-threaded hole in the display panel.

73. The flat-panel display of claim 66, wherein the cover includes pivotal couplings configured to connect the cover to the base unit of the computer, at least one other lateral mounting member, and at least one bracket configured to have a portion extending from a pivotal coupling, the at least one other lateral mounting member engaging at least a portion of the at least one bracket.

74. The flat-panel display of claim 66, wherein the cover includes at least one bracket including at least one pin configured to engage at least a portion of a hole of the plurality of holes extending laterally into a plurality of edges of the back of the display panel.

75. The flat-panel display of claim 66, further comprising:
a bezel configured for covering a portion of the display panel.

76. A flat-panel display in a cover for a base unit of a computer comprising:

a display panel including an active area, a back, a plurality of sidewalls forming the circumference of the display panel, and a plurality of holes extending laterally into at least two opposed edges of the plurality of sidewalls of the display panel;

the cover including a back having a sidewall extending around a portion of the back, the sidewall having a plurality of holes extending laterally therethrough, pivotal couplings configured to connect the cover to a base unit of a computer for closing thereover, a plurality of brackets, each bracket having a hole extending laterally through a portion thereof, each bracket configured to have a portion to connect with a portion of the pivotal couplings; and

a plurality of lateral mounting members, each lateral mounting member of the plurality configured for engaging at least a portion of a hole of the plurality of holes in the sidewalls of the cover, engaging at least a portion of a hole of the plurality of holes of the display panel, and extending through the one hole in each bracket of the plurality of brackets.

77. The flat-panel display of claim 76, wherein the plurality of lateral mounting members comprise threaded fasteners.

78. The flat-panel display of claim 76, wherein the display panel further comprises:

a rim extending around the circumference of the display panel, the rim having a plurality of holes therethrough.

79. The flat-panel display of claim 76, wherein the plurality of lateral mounting members includes each member configured for engaging a non-threaded hole in the display panel.

80. The flat-panel display of claim 76, wherein the cover includes a bracket having at least one pin configured to engage at least a portion of a hole of the plurality of holes extending laterally into a plurality of edges of the back of the display panel.

81. The flat-panel display of claim 76, wherein the sidewall of the cover includes a sidewall configured to extend around a plurality of sides of the back.

82. The flat-panel display of claim 76, further comprising:
a bezel configured for covering a portion of the display panel.

83. The flat-panel display of claim 82, wherein the bezel includes a portion extending between the plurality of brackets.

84. A flat-panel display in a cover for a base unit of a computer comprising:

a display panel including an active area, a back, a plurality of sidewalls forming the circumference of the display panel, and a plurality of holes extending laterally into at least two opposed edges of the plurality of sidewalls of the display panel;

a cover including a back having a sidewall extending around a portion of the back, couplings configured to connect the cover to a base unit of a computer for closing thereover, a plurality of brackets, each bracket of the plurality having a hole extending laterally through a portion thereof, each bracket of the plurality configured to have a portion to connect with a portion of the couplings; and

a plurality of lateral mounting members, each lateral mounting member of the plurality configured for engaging at least a portion of a hole of the plurality of holes of the display panel and extending through the hole in each bracket of the plurality of brackets.

85. The flat-panel display of claim 84, wherein the plurality of lateral mounting members comprise threaded fasteners.

86. The flat-panel display of claim 84, wherein the display panel further comprises:

a rim extending around the circumference of the display panel, the rim having a plurality of holes therethrough.

87. The flat-panel display of claim 84, wherein the plurality of lateral mounting members includes each member configured for engaging a non-threaded hole in the display panel.

88. The flat-panel display of claim 84, wherein the cover includes a bracket having at least one pin configured to engage at least a portion of a hole of the plurality of holes extending laterally into a plurality of edges of the back of the display panel.

89. The flat-panel display of claim 84, wherein the sidewall of the cover includes a sidewall configured to extend around a plurality of sides of the back.

90. The flat-panel display of claim 84, further comprising:
a bezel configured for covering a portion of the display panel.

91. The flat-panel display of claim 90, wherein the bezel includes a portion extending between the plurality of brackets.

92. A flat-panel display for a computer in a cover comprising:

a bracket member for mounting the flat-panel display in a cover, the bracket member having at least one first hole extending through a portion thereof and at least one second hole formed therethrough; and

the flat-panel display including a back having at least one mounting member extending laterally therefrom, the flat-panel display secured to at least a portion of the bracket member using at least one mounting member extending through the at least one first hole formed laterally through a portion of the bracket member for mounting the flat-panel display to the bracket member.

93. The flat-panel display of claim 92, wherein the bracket member comprises a member having a first portion extending in a first direction and a second portion extending orthogonally in a second direction therefrom.

94. The flat-panel display of claim 93, wherein the at least one first hole is formed in the first portion of the bracket member and the at least one second hole is formed in the second portion of the bracket member.

95. The flat-panel display of claim 92, wherein a cover includes a sidewall.

96. The flat-panel display of claim 95, wherein the bracket member comprises a member having a first portion extending in a first direction for extending in the direction of the sidewall of the cover being spaced therefrom and a second portion extending orthogonally in a second direction therefrom.

97. The flat-panel display of claim 96, wherein the bracket member further includes the at least one first hole located in the first portion and the at least one second hole located in the second portion.

98. The flat-panel display of claim 97, further comprising another mounting member for mounting the flat-panel display in the cover.

99. The flat-panel display of claim 98, wherein the another mounting member is for mounting the flat-panel display in the cover having a portion thereof extending through a hole in the cover and extending into at least a portion of the at least one second hole in the bracket member for mounting the flat-panel display in the cover.

100. The flat-panel display of claim 99, wherein a bezel may be used to cover a portion of the flat-panel display.

101. The flat-panel display of claim 100, wherein the bezel further includes a portion for abutting a portion of the sidewall of the cover.

102. The flat-panel display of claim 101, wherein the bezel further includes a portion for extending into the cover.

103. The flat-panel display of claim 102, wherein the bezel further includes a portion for extending into the cover to be located between the sidewall thereof and the first portion of the bracket member.

104. The flat-panel display of claim 92, wherein the flat-panel display includes a display panel.

105. The flat-panel display of claim 104, wherein the flat-panel display further includes a rim extending around the display panel and the back.

106. The flat-panel display of claim 92, wherein the flat-panel display includes a display panel and a rim extending around the display panel and the back.

107. A display in a cover for a computer comprising:

a display panel including an active area, a back, a plurality of sidewalls forming the circumference of the display panel, and a plurality of holes extending laterally into at least two opposed edges of the a plurality of sidewalls of the display panel;

a cover including a back having a sidewall extending around a portion of the back, couplings configured to connect the cover to a base unit of a computer for closing thereover, a plurality of brackets, each of the plurality of brackets having a hole extending laterally through a portion thereof, each bracket of the plurality configured to have a portion to connect with a portion of the couplings; and

a plurality of lateral mounting members, each lateral mounting member of the plurality configured for engaging at least a portion of a hole of the plurality of holes of the display panel using an interference fit

therewith and extending through the hole in each bracket of the plurality of brackets.

108. The display of claim 107, wherein the plurality of lateral mounting members comprise pins.

109. The display of claim 107, wherein the display panel further comprises:

a rim extending around the circumference of the display panel, the rim having a plurality of holes therethrough.

110. The display of claim 107, wherein the plurality of lateral mounting members includes each member configured for engaging a non-threaded hole in the display panel.

111. The display of claim 107, wherein the cover includes a bracket having at least one pin configured to engage at least a portion of a hole of the plurality of holes extending laterally into a plurality of edges of the display panel.

112. The display of claim 107, wherein the sidewall of the cover includes a sidewall configured to extend around a plurality of sides of the back.

113. The display of claim 107, further comprising:

a bezel configured for covering a portion of the display panel.

114. A display in a back covering a portion of the display comprising:

a display panel including an active area, a back, a plurality of sidewalls forming the circumference of the display panel, and a hole extending laterally into an edge of the plurality of sidewalls of the display panel;

a back including a sidewall extending around a portion of the back;

a support having a hole extending laterally through a portion thereof; and

a lateral mounting member configured for engaging at least a portion of the hole of the plurality of sidewalls of the display panel and extending through the hole in the support.

115. The display of claim 114, wherein the lateral mounting member comprises a pin.

116. The display of claim 114, wherein the display panel further comprises:

a rim extending around the circumference of the display panel.

117. The display of claim 114, wherein the lateral mounting member includes a member configured for engaging a non-threaded hole in the display panel.

118. The display of claim 114, wherein the back includes a support having at least one pin configured to engage at least a portion of a hole extending laterally into a plurality of edges of the display panel.

119. The display of claim 114, wherein the sidewall of the back includes a sidewall configured to extend around a plurality of sides of the back.

120. The display of claim 114, further comprising:

a bezel configured for covering a portion of the display panel.

121. The display of claim 120, wherein the bezel includes a portion extending between the bezel and the back.

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