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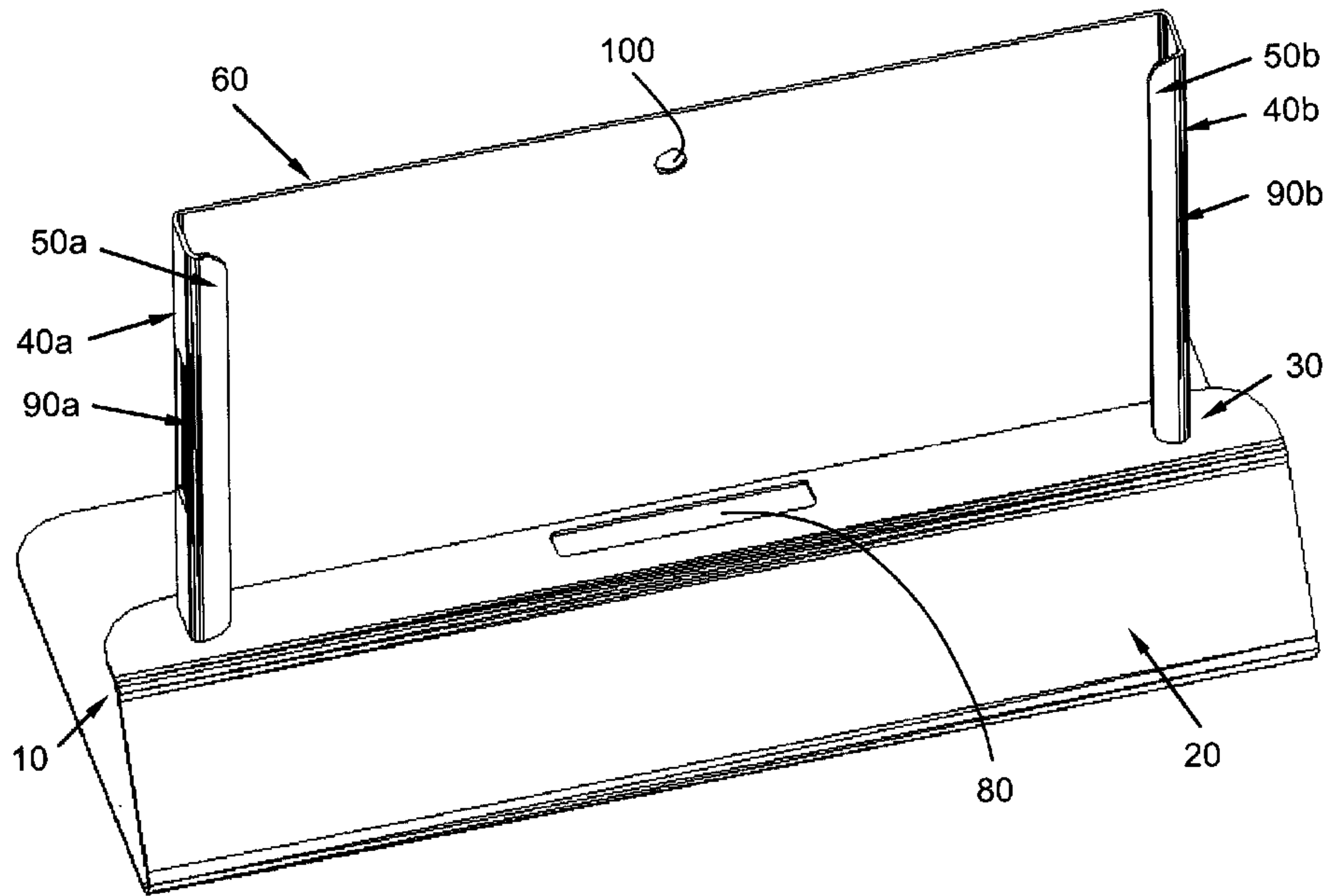
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(54) Titre : SUPPORT POUR TABLETTE ET TELEPHONE INTELLIGENT POUR BUREAU ET TABLEAU DE BORD ET
PINCE POUR TRIPOD
(54) Title: TABLET AND SMART PHONE SUPPORT STAND FOR DESKTOP AND DASHBOARD AND CLAMP FOR
TRIPOD



3D view

(57) **Abrégé/Abstract:**

This relates to support stands and clamps for tablets and smart phones. Tablets and smart phones offer a number of functions and services for users in their home, in their automobile and virtually anywhere. The use of tablets and smart phones is more convenient



(57) **Abrégé(suite)/Abstract(continued):**

with support stands and tripod clamps. Certain functions are indeed only possible with support stands and clamps for tripods. Tablets and smart phones with photographic or video functions can perform some functions most effectively when clamped to a tripod. Tripods with mounting platforms are commercially and generally available to consumers. For example tablets and smart phones can be used to photograph or video activities such as sports. A tripod can hold the tablet or smart phone much more steadily than a person. Also it is sometimes desirable to video one's own sports activity in order to improve performance. Tablets and smart phones can perform navigation, traffic, shopping, music and a myriad of other useful functions by people in motor vehicles. However tablets and smart phones can only be used safely in automobiles when properly mounted inside vehicles. The dashboard and instrument panels of motor vehicles are the most popular locations to mount smart phones and navigation devices. The present invention is a Tablet and Smart Phone Support Stand for Desktop and Dashboard and a Clamp for a Tripod. The present invention is designed to be used on desktops, automobile dashboards, tripods and a myriad of surfaces.

ABSTRACT

This relates to support stands and clamps for tablets and smart phones. Tablets and smart phones offer a number of functions and services for users in their home, in their automobile and virtually anywhere. The use of tablets and smart phones is more convenient with support stands and tripod clamps. Certain functions are indeed only possible with support stands and clamps for tripods.

Tablets and smart phones with photographic or video functions can perform some functions most effectively when clamped to a tripod. Tripods with mounting platforms are commercially and generally available to consumers. For example tablets and smart phones can be used to photograph or video activities such as sports. A tripod can hold the tablet or smart phone much more steadily than a person. Also it is sometimes desirable to video one's own sports activity in order to improve performance.

Tablets and smart phones can perform navigation, traffic, shopping, music and a myriad of other useful functions by people in motor vehicles. However tablets and smart phones can only be used safely in automobiles when properly mounted inside vehicles. The dashboard and instrument panels of motor vehicles are the most popular locations to mount smart phones and navigation devices.

The present invention is a Tablet and Smart Phone Support Stand for Desktop and Dashboard and a Clamp for a Tripod. The present invention is designed to be used on desktops, automobile dashboards, tripods and a myriad of surfaces.

SPECIFICATION

Clamps, brackets and support stands for smart phones and tablets (tablet computers) are available from a variety of sources. These devices are usually designed for usage in specific classes of locations. The specific classes of locations include vehicle dashboards, desktops and table tops, camera tripods, and even the user lying down.

The present invention is a Tablet and Smart Phone Support Stand for Desktop and Dashboard and a Clamp for a Tripod. The present invention is designed to be used for general classes of locations and smart phones and tablets that are capable of being secured to general classes of locations.

The advantages of the invention and the improvements to the state of the art are as follows:

The device can be used in general classes of locations such as desktops, table tops, vehicle dashboards, and camera tripods.

The device is lightweight, flexible yet strong.

The device has no moving parts.

The device can be fabricated from a single sheet of suitable material and no assembly of parts is required during manufacture.

The device is simple and inexpensive to fabricate, using standard fabrication techniques.

The device can be secured to a vehicle dashboard with fastening materials which are readily available. Readily available fasteners are tape, velcro strips, or adhesive.

Tablets and smart phones secured to vehicle dashboards are subject to vibration. The device absorbs vibration.

The device is made from material which is abundant, readily available and relatively cheap.

The device can also be made from plexiglass and other materials in the alternative to sheet metal.

DESCRIPTION OF THE DRAWINGS

Figure 1 is the front view.

Figure 2 is the top view.

Figure 3 is the left side view. The device is symmetrical.

Figure 4 is the 3D view or left perspective view.

DESCRIPTION OF THE ELEMENTS REFERRED TO IN THE DRAWINGS

FIGURE 1

The elements as described below are from Figure 1 Front View (except for element 70).

Element 10 refers to the base. Figures 1, 2, 3 and 4 show element 10. Normally the base will rest on a flat surface such as a camera tripod, or the superior surface of an automobile dashboard just below the windshield or a desk or table top. In the case of the camera tripod, the device is attached to the superior surface of the camera tripod by the tripod bolt which extends into the device through the hole in the base. The camera tripod normally comes with a bolt which secures the device to the camera tripod. The hole in the base is element 70. Appropriate nuts are readily available for the bolt.

Element 70 is referred to in Figure 2.

Element 20 refers to the front wall of the device. The front wall curves upward from the base. The front wall may be inclined away from the viewer.

Element 60 is the back wall. The back wall is vertical or slightly inclined from vertical. The phone or tablet rest against the back wall.

Element 100 is a hole in back wall for hanging the device on retail displays.

Element 30 is the phone or tablet support base. The support base is horizontal or slightly inclined from vertical.

Element 40a is the left edge which extends orthogonally from the back wall.

Element 40b is the right edge which extends orthogonally from the back wall.

Element 50a is the left flange which extends orthogonally from the left edge.

Element 50b is the right flange which extends orthogonally from the right edge.

FIGURE 2

Figure 2 shows elements 40a, 50a, 10, 60, 70, 20, 30, 50b and 40b described above.

Element 80 in Figure 2 is the opening for the power supply to the phone or tablet.

FIGURE 3

Figure 3 shows elements 10, 20, 30, 40a, 50a and 60 as described above. Element 50b is noted on Figure 3 as it is symmetrical to 50a. Element 50b is visible in Figures 1, 2 and 4.

Element 90a in figure 3 is the left opening for phone or tablet controls or buttons or power supply. Element 90b is noted on Figure 3 as it is symmetrical to 90a. Element 90b is visible in Figure 4.

FIGURE 4

Figure 4 shows elements 10, 40a, 50a, 60, 100, 50b, 40b, 30, 20, and 80 described above.

Element 90a in Figure 4 is the opening in the left edge (element 40a) to allow access to the controls or buttons or power supply on the phone or tablet.

Element 90b in Figure 4 is the opening on the right edge (element 40b) to allow access to the controls or buttons or power supply on the phone or tablet.

USAGE OF THE DEVICE

USAGE AS A TRIPOD CLAMP: The base of the device 10 rests on a camera tripod and is bolted at 70 to the camera tripod to secure the device. The tablet or smart phone is then placed between the left and right edges 40a and 40b and rests upon the support base 30. The flanges 50a and 50b secure the tablet or the smart phone to the device.

USAGE IN A MOTOR VEHICLE: The base of the device 10 may be secured to the superior aspect of a motor vehicle dashboard with fastening materials which are readily available. Readily available fasteners are tape, velcro strips, or adhesive. The tablet or phone is then placed between the left and right edges 40a and 40b and rests upon the support base 30. The flanges 50a and 50b secure the tablet or the smart phone to the device. Due to safety concerns, it is not advisable to remove the tablet or phone whilst driving. Human interfaces for tablets and smart phones include touch screens, buttons, and natural language processing. The device anticipates the widespread usage of natural language processing in human interfaces.

USAGE ON A FLAT SURFACE: The device may be placed upon a flat surface such as a desktop or tabletop. The tablet or phone is then placed between the left and right edges 40a and 40b and rests upon the support base 30. The flanges 50a and 50b secure the tablet or the smart phone to the device.

CLAIMS

1. A single sheet of suitable material which is cut and shaped as a Tablet and Smart Phone Support Stand for Desktop and Dashboard and a Clamp for a Tripod.
2. Suitable materials may be chosen from clear acrylic, frosted or satin-finished acrylic, colored acrylic, textured acrylic, brushed aluminum, polished aluminum, brushed stainless steel, polished stainless steel, brushed nickel, polished brass, brushed brass, antique brass, copper, plastic, rubber, wood, clay, ceramic, or suitable grades of sheet metal or ferro-magnetic material. Wire is also possible but certain materials, such as suitable grades of sheet metal have optimal cost and performance.
3. The horizontal base of the device rests on a desktop, table, dashboard or tripod with camera mount. The horizontal base has a hole in the center where the bolt from the tripod enters. The tripod nut then fastens onto the tripod bolt in such way that the device is secured to the tripod. The back of the device rests against the back of the smart phone or tablet. The edges of the back of the device have flanges which curl around the sides of the tablet or smart phone to secure it in place.
4. The device can be used in general classes of locations such as desktops, table tops, vehicle dashboards, and camera tripods.
5. The device is lightweight, flexible yet strong.
6. The device has no moving parts.
7. The device can be fabricated from a single sheet of suitable material and no assembly of parts is required during manufacture.
8. The device is simple and inexpensive to fabricate, using standard fabrication techniques.
9. The device can be secured to a vehicle dashboard with fastening materials which are readily available. Readily available fasteners are tape, velcro strips, or adhesive.
10. Tablets and smart phones secured to vehicle dashboards are subject to vibration. The device absorbs vibration.
11. The device is made from material which is abundant, readily available and relatively cheap.
12. The device can also be made from plexiglass and other materials in the alternative to sheet metal.
13. The device can be manufactured from standard sheet metal tools.

14. The device can be coated with different coatings, textures or paints.
15. The device anticipates distracted driving laws in holding the phone or tablet securely whilst driving.
16. The device anticipates the widespread use of touchscreen or natural language processing as human interfaces yet also allows access to buttons, controls or power supply on the phone or tablet.
17. Although the description refers to smart phones, other mobile phones and devices similar to phones and tablets (phablets) are within the scope of the device.
18. The Tablet and Smart Phone Support Stand for Desktop and Dashboard and Tripod Clamp is the invention described herein and is also referred to as "the device".

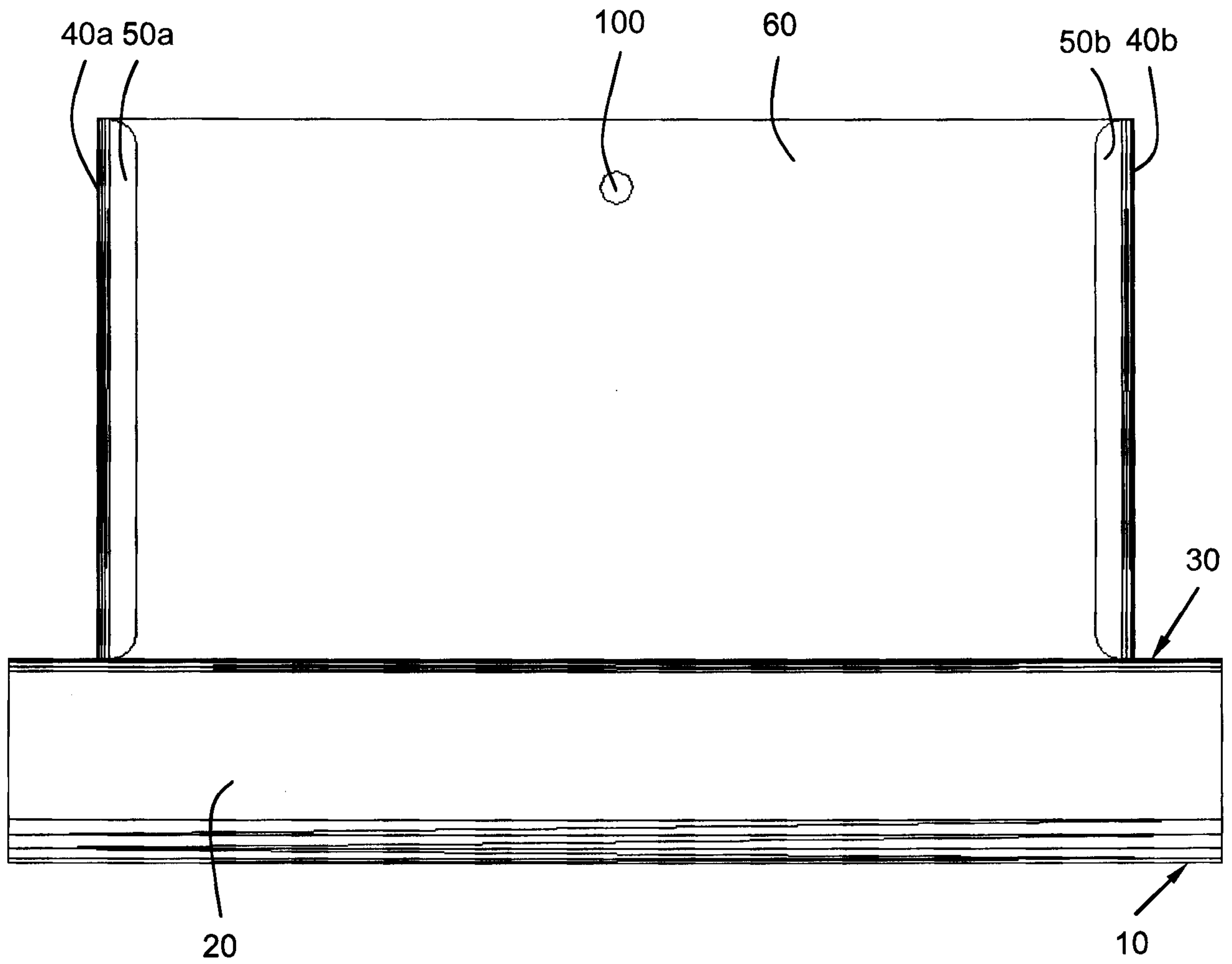


Figure 1. Front view

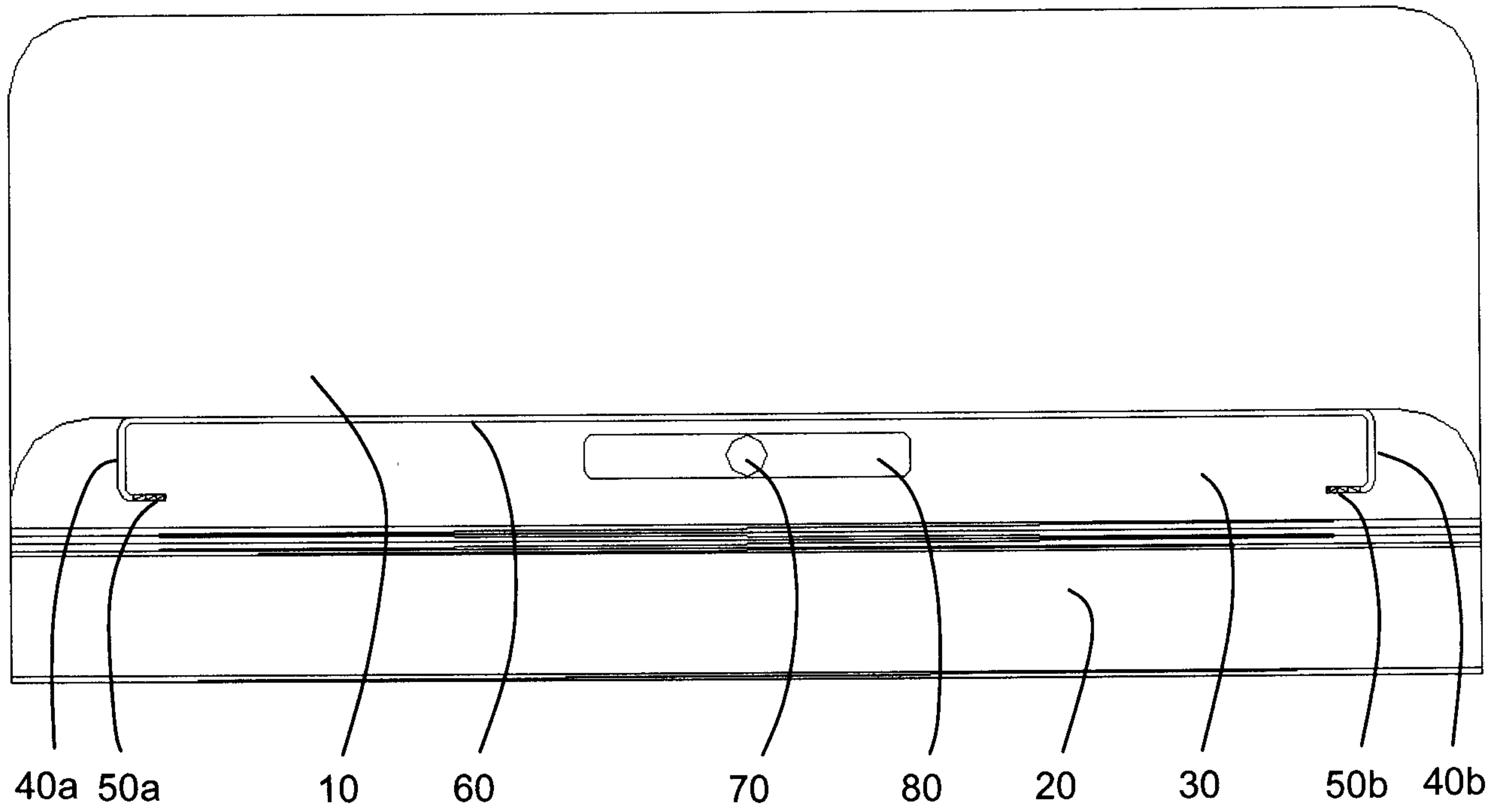


Figure 2. Top view

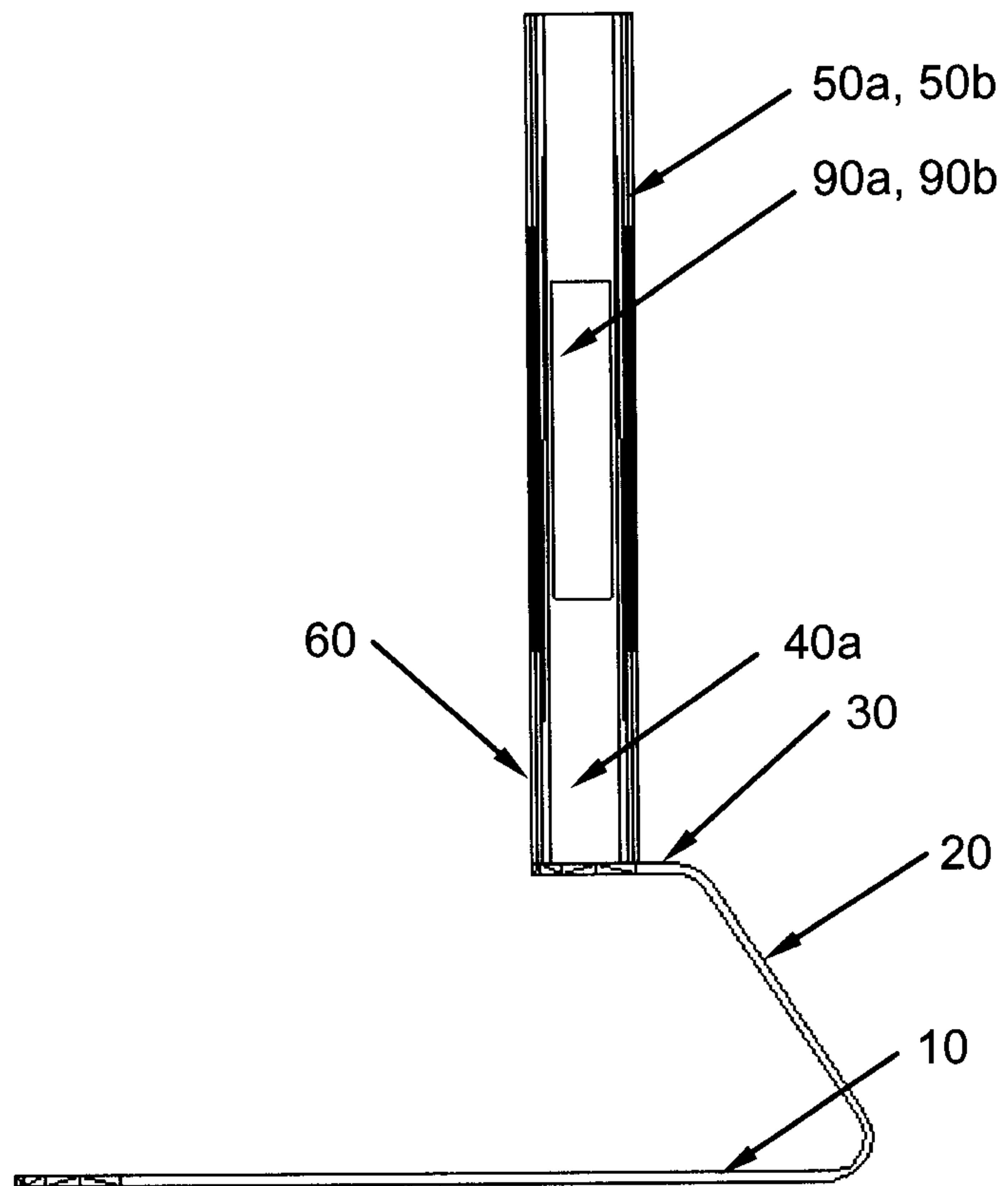


Figure 3. Side view (Left)

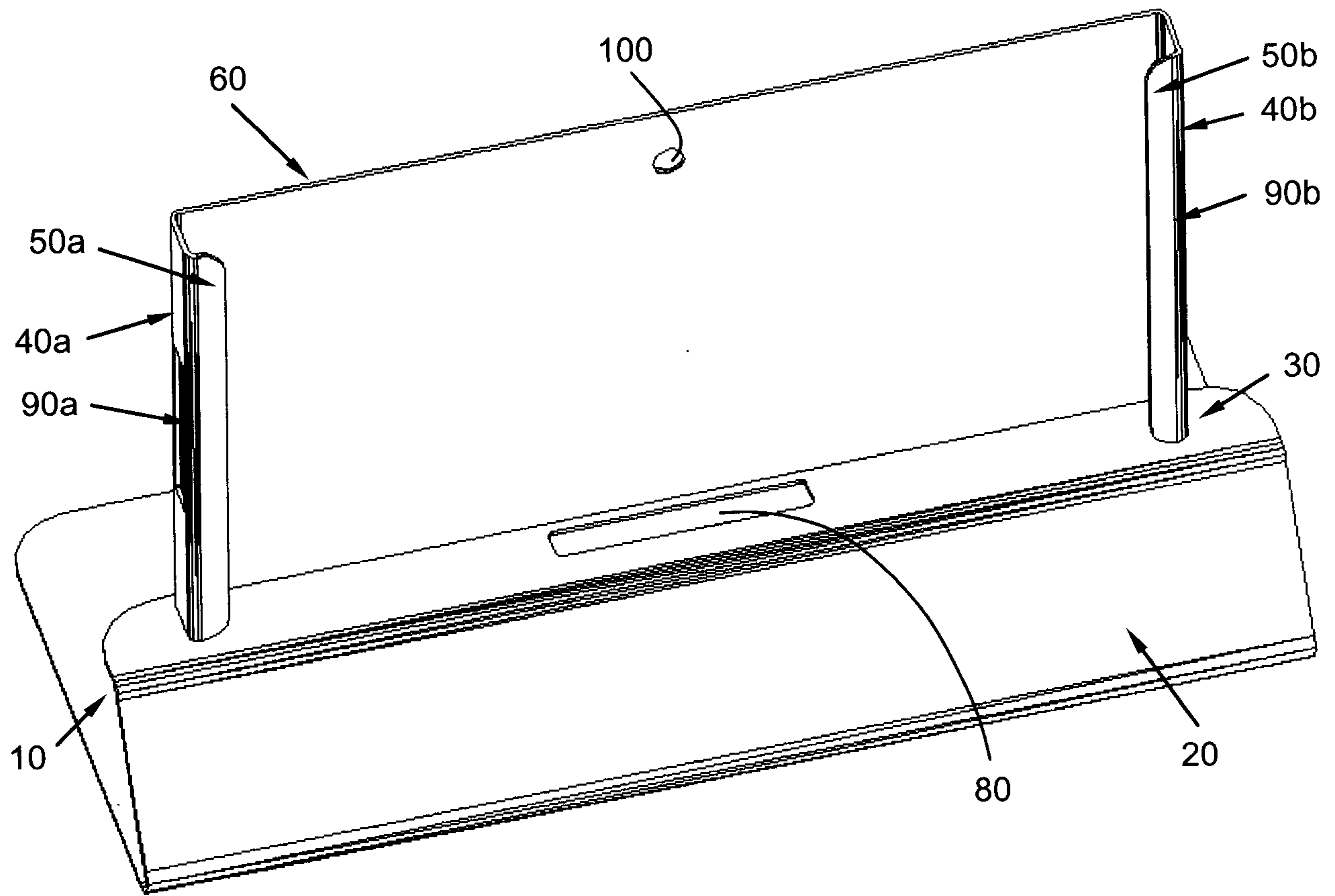
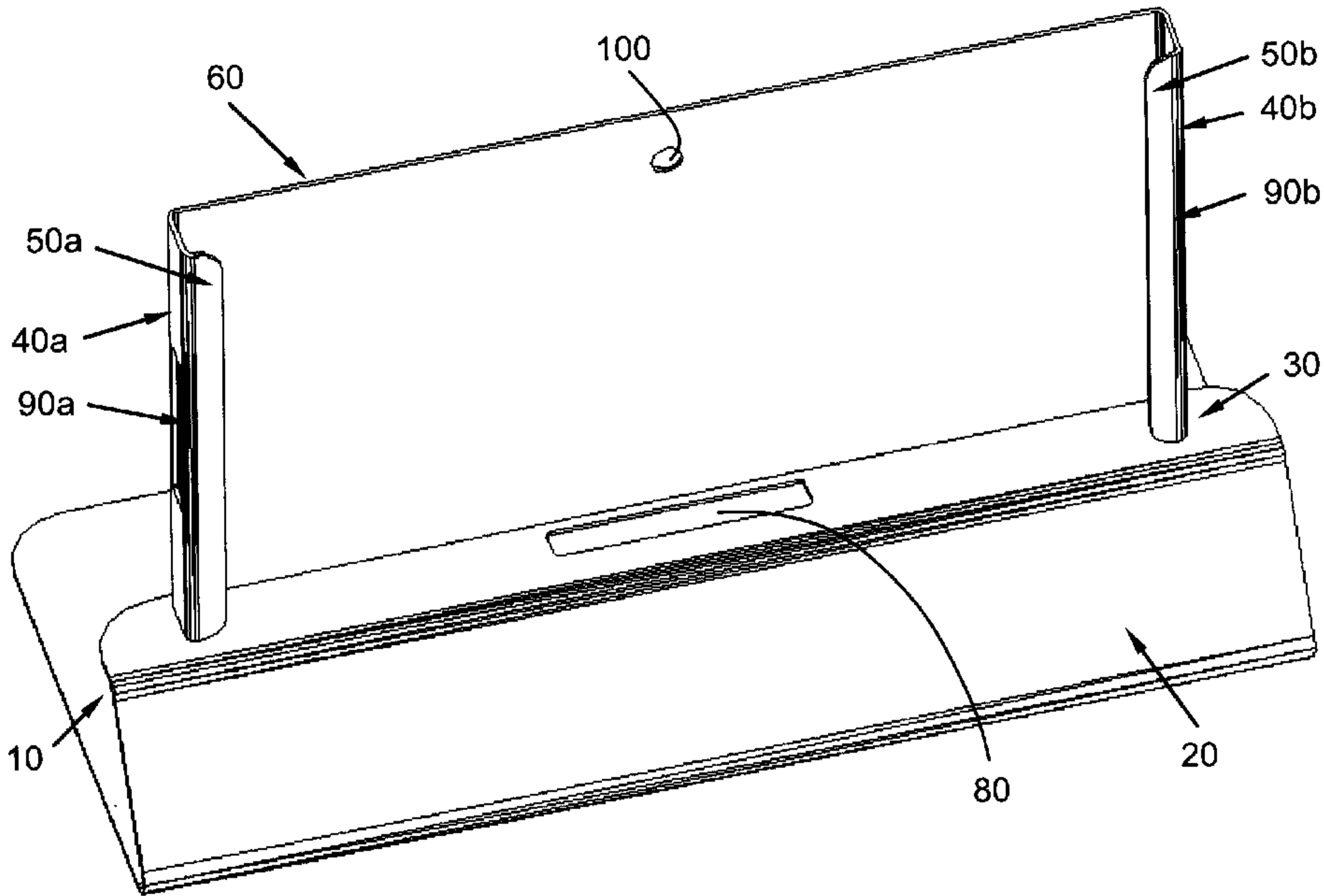


Figure 4. 3D view



3D view