

FACSIMILE APPARATUS

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to a facsimile apparatus with an upper cover that can be opened and closed.

Description of the Related Art

In a conventional facsimile apparatus with an upper cover that can be opened and closed, since a handset holder is fixed on the apparatus and an operation panel is only opened and closed, the width of usable document is limited by the width of the operation panel not by the width of the whole apparatus. Accordingly, in a personal type facsimile apparatus having the strict apparatus size limitation, the document larger than B4 size (36.4cm x 25.7cm) can not be used.

And in the upper cover structure where a handset holder and an operation panel are integrated, when the upper cover is opened, the handset holder is also opened. That remains the problem that a handset is unstable and easy to be out of the holder when the upper cover is opened.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide

a facsimile apparatus capable of using a B4 size document with the handy apparatus size kept, and with the stable structure in which a handset is not out of the handset holder when the upper cover is opened.

The object is achieved by the structure where a handset holder and an upper cover are integrated, a face of a handset receiver and an internal face of a concavity section of a handset holder are contacted in faces when an upper cover is full opened, and the depth of the concavity section of the handset is larger than a second the thickness of the handset.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG.1 is a schematic perspective diagram of a facsimile apparatus of the present invention;

FIG.2A and FIG.2B are schematic sectional views of a facsimile apparatus of the present invention; and

FIG.3 is an enlarged sectional diagram of a handset and a handset holder of a facsimile apparatus of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Hereinafter, the embodiment of the present invention is explained in detail with reference to the drawings.

FIG.1 is a schematic perspective diagram

illustrating a schematic structure of a facsimile apparatus of the present invention. Upper cover 1 is composed of handset holder 3 on the upper left side of the box on which a handset is placed, and operation panel 4 on the upper right side of the box. In the apparatus, the height of the back side is larger than that of the front side so that operation panel 4 forming a flat plate is easy to watch. And upper cover 1 can be opened and closed by the hinge structure in the back side of the box not shown in the figure as a center. When upper cover 1 is full opened at the time of exchanging a document, the upper front side of the box is higher than the upper back side of the box.

Handset 2 has grip 5 in the center, receiver 6 for outputting a voice at the end of grip 5, and microphone 7 for inputting a voice at another end of grip 5, and is connected to the apparatus using cable 8. And grip section 5 is designed so that a space is generated to insert fingers between grip 5 and handset holder 3 when handset 2 is placed on handset holder 3 for the easy grasp of handset 2.

In handset holder 3, concavity section 9 to drop receiver 6 of handset 2 and concavity section 10 to drop microphone 7 of handset 2 are prepared. In convex 9, hook 11 is prepared to detect whether or not handset 2 is placed.

Operation panel 4 has LCD and various keys such as start key, stop key, function key, and ten keys to perform

a facsimile communication, copy and so on.

Thus, since handset holder 3 and operation panel 4 are integrated as upper cover 1 so that it is possible to open and close the whole upper cover, almost of the width of the apparatus is applicable to the document insert width. That allows keeping the handy size of the apparatus and using a B4 size document.

Next, a schematic sectional view illustrated in FIG.2A and FIG.2B and an enlarged sectional view illustrated in FIG.3 are used to explain about how handset 2 and handset holder 3 are contacted when handset 2 is placed on handset holder 3. FIG.2A illustrates the appearance when handset 2 is placed on handset holder 3 with upper cover 1 closed. FIG.2B and FIG.3 illustrate the appearances when upper cover 1 is opened with handset 2 placed on handset holder 3.

Hook 11 is prepared on arm 32 supported by spring 31 fixed to handset holder 3, and arm 32 moves around hinge 33. And hook 11 is pushed down by handset 2 while handset 2 is placed on handset holder 3 whether upper cover 1 is opened or closed, and is pushed up by the repulsion of spring 31 while handset 2 is not placed on handset holder 3.

When upper cover 1 is opened while handset 2 is placed on handset holder 3, the level of receiver 6 is lower than that of microphone 7, and handset 2 moves down toward the back side of the box on the upper face by the

function of the gravity. At this time, side face 34 of receiver 6 and internal face 35 of concavity section 9 are cut to be flat surfaces so that both faces of receiver 6 of handset 2 and concavity section 9 are contacted flat. And h_2 that is the depth of internal face 35 in concavity section 9 of handset receiver 3 is processed to be larger than a second h_1 that is the thickness of handset 2.

Thus, since both faces of receiver 6 of handset 2 and an internal face of concavity section 9 in handset holder 3 are contacted flat, and h_2 that is the depth of concavity section 9 of handset holder 3 is processed to be larger than a second h_1 that is the thickness of handset 2, handset 2 does not fall from handset holder 3 when upper cover 1 is full opened. Therefore handset 2 is always held on handset holder 3 stably.

As described above, according to a facsimile apparatus of the present invention, it is possible to hold a handset on a handset holder stably without the falling of the handset from the handset holder when an upper cover, in which a handset holder and an operation panel are integrated, is opened and closed, and to use a B4 size document without the increase of the apparatus size.

A facsimile apparatus of the present invention is appropriate in a personal type apparatus to use a B4 size document without the increase of the apparatus size.



What is claimed is:

1. A facsimile apparatus comprising:
a handset for a call;
a handset holder to place the handset with a concavity section to which a receiver of the handset is dropped; and
an upper cover at the end corner of which the handset holder is prepared, wherein said upper cover can be opened and closed in whole.
2. The facsimile apparatus according to claim 1, wherein in the handset holder an internal face of a concavity section to drop the receiver and a face of the receiver are contacted in faces when the upper cover is opened to the maximum angle.
3. The facsimile apparatus according to claim 1, wherein in the handset holder the depth of the concavity section to drop the receiver is larger than a second the thickness of the handset.