

FIXING TOOL OF BINDER FOR FILE, AND THE FILE

BACKGROUND OF THE INVENTION

In a file for binding relatively thick documents and paper sheets, a spine cover for covering a side thereof where a front cover and a back cover are bound to each other is provided. In a usual file, the spine cover serves as a space for an index onto which a title of the documents, a file name, and the like are written.

For example, as shown in Utility Model Patent Document JP S50-16658, holes are provided on a surface of a spine portion of the cover (spine cover). Engagement portions provided in an index holding tool for fixing a frame body for holding the index onto which the title and the file name are written are engaged with the holes, and the index holding tool is thus attached to the spine portion.

Further, as shown in Patent Document JP S58-23239, a cardboard in which a window hole is formed is pasted onto the spine cover of the file, and further, a cover sheet covers the cardboard from the above in a stacking manner. Then, the spine cover turns into a state where the window hole is dented. Accordingly, an index sheet onto which the title and the file name are written can be held in the dent.

As described above, in order to provide the index on the spine cover of the file, the index sheet onto which the title, the file

name, and the like are written, or the frame body for holding the index sheet must be attached thereonto.

However, in a certain type of the file, a binder for binding the paper sheets is fixed to the inside of the spine cover. In many cases, the binder is fixed to the file in such a manner that a part equivalent to a female crimp is crimped to the spine cover from the outside thereof, and that a part equivalent to a male crimp is implanted to the spine cover from the inside thereof.

Therefore, onto the spine cover, there will be attached the part for fixing the index (including the frame body which holds the index sheet), and the part for fixing the binder. From the above, it has been necessary to pay attention so that positions where the parts are fixed, fixing structures thereof, and the like cannot interfere individually with each other.

Further, since the respective parts are arranged on an outer surface of the spine cover, there has been a defect that an exterior appearance of the file is damaged.

In this connection, it is an object of the present invention to provide a fixing tool of a binder for a file, and an index tool for the file, which are capable of attaching the binder onto the cover of the file by using a simple structure.

Further, it is another object of the present invention to provide a fixing tool of a binder for a file, and the file, which are capable of providing the binder, and further, a spine index

without damaging the exterior appearance of the file.

SUMMARY OF THE INVENTION

The present invention has been made in view of the above matters. That is, the present invention relates to a fixing tool of a binder for a file, the fixing tool fixing, to a file body composed of a front cover, a spine cover, and a back cover, which are mutually partitioned by fold lines, a binder for collectively binding sheets and storing the sheets in the file body, characterized in that, in the file body and the binder, through holes are provided at positions of the file body and the binder corresponding to each other, and in that the fixing tool further includes: an attaching means including an insertion portion to be inserted into the through holes from an outside of the file body, and a plate portion provided at a base end of the insertion portion and disposed perpendicularly to the insertion portion; and an engaging means for fixing the binder to the file body, the engaging means being engaged with the insertion portion.

The attaching means of the present invention includes the insertion portion and the plate portion. The insertion portion is engaged with the engaging means inserted through the through holes, thereby fixing the binder. Further, the plate portion is disposed along the front cover, spine cover, and back cover of the file body, and accordingly, the title, the index, and the like can be written

onto the plate portion.

As described above, according to the fixing tool of the present invention, such the fixing part for fixing the binder and such the part that serves as an index of the file can be integrated together, with the result that the number of parts can be reduced to enhance manufacturing efficiency of the fixing tool.

Further, the engaging means and the attaching means are made detachable from the file body, thus making it possible to promote separating disposal and reuse of the parts constituting the file.

Further, it is preferable if the plate portion according to the present invention is extended along a longitudinal direction of the spine cover. The plate portion is formed into a long plate shape along the spine cover, thus making it possible to use a surface of the long plate as the spine index (index) onto which the title, the file name, and the like are written. The plate portion can be formed into various sizes and shapes in response to the size of the spine cover and the purpose of the file.

Further, the plate portion according to the present invention can also be constituted to include a frame body provided along a peripheral edge of a surface thereof opposite with a surface thereof on which the insertion portion is provided.

When the frame body is provided along the peripheral edge of the plate portion, the peripheral edge of the plate portion becomes a casing, and a piece of paper can be set in an inside of the casing.

The index such as the file name and the title is written onto the piece of paper, thus making it possible to use the attaching means itself as the index with the frame body. Note that, with such a constitution, when the contents of the index (title) are desired to be changed, only by replacing only the piece of paper by a new one and writing a new index thereonto, it becomes possible to rewrite the index any times. Thus, a usable period of the file can be extended, and accordingly, resource saving can be promoted.

Further, in the inside of the frame body, not only the piece of paper is set, but also a transparent film is set thereon in a stacking manner, thus making it possible to protect the piece of paper from deterioration, damage, and the like.

Further, it is preferable if, on the surface of the plate portion according to the present invention, on which the insertion portion is provided, a hook portion that forms a hook shape is provided at a position facing to the insertion portion. The hook portion is formed into a downward hook shape so as to be hooked on a groove portion provided on the file body by self weight thereof.

As described above, the attaching means functions so as to be held on the file body not only by the insertion portion but also by the hook portion, and accordingly, fixing force of the attaching means to the file body is enhanced.

Further, the present invention relates to a file including: a file body composed of a front cover, a spine cover, and a back

cover, which are mutually partitioned by fold lines; a binder for collectively binding sheets and storing the sheets in the file body; and a fixing tool for fixing the binder to the file body, characterized in that, in the file body and the binder, through holes are provided at positions of the file body and the binder corresponding to each other, and in that the file further comprises: an attaching means including an insertion portion to be inserted into the through holes from an outside of the file body, and a plate portion provided at a base end of the insertion portion and disposed perpendicularly to the insertion portion; and an engaging means for fixing the binder to the file body, the engaging means being engaged with the insertion portion.

The attaching means of the present invention includes the insertion portion and the plate portion. The insertion portion is engaged with the engaging means inserted through the through holes, thereby fixing the binder. Further, the plate portion is disposed along the front cover, spine cover, and back cover of the file body, and accordingly, the title, the index, and the like can be written onto the plate portion.

As described above, according to the file of the present invention, such the fixing part for fixing the binder and such the part that serves as the index of the file can be integrated together, with the result that the number of parts can be reduced to enhance the manufacturing efficiency of the fixing tool concerned.

Further, the engaging means and the attaching means are made detachable from the file body, thus making it possible to promote separating disposal and reuse of the parts constituting the file.

According to the present invention, it becomes possible to provide a fixing tool of a binder for a file, and the file, which are capable of attaching the binder onto the cover of the file by using a simple structure, and are capable of providing the binder, and further, the spine index without damaging the exterior appearance of the file.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded perspective view showing a state where a fixing tool of a binder for a file according to an embodiment of the present invention is attached to the file.

FIG. 2 is a plan view of the file according to the embodiment.

FIG. 3 is a plan view of the binder according to the embodiment.

FIG. 4 is a plan view of the fixing tool according to the embodiment.

FIG. 5 is a side view of the fixing tool according to the embodiment.

FIG. 6 is a cross-sectional view taken along the line A-A' of FIG. 4.

FIG. 7 is a plan view of a slide-stop fastening member according to the embodiment.

FIG. 8 is a side view of the slide-stop fastening member according to the embodiment.

FIG. 9 is a perspective view showing a state where a fixing tool according to Another Embodiment 1 is attached to the file.

FIG. 10 is a cross-sectional view of the fixing tool according to Another Embodiment 1.

FIG. 11 is a perspective view showing a state where a fixing tool according to Another Embodiment 2 is attached to the file.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A description will be made below of a fixing tool of a binder for a file according to an embodiment of the present invention with reference to the drawings.

FIG. 1 shows an exploded perspective view showing a state where a fixing tool 1 according to this embodiment is attached to a file body 2 and a binder 3. The file body 2 is composed of a front cover 2a, a spine cover 2b, and a back cover 2c, which are mutually partitioned by fold lines (valley fold lines). The binder 3 is fixed to an inside of the spine cover 2b by the fixing tool 1.

First, a detailed description will be made of the file body 2. As shown in FIG. 2, in the spine cover 2b of the file body 2 according to this embodiment, thorough holes 4a and 4b are formed along a longitudinal direction thereof. Note that this description is made on the assumption that the through hole 4a is located above

the through hole 4b in response to an up-and-down orientation of the file body 2. The fixing tool 1 is inserted through the through holes 4a and 4b, and attaches the binder 3 thereto.

Further, above the through hole 4a, a slit 5 extended in a lateral direction of the spine cover 2b is formed. Although details will be described later, the fixing tool 1 is partially fitted to the slit 5.

Next, a detailed description will be made of the binder 3. As shown in FIG. 3, the binder 3 is composed of a base 6 with a long plate shape, and at positions thereof corresponding to the through holes 4a and 4b, through holes 6a and 6b are provided.

Further, on the base 6 of the binder 3, at approximate quarter positions thereof from both ends, two paper-binding ring members 7 and 8 are provided. The paper-binding ring members 7 and 8 and an open/close mechanism thereof are the conventionally known ones, and a detailed description thereof will be omitted. An upper surface of the base 6 according to this embodiment entirely forms such a curved surface that increases a thickness thereof toward the center. Meanwhile, surfaces of the base 6 in the vicinities of both-end fixing portions thereof become slant surfaces going down toward the through holes 6a and 6b, and peripheral portions 9a and 9b of the through holes 6a and 6b are formed into a flat thin plate shape.

Next, a detailed description will be made of the fixing tool

1. As shown in FIGS. 4 and 5, the fixing tool 1 according to this embodiment includes a long plate portion (attaching means) 1a, and an insertion portion (attaching means) 1b which protrudes from a back surface of the plate portion 1a and is inserted through the through hole 4a of the file body 2.

Then, on the plate portion 1a, a frame body 10 which surrounds four sides of a front surface of the plate portion 1a is formed. FIG. 6 shows a cross-sectional view of the fixing tool 1. An inside of the frame body 10 serves as a planar plate portion 11 recessed from a surface of the frame body 10 toward the insertion portion 1b side. Then, between the planer plate portion 11 and upper and lower portions of the inside of the frame body 10, cut grooves 12a and 12b extended in a lateral direction of the plate portion 1a are provided. The cut grooves 12a and 12b can facilitate a piece of paper (hereinafter, referred to as index sheet) onto which a title, a file name, and the like are written to be inserted into the frame body 10 and to be taken out therefrom.

For example, in the case of attaching, into the frame body 10, an index sheet formed to be longer than the planer plate portion 11 and to be shorter than the frame body 10, an upper end of the index sheet is inserted through the cut groove 12b from the back surface side of the planer plate portion 11, and is further inserted along a front surface of the planer plate portion 11 (refer to an arrow X of FIG. 6). When a lower end of the index sheet reaches

a position to be overlapped with the frame body 10, the upper end of the index sheet is inserted into the cut groove 12a toward the back surface side concerned (refer to an arrow Y of FIG. 6). The index sheet is formed into a size longer than the planer plate portion 11 and shorter than the frame body 10. Consequently, the upper and lower ends of the index sheet inserted into the cut grooves 12a and 12b turn into a state to be retained by an inner edge portion of the frame body 10. Thus, the index sheet will be held on the fixing tool 1.

Further, from the back surface of the planer plate portion 11, a hook portion 1c forming a hook shape above the insertion portion 1b is provided.

The hook portion 1c forms the hook shape going toward the insertion portion 1b (in a downward direction when taking the file body 2 as a reference). The hook portion 1c is attached to the file body 2 in such a manner of being hooked on the slit 5 provided in the file body 2.

Further, as shown in FIG. 1, the insertion portion 1b provided below the hook portion 1c aligns the through hole 4a provided in the spine cover 2b and the through hole 6a provided in the binder 3 with each other, and is inserted into the through hole 6a from the outside of the spine cover 2b.

As shown in FIG. 5, the insertion portion 1b is formed of a neck portion 13 forming a shape in which a tip corner is chamfered,

a constricted portion 14 continuous from the neck portion 13 toward the back surface side of the planer plate portion 11, and a pillar portion 15 continuous from the constricted portion 14. Note that a diameter of the pillar portion 15 is slightly smaller than a diameter of the through hole 4a of the file body 2 and a diameter of the through hole 6a of the binder 3. Hence, in the case of inserting the insertion portion 1b into the through holes concerned, a shape is made, in which upper portions (the neck portion 13 and the constricted portion 14) of the insertion portion 1b, which are located above the pillar portion 15, protrude from the insertion portion 6a of the binder 3. A slide-stop fastening member (refer to FIG. 1) 20 is inserted onto the constricted portion 14 situated in this state from sideward, and the constricted portion 14 is thus fixed.

Here, a detailed description will be made of the slide-stop fastening member 20. As shown in FIG. 7, the slide-stop fastening member 20 has a tip end formed into a tip-split shape like a keyhole. An opening portion 21 provided on the tip end has a larger diameter than the diameter of the constricted portion 14 of the insertion portion 1b, which is shown in FIG. 5. From the opening portion 21, a space which becomes gradually narrower toward a direction of a circular space 22 is formed. An entrance of the circular space 22 has a smaller diameter than the diameter of the constricted portion 14 of the insertion portion 1b, and a diameter of the circular space

is substantially equivalent to the diameter of the constricted portion 14.

Hence, in order to pinch the insertion portion 1b by the slide-stop fastening member 20, first, the slide-stop fastening member 20 is pressed against the constricted portion 14 of the insertion portion 1b with certain force while putting the opening portion 21 as a head. Then, the entrance of the circular space 22 is spread, and the constricted portion 14 is fitted into the circular space 22, and is engaged therewith. In this case, since a lower boundary surface of the constricted portion 14 is a slant surface, the slide-stop fastening member 20 is automatically guided to an appropriate position of the constricted portion 14, thus making it possible to attach the slide-stop fastening member 20 to the constricted portion 14 easily.

Further, as shown in FIG. 8, on a rear end portion of the slide-stop fastening portion 20, there is provided a groove portion 23 which is extended in a direction perpendicular to a longitudinal axis of the tip-split portion described above, and is formed by cutting the slide-stop fastening member 20 perpendicularly from an upper surface thereof. Note that the groove portion 23 of this embodiment is formed by cutting approximately a half of the slide-stop fastening member 20 in terms of height. In order to detach the slide-stop fastening member 20 from the insertion portion 1b, a finger or a plate member is inserted into the groove portion

23 to pull the slide-stop fastening member 20. Thus, the slide-stop fastening member (engaging means) 20 can be detached from the insertion portion 1b. To be specific, the fixing tool 1 of this embodiment forms the fixing tool of a binder for a file while including the slide-stop fastening member 20.

Further, as shown in FIG. 1, a rivet 30 having similar constitutions to those of the neck portion 13, constricted portion 14, and pillar portion 15 of the above-described insertion portion 1b is inserted into the through hole 4b provided in the file body 2 and the through hole 6b provided in the binder 3. The above-described slide-stop fastening member 20 is fitted onto the constricted portion 14, thus making it possible to fix the binder 3 to the spine cover 2b. Note that dimensional accuracy of the fixing tool 1, the rivet 30, and the slide-stop fastening members 20 according to this embodiment can be enhanced by manufacture thereof by using injection molding. For example, it is preferable that the fixing tool 1 and the rivet 30 be molded of polycarbonate excellent in impact strength as a material, and that the slide-stop fastening members 20 be molded of polyacetal excellent in creep characteristics/elasticity as a material. Thus, a structure can be achieved, in which the binder 3 is rattled little, and the fixing tool 1 and the rivet 30 are difficult to be broken even if the binder 3 is repeatedly attached/detached.

As described above, in accordance with the fixing tool 1

according to this embodiment, when the binder 3 is fixed to the spine cover 2b by the insertion portion 1b, the rivet 30, and the slide-stop fastening member 20, the plate portion 1a is disposed along the surface of the spine cover 2b. Accordingly, the plate portion 1a can be used as the index of the file body 2. Thus, it becomes unnecessary to separately provide the part which fixes the binder 3 and the part which fixes the index. Accordingly, the number of parts can be reduced, thus making it possible to facilitate the manufacture/assembly of the above-described members.

Further, the hook portion 1c is provided on the fixing tool 1 of this embodiment, and the fixing tool 1 is attached to the file body 2 in such a manner that the hook portion 1c concerned is hooked on the slit 5 provided in the spine cover of the file body 2. Accordingly, fixing force of the fixing tool 1 to the spine cover 2b can be enhanced. In particular, since the hook portion 1c is formed into the downward hook shape so as to be hooked on the slit 5, it becomes possible for the fixing tool 1 to be attached onto the spine cover 2b by a self load of the fixing tool 1 even without providing a dedicated attachment part.

Further, the frame body 10 is provided on the plate portion 1a, thus making it possible to fit, into the file body 10, not only the index sheet but also a transparent film placed thereon. Thus, the index can be rewritten easily in response to the contents of the file, and damage of the index sheet and invasion of water and

the like can be prevented by the film.

Further, with regard to the fixing tool 1 of this embodiment, the binder 3 can be easily detached from the file body 2 by detaching the slide-stop fastening members 20 fitted onto the insertion portion 1b and the rivet 30 therefrom. Thus, a user can disassemble (dismantle) the file by simple work, and accordingly, it becomes also possible to enhance separating collection efficiency thereof. In addition, since the separated parts do not include extremely small parts, a risk to lose these parts is reduced, and the parts can be reused effectively.

<Other Embodiment 1>

As shown in FIG. 9, for the fixing tool 1 of this embodiment, a mode can also be adopted, in which the plate portion 1a formed to have substantially the same size as that of the spine cover 2b is provided. In this case, as shown in FIG. 10, the insertion portions 1b are provided one by one in upper and lower portions of the plate portion 1a, and are fitted into the through holes 4a and 4b provided in the spine cover 2b of the file body 2.

As described above, the two insertion portions 1b are provided for the one fixing tool 1, thus eliminating the above-described rivet 30 (refer to FIG. 1), thus making it possible to further reduce the number of parts.

<Other Embodiment 2>

The description has been made that the fixing tool 1 of this

embodiment fixes the binder 3 to the inside of the spine cover 2b. However, as shown in FIG. 11, a fixing tool 1 of Another Embodiment 2 may attach the binder to the front cover 2a or the back cover 2c without being limited to the spine cover 2b.

Thus, an index can be provided on the other portion than the spine cover, and accordingly, it becomes possible to write a far more detailed title, to write a title corresponding to a classification method, to write a title in response to a storage method of the file, and so on. Thus, versatility of the file is enhanced.

Although the description has been made above of the preferred embodiments of the present invention, the present invention is not limited to these, and it is a matter of course that it is possible to perform various design changes without departing from the technical concept of the present invention.

[Description of Symbols]

1	fixing tool
1a	plate portion (attaching means)
1b	insertion portion (attaching means)
1c	hook portion
2	file body
2a	front cover
2b	spine cover
2c	back cover
3	binder
4a, 4b	thorough hole
5	slit
6	base
6a, 6b	through hole
7, 8	ring member
9a, 9b	peripheral portion
10	frame body
11	planar plate portion
12a, 12b	cut groove
13	neck portion
14	constricted portion
15	pillar portion
20	slide-stop fastening member (engaging means)
21	opening portion

22	circular space
23	groove portion
30	rivet

CLAIMS

1. A fixing tool of a binder for a file, the fixing tool fixing to a file body composed of a front cover, a spine cover, and a back cover, which are mutually partitioned by fold lines, a binder for collectively binding sheets and storing the sheets in the file body, wherein, in the file body and the binder, through holes are provided at positions of the file body and the binder corresponding to each other, and the fixing tool further comprises:

an attaching means including an insertion portion to be inserted into the through holes from an outside of the file body, and a plate portion which is provided at a base end of the insertion portion and disposed perpendicularly to the insertion portion and including means for serving as an index of the file body; and

an engaging means for fixing the binder to the file body, the engaging means being engaged with the insertion portion.

2. The fixing tool of a binder for a file according to claim 1, wherein the plate portion is extended along a longitudinal direction of the spine cover.

3. The fixing tool of a binder for a file according to any one of claims 1 and 2, wherein the plate portion includes a frame body provided along a peripheral edge of a surface of the plate portion opposite with a surface of the plate portion on which the

insertion portion is provided.

4. The fixing tool of a binder for a file according to any one of claims 1 to 3, wherein, on the surface on which the insertion portion is provided, a hook portion which forms a hook shape is provided at a position facing to the insertion portion, and the hook portion is engaged with a groove portion provided on the file body.

5. A file comprising:

a file body composed of a front cover, a spine cover, and a back cover, which are mutually partitioned by fold lines;

a binder for collectively binding sheets and storing the sheets in the file body; and

a fixing tool for fixing the binder to the file body, wherein, in the file body and the binder, through holes are provided at positions of the file body and the binder corresponding to each other,

and the file further comprises:

an attaching means including an insertion portion to be inserted into the through holes from an outside of the file body, and a plate portion which is provided at a base end of the insertion portion and disposed perpendicularly to the insertion portion and including means for serving as an index of the file body; and

an engaging means for fixing the binder to the file body, the engaging means being engaged with the insertion portion.