

CERTIFICATE OF TRANSLATION ACCURACY

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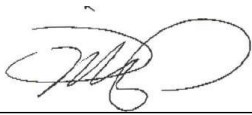
I served as Chief Examiner of the certified court interpreter test for the State of California and as a contract translator and interpreter for various federal agencies through the U.S. Department of State for more than a decade. I served as an instructor at the University of California at Berkeley and the Middlebury Institute of International Studies at Monterey (MIIS) Graduate Program in Translation.

I have more than 30 years of experience reviewing thousands of technical, legal, and business documents from Japanese to English submitted to, among others, Japanese judicial authorities, U.S. federal courts, the U.S. International Trade Commission (ITC), and the USPTO Patent Trial and Appeal Board (PTAB).

I certify that the following document translated from Japanese to English is a true, correct, and complete translation of the corresponding source text to the best of my knowledge and ability.

I certify under penalty of perjury that the foregoing is true and correct.

Executed this 7th day of January 2025 in Contra Costa County of the State of California.

By: 

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(54) (Title of the Invention) IMAGE INFORMATION FILING DEVICE

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SPECIFICATION

1. Title of the Invention: IMAGE INFORMATION FILING DEVICE

2. SCOPE OF PATENT CLAIMS

- (1) An image information filing device that files an original as image information provided with a means for storing a flag that sets a restricted use area and a use scope for desired image information, and a means for masking that region according to the content of the flag during image information use.
- (2) The image information file device described in claim 1, wherein the flag stored in the means has content allowing display of the area but preventing copying and use in edit mode.
- (3) The image information file device described in claim 1, wherein the flag stored in the means allows display and copying of the region but prevents use in edit mode.

- (4) The image information file device described in claim 1, wherein the flag stored in the means allows use in edit mode but prevents addition and revision to the area.

3. DETAILED DESCRIPTION OF THE INVENTION [TECHNICAL FIELD OF THE INVENTION]

The invention relates to an image information filing device that files a document or the like as image information.

[TECHNICAL BACKGROUND OF THE INVENTION AND PROBLEMS THEREOF]

In the name of office automation, improvements in office efficiency have been considered recently, and among such improvements, efficiently organizing and filing documents and the like in particular is considered extremely important in information management.

The most elementary method of filing documents and the like is to classify the same into categories and bind same in a binder.

However, this method is not practical because not only is management difficult when the volume of documents is large,

but a great deal of time and effort are required for searching.

In such cases, an image information filing device is used to store documents and the like as image information at addresses corresponding to predetermined classifications of microfilm, optical disks, and other storage means, and mechanically retrieve the corresponding document image by specifying the desired address when needed.

To facilitate the search of such filed image information, a classification table or an index is used, and when searching for needed information, first, for example, the index is searched and an item therein specified to retrieve the target document.

Therefore, the content of the classification table or index affects the efficiency of search operations, and the complexity of operations according to the classification table or the search [*sic*: index] affects the ease of use of the device, and various types of devices have been considered in view of these points.

However, this is extremely inconvenient when there are documents that need to be kept confidential since the easy searching of documents and the like makes it easy for any operator to view file content.

Therefore, a password-based search prevention method has been conventionally used. In further detail, with this method, a password of numbers is stored in an index table by document, operator, or organization, and in a search, corresponding documents are searched for as long as the password is specified.

However, even if this is done, passwords may match, albeit by coincidence, in which case the document content can be viewed.

The most problematic cases are those in which the content of a viewed document is intentionally altered, so-called falsification, or misappropriated for other purposes. In particular, documents with an editing function that enables the creation of a new document by cutting and pasting on the display have been abused recently such as, for example, where only the seal or signature portion of an important document is used in a new document created by editing, making it look as if the document has already been approved, or where part of a number with important

meaning is falsified to have a different meaning, and such problems must be prevented.

[OBJECT OF THE INVENTION]

The invention was invented taking these circumstances into account, and it is an object of the invention to provide an image information filing device capable of restricting the range of use of predesignated areas of image information.

[OVERVIEW OF THE INVENTION]

The image information filing device according to the invention registers flags in advance that set restricted use areas and use areas in filed image information so that the relevant areas can be masked and the usage thereof restricted according to the content of the respective flag.

[EFFECT OF THE INVENTION]

According to the invention, it is possible to prevent malicious use, such as the use of only the seal or signature portion of an important document for other purposes and the falsification of part of a number that has important meaning, by editing or the like.

[CONFIGURATIONS OF THE INVENTION]

A configuration of the invention is described below with reference to the drawings.

In FIG. 1, 1 is a device main unit which has an image input device 10, an image output device 11, a mask generator 12, a buffer memory 13, a CRT display 14, an image storage device 15, an address control device 16, a search control device 17, an index table 18, and a related table 19. Also a keyboard 3 and a coordinate input device 4 are connected to this device main body 1 via a system control device 2.

To file a document in such a configuration, first a printed or handwritten document original is set in the image input device 10. In this case, the image input device 10 is similar to a well-known facsimile machine.

In this state, an input mode code is keyed in with the keyboard 3. Then, the image input device 10 is activated by the system control device 2, the original is scanned and photoelectrically converted, and image information corresponding to the original is output. This image information is temporarily stored in the buffer memory 13

via the mask generator 12. In this case, the mask generator 12 unmask in input mode and all of the image information from the image input device 10 is input into the buffer memory 13. Then the image information input into the buffer memory 13 is sent to the CRT display device 14 for display. In this case, the CRT display device 14 has three display areas, i.e., a document display area 141, a menu area 142, and a message display area 143 as shown in FIG. 2, and the image information from the buffer memory 13 is displayed in the document display area 141.

In this state, the classification and attribute tables relating to the file are displayed in the menu area 142 of the CRT display device 14. In this case, these classification and attribute tables are stored in advance in the image storage device 15, and the storage area therein is registered in the index table 18. In further detail, the classification and attribute tables are prepared in an operator-friendly format as shown in FIG. 3, for example, and the original is set in the image input device 10 in advance to obtain image information, which is then stored in the image storage device 15 via the mask generator 12 and the buffer memory 13, and at the same time, indexing is carried out in the order of storage and that indexing is registered through the search control device 17 in the index table 18 as a storage area in the image storage device 15. When the code for the index information is keyed in from keyboard 3, the index table 18 is queried on the basis of the code to read out the corresponding storage area, the address is generated by the address control device 16, the image information of the corresponding classification table [or] attribute table is read out from the image storage device 15, and this image information is displayed in the menu area 142 [sic: document display area 141] of the CRT display device 14. In this case, it is assumed that the classification table and the attribute table shown in FIG. 3 are displayed in the menu area 142.

In this state, the operator uses the coordinate input device 4 to view the image information of the document original in the document display area 141 and select the appropriate classification or attribute on the basis of the classification

table and attribute table in the menu area 142. Here, for example, a mouse, a light pen, or the like is used as the coordinate input device 4.

Next, the message area 143 of the CRT display device 14 displays a query as to whether or not the area requires restricted use.

If, viewing this display, the operator indicates that there is a restricted use area using the coordinate input device 4, the corresponding area and a flag query will be displayed in the message area 143. The flags are used to set the specific range of use of an area, and content is set as shown in FIG. 4 (a), (b), and (c), for example. In further detail, a flag 1 in FIG. 4(a) allows display of the area but prohibits all copying and prohibits all use in edit mode. A flag 2, shown in FIG. 4(b), allows display and copying of the area but prohibits all use in edit mode. As shown in FIG. 4(c), a flag 3 allows all display and copying of the area, including in edit mode, and allows the area to be used for other purposes, but prohibits writing to the storage device for that area in edit mode and prohibits addition or revision to this portion. As shown in FIG. 4(d), a flag 4 prohibits the display of the area in edit mode and prohibits use of the area for other purposes but allows writing to the storage device for the area to allow addition or revision to that portion.

Naturally, the flags shown in FIG. 4(a), (b), (c), and (d) are only examples, and it is also possible to set flags with other use content.

In this state, the operator uses the coordinate input device 4 to set flags and indicate the restricted use areas in the document display area 141. The flag types and the coordinate addresses of the areas are then written into the related table 19 via the system control device 2 and the search control device 17. Naturally, if the user indicates that there is no restricted use area, no flags or corresponding areas need to be specified.

Subsequently, when the code to end input mode is keyed in with the keyboard 3, the image information temporarily stored in the buffer memory 13 is stored in the image storage section 15 via the mask generator 12, and the

storage area in the storage section 15 is also written to the related table 19.

In the same way, many documents are stored in the image storage section 15 as image information in input mode, and at the same time, the presence or absence of restricted use areas, flag types, instructions for the area, and other details concerning the image information are written to the related table 19 as shown in FIG. 5.

Next, to search for a document thus filed, the search mode is keyed in with the keyboard 3. Then, from the index table 18, the classification and attribute tables are read out similarly to during input mode via the search control device 17, and these tables are displayed in the menu area 142 of the CRT display device 14.

While viewing this, the operator uses the coordinate input device 4 to specify the classification or attribute that applies to the document to be searched for. Then, the search control device 17 searches for whether content identical to the indicated coordinate address is in the related table 19, and if so, the search control device first checks whether there is a restricted use area, and if so, the search control device first checks whether there is a restricted use area, and if so, the coordinate of the area and the type of flag in the related table 19 are temporarily stored. At the same time, the relevant storage area of the image storage device 15 is read from the related table 19, and on the basis of the readout, the address is output from the address control device 16. The corresponding image information is thereby read from the image storage device 15, temporarily stored in the buffer memory 13 via the mask generator 12, and then displayed in the document display area 141 of the CRT display device 14.

By repeating a similar operation, desired image information can be retrieved and displayed.

Next, to copy the retrieved image, the print output code is keyed in with the keyboard 3. Then, the search control device 17 checks the flags and the coordinates of the restricted use area, and if there is a flag that prohibits copying, that information is sent to the mask generator 12 in advance. Then the image information in the buffer

memory 13 is output to the image output device 11 via the mask generator 12, at which time the relevant area is masked and other areas are printed out. In this case, using a concrete example, the areas with the flag 1 and the flag 4 shown in FIG. 4 (a) and (d) are masked and not printed out, while the areas with the flag 2 and the flag 3 shown in Figure 4 (b) and (c) are printed out without being masked. Naturally, if there are no flags, the image information is not masked and is printed out as is.

Next, for editing, edit mode is keyed in with the keyboard 3.

In this case, the image information necessary for editing is retrieved in advance in the search mode described above and is displayed in the document display area 141 of the CRT display device 14, and then the editing operation begins.

First, the cutting operation to cut out a necessary area is keyed in with the keyboard 3. Then, the area that is desired to be cut out of the image information displayed in the document display area 141 of the CRT display device 14 is specified using the coordinate input device 4. Then, the system control device 3 reads out the area corresponding to the cutout area in the image information temporarily stored in the buffer memory 13, gives the readout to the CRT display device 14 via the mask generator 12, and displays the readout in the message area 143. Here, the 143 message area serves as a component box. Naturally, if the cutout area contains the coordinates of a restricted use area that has a flag that prohibits editing, such as the flag 1 or the flag 2 shown in FIG. 4 (a) and (b), that area is masked and will not be displayed in the message area 143. That is, the image information obtained with a cutout operation does not include areas that are prohibited from being edited.

The image information thus cut out is temporarily stored in an open area of the buffer memory 13.

By repeating this operation in the same manner, the image information necessary for editing is collected in the message area 143 and the buffer memory 13 as components. To cut out a plurality of image information items, the search mode and the edit mode should be

repeated. In this case, each time new image information is retrieved, the related table 19 is referred to and information about restricted use areas is sent to the search information [sic: control] device 17. In addition, the area cut out in this cutout operation can be recorded in the related table 19 of the cutout image information to store the edit history information. In this case, the content of the related table 19 can be displayed on the CRT display device 14 via the search control device 17 and the mask generator 13 to confirm such information.

Next, to lay out and paste the cutout areas collected in this way, first this operation is keyed in from the keyboard 3, then the desired component in the message area 143 is specified with the coordinate input device 4, and the paste position in the document display area 141 is specified with the coordinate input device 4. Then the image information corresponding to the specified component among the components stored in the open area of the buffer memory 13 is selected, and that image information is written at the position corresponding to the paste position in the buffer memory 13 corresponding to the document display area 141 and displayed in the document display area 141.

In this way, the cutout area is laid out in the buffer memory 13 and the document display area 141 and pasted to obtain new document image information. Then, the new image information thus edited is printed out on the image output device 11 according to need.

If the image information obtained by editing in this way is subsequently used as independent image information, it may be stored in the image storage device 15 and the related table 19 in the same manner as in input mode described above.

In such an edit mode, if the flag 3 shown in FIG. 4(c) is set in a restricted use area, writing to the image storage device 15 for that area is prohibited and falsifying this portion is prevented. In addition, the flag 4 shown in FIG. 4 (b) prohibits cutting of the restricted use area for editing and prevents use for other purposes but allows writing to the image storage device 15 for the area, thereby enabling revision.

In this way, if, for example, it is desired to prohibit the use of a seal or signature in an important document for

other purposes, a flag shown in FIG. 4 (a) or (b) can be registered at the same time as the area of that portion and use in the edit mode prohibited altogether, preventing the seal or signature from being used in a newly created document by editing. In addition, to not allow falsification of a portion, such as a number with an important meaning, a flag shown in FIG. 4 (c) can be registered at the same time as the area of the number to prevent revision in that area but allow use for other purposes in edit mode, reliably preventing abuse such as falsifying a portion of the number to change it to a different meaning. In addition, it is possible to store the history of editing in edit mode, which has the advantage of allowing the user to check for any errors related to editing.

The invention is not limited to the configuration described above but may be changed, as suitable, within a scope not deviating from the gist.

[BRIEF DESCRIPTION OF THE DRAWINGS]

FIG. 1 is a schematic diagram showing the configuration of this invention, FIG. 2 is a view showing the display screen of the CRT display device used in the configuration, FIG. 3 shows an example of a classification table and attribute table used in the configuration, FIG. 4 (a), (b), (c), and (d) are views showing specific examples of flags used in the configuration, and FIG. 5 is a view showing an example of the related table used in the configuration.

[DESCRIPTION OF THE REFERENTIAL NUMBERS]

1: device main unit	10: image input device
11: image output device	12: mask generator
13: buffer memory	14: CRT display device
141: document display area	142: menu area
143: message display area	15: image storage device
16: address control device	
17: search control device	18: index table
19: related table	2: system control device
3: keyboard	4: coordinate input device

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