

216, and the order numbers 207, 217 are information that can be displayed on the plate generally. Incidentally, pieces of the information other than the IDs 205, 215, 209, and 219 may not be included in the display by the stencil or the display by the die stamp. Further, information other than the information described above may be included in the display by the stencil and the display by the die stamp. For example, as the display by the die stamp, display items equivalent to the display items by the stencil (for example, at least one of the mark, the customer name, the standard, the size, the customer code, the order numbers, and the identification information) are sometimes displayed.

[0025] In this embodiment, there is explained, as an example, the case where the identification information 208, 218 are included in the display by the stencil, in addition to the marks 201, 211, the customer names 202, 212, the standards 203, 213, the sizes 204, 214, the IDs 205, 215, the customer codes 206, 216, and the order numbers 207, 217. The identification information 208, 218 are dedicated information for identifying the plate (an ID of the plate) by an identification device 400, which will be described later. In this embodiment, there is explained, as an example, the case of using information with a high identification rate by character recognition processing as the identification information 208, 218. Examples of the

display by the label described above, the contents of display items that may be displayed as the display item in the display by the label are also stored in the management table 500 as the storage information. "... present under the section of identification information in the section of label in Fig. 5 indicates the above. Further, the display items themselves may be added and/or deleted.

[0040] Next, there is explained one example of storage information to be stored in the section of non-actual article display in the management table 500.

In the section of position in article, the storage information indicating the position of the display region when a predetermined position in the plate is set as the origin (reference) is stored.

In the section of stencil of the section of position in article, the storage information indicating the position of the display region by the stencil when a predetermined position in the plate is set as the origin (reference) is stored.

In the section of a die stamp of the section of position in article, the storage information indicating the position of the display region by the die stamp when a predetermined position in the plate is set as the origin (reference) is stored.

In the section of label of the section of position in article, the storage information indicating the position of the display region by the

where the collation target is the display information>>
is also applicable to the cases where the collation
target is the display information other than the ID.

[0100] In this embodiment, the storage information in
each section (each item) of actual article display of
the management table 500 is one example of the first
storage information. Further, the storage information
in each section (each item) of non-actual article
display of the management table 500 is one example of
the second storage information.

[0101] When the collation target selected at Step
S1104 is the information in each section (each item) of
non-actual article display in the management table 500
and the information in the section of image ID in the
management table 500, the acquisition of the
information whose accuracy is guaranteed is not
executed (the processing at Step S1105 is omitted). In
this case, at Step S1106, the collation unit 413
collates all pieces of the recognition information of
the collation target selected at Step S1104 with all
pieces of the storage information of the collation
target. However, the information whose accuracy is
guaranteed may be set for the information in each
section of non-actual article display in the management
table 500 and the information in the section of image
ID of the management table 500. In this case, for
example, the information whose

plates are stacked, the plate with the shortest elapsed time among the plates with the same position of the x-y coordinates is stacked on top, and thus, it is considered that capturing of the display regions 101 by the stencil is enabled. Thus, the collation unit 413 executes the following collation when the captured image acquired at Step S1101 is the first captured image (namely, when the captured image includes the display regions 101 by the stencil). That is, the collation unit 413 collates, among candidates for the plate specified at the time when Step S1106 starts, the registration times stored in the sections of registration time of the section of non-actual article display of candidates for a plurality of the plates having the same information (x-y coordinates) indicating the position of the plate stored in the sections of storage space position of the section of non-actual article display. In this case, the plate with the latest registration time is specified as the plate captured in the first captured image acquired at Step S1101. In this case, among the candidates for a plurality of the plates having the same information (x-y coordinates) indicating the position of the plate stored in the sections of storage space position of the section of non-actual article display, all but the candidate for the plate having the latest registration time are excluded from the candidates for the plate. Incidentally, there is explained a

collation targets have not been selected is not limited to the processing at Step S1101. For example, when pieces of the information (captured image and non-display information) that need to be acquired at Steps S1001, S1003 in order to acquire the recognition information of all collation targets are acquired at a time at Steps S1001, S1003, as a result of the determination at Step S1108, the processing to be executed first when it is determined that all collation targets have not been selected may be Step S1104. As described previously, at Step S1104, one collation target is selected. Accordingly, when the recognition information of one collation target and the storage information of this single collation target match, at least one candidate for the plate that should be identified is specified.

[0117] As a result of the determination at Step S1107, when only one plate is specified from the plates managed in the management table 500, the processing at Step S1109 is executed. At Step S1109, the output unit 415 outputs article specification information. The article specification information includes the information (for example, the ID) of the plate that is determined to be specified at Step S1107, for example. The form of output is, for example, at least one of display on a computer display, storage in an internal or external storage medium of the identification device 400, and transmission to an external device of the

identification device 400 collates the information that satisfies the condition for accuracy among the recognition information with the information corresponding to the information that satisfies the condition for accuracy among the storage information. Accordingly, even when collations of all pieces of the recognition information fail, the identification of the plate can be performed as accurately as possible.

[0129] Further, in this embodiment, the identification device 400 collates the non-display information that is not displayed on the plate with the storage information stored in the management table 500 as the information corresponding to the non-display information. Thus, when the information displayed on the plate cannot be extracted correctly, the information that is not displayed on the plate can be utilized to identify the plate. As a preferred example of the non-display information that is not displayed on the plate, there is cited at least one of the position in article, the weight of the plate, the size of the plate, the storage space position, and the registration time.

[0130] Further, in this embodiment, the identification device 400 collates the acquired captured image and the captured image that is stored in association with the same ID as the ID of the acquired captured image among the IDs stored in the sections of image ID of the management table 500.