

CLAIMS

[Claim 1] An identification device that identifies an article, the device comprising:

an image acquisition unit that acquires one or two or more captured images of a region including first information that is information displayed on the article;

a recognition unit that recognizes at least one piece of the first information based on a captured image acquired by the image acquisition unit;

a collation unit that collates at least partial information of first recognition information being the first information recognized by the recognition unit with first storage information being first information stored beforehand in a storage medium as one piece of storage information; and

a specification unit that specifies at least one candidate for the article based on a result of collation by the collation unit, wherein

the collation unit is able to collate recognition information, which is partly different from the first recognition information, with storage information stored beforehand in a storage medium as information corresponding to the recognition information; and

the collation unit collates, when the first recognition information includes information that satisfies a condition for recognition accuracy and information that does not satisfy the condition for recognition accuracy, for partial information of the

first recognition information, information that satisfies the condition for recognition accuracy among the first recognition information with information corresponding to the information that satisfies the condition for recognition accuracy among the first storage information.

[Claim 2] The identification device according to claim 1, further comprising:

an information acquisition unit that acquires second information, which is information not displayed on the article, as second recognition information, wherein

second storage information, which is the second information, is stored beforehand in a storage medium in association with the first storage information as storage information, and

the collation unit collates second recognition information acquired by the information acquisition unit with the second storage information.

[Claim 3] The identification device according to claim 2, wherein

the second information includes at least one of a position in article, which is the position of information displayed on the article based on a predetermined position of the article; a weight of the article; a size of the article; a storage space position, which is the position where the article is placed; and a registration time, which is the time when the article was placed at a current position.

[Claim 4] The identification device according to any one of claims 1 to 3, wherein

a captured image of a region including the first information is stored beforehand in a storage medium in association with the first storage information as storage information, and

the collation unit collates at least a partial region of the captured image acquired by the image acquisition unit with at least a partial region of a captured image stored as the storage information.

[Claim 5] The identification device according to any one of claims 1 to 4, wherein

there are a plurality of pieces of the first information, and

the collation unit collates at least partial information of first recognition information being the first information that is not collated among the first information recognized by the recognition unit with first storage information being first information that is stored beforehand in a storage medium as one piece of storage information.

[Claim 6] An identification method that identifies an article, the method comprising:

an image acquisition step that acquires one or two or more captured images of a region including first information that is information displayed on the article;

a recognition step that recognizes at least one piece of the first information based on a captured

image acquired by the image acquisition step;

a collation step that collates at least partial information of first recognition information being the first information recognized by the recognition step with first storage information being first information stored beforehand in a storage medium as one piece of storage information; and

a specification step that specifies at least one candidate for the article based on a result of collation by the collation step, wherein

the collation step is able to collate recognition information, which is partly different from the first recognition information, with storage information stored beforehand in a storage medium as information corresponding to the recognition information; and

the collation step collates, when the first recognition information includes information that satisfies a condition for recognition accuracy and information that does not satisfy the condition for recognition accuracy, for partial information of the first recognition information, information that satisfies the condition for recognition accuracy among the first recognition information with information corresponding to the information that satisfies the condition for recognition accuracy among the first storage information.

[Claim 7] A program causing a computer to execute pieces of processing intended for identifying an article, the program comprising:

an image acquisition step that acquires one or two or more captured images of a region including first information that is information displayed on the article;

a recognition step that recognizes at least one piece of the first information based on a captured image acquired by the image acquisition step;

a collation step that collates at least partial information of first recognition information being the first information recognized by the recognition step with first storage information being first information stored beforehand in a storage medium as one piece of storage information; and

a specification step that specifies at least one candidate for the article based on a result of collation by the collation step, wherein

the collation step is able to collate recognition information, which is partly different from the first recognition information, with storage information stored beforehand in a storage medium as information corresponding to the recognition information; and

the collation step collates, when the first recognition information includes information that satisfies a condition for recognition accuracy and information that does not satisfy the condition for recognition accuracy, for partial information of the first recognition information, information that satisfies the condition for recognition accuracy among the first recognition information with information

corresponding to the information that satisfies the condition for recognition accuracy among the first storage information.