CLAIMS

1. An alert output apparatus, comprising:

a processor; and

a memory,

the alert output apparatus being coupled to an output apparatus,

the memory being configured to hold:

image information indicating each inspection object out of one or more inspection objects included in a photographic object of an image for which determination is to be executed;

alert target item information indicating an alert target item, wherein the alert target item information indicates a mistakable item determined in advance as an item resembling the alert target item; and

co-occurrence item information indicating alert co-occurrence items each determined in advance as an item to be included in the image at the same time as the alert target item, wherein the co-occurrence item information indicates a general co-occurrence item determined in advance as an item to be included in the image at the same time as a general item, which is a non-alert target item,

the processor being configured to:

determine, by referring to the alert target item information, whether at least one of the one or more inspection objects is a match to the alert target item;

determine, when it is determined that no inspection object out of the one or more inspection objects is a match to the alert target item, by referring to the co-occurrence item information, whether at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items; and

output a first alert to the output apparatus when it is determined that at least one inspection object out of the one or more inspection objects is a match to the alert target item and satisfies a given condition, and a second alert when it is determined that no inspection object out of the one or more inspection objects is a match to the alert target item but at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items.

2. The alert output apparatus according to claim 1,

wherein the image information indicates, for each inspection object out of the one or more inspection objects, a probability at which each inspection object is included in the photographic object, and

wherein the given condition is that a probability at which the at least one inspection object determined to be a match to the alert target item is a match to the alert target item is equal to or higher than a given value.

3. The alert output apparatus according to claim 2, wherein the processor is configured to:

output the first alert to the output apparatus when it is determined that the probability at which the at least one inspection object determined as a match to the alert target item is a match to the alert target item is equal to or higher than the given value; and

output the second alert lower in alert level than the first alert to the output apparatus when it is determined, for every single inspection object out of the one or more inspection objects, that a probability at which the single inspection object is a match to the alert target item is lower than the given value, but that at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items.

4. The alert output apparatus according to claim 2, wherein the processor is configured to avoid outputting alert to the output apparatus when it is determined that no inspection object out of the one or more inspection objects is a match to any of the alert target item and the alert co-occurrence items.

5. The alert output apparatus according to claim 2, wherein the processor is configured to avoid outputting alert to the output apparatus when it is determined, for every single inspection object out of the one or more inspection objects, that a probability at which the single inspection object is a match to the alert target item is lower than the given value, and that the single inspection object is a match to none of the alert co-occurrence items.

6. The alert output apparatus according to claim 2,

wherein the processor is configured to:

determine, by referring to the co-occurrence item information, whether at least one inspection object out of the one or more inspection objects is a match to the general co-occurrence item; and

output, when it is determined that no inspection object out of the one or more inspection objects is a match to any of the alert target item and the alert co-occurrence items, but that at least one inspection object out of the one or more inspection objects is a match to the general co-occurrence item, information indicating that a mistakable item is included among the one or more inspection objects, to the output apparatus.

7. The alert output apparatus according to claim 6, the processor is configured to:

output the first alert to the output apparatus when it is determined that a probability at which the at least one inspection object determined as a match to the alert target item is a match to the alert target item is equal to or higher than the given value; and

output a third alert lower in alert level than the first alert to the output apparatus when it is determined, for every single inspection object out of the one or more inspection objects, that a probability at which the single inspection object is a match to the alert target item is lower than the given value, and that the single inspection object is a match to none of the alert co-occurrence items and the general co-occurrence item.

8. The alert output apparatus according to claim 1,

wherein the processor is configured to output, when it is determined that at least one inspection object out of the one or more inspection objects is a match to the mistakable item by referring to the alert target item information, information indicating that the mistakable item is included among the one or more inspection objects, to the output apparatus.

9. An alert output method by an alert output apparatus, the alert output apparatus comprising:

a processor; and

a memory,

the alert output apparatus being coupled to an output apparatus,

the memory being configured to hold:

image information indicating each inspection object out of one or more inspection objects included in a photographic object of an image for which determination is to be executed;

alert target item information indicating an alert target item, wherein the alert target item information indicates a mistakable item determined in advance as an item resembling the alert target item; and

co-occurrence item information indicating alert co-occurrence items each determined in advance as an item to be included in the image at the same time as the alert target item, wherein the co-occurrence item information indicates a general co-occurrence item determined in advance as an item to be included in the image at the same time as a general item, which is a non-alert target item,

the alert output method comprising:

determining, by the processor, by referring to the alert target item information, whether at least one of the one or more inspection objects is a match to the alert target item;

determining, by the processor, when it is determined that no inspection object out of the one or more inspection objects is a match to the alert target item, by referring to the co-occurrence item information, whether at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items; and

outputting, by the processor, a first alert to the output apparatus when it is determined that at least one inspection object out of the one or more inspection objects is a match to the alert target item and satisfies a given condition, and a second alert when it is determined that no inspection object out of the one or more inspection objects is a match to the alert target item but at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items.

10. A non-transitory computer-readable medium storing a program causing an alert output apparatus to execute alert outputting, the alert output apparatus comprising:

a processor; and

a memory,

the alert output apparatus being coupled to an output apparatus,

the memory being configured to hold:

image information indicating each inspection object out of one or more inspection objects included in a photographic object of an image for which determination is to be executed;

alert target item information indicating an alert target item, wherein the alert target item information indicates a mistakable item determined in advance as an item resembling the alert target item; and

co-occurrence item information indicating alert co-occurrence items each determined in advance as an item to be included in the image at the same time as the alert target item, wherein the co-occurrence item information indicates a general co-occurrence item determined in advance as an item to be included in the image at the same time as a general item, which is a non-alert target item,

the program causes the processor to execute:

processing that determines, by referring to the alert target item information, whether at least one of the one or more inspection objects is a match to the alert target item;

processing that determines, when it is determined that no inspection object out of the one or more inspection objects is a match to the alert target item, by referring to the co-occurrence item information, whether at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items; and

processing that alerts to the output apparatus a first alert when it is determined that at least one inspection object out of the one or more inspection objects is a match to the alert target item and satisfies a given condition, and a second alert when it is determined that no inspection object out of the one or more inspection objects is a match to the alert target item but at least one inspection object out of the one or more inspection objects is a match to at least one of the alert co-occurrence items.