

CLAIMS

1. An inspection apparatus comprising:
an image-capturing unit configured to capture an image of an
article;

5 an inspection unit configured to inspect the article;
a generation-processing unit configured to generate a data group
related to an inspection result obtained by the inspection unit indicating
the presence or absence of tampering with the captured image of the
article, the data group including article information for distinguishing
10 the article, the inspection result obtained by the inspection unit,
captured-image information for distinguishing a captured image
captured by the image-capturing unit from another captured image, and
a hash value of the captured image that are associated with each other;
and

15 a storage-processing unit configured to store the data group and
the captured image in respective different storage units.

2. The inspection apparatus according to claim 1, wherein the
storage-processing unit stores the data group in a storage unit
20 configured to store the data group as a blockchain.

3. The inspection apparatus according to claim 1 or 2, wherein the
captured-image information is a file path of the captured image in a
storage unit configured to store the captured image.

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4. The inspection apparatus according to any one of claims 1 to 3,

wherein the inspection unit inspects the article on the basis of the captured image.

5. The inspection apparatus according to any one of claims 1 to 4, further comprising: an article identification unit configured to identify a type of the article on the basis of the captured image.

6. An inspection-result management system comprising:
the inspection apparatus as claimed in any one of claims 1 to 5;
a first storage unit configured to store the data group; and
a second storage unit being a storage unit configured to store the captured image and configured as a medium different from the first storage unit, wherein
the storage-processing unit of the inspection apparatus stores the data group in the first storage unit and stores the captured image in the second storage unit.

7. An inspection-result management system comprising:
an inspection apparatus including
an image-capturing unit configured to capture an image of an article,
an inspection unit configured to inspect the article,
a generation-processing unit configured to generate a data group related to an inspection result obtained by the inspection unit, the inspection result indicates the presence or absence of tampering with the captured image of the article, the data group including article

information for distinguishing the article, the inspection result obtained by the inspection unit, captured-image information for distinguishing a captured image captured by the image-capturing unit from another captured image, and a hash value of the captured image that are associated with each other, and

a storage-processing unit configured to store the data group and the captured image in respective different storage units;

a first storage unit configured to store the data group; and

a second storage unit configured as a medium different from the first storage unit, wherein

the storage-processing unit of the inspection apparatus stores the data group in the first storage unit and stores the captured image in the second storage unit.

8. The inspection-result management system according to claim 6 or 7, wherein the first storage unit stores the data group as a blockchain.

9. The inspection-result management system according to claim 7 or 8, further comprising: a search unit including

a receiving unit configured to receive the article information, an extraction unit configured to extract the captured-image information and the hash value, which are associated with the article information received by the receiving unit, from the data group stored in the first storage unit,

an identification unit configured to extract the captured image, which is identified with the captured-image information extracted by the

extraction unit as a key, from a plurality of the captured images stored in the second storage unit, and

a presentation unit configured to present the captured image extracted by the identification unit when the hash value calculated on the basis of the captured image extracted by the identification unit coincides with the hash value extracted by the extraction unit.

10. The inspection-result management system according to claim 9, wherein when the hash value calculated on the basis of the captured image extracted by the identification unit does not coincide with the hash value extracted by the extraction unit, the presentation unit provides notification that the captured image extracted by the identification unit has been tampered with.

11. An inspection-result storage method comprising:
an image-capturing step of capturing an image of an article;
an inspection step of inspecting the article;
a generation-processing step of generating a data group related to an inspection result obtained at the inspection step, the inspection result indicating the presence or absence of tampering with the captured image of the article, the data group including article information for distinguishing the article, the inspection result obtained at the inspection step, captured-image information for distinguishing a captured image captured at the image-capturing step from another captured image, and a hash value of the captured image that are associated with each other;
and

a storage-processing step of storing the data group and the captured image in respective different storage units.

12. The inspection-result storage method according to claim 11,
wherein the data group is stored as a blockchain at the storage-processing step.

13. An inspection-result management method comprising:
an image-capturing step of capturing an image of an article;
an inspection step of inspecting the article;
a generation-processing step of generating a data group related to an inspection result obtained at the inspection step, the inspection result indicating the presence or absence of tampering with the captured image of the article, the data group including article information for distinguishing the article, the inspection result obtained at the inspection step, captured-image information for distinguishing a captured image captured at the image-capturing step from another captured image, and a hash value of the captured image that are associated with each other;
and

a storage-processing step of storing the data group and the captured image in respective different storage units, wherein

the data group is stored in a first storage unit and the captured image is stored in a second storage unit configured as a medium different from the first storage unit at the storage-processing step.

14. The inspection-result management method according to claim

13, wherein the data group is stored as a blockchain at the storage-processing step.

15. The inspection-result management method according to claim 14, further comprising:

a receiving step of receiving the article information;

an extraction step of extracting the captured-image information and the hash value, which are associated with the article information received at the receiving step, from the data group stored in the first storage unit;

an identification step of extracting the captured image, which is identified with the captured-image information extracted at the extraction step as a key, from a plurality of the captured images stored in the second storage unit; and

a presentation step of presenting the captured image extracted at the identification step when the hash value calculated on the basis of the captured image extracted at the identification step coincides with the hash value extracted at the extraction step.