CLAIMS

[Claim 1] A tracking device that tracks an article, comprising:

one or two or more of image acquisition units each of which acquires a captured image of a region including display information displayed on the article;

an identification information acquisition unit that acquires identification information of the article;

a position derivation unit that derives, based on the captured image acquired by the image acquisition unit, an information display position being a three-dimensional position at which the display information is displayed; and

a storage unit that stores the information display position in the article derived by the position derivation unit, in a storage medium in association with the identification information of the article acquired by the identification information acquisition unit.

[Claim 2] The tracking device according to claim 1, wherein:

the display information displayed on the article includes the identification information of the article; and

the identification information acquisition unit includes at least one of:

a recognition unit that recognizes the identification information of the article based on the

~~captured image acquired by the image acquisition unit; and~~

~~an obtainment unit that obtains the identification information of the article stored in the storage unit.~~

~~[Claim 3] The tracking device according to claim 2, wherein:~~

~~the information display position stored in the storage medium in association with the identification information of the article includes, as information regarding the three-dimensional position at which the display information is displayed, information regarding a three-dimensional position based on a predetermined position of the article; and~~

~~the captured image acquired by the image acquisition unit includes a region including the predetermined position of the article.~~

~~[Claim 4] The tracking device according to claim 2 or 3, wherein~~

~~the identification information acquisition unit includes:~~

~~the recognition unit;~~

~~the obtainment unit;~~

~~a collation unit that collates the identification information of the article recognized by the recognition unit with the identification information of the article obtained by the obtainment unit; and~~

~~a specification unit that specifies, based on a result of collation by the collation unit, the identification information of the article included in~~

~~the captured image acquired by the image acquisition unit.~~

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

~~the position derivation unit derives a position in a height direction of a surface of the article on which the display information is displayed, based on two or more of captured images acquired by two or more of the image acquisition units.~~

~~[Claim 6] A tracking method of tracking an article, comprising:~~

~~one or two or more of image acquisition steps of acquiring a captured image of a region including display information displayed on the article;~~

~~an identification information acquisition step of acquiring identification information of the article;~~

~~a position derivation step of deriving, based on the captured image acquired by the image acquisition step, an information display position being a three-dimensional position at which the display information is displayed; and~~

~~a storage step of storing the information display position in the article derived by the position derivation step, in a storage medium in association with the identification information of the article acquired by the identification information acquisition step.~~

~~[Claim 7] A data structure of tracking data, comprising:~~

~~display information displayed on an article; and~~

~~non-display information that is not displayed on the article, wherein:~~

~~the non-display information includes an information display position being a three-dimensional position at which the display information is displayed; and~~

~~the data structure of the tracking data is used for deriving, by a tracking device, the information display position in the article based on a captured image of a region including the display information displayed on the article.~~

~~[Claim 8] A program for making a computer execute processing of tracking an article, the program making the computer execute:~~

~~one or two or more of image acquisition steps of acquiring a captured image of a region including display information displayed on the article;~~

~~an identification information acquisition step of acquiring identification information of the article;~~

~~a position derivation step of deriving, based on the captured image acquired by the image acquisition step, an information display position being a three-dimensional position at which the display information is displayed; and~~

~~a storage step of storing the information display position in the article derived by the position derivation step, in a storage medium in association with the identification information of the article~~

acquired by the identification information acquisition step.

CLAIMS

[Claim 1] A tracking device that tracks an article, comprising:

one or two or more of image acquisition units each of which acquires a captured image of a region including display information displayed on the article;

an identification information acquisition unit that acquires identification information of the article;

a position derivation unit that derives, based on the captured image acquired by the image acquisition unit, an information display position being a three-dimensional position at which the display information is displayed; and

a storage unit that stores the information display position in the article derived by the position derivation unit, in a storage medium in association with the identification information of the article acquired by the identification information acquisition unit.

[Claim 2] The tracking device according to claim 1, wherein:

the display information displayed on the article includes the identification information of the article; and

the identification information acquisition unit includes at least one of:

a recognition unit that recognizes the

identification information of the article based on the captured image acquired by the image acquisition unit; and

an obtainment unit that obtains the identification information of the article stored in the storage unit.

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

the information display position stored in the storage medium in association with the identification information of the article includes, as information regarding the three-dimensional position at which the display information is displayed, information regarding a three-dimensional position based on a predetermined position of the article; and

the captured image acquired by the image acquisition unit includes a region including the predetermined position of the article.

[Claim 4] The tracking device according to claim 2 or 3, wherein

the identification information acquisition unit includes:

the recognition unit;

the obtainment unit;

a collation unit that collates the identification information of the article recognized by the recognition unit with the identification information of the article obtained by the obtainment unit; and

a specification unit that specifies, based on a

result of collation by the collation unit, the identification information of the article included in the captured image acquired by the image acquisition unit.

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

the position derivation unit derives a position in a height direction of a surface of the article on which the display information is displayed, based on two or more of captured images acquired by two or more of the image acquisition units.

[Claim 6] A tracking method of tracking an article, comprising:

one or two or more of image acquisition steps of acquiring a captured image of a region including display information displayed on the article;

an identification information acquisition step of acquiring identification information of the article;

a position derivation step of deriving, based on the captured image acquired by the image acquisition step, an information display position being a three-dimensional position at which the display information is displayed; and

a storage step of storing the information display position in the article derived by the position derivation step, in a storage medium in association with the identification information of the article acquired by the identification information acquisition

step.

[Claim 7] A program for making a computer execute processing of tracking an article, the program making the computer execute:

one or two or more of image acquisition steps of acquiring a captured image of a region including display information displayed on the article;

an identification information acquisition step of acquiring identification information of the article;

a position derivation step of deriving, based on the captured image acquired by the image acquisition step, an information display position being a three-dimensional position at which the display information is displayed; and

a storage step of storing the information display position in the article derived by the position derivation step, in a storage medium in association with the identification information of the article acquired by the identification information acquisition step.