

CLAIMS

1. A display apparatus, comprising:
 - an image acquisition unit configured to acquire an
 - 5 image including a drawing region drawn by a user;
 - an image extraction unit configured to extract, from the acquired image, a first image being an image in the drawing region;
 - a registration unit configured to register attribute
 - 10 information indicating attributes that is set with respect to the extracted first image and is used for controlling of moving the first image on a screen;
 - a display control unit configured to control display on the screen;
 - 15 a coordinate generation unit configured to generate, based on a detection result of a detection unit configured to detect a position of an object in a three-dimensional space, coordinates of the object in the screen; and
 - a motion detection unit configured to detect a motion
 - 20 of the object based on the coordinates, wherein the display control unit is configured to further display, when the motion is detected by the motion detection unit, a second image on the screen based on the coordinates corresponding to the
 - 25 detected motion, and change the display of the first image to which attribute information of a certain attribute among the attributes of the first image displayed on the screen is set,
 - wherein the display control unit is configured to
 - 30 determine whether an attribute of the second image corresponds with the attribute set for the first image and change the display of the first image when the attribute of the second image corresponds with the attribute set for the

first image.

2. The display apparatus according to claim 1, wherein the display control unit is configured to move, when the
5 motion is detected by the motion detection unit, a position of the first image toward a position of the second image.

3. The display apparatus according to claim 1 or 2, wherein the display control unit is configured to execute,
10 when the second image is displayed on the screen, an emphasis processing for emphasizing that the second image is displayed.

4. The display apparatus according to claim 3, wherein
15 the display control unit is configured to further display a third image in vicinity of the second image as the emphasis processing.

5. The display apparatus according to claim 3 or 4,
20 wherein the display control unit is configured to determine whether at least a part of the second image overlaps with the first image based on the coordinates, and when determining that at least a part of the second image overlaps with the first image, change the display of the
25 first image as the emphasis processing.

6. The display apparatus according to any one of claims 1 to 5, wherein the display control unit is configured to arrange the first image in a region having an attribute
30 corresponding to an attribute of the first image within the screen.

7. The display apparatus according to any one of claims

1 to 6, further comprising a display image acquisition unit configured to acquire display contents on the screen as a capture image, wherein

5 the display control unit is configured to instruct the display image acquisition unit to acquire the capture image when the coordinates are included in a predetermined region in the screen.

8. The display apparatus according to any one of claims 1
10 to 7, wherein the display control unit is configured to change the display of the first image when the detection result is not obtained for a given period.

9. The display apparatus according to any one of claims 1
15 to 8, wherein the first image is a display image presented by a user, and the second image is an image stored in a storage unit in advance.

10. A display control method, comprising:
20 acquiring an image including a drawing region drawn by a user;
extracting, from the acquired image, a first image being an image in the drawing region;
registering attribute information indicating
25 attributes that is set with respect to the extracted first image and is used for controlling of moving the first image on a screen;
controlling display on the screen;
generating, based on a detection result of a detection
30 unit configured to detect a position of an object in a three-dimensional space, coordinates of the object in the screen; and
detecting a motion of the object based on the

coordinates, wherein

the displaying comprising displaying a first image on the screen, and when the motion is detected at the motion detection, further displaying a second image on the screen
5 based on the coordinates corresponding to the detected motion, and changing the display of the first image to which attribute information of a certain attribute among the attributes of the first image displayed on the screen is set;

10 determining whether an attribute of the second image corresponds with the attribute set for the first image; and changing the display of the first image when the attribute of the second image corresponds with the attribute set for the first image.

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11. A computer-readable recording medium that contains a computer program that causes a computer to execute:

acquiring an image including a drawing region drawn by a user;

20 extracting, from the acquired image, a first image being an image in the drawing region;

registering attribute information indicating attributes that is set with respect to the extracted first image and is used for controlling of moving the first image
25 on a screen;

controlling display on the screen;

generating, based on a detection result of a detection unit configured to detect a position of an object in a three-dimensional space, coordinates of the object in
30 the screen;

detecting a motion of the object based on the coordinates, wherein

the controlling comprising displaying a first image on

the screen, and when the motion is detected at the motion detection, further displaying a second image on the screen based on the coordinates corresponding to the detected motion, and changing the display of the first image to
5 which attribute information of a certain attribute among the attributes of the first image displayed on the screen is set;

determining whether an attribute of the second image corresponds with the attribute set for the first image; and
10 changing the display of the first image when the attribute of the second image corresponds with the attribute set for the first image.

12. A display system, comprising:

15 an image acquisition unit configured to acquire an image including a drawing region drawn by a user;

an image extraction unit configured to extract, from the acquired image, a first image being an image in the drawing region;

20 a registration unit configured to register attribute information indicating attributes that is set with respect to the extracted first image and is used for controlling of moving the first image on a screen;

a storage unit configured to store therein a second
25 image;

a display control unit configured to control display on the screen;

a coordinate generation unit configured to generate, based on a detection result of a detection unit configured
30 to detect a position of an object in a three-dimensional space, coordinates of the object in the screen; and

a motion detection unit configured to detect a motion of the object based on the coordinates, wherein

the display control unit is configured to display the first image on the screen, and when the motion is detected by the motion detection unit, further display the second image on the screen based on the coordinates corresponding to the detected motion, and changes the display of the first image to which attribute information of a certain attribute among the attributes of the first image displayed on the screen is set,

wherein the display control unit is configured to determine whether an attribute of the second image corresponds with the attribute set for the first image and change the display of the first image when the attribute of the second image corresponds with the attribute set for the first image.

13. The display apparatus according to any one of claims 1 to 9, wherein the display control unit is configured to display movement of the first image according to the attribute set for the first image.

14. The display control method according to claim 10, wherein the method comprises:

displaying movement of the first image according to the attribute set for the first image.

15. The computer-readable recording medium according to claim 11, wherein the computer program causes the computer to execute:

displaying movement of the first image according to the attribute set for the first image.

16. The display system according to claim 12, wherein the display control unit is configured to display movement of

the first image according to the attribute set for the first image.