

CLAIMS

CLAIM 1. An image generating apparatus for
generating an output image based on an input panorama
5 image, comprising:

a parameter input unit configured to input
an output range parameter and a correction parameter,
the output range parameter designating an output range
in the panorama image, the correction parameter
10 designating a correction part to be corrected in the
output image; and

an image correction unit configured to
correct the correction part designated by the
correction parameter in the output image,
15 wherein the image correction unit is
configured to calculate a similarity between the
correction part and peripheral pixels and correct the
correction part in the output image based on the
similarity and the peripheral pixels, and

20 wherein the output image is generated from
the output range of the panorama image, the output
range being designated by the output range parameter,
and is the panorama image corrected by the correction,

wherein the image correction unit is

configured to change the output range based on a ratio
of the correction part to the output range.

CLAIM 2. The image generating apparatus
5 according to claim 1,
wherein the image correction unit is
configured to calculate the similarity more than once
by using a number of pixels or a resolution of the
output image or the output image whose direction has
10 been changed.

CLAIM 3. The image generating apparatus,
according to claim 1 or 2,
wherein the image correction unit is
15 configured to set
a first projection surface indicating a
surface of a range to be output to the output image,
a second projection surface formed by
moving the first projection surface to an area
20 indicated by the output range parameter,
first coordinates on the first
projection surface,
second coordinates, which corresponds
to the first coordinates, on the second projection
25 surface, and
a sphere inscribed in the first

projection surface and the second projection surface,

and

calculate a distance between the first
5 coordinates on the first projection surface and the
second coordinates on the second projection surface
based on an arc length calculated based on a radius of
the sphere and a length of one side of the first
projection surface.

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~~CLAIM 4. The image generating apparatus
according to claim 1 or 2,~~

~~wherein the image correction unit is
configured to change the output range based on a ratio
15 of the correction part to the output range.~~

CLAIM 54. The image generating apparatus
according to claim 41,

wherein the change of the output range is
20 enlarge the output range.

CLAIM 65. The image generating apparatus
according to claim 41,

wherein the change of the output range is to
25 decrease a number of pixels of the output range.

CLAIM 76. The image generating apparatus according to claim 41,

wherein the change of the output range is change a number of pixels of the output range to be
5 equal or substantially equal to a resolution of the panorama image.

CLAIM 87. The image generating apparatus according to claim 1 or 2,

10 wherein the image correction unit is configured to correct the correction part in the output image more than once while determining whether to further correct before each correction based on a number of pixels of the output image.

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CLAIM 98. An image generating method of generating an output image based on an input panorama image, comprising:

a parameter input step of inputting an
20 output range parameter and a correction parameter, the output range parameter designating an output range in the panorama image, the correction parameter designating a correction part to be corrected in the output image; and

25 an image correction step of correcting the correction part designated by the correction

parameter in the output image,

wherein in the image correction step, a similarity between the correction part and peripheral pixels is calculated, and the correction part in the
5 output image is corrected based on the similarity and the peripheral pixels, and

wherein the output image is generated from the output range of the panorama image, the output range being designated by the output range parameter,
10 and is the panorama image corrected by the correction,

wherein the image correction step includes changing the output range based on a ratio of the correction part to the output range.

15 CLAIM 109. A program to cause a computer to execute an image generating method of generating an output image based on an input panorama image, the image generating method including:

a parameter input step of inputting an
20 output range parameter and a correction parameter, the output range parameter designating an output range in the panorama image, the correction parameter designating a correction part to be corrected in the output image; and

an image correction step of correcting the correction part designated by the correction parameter in the output image,

wherein in the image correction step, a
5 similarity between the correction part and peripheral pixels is calculated, and the correction part in the output image is corrected based on the similarity and the peripheral pixels, and

wherein the output image is generated from
10 the output range of the panorama image, the output range being designated by the' output range parameter, and is the panorama image corrected by the correction,

wherein the image correction step includes
changing the output range based on a ratio of the
15 correction part to the output range.