

CLAIMS:

1. A method for displaying to a user a transition between a first rendered projection of a first image data and a final rendered projection of a second image data, the method comprising:

5 obtaining said first image data and said second image data, each generated by a corresponding 3D scanning device scanning a structure;

displaying a first view corresponding to the first rendered projection of said first image data in a given window;

10 obtaining an input from the user, said input being indicative of said final rendered projection of a portion of said second image data;

displaying in sequence a plurality of views in the given window, each view corresponding to a different rendered projection of at least one of the first image data and the second image data, wherein the plurality of rendered projections are defined so as to perform a transition between the first rendered projection and the
15 final rendered projection, further wherein the transition enables a sequential display of a continuity of information of said structure from said first image data to said portion of said second image data, further wherein at least said first rendered projection and said final rendered projection are defined according to a different spatial arrangement.

20 2. The method as claimed in claim 1, wherein the 3D scanning device is selected from a group consisting of at least one of a computerized tomography (CT) scan device, a tomosynthesis device, a magnetic resonance imaging (MRI) device, a positron emission tomography (PET) device and an ultrasound device.

3. The method as claimed in any one of claims 1 and 2, wherein the first
25 rendered projection of the first image data is selected from a group consisting of 2D thin slice, 2D thick slice, 2D maximum intensity projection, 3D ray-tracing, 3D surface rendering, 3D perspective projection, 3D endoscopic projection and world projection.

4. The method as claimed in any one of claims 1 to 3, wherein the final rendered projection is selected from a group consisting of 2D thin slice, 2D thick slice, 2D maximum intensity projection, 3D ray-tracing, 3D surface rendering, 3D perspective projection, 3D endoscopic projection and world projection.
- 5 5. The method as claimed in any one of claims 1 to 4, wherein said first image data is generated by a first 3D scanning device scanning the structure and said second image data is generated by a second 3D scanning device scanning the structure.
6. The method as claimed in any one of claims 1 to 4, wherein said first
10 image data and said second image data are generated by a single 3D scanning device scanning the structure.
7. The method as claimed in any one of claims 1 to 6, wherein the obtaining of an input from the user comprises obtaining said input from at least one of a keyboard and a mouse.
- 15 8. The method as claimed in any one of claims 1 to 6, wherein the displaying of the first view corresponding to the first rendered projection of said first image data in a given window is performed on a touchscreen display, further wherein the obtaining of an input from the user comprises detecting a finger gesture on said touchscreen display.
- 20 9. The method as claimed in claim 1, wherein the obtaining of said first image data and said second image data comprises receiving said first image data and said second image data from a 3D scanning device scanning the structure.
10. The method as claimed in any one of claims 1 to 8, wherein the obtaining of said first image data and said second image data comprises retrieving from a
25 memory said first image data and said second image data.

11. The method as claimed in any one of claims 1 to 10, wherein the obtaining of an input from the user comprises obtaining an indication of said final rendered projection of a portion of said second image data and an indication of a zoom to perform on a region of interest in a given view, further comprising generating a plurality of zoomed views in the given view, further wherein the plurality of views in the given windows comprises the generated plurality of zoomed views.

12. A system for displaying to a user a transition between a first rendered projection of a first image data and a final rendered projection of a second image data, the system comprising:

a display device for displaying data to a user;
a central processing unit operatively connected to the display device;
an input device operatively connected to the central processing unit, said input device for obtaining an input from the user;

a memory operatively connected to the central processing unit and comprising a database for storing the first image data and the second image data and an application for displaying to a user a transition between a first rendered projection of a first image data and a final rendered projection of a second image data, the application comprising:

instructions for obtaining from said database said first image data and said second image data, each generated by a corresponding 3D scanning device scanning a structure;

instructions for displaying on said display device a first view corresponding to the first rendered projection of said first image data in a given window;

instructions for obtaining from said input device an input from the user, said input being indicative of said final rendered projection of a portion of said second image data;

instructions for displaying on said display device in sequence a plurality of views in the given window, each view corresponding to a different rendered projection of at least one of the first image data and the second image data, wherein the plurality of rendered projections are defined so as to perform a

transition between the first rendered projection and the final rendered projection, further wherein the transition enables a sequential display of a continuity of information of said structure from said first image data to said portion of said second image data, further wherein at least said first rendered projection and
5 said final rendered projection are defined according to a different spatial arrangement.

13. The system as claimed in claim 12, further comprising a communication port operatively connected to the central processing unit, the connection port for operatively connecting the system to a remote 3D scanning device scanning the
10 structure.

14. The system as claimed in claim 13, wherein the communication port is operatively connected to the remote 3D scanning device scanning the structure via a data network.

15. The system as claimed in claim 14, wherein the data network is selected
15 from a group consisting of a local area network (LAN), a metropolitan area network (MAN) and a wide area network (WAN).

16. The system as claimed in claim 15, wherein the data network comprises the Internet.

17. The system as claimed in claim 12, wherein the display device is a
20 touchscreen display, further wherein at least one part of said input of said user is obtained from said touchscreen display.

18. A non-transitory computer-readable storage medium for storing computer-executable instructions which when executed cause a computing device to perform a method for displaying to a user a transition between a first rendered
25 projection of a first image data and a final rendered projection of a second image data, the method comprising:

obtaining said first image data and said second image data, each generated by a corresponding 3D scanning device scanning a structure;

displaying a first view corresponding to the first rendered projection of said first image data in a given window;

5 obtaining an input from the user, said input being indicative of said final rendered projection of a portion of said second image data;

displaying in sequence a plurality of views in the given window, each view corresponding to a different rendered projection of at least one of the first image data and the second image data, wherein the plurality of rendered projections are defined so as to perform a transition between the first rendered projection and the final rendered projection, further wherein the transition enables a sequential display of a continuity of information of said structure from said first image data to said portion of said second image data, further wherein at least said first rendered projection and said final rendered projection are defined according to a different spatial arrangement.

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19. The method as claimed in any one of claims 1 to 11, wherein at least one of the plurality of views further comprises visual information displayed which is associated to at least one of an associated rendered projection and the input from the user.

20. The method as claimed in any one of claims 1 to 11 and 19, wherein the input from the user further comprises location property data in said first image data, further wherein the location property data is used for determining rendering parameters associated with rendered projection for subsequent views.

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21. The method as claimed in any one of claims 1 to 11 and 19 to 20, wherein the input from the user comprises information associated with a segmentation to perform, further wherein the displaying in sequence of a plurality of views in the given window comprises performing a segmentation prior displaying at least one of the plurality of views.

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