CLAIMS

We claim:

1. A virtual reality system, comprising:

one or more virtual reality components, wherein the one or more virtual reality components comprise a virtual reality headset;

one or more position tracking sensors, wherein the position tracking sensors identify a relative location of the user with respect to a physical space; and

computer executable instructions of a design program loaded into memory and processed at a central processing unit to cause the virtual reality system to display a three-dimensional view of an architectural design to a user through the one or more virtual reality components, the computer-executable instructions including instructions that are executable to cause the virtual reality system to perform at least the following:

access an architectural design file that includes an architectural design that is renderable to create a three-dimensional image of the architectural design;

receive a communication from the one or more position tracking sensors, wherein the communication comprises an indication of a relative direction that the virtual reality headset is facing;

render at least a portion of the architectural design file, wherein the rendered portion of the architectural design file comprises a three-dimensional image that corresponds with the relative direction that the virtual reality headset is facing;

transmit to the virtual reality headset the rendered portion of the architectural design file;

identify at least one bookmark within the architectural design file, the at least one bookmark comprising a predetermined position and view within the architectural design file;

identify through the one or more position tracking sensors whether the user has changed physical positions; and

establish a virtual reality scenario wherein:

in response to detecting a change in the physical position of the user, the virtual reality system renders a corresponding change in the three-dimensional

image that corresponds with the relative direction that the virtual reality headset is facing; and

in response to detecting a triggering user input while a current virtual user position and view does not correspond with the predetermined position and view of any bookmark, the virtual reality system transitions the user's virtual position and view to correspond with the predetermined position and view of a bookmark within the architectural design file.

2. The virtual reality system as recited in claim 1, wherein identifying through the one or more position tracking sensors that the user has changed physical positions comprises determining a change in at least one of:

a direction in which the user has moved;

a direction that the user is facing;

a tilt of the user's head; and

a position of the user's head.

3. The virtual reality system as recited in claim 2, wherein determining the change in the position of the user's head comprises determining that the user is in a crouched position.

4. The virtual reality system as recited in claim 3, wherein the at least a portion of the architectural design file is rendered such that a view of the user is from a perspective of a crouched position in response to determining that the user is in the crouched position.

5. A method, implemented at a computer system that includes one or more processors, for displaying a three-dimensional view of an architectural design to a user through one or more virtual reality components, the method comprising:

accessing an architectural design file that includes an architectural design that is renderable to create a three-dimensional image of the architectural design;

receiving a communication from one or more position tracking sensors, wherein the communication comprises an indication of a relative direction that a virtual reality headset is facing;

rendering at least a portion of the architectural design file, wherein the rendered portion of the architectural design file comprises a three-dimensional image that corresponds with the relative direction that the virtual reality headset is facing;

transmitting to the virtual reality headset the rendered portion of the architectural design file;

identifying at least one bookmark within the architectural design file, the at least one bookmark comprising a predetermined position and view within the architectural design file;

identifying through the one or more position tracking sensors whether the user has changed physical positions; and

establishing a virtual reality scenario wherein:

in response to detecting a change in the physical position of the user, the virtual reality system renders a corresponding change in the three-dimensional image that corresponds with the relative direction that the virtual reality headset is facing; and

in response to detecting a triggering user input while a current virtual user position and view does not correspond with the predetermined position and view of any bookmark, the virtual reality system transitions the user's virtual position and view to correspond with the predetermined position and view of a bookmark within the architectural design file.

6. The method as recited in claim 5, wherein identifying through the one or more position tracking sensors that the user has changed physical positions comprises determining a change in at least one of:

a direction in which the user has moved;

a direction that the user is facing;

a tilt of the user's head; and

a position of the user's head.

7. The method as recited in claim 6, wherein determining the change in the position of the user's head comprises determining that the user is in a crouched position.

8. The method as recited in claim 7, wherein the at least a portion of the architectural design file is rendered such that a view of the user is from a perspective of a crouched position in response to determining that the user is in the crouched position.

9. A computer program product comprising one or more computer-readable storage devices having stored thereon one or more computer-executable instructions that are executable by one or more processors of a virtual reality system to cause the virtual reality system to display a three-dimensional view of an architectural design to a user through one or more virtual reality components, the computer-executable instructions including instructions that are executable to cause the virtual reality system to perform at least the following:

access an architectural design file that includes an architectural design that is renderable to create a three-dimensional image of the architectural design;

receive a communication from one or more position tracking sensors, wherein the communication comprises an indication of a relative direction that a virtual reality headset is facing;

render at least a portion of the architectural design file, wherein the rendered portion of the architectural design file comprises a three-dimensional image that corresponds with the relative direction that the virtual reality headset is facing;

transmit to the virtual reality headset the rendered portion of the architectural design file;

identify at least one bookmark within the architectural design file, the at least one bookmark comprising a predetermined position and view within the architectural design file;

identify through the one or more position tracking sensors whether the user has changed physical positions; and

establish a virtual reality scenario wherein:

in response to detecting a change in the physical position of the user, the virtual reality system renders a corresponding change in the three-dimensional image that corresponds with the relative direction that the virtual reality headset is facing; and

in response to detecting a triggering user input while a current virtual user position and view does not correspond with the predetermined position and view of any bookmark, the virtual reality system transitions the user's virtual position and view to

correspond with the predetermined position and view of a bookmark within the architectural design file.