CLAIMS:

1. An orientation detection system, comprising:

an orientation detector including an image sensor and image processing circuitry; and

an orientation tag configured to be coupled to a user interactive device, the orientation tag comprising:

a first layer of visual data; and

a second layer of visual alignment features disposed over the first layer of visual data, wherein the visual alignment features are configured to reveal and block portions of the visual data with respect to a viewpoint of the image sensor, wherein different patterns of the visual data are observable to the image sensor, wherein each pattern of the different patterns corresponds to a relative orientation of the orientation tag with respect to the viewpoint, wherein the image processing circuitry is configured to identify an orientation of the orientation tag based on a pattern of different patterns of the visual data observed by the image sensor.

2. The orientation detection system of claim 1, wherein the visual alignment features are configured to physically block patterns of the different patterns of the visual data that do not correspond to the relative orientation of the orientation tag with respect to the viewpoint from being viewed by the image sensor.

3. The orientation detection system of claim 1, wherein the visual alignment features are configured to:

provide, via refraction, the pattern of different patterns of the visual data for observation by the image sensor from the viewpoint; and

block, via refraction, patterns of the different patterns of the visual data that do not correspond to the relative orientation of the orientation tag with respect to the viewpoint from being viewed by the image sensor.

4. The orientation detection system of claim 1, wherein each pattern of the different patterns comprises a barcode or a Quick Response (QR) code that is decipherable by the image processing circuitry to represent a horizontal rotational angle and a vertical rotational angle of the orientation tag.

5. The orientation detection system of claim 1, wherein each pattern of the different patterns comprises text indicative of a horizontal rotational angle and a vertical rotational angle of the orientation tag.

6. An entertainment system, comprising:

an orientation tag of a user interactive device, the orientation tag comprising a plurality of visual patterns and a visual alignment feature that limits viewing of the plurality of visual patterns based on a viewing orientation of the orientation tag;

a camera configured to capture an image of the orientation tag of the user interactive device; and

a controller having processing circuitry and a memory, the memory storing machine-readable instructions configured to cause the processing circuitry to:

identify the orientation tag of the user interactive device in the image; and

determine an orientation of the orientation tag based on orientation information associated with a visual pattern of the plurality of visual patterns captured in the image.

7. The entertainment system of claim 6, wherein the orientation information comprises a horizontal rotational angle and a vertical rotational angle of the orientation tag.

8. The entertainment system of claim 7, wherein the machine-readable instructions are configured to cause the processing circuitry to determine the orientation of the orientation tag by applying the horizontal rotational angle and the vertical rotational angle to the orientation tag in the image.

9. The entertainment system of claim 6, wherein the machine-readable instructions are configured to cause the processing circuitry to determine a position of the orientation tag in the image.

10. The entertainment system of claim 9, comprising an output device, wherein the machine-readable instructions are configured to cause the processing circuitry to instruct the output device to output a user interactive experience based on the orientation and the position of the orientation tag.

11. The entertainment system of claim 10, wherein the output device comprises an electronic display, wherein the memory stores data correlating the orientation of the orientation tag to video data, and wherein the machine-readable instructions are configured to cause the processing circuitry to instruct the electronic display to display the video data based on the orientation of the orientation tag.

12. The entertainment system of claim 10, wherein the output device comprises a speaker, and wherein the memory stores data correlating the orientation of the orientation tag to audio data, and wherein the machine-readable instructions are configured to cause the processing circuitry to instruct the speaker to output the audio data based on the orientation of the orientation tag.

13. The entertainment system of claim 6, wherein the user interactive device comprises a mobile device, and wherein the orientation tag is affixed to the mobile device.

14. A user interactive device, comprising:

an orientation tag comprising:

a first layer comprising a plurality of patterns, wherein each pattern of the plurality of patterns indicates a set of orientation information; and

a second layer disposed over the first layer, wherein the second layer comprises a plurality of elements configured to:

enable a corresponding pattern of the plurality of patterns, wherein the corresponding pattern corresponds to a viewpoint of the orientation tag to be viewed from the viewpoint; and

prevent non-corresponding patterns of the plurality of patterns, wherein the non-corresponding patterns do not correspond to the viewpoint of the orientation tag from being viewed from the viewpoint.

15. The user interactive device of claim 14, comprising a handheld device.

16. The user interactive device of claim 14, comprising a head-mounted device.

17. The user interactive device of claim 16, wherein the head-mounted device comprises a display, and wherein the display is configured to output video data based on the set of orientation information indicated by the corresponding pattern.

18. The user interactive device of claim 14, comprising a wearable material, wherein the wearable material comprises a plurality of orientation tags, wherein the plurality of orientation tags comprises the orientation tag.

19. The user interactive device of claim 14, comprising a light source, wherein the light source is configured to emit light to illuminate the plurality of patterns.

20. The user interactive device of claim 19, wherein the light source comprises a liquid crystal display, a light-emitting diode, or an organic light-emitting diode.

21. The user interactive device of claim 19, wherein the light source comprises reflective material.