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(54) **AMUSEMENT OR WATER RIDE  
ATTRACTION INCLUDING SUB-ELEMENTS**

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(57) **ABSTRACT**

A waterslide ride that provides multiple directly connected sub-elements. The sub-elements may be ramps that provide a pendulum action ride as the first sub-element ramp is opposite in direction to second sub-element ramp. The first sub-element may be higher in elevation than second and subsequent sub-elements. In an alternative embodiment, the sub-elements may include arcing, banked turns that alternate in direction as the elevation of the waterslide attraction decreases. Where arcing, banked turns comprise the sub-elements, the rider arcs from side to side changing direction with each arcing banked turn. An exit slide is connected to the final sub-element and directs a rider to a runout pool. The waterslide may include speed-altering components for changing a speed and/or direction of a rider as the rider travels along the waterslide.

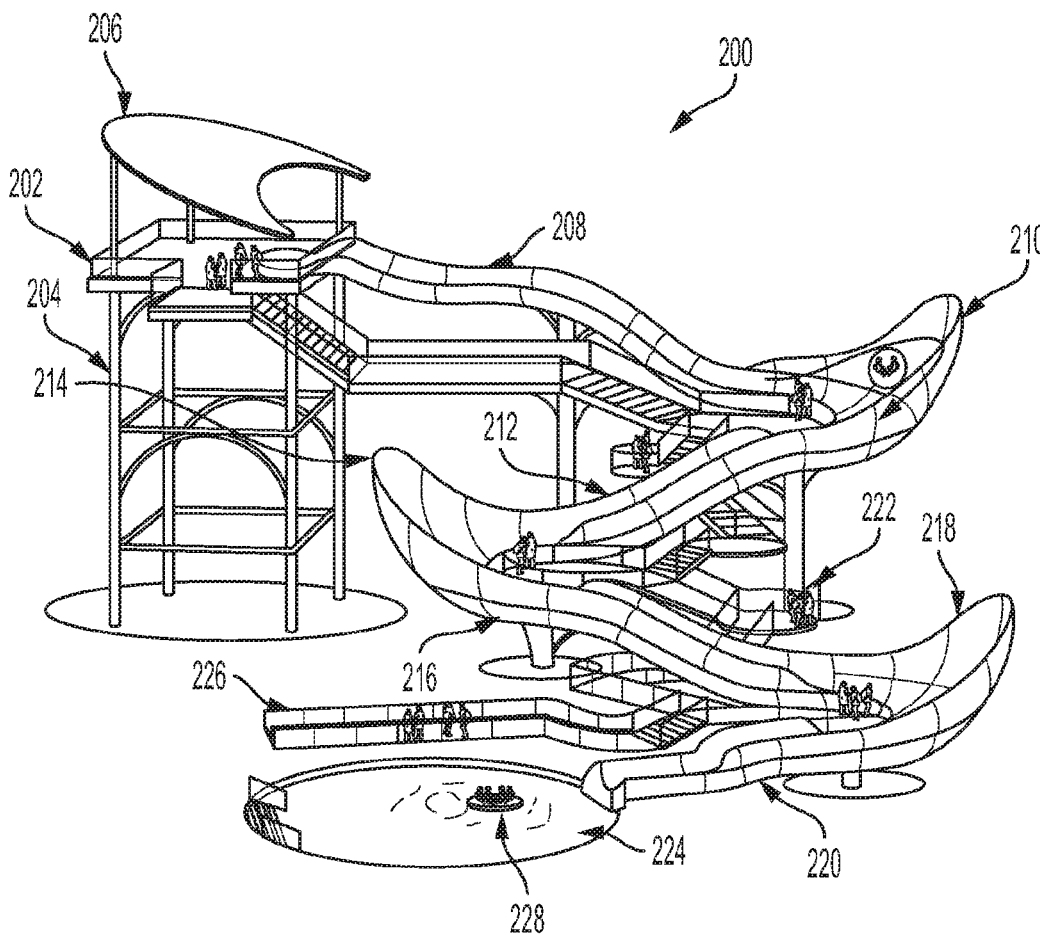
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(60) Provisional application No. 62/584,467, filed on Nov. 10, 2017.



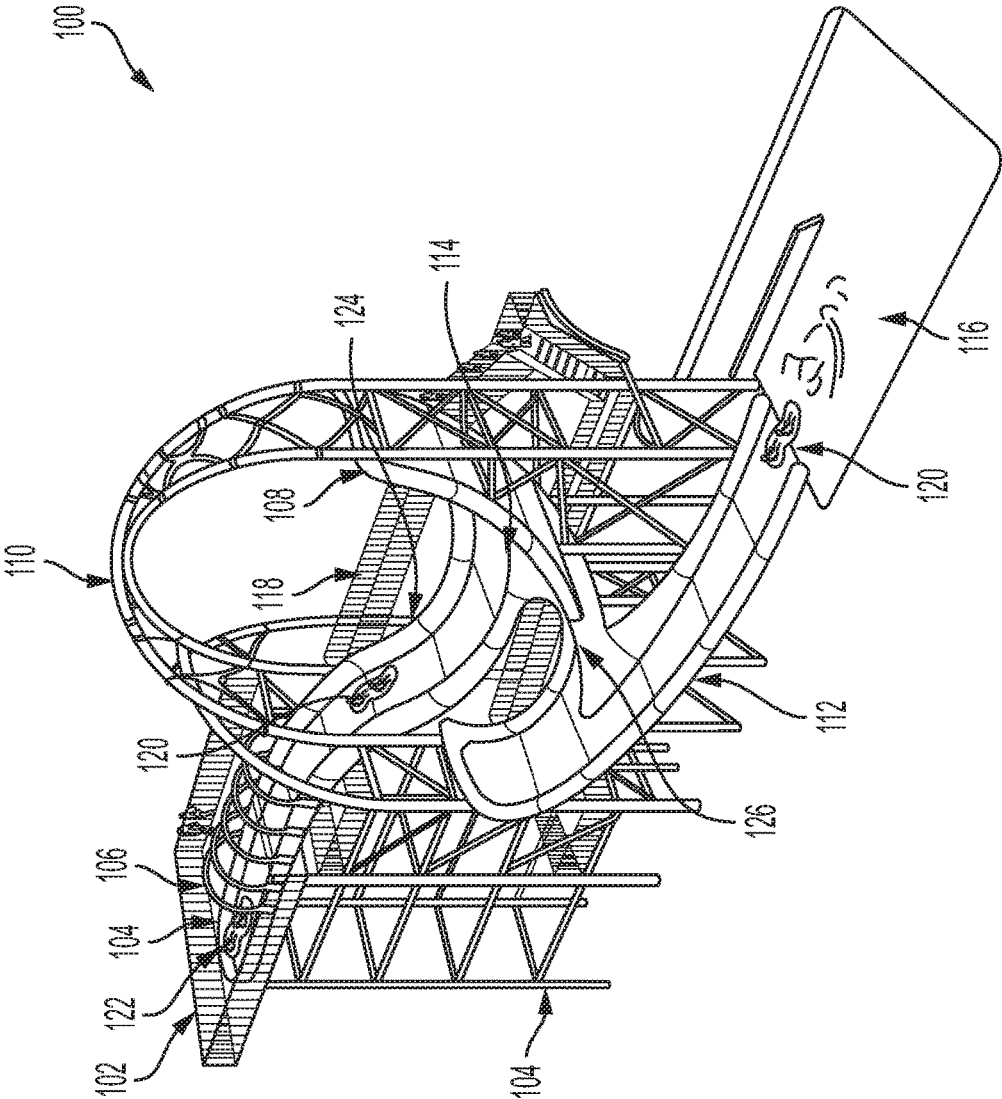


FIG. 1

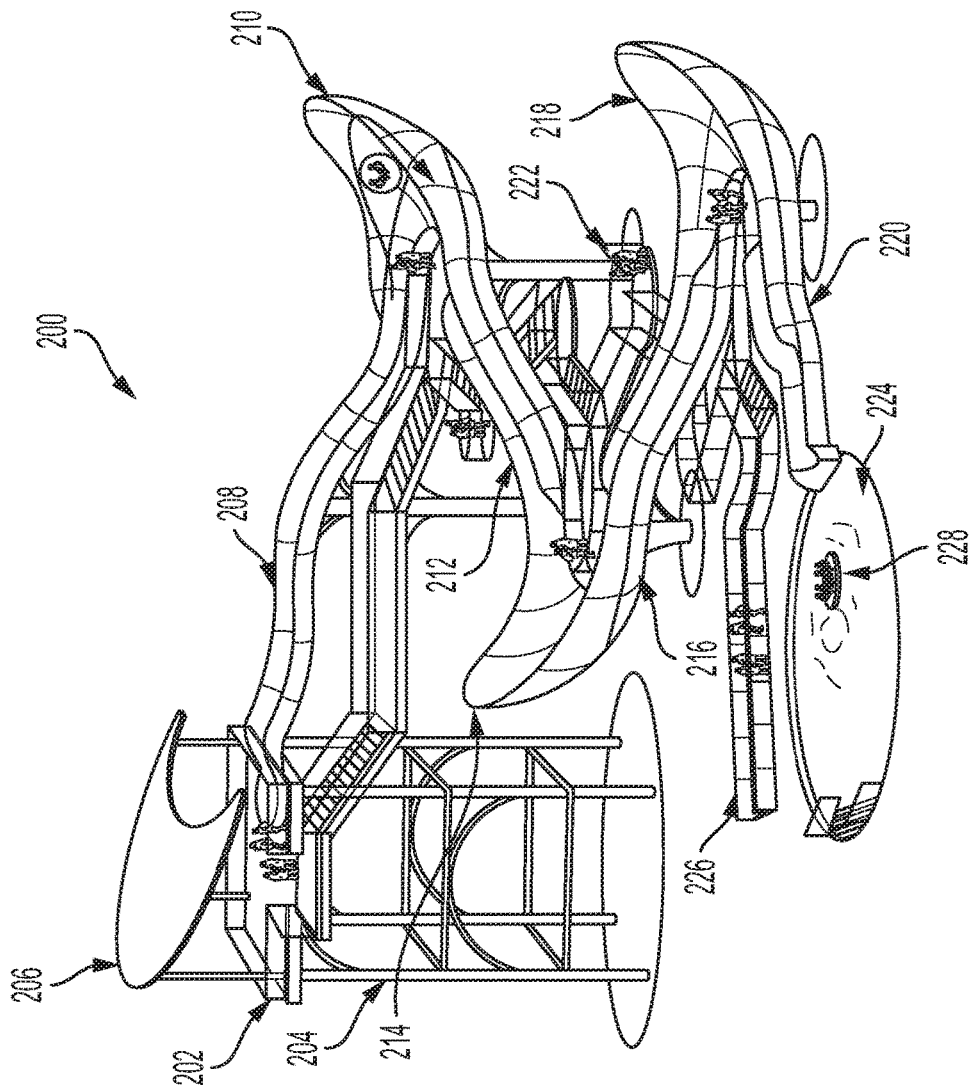


FIG. 2

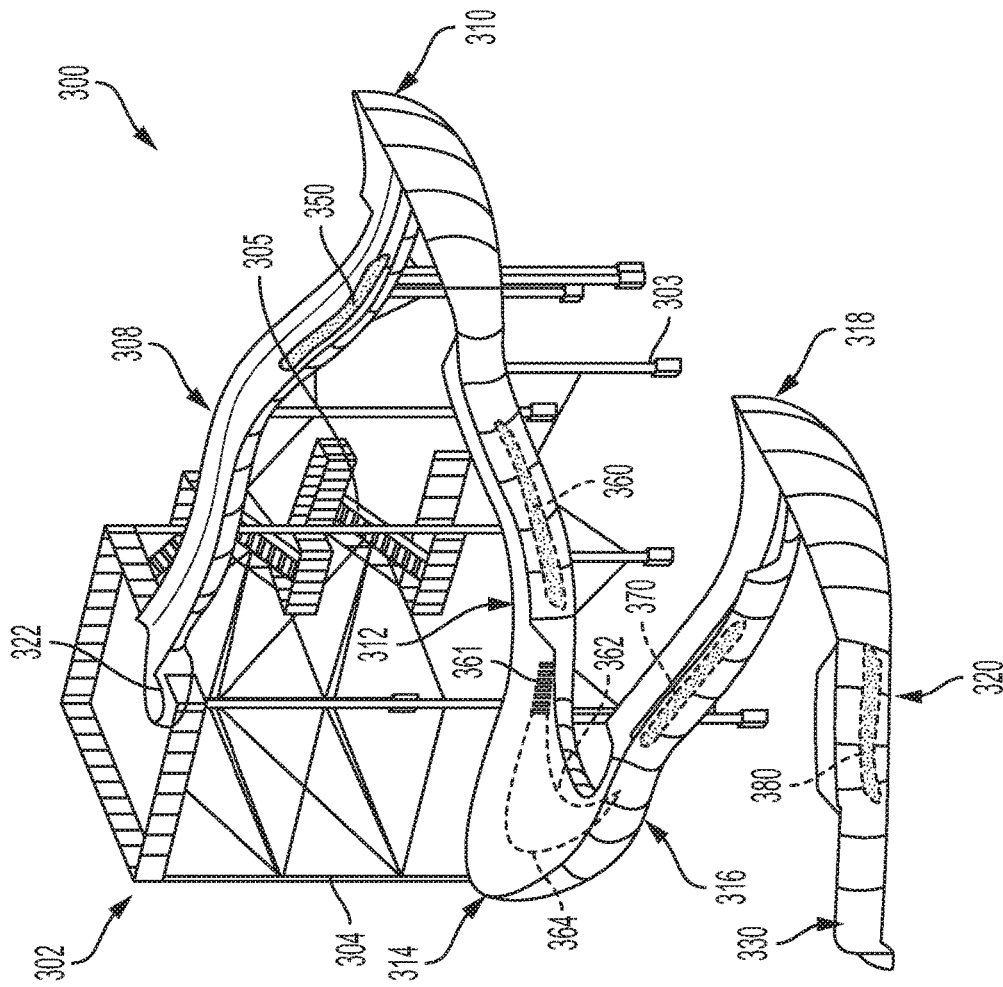


FIG. 3

## AMUSEMENT OR WATER RIDE ATTRACTION INCLUDING SUB-ELEMENTS

### CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Patent Application Ser. No. 62/584,467, filed on Nov. 10, 2017, entitled “AMUSEMENT OR WATER RIDE ATTRACTION INCLUDING SUB-ELEMENTS,” which is hereby incorporated by reference in its entirety.

### BACKGROUND

#### 1. Field of the Invention

[0002] The present invention relates generally to amusement attractions or water ride attractions. More particularly, the present invention relates to amusement attractions capable of incorporating multiple ride elements, for example, to provide riders with changing experiences as they traverse the amusement attraction from start to finish.

#### 2. Description of the Related Art

[0003] Waterslide attractions typically provide riders with a thrilling experience of speed and lateral force upon the body as the riders slide on the attraction. A stream of water is commonly flowed along a flume from an entrance location of higher elevation to an exit location of lower elevation. A rider slides along the flume due to the stream of water, either with or without a ride vehicle, and experiences the twists, turns, and drops predetermined by the design and setup of the flume. While such attractions provide an initial rush of excitement, many use single elements, such as a simple bump or gentle curve, with transition sections between these single elements. The initial rush of excitement for the rider quickly diminishes with repeated riding. Ride elements that incorporate multiple sub-elements add more excitement and variety to the rider's experience.

[0004] Thus, an improved amusement or waterslide attraction that incorporates ride elements having multiple sub-elements is desired. The improved amusement or waterslide would ideally provide a more exciting riding experience as riders pass through multiple sub-elements that incorporate steeper drops and more curves than current single ride elements. Moreover, the improved amusement or waterslide would desirably allow riders to have a more exciting and unique ride experience.

### SUMMARY

[0005] The present invention describes a waterslide ride element configured to provide a first sub-element and a second sub-element directly connected to the first sub-element. The first and second sub-elements may be ramps facing in opposite directions to provide a pendulum effect to the rider. The first sub-element ramp may be higher than the second sub-element ramp. Alternatively, the first sub-element may be a first slide directly connected to a first arcing banked turn. A second slide may connect the exit of the first arcing banked turn with a second arcing banked turn. The arcing banked turns turn in opposite directions. Multiple slides may connect multiple arcing banked turns. In one aspect of the invention, a rider, either in conjunction with a ride vehicle or without a ride vehicle, may travel directly from one attraction sub-element to the next attraction sub-

element without a typical or conventional transition (e.g., traveling back to a flume or other transition portion of the slide) between the two. In certain embodiments, such connection without transition portions may add additional excitement for the rider upon the attraction since the rider may undergo constant motion upon the attraction sub-elements without being slowed or otherwise recovering from the first sub-element before entering the second sub-element. Moreover, in certain embodiments, such direct connection may increase the enjoyability of the attraction and encourage constant motion by the rider without a break or cooling-off portion between sub-elements. Speed-altering components may be coupled or integrated before or between sub-elements to help adjust a speed and/or direction of the rider.

[0006] In one embodiment, a waterslide for traversal by a rider may include a first sub-element including a ramp facing in a first direction and at least a second sub-element including a ramp facing in a second direction different from the first direction, wherein the second sub element is connected to the first sub-element such that the rider traverses the first sub-element and immediately into the second sub-element.

[0007] In another embodiment, a waterslide for traversal by a rider may include a first sub-element including a ramp facing in a first direction, at least a second sub-element including a ramp facing in a second direction different from the first direction, and an intermediate section connected between the first sub-element and the second sub-element such that the rider traverses the first sub-element, across the intermediate section, and then into the second sub-element.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Other systems, methods, features, and advantages of the present invention will be or will become apparent to one with skill in the art upon examination of the following figures and detailed description. It is intended that all such additional systems, methods, features, and advantages be included within this description, be within the scope of the present invention, and be protected by the accompanying claims. Component parts shown in the drawings are not necessarily to scale and may be exaggerated to better illustrate the important features of the present invention. In the drawings, like reference numerals designate like parts throughout the different views, wherein:

[0009] FIG. 1 shows a perspective view of a waterslide attraction capable of incorporating ride elements that comprise multiple sub-elements according to an embodiment of the present invention;

[0010] FIG. 2 shows a perspective view of a waterslide attraction capable of incorporating ride elements that comprise multiple sub-elements according to a further embodiment of the present invention; and

[0011] FIG. 3 shows a perspective view of a waterslide attraction capable of incorporating ride elements that comprise multiple sub-elements including components for manipulating the speed of a rider before or after such sub-elements according to a further embodiment of the present invention.

### DETAILED DESCRIPTION

[0012] The detailed description of exemplary embodiments herein makes reference to the accompanying draw-

ings and pictures, which show the exemplary embodiments by way of illustration and its best mode. While these exemplary embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, it should be understood that other embodiments may be realized and that logical and mechanical changes may be made without departing from the spirit and scope of the invention. Thus, the detailed description herein is presented for purposes of illustration only and not of limitation. For example, the steps recited in any of the method or process descriptions may be executed in any order and are not limited to the order presented. Moreover, any of the functions or steps may be outsourced to or performed by one or more third parties. Furthermore, any reference to singular includes plural embodiments, and any reference to more than one component may include a singular embodiment.

[0013] Turning first to FIG. 1 a perspective view of a waterslide attraction 100 is shown. Although the embodiment of FIG. 1 is described in detail as a waterslide, other amusement attractions (e.g., dry attractions) may incorporate the features set forth herein in an alternative embodiment. A boarding area or observation deck 102 is placed on top of support structure 104. The observation deck 102 may have a shape substantially as depicted. In an alternative embodiment the observation deck may have a round or oval shape and/or may be shaped in any desired configuration and/or to reflect a theme for the water attraction 100. The boarding area or observation deck 102 may be configured to allow riders to view one or more of the riders or ride elements, described in further detail below, of the waterslide attraction 100 while queuing or otherwise waiting for their turn to traverse the waterslide attraction 100. The support structure 104 may be substantially as depicted, as a scaffolding structure to support the flumes or slides and ride elements of the waterslide attraction 100. Support structure 104 may incorporate multiple stairs and/or viewing/observation sections 118 to allow those queued to watch other riders. In an alternative embodiment, the support structure 104 may be reduced to accommodate sloping terrain. In certain embodiments the support structure 104 may allow riders to enter the boarding area or observation deck 102 without having to traverse stairs or other uphill pathways (e.g., riders may enter at a top portion of the waterslide attraction 100).

[0014] The waterslide attraction 100 may incorporate a boarding zone 122 which may be covered by one or more sequenced light bars 106. The sequenced light bars 106 may be timed to indicate a rider launch sequence. The sequenced light bars 106 may give riders and/or observers advance notice of ride initiation. For example, water jets or other impetus to cause a rider to launch may be modified (e.g., turned on, increased in power, direction, etc.) at a predetermined time in relation to the rider launch sequence of the sequenced light bars 106. Although light bars 106 are specifically illustrated in FIG. 1, any of a variety of other indications and or notifications may be used to indicate to a rider a launch sequence or procedure and/or to otherwise entertain riders or viewers in alternative embodiments (e.g., lights, music, sound, vibration, etc. alone or in combination with one another).

[0015] An entry slide or flume 124 connects the boarding zone 122 with the rest of the waterslide attraction 100 that comprises multiple sub-elements, as discussed in greater detail below. The entry slide or flume 124 may act to

accelerate a rider 120 traveling on the entry slide or flume 124 via propelled water forced or flowing along the entry slide or flume 124 toward a first sub-element 108 of the waterslide attraction 100. In an alternative (e.g., non-water-based attraction), the acceleration of the rider 120 may be caused by other features (e.g., air, magnetism, powered motors, etc.). The first sub-element 108 may comprise an angled ramp (e.g., an upwardly extending ride surface that allows riders to travel from the entry slide or flume 124 in an upward direction and then back down the upwardly extending ride surface due to the force of gravity overcoming the rider's 120 momentum up the angled ramp due to the entry slide or flume 124, for example as shown in FIG. 1. The shape, width, or other configuration of the first sub-element 108 may be sufficient to provide for a direct connection to a second sub-element 112, such that a rider may travel with sufficient speed or momentum from the first sub-element 108 onto the second sub-element 112 without need for any transition portions. In an alternative embodiment, intermediary elements or sections (e.g., extended slide or flume sections, other twists, turns, drops, other ride features, etc.) may be included between the first sub-element 108 and the second sub-element 112 if immediate movement of the rider from the first sub-element 108 into the second sub-element 112 is not desired. Moreover, in an alternative embodiment, the angle of the first sub-element 108 may be more or less steep than as explicitly shown in FIG. 1.

[0016] Momentum of the rider 120 (e.g., either with a ride vehicle or without a ride vehicle) may dissipate as the rider 120 scales higher upon the first sub-element 108, causing the rider 120 to eventually stop (e.g., temporarily pause) and/or travel in an arc such that his or her upward trajectory ends and subsequently begin traveling from upward motion to downward motion along the first sub-element 108. The rider 120 may experience a feeling of weightlessness as part of the transition from upward motion to downward motion. Water (or other fluid, such as air, or a track/depression in the ride surface) flowing on or along the first sub-element 108 may direct the rider 120 during the descent (e.g., downward motion along the first sub-element 108) such that the rider 120 does not retrace the initial path of upward motion along the first sub-element 108.

[0017] Such flowing water or other feature may also aid in moving the rider 120 up the first sub-element 108 and or directing the rider 120 towards a second sub-element 112. The rider 120 is directed by the flow of water or other feature flowing or incorporated with the ride surface of first sub-element 108 to descend into the exit portion 126 of the first sub-element 108, which serves as an entry to the second sub-element 112 as discussed in greater detail below.

[0018] To further support the first sub-element 108, a first sub-element support structure 110 is provided. The first sub-element support structure 110 connects to support structure 104. The first sub-element support structure 110 may provide additional support and/or aesthetics, for example, by stiffening and or integrating the first sub-element 108 with the support structure 104. Such additional support may be provided over the top of the first sub-element 108 and may incorporate netting or other safety devices to ensure that riders remain within the waterslide attraction 100. In an alternative embodiment, the first sub-element support structure 110 may appear substantially as shown, or may utilize an alternative configuration and/or positioning, such as an A-frame, or other design.

[0019] The waterslide attraction **100**, including its support structures, such as the first sub-element support structure **110** and or the support structure **104** may be themed in any of a variety of manners (e.g., enclosed and/or partially enclosed and or decorated to represent color, a pattern, or an object (such as an animal or creature, real or mythical) as desired. Such theming can be made of any of a variety of materials and shaped in any of a variety of configurations as desired.

[0020] Upon exiting the first sub-element **108**, the rider **120** enters the second sub-element **112**. As discussed in greater detail below, the entrance from the first sub-element **108** to the second sub-element **112** may be a direct entry without any transition and/or a short transition that does not allow time or opportunity for the rider **120** to recover from the first sub-element **108** to the second sub-element **112**. The second sub-element **112** may be directly connected to first sub-element **108** through a connection **114**. The connection **114** may form a part of the side of first sub-element **108** and/or form a part of second sub-element **112**. The connection **114** may serve as a divider for guiding riders through an exit of first sub-element **108** and may guide or channel them into an entry of the second sub-element **112**. The connection **114** may provide a direct connection between first sub-element **108** and the second sub-element **112**. As a result, in certain embodiments, there may be no transition slide, flume, and/or other component between the first sub-element **108** and the second sub-element **112** that allows for the rider **120** to recover from the momentum or movement caused by the first sub-element **108**.

[0021] The second sub-element **112** may be a ramp oriented in the direction opposite (e.g., having a ride surface that faces substantially towards a ride surface of the first sub-element **108**) to the ramp of first sub-element **108**. This orientation provides riders with a pendulum-like action as they move through the waterslide attraction **100**. In an alternative embodiment, the second sub-element **112** may incorporate a ramp or configuration of lesser or different height, steepness, and/or configuration or orientation. In an alternative embodiment second sub-element **112** may connect to one or more further sub-elements, with a direct connection (e.g., without transition) or otherwise. Further sub-elements may be of a different character, and may be turn or banked elements.

[0022] Once a rider **120** passes through the second sub-element **112** (or any further sub-elements as described above for alternative embodiments), the rider **120** exits the waterslide attraction **100** in the runout pool **116**. In an alternative embodiment, additional and/or different sub-elements may be connected as part of the waterslide attraction **100** prior to the runout pool **116**. The runout pool **116** may be substantially as shown, or may have an alternate shape to reflect a theme for the waterslide attraction **100**. In still another embodiment, any of a variety of other exiting structures (e.g., shutdown lanes or flumes, etc.) may be used alternative to or in addition to a pool for slowing the rider **120** and/or allowing the rider **120** an opportunity to exit from the waterslide attraction **100**. Alternative embodiments may use any of a variety of numbers and/or types of sub-elements in creating the travel path of one or more riders along a waterslide or other amusement attraction.

[0023] Turning next to FIG. 2, a perspective view of a waterslide attraction **200** is shown. Similar to FIG. 1, although FIG. 2 is described with respect to a waterslide, in

an alternative embodiment certain features of FIG. 2 may be applied in alternative contexts, such as on an amusement attraction that does not utilize water (e.g., a dry slide with or without a ride vehicle, on track-based attractions, etc.). Certain features of the waterslide attraction **200** may be the same as or similar to those previously discussed.

[0024] A boarding area or observation deck **202** is positioned on top of a support structure **204**. The boarding area or Observation deck **202** may have a shape substantially as depicted or may be in an alternative shape or configuration in an alternative embodiment, for example, a round or oval shape and/or may be shaped to reflect a theme for the water attraction **200**. The boarding area or observation deck **202** may have a cover **206** (e.g., partially or fully covering all or some of the boarding or observation deck **202**) to provide shade and/or to enhance the visual design of the waterslide attraction **200**. The cover **206** may be aesthetically designed to have a theme matching that of the waterslide attraction **200** and/or in accordance with a mathematical aesthetic (e.g., a kessel curve).

[0025] The support structure **204** may be substantially as depicted, such as a scaffolding structure to support the flumes or slides and or other ride elements of the waterslide attraction **200**. In an alternative embodiment, the support structure **204** may be configured and/or positioned in any of a variety of manners. The support structure **204** may incorporate multiple stairs and viewing sections **222** to allow those queued to watch other riders. In certain embodiments, riders may enter the waterslide attraction **200** near or at a top of the waterslide attraction **200** where, due to topography or other build circumstance, such that stairs or other upward pathways are not needed. An observation queue **226** positioned at an end **227** (e.g., an exit portion) of the waterslide attraction **200** may provide an entrance to support structure **204** and allow those queued to watch others on the waterslide attraction **200**. In an alternative embodiment, support structure **204** may be reduced or configured so as to accommodate sloping terrain.

[0026] An entry slide or flume **208** connects the observation deck and boarding area **202** with the rest of the waterslide attraction **200** that comprises multiple sub-elements, as discussed in greater detail below. The entry slide or flume **208** may operate to accelerate a rider **228** (e.g., upon a ride vehicle or without any ride vehicle) on a riding or sliding surface propelled by water forced or flowing along the entry slide or flume **208** toward a first sub-element **210** of the waterslide attraction **200**. The first sub-element **210** may include an upwardly extending ride surface that provides an arcing, banked turn, for example, substantially as shown in FIG. 2. The arcing, banked turn may be substantially 180 degrees. In an alternative embodiment, the configuration of the first sub-element **210** and or an angle of the banked turn of first sub-element **210** may differ from the embodiment specifically illustrated (e.g., may be more or less than the 180 degrees shown).

[0027] After traveling through the first sub-element **210**, a second slide or flume **212** routes the rider **228** into a second sub-element **214**. The second sub-element **214** may be a second arcing, banked turn (e.g., of 180 degrees or a different arc of greater than or less than 180 degrees). The arcing, banked turn may turn in a direction opposite to that of the first sub-element **210**. In an alternative embodiment, the arcing, banked turn of the second sub-element **214** may turn in the same direction as that of the first sub-element **210**.

In an alternative embodiment, a different angle may be used for the second sub-element 214 than was used for the first sub-element 210. The first sub-element 210 and the second sub-element 214 may be connected via a transition portion (e.g., a flume or other portion of slide or slide feature positioned intermediate between the first sub-element 210 and the second sub-element 214) or may be directly connected, similar to the discussion for FIG. 1.

[0028] The waterslide attraction 200 may incorporate multiple arcing, banked turns as shown in FIG. 2, with a third slide 216 directing riders into a third sub-element 218 after the second sub-element 214, and subsequently a fourth slide 220 directing riders into a runout pool 224. Thus, the rider 228 experiences multiple high banked turns at high speed and then drops and cuts back in the opposite direction, much like a surfer riding a wave. This configuration may provide a more novel and exciting ride than current waterslide attractions. In alternative embodiments, sub-elements may be organized to provide a variety of turn sequences, with alternating right and left turns, or other desired configurations based on terrain and space considerations. In certain embodiments, any of a variety of possible exit portions (e.g., shutdown lane, etc.) may be used in addition to or in replacement of the runout pool 224 for the purpose of bringing the rider 228 to a stop or slow the speed of the rider 228 for exiting of the waterslide attraction 200.

[0029] FIG. 3 shows a perspective view of a waterslide attraction 300. Similar to FIGS. 1 and/or 2, although FIG. 3 is described with respect to a waterslide, in an alternative embodiment certain features of FIG. 3 may be applied in alternative contexts, such as on an amusement attraction that does not utilize water (e.g., a dry slide with or without a ride vehicle, on track-based attractions, etc.). Certain features of the waterslide attraction 300 may be the same as or similar to those previously discussed.

[0030] A boarding area or observation deck 302 is coupled with a support structure 304. The boarding area or observation deck 302 may have a shape substantially as depicted (e.g., square or rectangular configuration) or may be in an alternative shape or configuration in an alternative embodiment, for example, a round or oval shape and/or may be shaped to reflect a theme for the water attraction 300.

[0031] The support structure 304 may be substantially as depicted, such as a scaffolding structure to support the flumes or slides and or other ride elements of the waterslide attraction 300. In an alternative embodiment, the support structure 304 may be configured and/or positioned in any of a variety of manners. The support structure 304 may incorporate stairs or other ramps or walkways 305 to allow riders to traverse to an area of the waterslide attraction 300 at a higher elevation. Multiple stairs or other ramps or walkways 305 may have associated viewing sections to allow riders to watch other riders or witness sub-elements (described in greater detail below) as they queue in line or travel to a starting area of the waterslide attraction 300. Support beams 303 may be included as part of the support structure 304 and/or may be separate from the support structure 304 for aiding in supporting the slide, flume, and/or other sub-elements components of the waterslide attraction 300.

[0032] A boarding zone 322 (e.g., located at a top portion of the waterslide attraction 300) may permit entrance by one or more riders to an entry slide or flume 308. The entry slide or flume 308 may operate to accelerate a rider (either upon a ride vehicle or without a ride vehicle in certain embodi-

ments) on a riding or sliding surface propelled by water forced or flowing along the entry slide or flume 308 toward a first sub-element 310 of the waterslide attraction 300. As shown, a first speed-altering component 350 may be coupled with the entry slide or flume 308 and/or with the first sub-element 310. For example, the a first speed-altering component 350 may be integrated into a portion of the entry slide or flume 308 and extend along a distance of the entry slide or flume 308 for the purpose of causing the rider to change their speed (e.g., increase or decrease the speed of the rider) as the rider begins entrance to the first sub-element 310.

[0033] The speed-altering component 350 may be a jet of water, a conveyer belt, one or more pumps, a magnetized coil, etc. for the purpose of causing the rider and/or the ride vehicle to increase or decrease in speed. Such a change in speed may be desired to ensure proper operation of the first sub-element 310 with the rider and/or may be desired to increase the excitement of the rider as the rider enters the first sub-element 310. In certain embodiments, a rider characteristic for the rider (e.g., weight) may be known prior to the rider encountering the speed-altering component 370 and/or may be determined as the rider encounters the speed-altering component 350 and the speed-altering component 350 may use the rider characteristic information in order to affect its operation (e.g., a heavier rider or riders may require additional water, pressure, power, etc.) in order to ensure the desired change in speed.

[0034] The first sub-element 310 may include an upwardly extending ride surface that provides an arcing, banked turn, for example, substantially as shown in FIG. 3. The arcing, banked turn may be substantially 180 degrees. In an alternative embodiment, the configuration of the first sub-element 310 and or an angle of the banked turn of first sub-element 310 may differ from the embodiment specifically illustrated (e.g., may be more or less than the 180 degrees shown).

[0035] After traveling through the first sub-element 310, a second slide or flume 312 having a second speed-altering component 360 routes the rider into a second sub-element 314. The second sub-element 314 may be a second arcing, banked turn (e.g., of 180 degrees or a different arc of greater than or less than 180 degrees). The arcing, banked turn may turn in a direction opposite to that of the first sub-element 310. In an alternative embodiment, the arcing, banked turn of the second sub-element 314 may turn in the same direction as that of the first sub-element 310. In an alternative embodiment, a different angle may be used for the second sub-element 314 than was used for the first sub-element 310. The first sub-element 310 and the second sub-element 314 may be connected via a transition portion (e.g., a flume or other portion of slide or slide feature positioned intermediate between the first sub-element 310 and the second sub-element 314) or may be directly connected, similar to the discussion for FIGS. 1 and/or 2.

[0036] In certain embodiments, one or more speed-altering components may be disposed in a more compact configuration when compared to a more extended or elongated configuration previously discussed. For example, a compact speed-altering component 361 may be disposed at or near (e.g., adjacent) to an immediate entrance to the second sub-element 314. The compact speed-altering component 361 may be one or more jets of water that are positioned so as to provide a pressurized or other flow of water in a particular direction to cause a change in speed or position of



a rider that encounters the compact speed-altering component **361**. In an alternative embodiment, the compact speed-altering component **361** may be any of a variety of possible devices for imparting a change in speed and/or direction to a rider, as desired. As illustrated in FIG. 3, while a rider might have otherwise traveled along travel path **362** when traversing the second sub-element **314**, with operation of the compact speed-altering component **361**, the rider may instead travel along travel path **364**, that takes the rider higher (and/or faster) along the second sub-element **314**. Compact speed-altering components may be placed in varying locations along the waterslide attraction **300** and may be used in addition to and/or in replacement of various of the other (e.g., more elongated or extended) speed-speed altering components.

**[0037]** The waterslide attraction **300** may incorporate multiple arcing, banked turns as shown in FIG. 3, with a third slide **316** having a third speed-altering component **370** directing riders into a third sub-element **318** after the second sub-element **314**, and subsequently a fourth slide **320** directing riders into an exit **324** (e.g., a run-out lane, etc.). Thus, the rider may experience multiple high banked turns at high speed and then drops and cuts back in the opposite direction, much like a surfer riding a wave. This configuration may provide a more novel and exciting ride than current waterslide attractions. The speed-altering components (**350**, **360**, **370**, **380**) may change the speed of the rider in the same fashion (e.g., water jets, magnetism, such as via an energized coil that cooperates with a plate or other component worn by a rider or coupled with a ride vehicle ridden by a rider, etc.) and/or by the same amount (e.g., an increase or decrease in speed, position, etc.) or may be different from one another. For example, the fourth speed-altering component **380** may operate to slow a rider down (e.g., in anticipation of the rider exiting the waterslide attraction **300**) while the first, second, and third speed-altering components (**350**, **360**, **370**, respectively) operate to increase the rider speed (e.g., in anticipation of the rider being pushed into the first, second, and third sub-elements (**310**, **314**, **318**, respectively)). In alternative embodiments, sub-elements may be organized to provide a variety of turn sequences, with alternating right and left turns, or other desired configurations based on terrain and space considerations.

**[0038]** Any of the above features discussed may be utilized or incorporated or combined with or into other waterpark or amusement park attractions discussed or retrofitted onto existing waterpark or amusement park ride designs. A particular waterslide or other amusement attraction may be configured using the same or similar features described above for single riders, double riders, or family riders. Riders may ride the waterslide attraction with or without a ride vehicle, and or the ride elements may be adapted to work in cooperation with the ride vehicle.

**[0039]** The previous description of the disclosed examples is provided to enable any person of ordinary skill in the art to make or use the disclosed methods and apparatus. Accordingly, the terminology employed throughout should be read in a non-limiting manner. Various modifications to these examples will be readily apparent to those skilled in the art, and the principles defined herein may be applied to other examples without departing from the spirit or scope of the disclosed method and apparatus. The described embodiments are to be considered in all respects only as illustrative and not restrictive and the scope of the invention is, there-

fore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope. Skilled artisans may implement the described functionality in varying ways for each particular application, but such implementation decisions should not be interpreted as causing a departure from the scope of the disclosed apparatus and/or methods.

What is claimed is:

1. A waterslide for traversal by a rider comprising:
  - a first sub-element including a ramp facing in a first direction; and
  - at least a second sub-element including a ramp facing in a second direction different from the first direction, wherein the second sub element is connected to the first sub-element such that the rider traverses the first sub-element and immediately into the second sub-element.
2. The waterslide of claim 1 wherein the first sub-element ramp is higher than the second sub-element ramp.
3. The waterslide of claim 1 wherein the first sub-element ramp is steeper than the second sub-element ramp.
4. The waterslide of claim 1 wherein the exit slide exits in a direction opposite to the second sub-element.
5. The waterslide of claim 1 wherein the exit slide is lower than the second sub-element ramp.
6. The waterslide of claim 1, wherein the first sub-element comprises an entry slide directly connected to a first arcing banked turn.
7. The waterslide of claim 7, further comprising: a second slide directly connected to an exit of the first arcing banked turn and an entrance to a second arcing banked turn.
8. The waterslide of claim 8, further comprising: a third slide directly connected to an exit of the second arcing banked turn and an entrance to a third arcing banked turn.
9. The waterslide of claim 9, further comprising: a fourth slide directly connected to an exit of the third arcing banked turn.
10. The waterslide of claim 8, wherein the first arcing banked turn is opposite in direction to the second arcing banked turn.
11. The waterslide of claim 9, wherein the second arcing banked turn is opposite in direction to the third arcing banked turn.
12. The waterslide of claim 7, wherein the first arcing banked turn turns 180 degrees.
13. The waterslide of claim 8, wherein the second arcing banked turn turns 180 degrees.
14. The waterslide of claim 9, wherein the third arcing banked turn turns 180 degrees.
15. The waterslide of claim 1 further comprising a speed-altering component disposed at an entrance to the first sub-element.
16. The waterslide of claim 15 wherein the speed-altering component increases the speed of the rider.
17. The waterslide of claim 15 wherein the speed-altering component is at least one water jet.
18. A waterslide for traversal by a rider comprising:
  - a first sub-element including a ramp facing in a first direction;
  - at least a second sub-element including a ramp facing in a second direction different from the first direction; and
  - an intermediate section connected between the first sub-element and the second sub-element such that the rider

traverses the first sub-element, across the intermediate section, and then into the second sub-element.

**19.** The waterslide of claim **18** further comprising a speed-altering component coupled with the intermediate section for changing a speed of the rider as the rider travels across the intermediate section.

**20.** The waterslide of claim **19** further comprising a second speed-altering component disposed after the second sub-element for decreasing the speed of the rider after the rider exits the second sub-element.

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