

CLAIMS:

1. An amusement park ride vehicle, comprising:
a chassis configured to direct the ride vehicle along a ride path in a direction of travel;
a cabin configured to hold one or more passengers;
a slider configured to translate between a neutral and cantilevered position relative to the chassis in a direction substantially transverse to the direction of travel; and
a rotator coupled between the slider and the cabin, wherein the rotator is configured to rotate the cabin relative to the slider and the slider is configured to carry the rotator and the cabin along the direction substantially transverse to the direction of travel.
2. The amusement park ride vehicle of claim 1, comprising a control system configured to output a first control signal to the slider to facilitate translation of the slider, and to output a second control signal to the rotator to facilitate rotation of the rotator.
3. The amusement park ride vehicle of claim 2, wherein the first control signal instructs the slider to translate in a first linear direction as the amusement park ride vehicle approaches a turn, wherein the first linear direction is toward an outside of the turn, and wherein the second control signal instructs the rotator to rotate in a first rotational direction as the amusement park ride vehicle approaches the turn, wherein the first rotational direction is opposite of a turn direction of the ride path.
4. The amusement park ride vehicle of claim 3, wherein the first control signal instructs the slider to translate in a second linear direction, opposite the first linear direction as the amusement park ride vehicle departs the turn, and wherein the second control signal instructs the rotator to rotate in a second rotational direction, opposite the first rotational direction as the amusement park ride vehicle departs the turn.

5. The amusement park ride vehicle of claim 1, wherein the slider comprises a counterweight configured to move opposite the cabin as the slider translates the cabin in the direction substantially transverse to the direction of travel.

6. The amusement park ride vehicle of claim 1, wherein the slider comprises a carriage configured to move along one or more tracks of the chassis.

7. The amusement park ride vehicle of claim 1, wherein the slider comprises a spring, a damper, or a combination thereof.

8. The amusement park ride vehicle of claim 1, comprising one or more pinch wheels configured to couple the chassis to a guide rail of the ride path.

9. The amusement park ride vehicle of claim 1, wherein the rotator comprises a motion base.

10. The amusement park ride vehicle of claim 1, wherein the rotator comprises a first plate, a second plate, a bearing disposed between the first plate and the second plate to facilitate rotation of the first plate relative to the second plate, and at least one actuator configured to rotate the first plate relative to the second plate.

11. The amusement park ride vehicle of claim 1, comprising one or more drive wheels configured to provide a propulsive force for the chassis.

12. An amusement park ride system, comprising:
a guide rail defining a ride path, wherein the guide rail comprises a bend defining a turn; and
a ride vehicle comprising:

a chassis configured to couple to the guide rail and to direct the ride vehicle along the guide rail in a direction of travel;

a slider configured to laterally translate in a direction substantially transverse to the direction of travel;

a cabin configured to house one or more guests; and

a rotator coupled between the slider and the cabin, wherein the rotator is configured to rotate the cabin relative to the slider and the slider is configured to carry the rotator and the cabin along the direction substantially transverse to the direction of travel.

13. The amusement park ride system of claim 12, comprising a control system configured to output a first control signal to the slider to facilitate translation of the slider, and to output a second control signal to the rotator to facilitate rotation of the rotator.

14. The amusement park ride system of claim 13, wherein the first control signal instructs the slider to translate in a first linear direction as the ride vehicle approaches a turn, wherein the first linear direction is toward an outside of the turn, and wherein the second control signal instructs the rotator to rotate in a first rotational direction as the ride vehicle approaches the turn, wherein the first rotational direction is opposite of a turn direction.

15. The amusement park ride system of claim 14, wherein the first control signal instructs the slider to translate in a second linear direction, opposite the first linear direction as the ride vehicle departs the turn, and wherein the second control signal instructs the rotator to rotate in a second rotational direction, opposite the first rotational direction as the ride vehicle departs the turn.

16. The amusement park ride system of claim 12, wherein the slider comprises a counterweight configured to move opposite the cabin as the slider laterally translates the cabin in the direction substantially transverse to the direction of travel.

17. The amusement park ride system of claim 12, wherein the slider comprises a carriage configured to move along one or more tracks of the chassis.

18. The amusement park ride system of claim 12, wherein the slider comprises a spring, a damper, or a combination thereof.

19. The amusement park ride system of claim 12, wherein the rotator comprises a motion base.

20. A method, comprising:

directing a ride vehicle along a guide rail defining a ride path in a direction of travel toward a turn;

actuating a slider to laterally actuate a cabin of the ride vehicle in a first linear direction substantially transverse to the direction of travel, from a neutral position toward a first side of the ride vehicle aligned with an outside of the turn;

actuating a rotator to rotate the cabin of the ride vehicle in a first rotational direction opposite of a turn direction, wherein the rotator is disposed between the cabin and the slider;

directing the ride vehicle along the guide rail in the direction of travel through the turn;

actuating the slider to laterally actuate the cabin of the ride vehicle in a second linear direction, opposite the first linear direction, toward a central plane of a chassis of the ride vehicle, returning the cabin to the neutral position; and

actuating the rotator to rotate the cabin of the ride vehicle in a second rotational direction, opposite the first rotational direction.