

CLAIMS:

1. An apparatus of an amusement park, comprising:
a bogie system configured to be positioned on a track system comprising a plurality of track members that define a ride path, wherein the bogie system comprises one or more bogies, each bogie comprising a track engagement mechanism configured to facilitate motion of the bogie along the plurality of track members, to detach a moveable track member of the plurality of track members from a first stationary track member of the plurality of track members, to move the moveable track member to a new location along the track system, and to attach the moveable track member to a second stationary track member of the plurality of track members at the new location along the track system.
2. The apparatus of claim 1, wherein the bogie system is configured to receive and secure a ride vehicle to the bogie system.
3. The apparatus of claim 1, wherein the bogie system comprises a plurality of bogies and at least one rotary joint configured to facilitate rotation of the plurality of bogies relative to each other.
4. The apparatus of claim 1, wherein the track engagement mechanism comprises a groove disposed on a side of a bogie of the one or more bogies.
5. The apparatus of claim 1, wherein the track engagement mechanism extends through a bogie of the one or more bogies.
6. The apparatus of claim 1, wherein each bogie comprises a track member gripping mechanism configured to grip moveable track member to detach the moveable track member from the track system from the track, and to release the moveable track member to attach the moveable track member to the track system.
7. The apparatus of claim 1, wherein the bogie system comprises a plurality of bogies, and wherein the track engagement mechanism is configured to facilitate bidirectional motion of a bogie of the plurality of bogies along the plurality of track members.

8. The apparatus of claim 1, wherein each bogie is configured to switch an actuation mechanism associated with the plurality of track members to detach the moveable track member from the track system, and to attach the moveable track member to the track system.

9. An amusement park track system, comprising:
a plurality of track members that define a ride path, wherein the plurality of track members comprises:
a first set of stationary track members that remain fixed relative to the ride path; and
a second set of moveable track members, wherein each moveable track member of the second set of moveable track members is detached configured to be detached from a first stationary track member of the first set of stationary track members, to be moved to a new location along the first set of stationary track members, and to be attached to the first set of stationary track members at the new location.

10. The amusement park track system of claim 9, wherein each moveable track member of the second set of moveable track members is associated with an actuation mechanism configured to be actuated to detach the moveable track member from the first set of stationary track members, and to attach the moveable track member to the first set of stationary track members.

11. The amusement park track system of claim 9, comprising a drive system configured to cause motion of a structure along the ride path.

12. The amusement park track system of claim 11, wherein at least one track member of the plurality of track members comprises at least one sensor configured to detect a position, velocity, or acceleration of the structure with respect to the ride path.

13. The amusement park track system of claim 12, comprising a controller communicatively coupled to the sensor and configured to control the drive system based at least in part on the detected position, velocity, acceleration, or any combination thereof.

14. The amusement park track system of claim 9, wherein at least one track member of the plurality of track members comprises a stop device configured to stop motion of a structure traveling along the ride path.

15. The amusement park track system of claim 9, wherein at least one of the stationary track members of the first set of stationary track members is disconnected from other stationary track members of the first set of stationary track members.

16. A method comprising:

detaching a moveable track member of an amusement park track system from a first stationary track member of the amusement park track system using a bogie system;

moving the moveable track member to a new location along the amusement park track system using the bogie system; and

attaching the moveable track member to a second stationary track member of the amusement park track system at the new location using the bogie system.

17. The method of claim 16, wherein the bogie system is configured to detach the moveable track member from the first stationary track member, and to attach the first track member to the second stationary track member by actuating at least one actuation mechanism associated with the moveable track member.

18. The method of claim 16, comprising rotating a first bogie of the bogie system relative to a second bogie of the bogie system using a rotary joint of the bogie system.

19. The method of claim 16, comprising detecting a position, velocity, or acceleration of the bogie system using at least one sensor of the amusement park track system.

20. The method of claim 19, comprising controlling operation of the bogie system based at least in part on the detected position, velocity, acceleration, or any combination thereof.