CLAIMS

1. A transport vehicle system, comprising:

a first track forming a circuit track that circles in an area comprising one of a plurality of areas;

a first transport vehicle configured to travel on the first track in one direction;

a second track positioned between, and connecting to, the areas;

a second transport vehicle configured to travel on the second track in one direction;

a first transfer section onto which a conveyed object is delivered from the second transport vehicle, and from which the conveyed object is received by the first transport vehicle; and

a second transfer section onto which the conveyed object is delivered from the first transport vehicle, and from which the conveyed object is received by the second transport vehicle, wherein

the area includes a first region and a second region,

the first track is arranged across the first region and the second region,

the first transfer section and the second transfer section are arranged in the first region,

and a third transfer section, in which the conveyed object can be transferred to or from the first

transport vehicle, is arranged in the second region,

the first track in the first region is arranged such that the first transport vehicle passes by the second transfer section and the first transfer section in this order, in a traveling direction of the first transport vehicle, and

the second track in the first region is arranged such that the second transport vehicle passes by the first transfer section and the second transfer section in this order, in a traveling direction of the second transport vehicle wherein the third transfer section is arranged between the first transfer section and the second transfer section in a direction extending along the first track.

2. The transport vehicle system according to claim 1, wherein in at least one of the first transfer section and the second transfer section, the conveyed object is transferred between the first transport vehicle and the second transport vehicle respectively traveling on the first track and the second track that are arranged substantially parallel to each other.

3. The transport vehicle system according to claim 1, wherein the first transport vehicle and the second transport vehicle respectively travel in the same direction on the first track and the second track that are arranged parallel to each other.

4. The transport vehicle system according to claim 1, wherein at least one of the first transfer section and the second transfer section is arranged below one of the first track and the second track and beside the other of the first track and the second track.

5. The transport vehicle system according to claim 1, wherein at least one of the first transfer section and the second transfer section is arranged below the second track and beside the first track.

6. The transport vehicle system according to claim 1, wherein

a plurality of first placement sections are arranged in the first transfer section,

the second transport vehicle delivers the conveyed object on a priority basis to one of the first placement sections that is arranged upstream in the one direction, and

the first transport vehicle receives the conveyed object on a priority basis from one of the first placement sections that is arranged upstream in the one direction.

7. The transport vehicle system according to claim 1, wherein

a plurality of second placement sections are arranged in the second transfer section,

the first transport vehicle delivers the conveyed object on a priority basis to one of the second placement sections that is arranged upstream in the one direction, and

the second transport vehicle receives the conveyed object on a priority basis from one of the second placement sections that is arranged upstream in the one direction.

8. The transport vehicle system according to claim 1, wherein in the second region, processing devices configured to perform at least one of identical processes and similar processes are arranged along the first track, and the conveyed object is transferred between the first transport vehicle and each processing device via the third transfer section.

9. A transport vehicle system, comprising:

a first track forming a circuit track that circles in an area comprising one of a plurality of areas;

a first transport vehicle configured to travel on the first track in one direction;

a second track positioned between, and connecting to, the areas;

a second transport vehicle configured to travel on the second track in one direction;

a first transfer section onto which a conveyed object is delivered from the second transport vehicle, and from which the conveyed object is received by the first transport vehicle; and

a second transfer section onto which the conveyed object is delivered from the first transport vehicle, and from which the conveyed object is received by the second transport vehicle, wherein

the area includes a first region and a second region,

the first track is arranged across the first region and the second region,

the first transfer section and the second transfer section are arranged in the first region, and a third transfer section, in which the conveyed object can be transferred to or from the first transport vehicle, is arranged in the second region,

the first track in the first region is arranged such that the first transport vehicle passes by the second transfer section and the first transfer section in this order, in a traveling direction of the first transport vehicle, and

the second track in the first region is arranged such that the second transport vehicle passes by the first transfer section and the second transfer section in this order, in a traveling direction of the second transport vehicle, wherein the first transport vehicle and the second transport vehicle respectively travel in the same direction on the first track and the second track that are arranged parallel to each other.

10. The transport vehicle system according to claim 9, wherein the third transfer section is arranged between the first transfer section and the second transfer section in a direction extending along the first track.

11. The transport vehicle system according to claim 9, wherein in at least one of the first transfer section and the second transfer section, the conveyed object is transferred between the first transport vehicle and the second transport vehicle respectively traveling on the first track and the second track that are arranged substantially parallel to each other.

12. The transport vehicle system according to claim 9, wherein at least one of the first transfer section and the second transfer section is arranged below one of the first track and the second track and beside the other of the first track and the second track.

13. The transport vehicle system according to claim 9, wherein at least one of the first transfer section and the second transfer section is arranged below the second track and beside the first track.

14. The transport vehicle system according to claim 9, wherein

a plurality of first placement sections are arranged in the first transfer section,

the second transport vehicle delivers the conveyed object on a priority basis to one of the first placement sections that is arranged upstream in the one direction, and

the first transport vehicle receives the conveyed object on a priority basis from one of the first placement sections that is arranged upstream in the one direction.

15. The transport vehicle system according to claim 9, wherein

a plurality of second placement sections are arranged in the second transfer section,

the first transport vehicle delivers the conveyed object on a priority basis to one of the second placement sections that is arranged upstream in the one direction, and

the second transport vehicle receives the conveyed object on a priority basis from one of the second placement sections that is arranged upstream in the one direction.

16. The transport vehicle system according to claim 9, wherein in the second region, processing devices configured to perform at least one of identical processes and similar processes are arranged along the first track, and the conveyed object is transferred between the first transport vehicle and each processing device via the third transfer section.