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(19) **United States**(12) **Patent Application Publication**
Chen(10) **Pub. No.: US 2025/0262561 A1**(43) **Pub. Date: Aug. 21, 2025**(54) **ROTATING TOY DEVICE FOR CHILDREN**(71) Applicant: **Chao Chen**, Shantou (CN)(72) Inventor: **Chao Chen**, Shantou (CN)(21) Appl. No.: **18/595,387**(22) Filed: **Mar. 4, 2024**(30) **Foreign Application Priority Data**

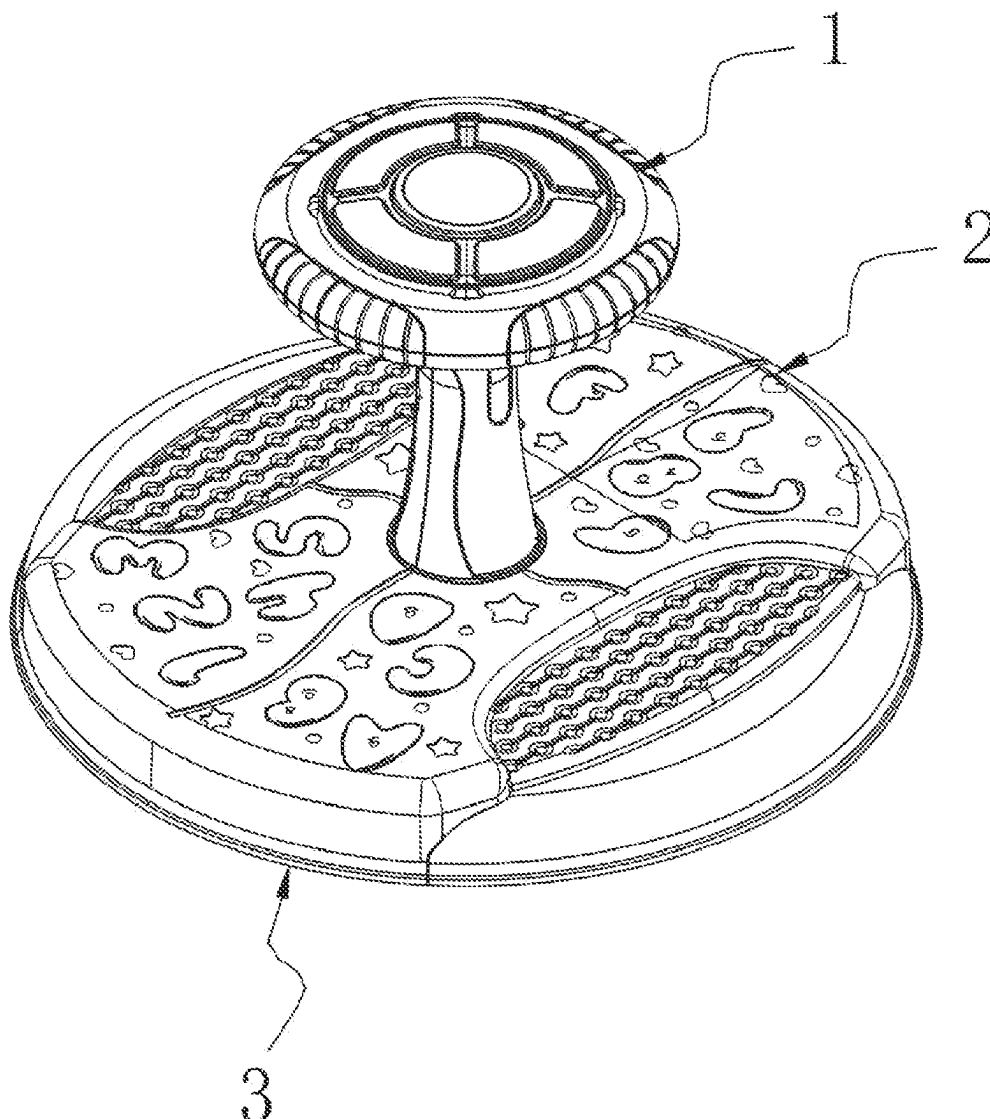
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(57)

ABSTRACT

Disclosed is a rotating toy device for children, belonging to the technical field of a toy and including a rotating platform and a turntable assembly disposed at a bottom of the rotating platform. A base assembly is disposed at a bottom of the turntable assembly. The turntable assembly includes a turntable fixedly connected with the rotating platform. A detachable structure is used between a base and each clamping seat, assembly and carrying are convenient, the rotating platform is fixed onto the turntable, and the turntable rotates through a limiting seat. Inner power-assisting wheels at a bottom of the turntable are clamped inside a rolling groove at a bottom of the base to roll, so rotating stability is high, and playability of the device is improved. The inner power-assisting wheels and outer power-assisting wheels are all attached to the base to move, so that detachable and assembly are convenient.



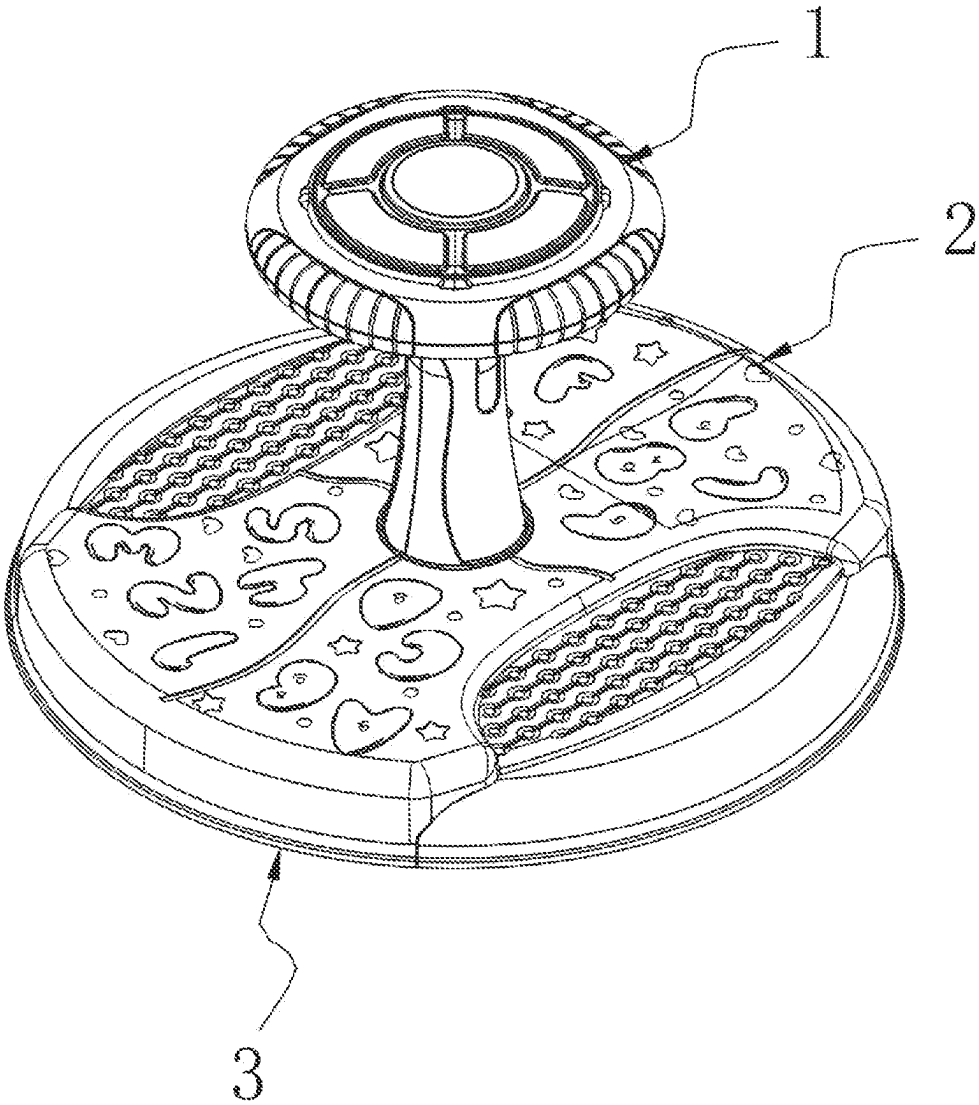


FIG. 1

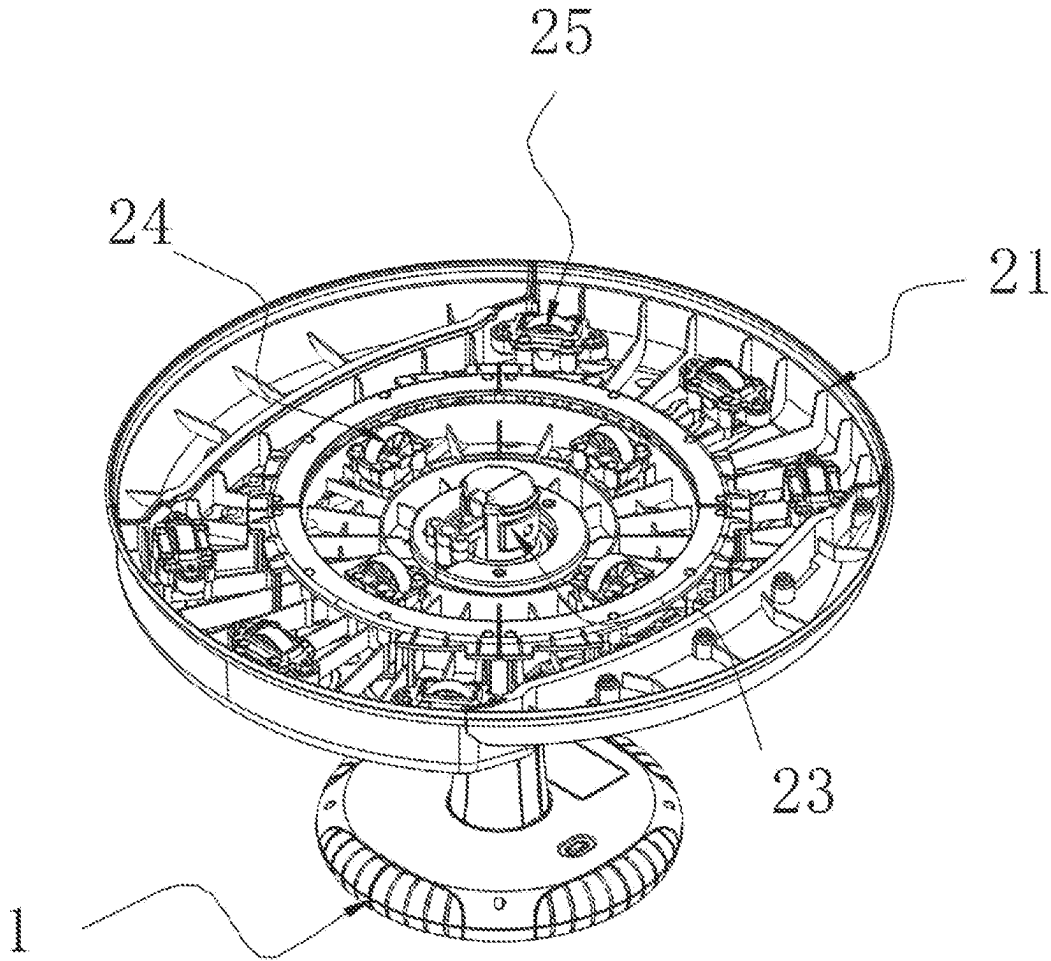


FIG. 2

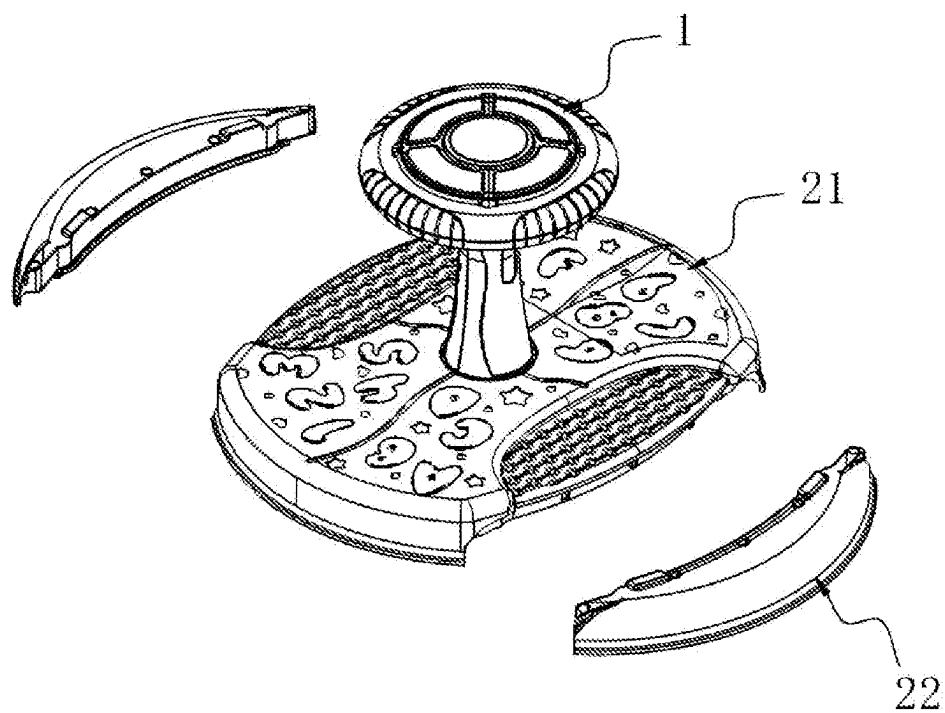


FIG. 3

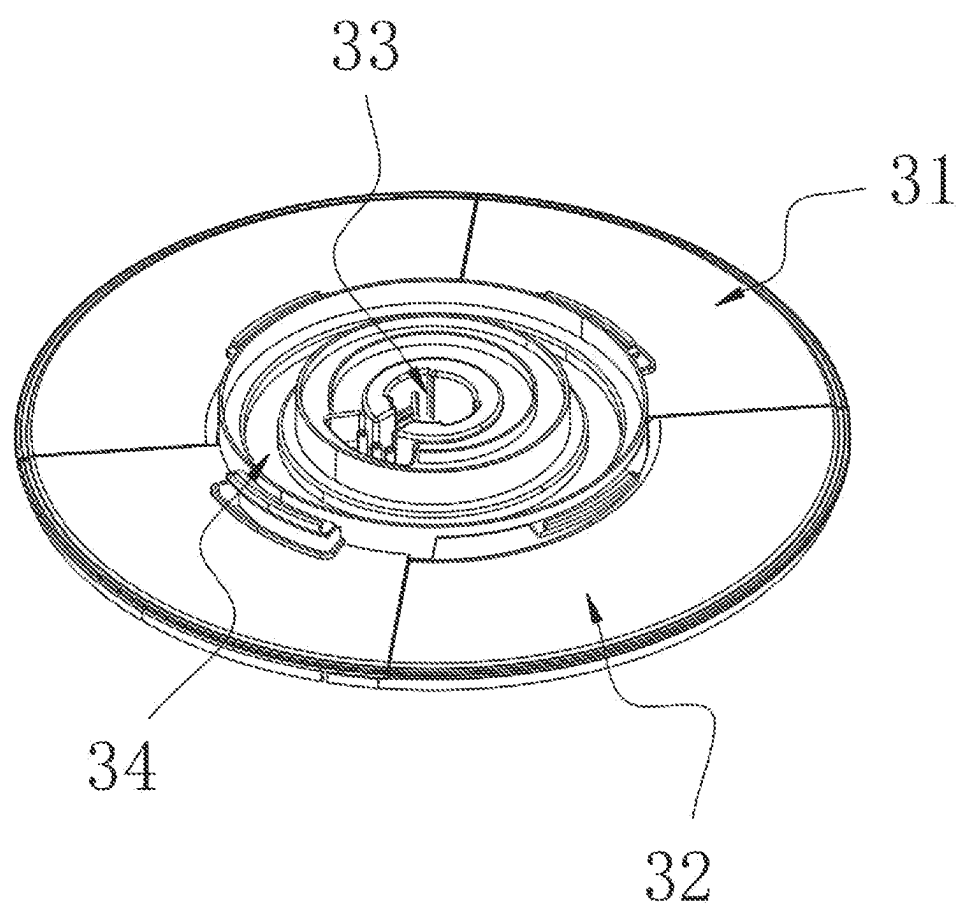


FIG. 4

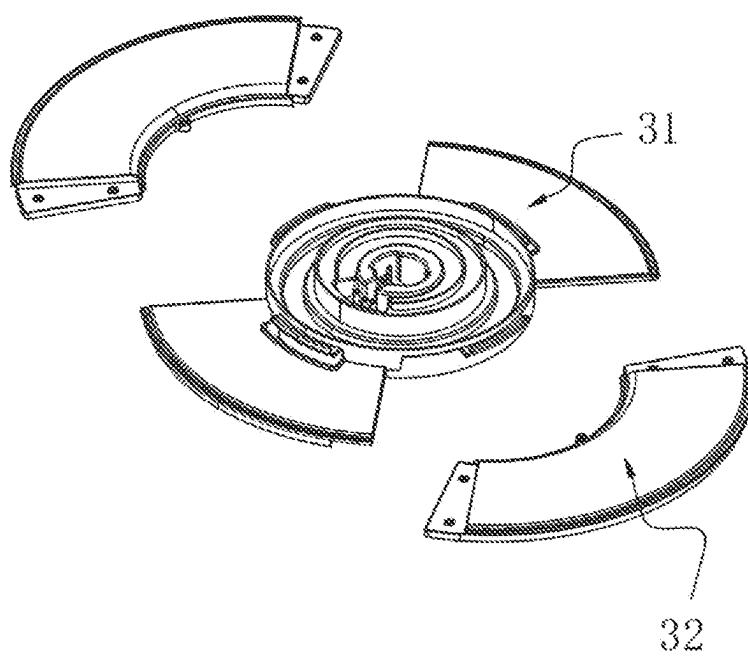


FIG. 5

ROTATING TOY DEVICE FOR CHILDREN

TECHNICAL FIELD

[0001] The present disclosure belongs to the technical field of a toy, and in particular to a rotating toy device for children.

BACKGROUND

[0002] A conventional rotating toy on the market is directly a turntable which is non-detachable and unportable, and has a simple structure and low playability. Additionally, its turntable is connected with a base through a bearing, and is non-detachable and unportable.

SUMMARY

[0003] In order to solve the problems in the Background, The present disclosure provides a rotating toy device for children, including a rotating platform and a turntable assembly disposed at a bottom of the rotating platform. A base assembly is disposed at a bottom of the turntable assembly, the turntable assembly includes a turntable fixedly connected with the rotating platform, and clamping plates are clamped and connected to two ends of the turntable and are fixed through screws.

[0004] Preferably, as the rotating toy device for children of the present disclosure, the turntable and the pair of clamping plates are assembled to form a round structure.

[0005] Preferably, as the rotating toy device for children of the present disclosure, a bottom center of the turntable is movably provided with a limiting seat through a bearing, and a bottom of the turntable is provided with a plurality of inner power-assisting wheels and outer power-assisting wheels.

[0006] Preferably, as the rotating toy device for children of the present disclosure, the base assembly includes a base, and clamping seats are clamped and connected to two ends of the base, and are fixed through screws.

[0007] Preferably, as the rotating toy device for children of the present disclosure, the base and the pair of clamping seats are assembled to form a round structure.

[0008] Preferably, as the rotating toy device for children of the present disclosure, a limiting groove is provided with a top center of the base, the limiting groove is matched with a limiting seat, and the base and the limiting seat are fixed through screws.

[0009] Preferably, as the rotating toy device for children of the present disclosure, a rolling groove used for rolling inner power-assisting wheels is formed in a top of the base, and outer power-assisting wheels roll on a top of a round structure formed by assembling the base and the pair of clamping seats.

[0010] Compared with the prior art, the present disclosure has the following beneficial effects:

[0011] A detachable structure is respectively used between the turntable and each clamping plate and between the base and each clamping seat, so that the assembly and carrying are convenient. The rotating platform is fixed onto the turntable, and the turntable rotates through the limiting seat. The inner power-assisting wheels at the bottom of the turntable are clamped and connected inside the rolling roove at a bottom of the base to roll, so that rotating stability is high. Additionally, the inner power-assisting wheels and the

outer power-assisting wheels are all attached to the base to move, so that detachable and assembly are convenient.

BRIEF DESCRIPTION OF FIGURES

[0012] The accompanying drawings are used to provide a further understanding of the present disclosure, and constitute a part of the specification to explain the present disclosure together with embodiments of the present disclosure, but do not constitute limitation to the present disclosure. In these figures,

[0013] FIG. 1 is a schematic structural diagram of the present disclosure.

[0014] FIG. 2 is a schematic bottom structure view of a turntable assembly of the present disclosure.

[0015] FIG. 3 is a schematic exploded structure view of a turntable assembly of the present disclosure.

[0016] FIG. 4 is a schematic structural diagram of a base assembly of the present disclosure.

[0017] FIG. 5 is a schematic exploded structure view of a base assembly of the present disclosure.

[0018] In the figures,

[0019] 1 denotes a rotating platform,

[0020] 2 denotes a turntable assembly, 21 denotes a turntable, 22 denotes a clamping plate, 23 denotes a limiting seat, 24 denotes an inner power-assisting wheel, 25 denotes an outer power-assisting wheel,

[0021] 3 denotes a base assembly, 31 denotes a base, 32 denotes a clamping seat, 33 denotes a limiting groove, and 34 denotes a rolling groove.

DETAILED DESCRIPTION

[0022] The technical solution in the embodiments of the present disclosure will be clearly and completely described hereafter in combination with the accompanying drawings in the embodiments of the present disclosure. Obviously, the described embodiments are only parts of the embodiments of the present disclosure, but not all embodiments. All other embodiments obtained by ordinary skill in the art based on the embodiments of the present disclosure without creative effort all belong to the protection scope of the present disclosure.

Embodiment 1

[0023] As shown in FIG. 1,

[0024] a rotating toy device for children includes a rotating platform 1 and a turntable assembly 2 disposed at a bottom of the rotating platform 1.

[0025] In this implementation, in order to solve the technical problem in the prior art, such as the problem that “A conventional rotating toy on the market is directly a turntable which is non-detachable and unportable, and has a simple structure and low playability.” as mentioned in the Background, in combination with the practical use, this problem is obviously an actually existing difficult-to-solve problem. Therefore, a rotating toy device for children is provided for solving this technical problem.

[0026] As shown in FIG. 1 to FIG. 5,

[0027] in combination with the above, the rotating toy device for children includes a rotating platform 1 and a turntable assembly 2 disposed at a bottom of the rotating platform 1. A base assembly 3 is disposed at a bottom of the turntable assembly 2, the turntable assembly 2 includes a turntable 21 fixedly connected

with the rotating platform 1, and clamping plates 22 are clamped and connected to two ends of the turntable 21 and are fixed through screws. The turntable 21 and the pair of clamping plates 22 are assembled to form a round structure.

[0028] In this implementation, a detachable structure is used between the turntable 21 and each clamping plate 22, so that the assembly and carrying are convenient.

[0029] In an optional embodiment, a bottom center of the turntable 21 is movably provided with a limiting seat 23 through a bearing, and a bottom of the turntable 21 is provided with a plurality of inner power-assisting wheels 24 and outer power-assisting wheels 25.

[0030] In an optional embodiment, the base assembly 3 includes a base 31, clamping seats 32 are clamped and connected to two ends of the base 31, and are fixed through screws. The base 31 and the pair of clamping seats 32 are assembled to form a round structure.

[0031] In this implementation, a detachable structure is used between the base 31 and each clamping seat 32, so that the assembly and carrying are convenient.

[0032] In an optional embodiment, a limiting groove 33 is formed in a top center of the base 31, the limiting groove 33 is matched with the limiting seat 23, and the base 31 and the limiting seat 23 are fixed through screws.

[0033] In an optional embodiment, a rolling groove 34 used for rolling inner power-assisting wheels 24 is formed in a top of the base 31. Outer power-assisting wheels 25 roll on a top of a round structure formed by assembling the base 31 and the pair of clamping seats 32.

[0034] The present disclosure has the following working principles:

[0035] the limiting seat 23 at the bottom of the turntable 21 is clamped and connected inside the limiting groove 33 of the base 31 and is fixed through screws, then, the clamping plates 22 are clamped and connected to two ends of the turntable 21, and are fixed through screws, and the clamping seats 32 are clamped and connected to two ends of the base 31, and are fixed through screws. The rotating platform 1 is fixed onto the turntable 21, and the turntable 21 rotates through the limiting seat 23. The inner power-assisting wheels 24 at the bottom of the turntable 21 are clamped and connected inside the rolling groove 34 at the bottom of the base 31 to roll, so that rotating stability is high. Additionally, the inner power-assisting wheels 24 and the outer power-assisting wheels 25 are all attached to the base to move, so that detachable and assembly are convenient.

[0036] Finally, it should be noted that the above embodiments are only exemplary embodiments of the present disclosure, and are not intended to limit the present disclosure. Although the present disclosure has been illustrated in detail with reference to the above embodiments, those skilled in the art may still modify the technical solution recorded in the embodiments or make equivalent substitution on parts of technical features of the embodiments. Any modification, equivalent substitution, improvement, etc. made within the spirit and principle of the present disclosure shall fall within the protection scope of the present disclosure.

What is claimed is:

1. A rotating toy device for children, comprising a rotating platform (1) and a turntable assembly (2) disposed at a bottom of the rotating platform (1), wherein a base assembly (3) is disposed at a bottom of the turntable assembly (2), the turntable assembly (2) comprises a turntable (21) fixedly connected with the rotating platform (1), and clamping plates (22) are clamped and connected to two ends of the turntable (21) and are fixed through screws.

2. The rotating toy device for children according to claim 1, wherein the turntable (21) and the pair of clamping plates (22) are assembled to form a round structure.

3. The rotating toy device for children according to claim 1, wherein a bottom center of the turntable (21) is movably provided with a limiting seat (23) through a bearing, and a bottom of the turntable (21) is provided with a plurality of inner power-assisting wheels (24) and outer power-assisting wheels (25).

4. The rotating toy device for children according to claim 1, wherein the base assembly (3) comprises a base (31), and clamping seats (32) are clamped and connected to two ends of the base (31), and are fixed through screws.

5. The rotating toy device for children according to claim 4, wherein the base (31) and the pair of clamping seats (32) are assembled to form a round structure.

6. The rotating toy device for children according to claim 4, wherein a limiting groove (33) is formed in a top center of the base (31), the limiting groove (33) is matched with a limiting seat (23), and the base (31) and the limiting seat (23) are fixed through screws.

7. The rotating toy device for children according to claim 4, wherein a rolling groove (34) used for rolling inner power-assisting wheels (24) is formed in a top of the base (31), and outer power-assisting wheels (25) roll on a top of a round structure formed by assembling the base (31) and the pair of clamping seats (32).

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