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#### **Stereoscopic Safe Trampoline** [54] Name of Invention:

#### [57] Abstract:

The present invention relates to a large fitness and amusement facility and, more particularly, to a stereoscopic safe trampoline whose side walls are installed with trampoline net. The stereoscopic safe trampoline comprises a stereoscopic trampoline frame and a stereoscopic trampoline net installed inside the trampoline frame, stereoscopic the stereoscopic trampoline net being provided with a safety exit disposed at a side wall thereof, the safety exit being provided with a convenience staircase disposed therebeneath, the angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 90° and smaller than 180°. The present invention adopts the design of a stereoscopic trampoline net where the side walls of stereoscopic trampoline net are also provided with trampoline net to form a three-dimensional spatial trampoline that effectively improves safety, increases landing area during jumps, prevents one from falling off the trampoline jumping surface, and makes trampoline jumping much more interesting. Adopting the design of a detachable trampoline net installed to the side wall of the stereoscopic trampoline net at a location where the safety exit corresponds thereto more effectively improves safety of the trampoline.

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# Claims

### What is claimed is:

1. A stereoscopic safe trampoline, comprising: a stereoscopic trampoline frame and a stereoscopic trampoline net installed inside the stereoscopic trampoline frame, the stereoscopic trampoline net being provided with a safety exit disposed at a side wall thereof, the safety exit being provided with a convenience staircase disposed there beneath, the angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 90° and smaller than 180°.

2. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the stereoscopic trampoline net is connected and fixed to the stereoscopic trampoline frame by means of net fixation ropes disposed at the various corners there beneath.

3. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the stereoscopic trampoline frame is connected and fixed to the floor by means of frame fixation ropes disposed at the various corners there above.

4. The stereoscopic safe trampoline as defined in claim 1, characterized in that: a detachable trampoline net is installed to the side wall of the stereoscopic trampoline net at a location where the safety exit corresponds thereto, the detachable trampoline net being a portion of the side wall of the stereoscopic trampoline net and at least one end of which being detachably connected to the stereoscopic trampoline net.

5. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to  $90^{\circ}$  and smaller than or equal to  $150^{\circ}$ .

6. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic

trampoline net is greater than or equal to 90° and smaller than or equal to 135°.

7. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 105° and smaller than or equal to 150°.

8. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 135°.

9. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 120°.

10. The stereoscopic safe trampoline as defined in claim 1, characterized in that: the bottom of the stereoscopic trampoline net may be one of an equilateral polygon, a rectangle, a triangle or a circle.

# Description

#### **Stereoscopic Safe Trampoline**

#### FIELD

[0001] The present invention relates to a large fitness and amusement facility and, more particularly, to a trampoline with a stereoscopic trampoline net installed inside a stereoscopic trampoline frame. The trampoline is structurally simple and has a big jumping area, and the safety factor thereof is much higher than prior art trampolines.

### BACKGROUND

[0002] At present, a prior art trampoline usually includes a trampoline frame and a trampoline net fixed thereon. When using this type of trampoline, the user is prone to falling off the trampoline net and suffering injuries. In addition, the actual available jumping area of this type of trampoline is limited to the trampoline net horizontally spread on the trampoline frame and as a result, it makes trampoline jumping not much fun and less interesting. To address these problems, some have improved by providing vertical rods and circular elastic ropes along the edges of the elastic net. However, this improvement is still defective as vertical rods are hazardous and the installation of these protective apparatuses is troublesome and they require larger space during transportation. Therefore, a new entertaining trampoline with a higher safety factor is required to resolve the aforementioned problems.

### SUMMARY OF THE INVENTION

[0003] The present invention aims to provide a trampoline that is safe, easy to install and highly interesting. The object of the present invention is accomplished by installing a stereoscopic trampoline net inside a stereoscopic trampoline frame.

[0004] The object of the present invention is accomplished through the following technical scheme: a stereoscopic safe trampoline, comprising a stereoscopic trampoline frame and a stereoscopic trampoline net installed inside the stereoscopic trampoline frame, the stereoscopic trampoline net being provided with a safety exit disposed at a side wall thereof, the safety exit being provided with a convenience staircase disposed there beneath, the angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 90° and smaller than  $180^\circ$ .

[0005] The stereoscopic trampoline net is connected and fixed to the stereoscopic trampoline frame by means of net fixation ropes disposed at the various corners there beneath.

[0006] The stereoscopic trampoline frame is connected and fixed to the floor by means of frame fixation ropes disposed at the various corners there above.

[0007] A detachable trampoline net is installed to the side wall of the stereoscopic trampoline net at a location where the safety exit corresponds thereto, the detachable trampoline net being a portion of the side wall of the stereoscopic trampoline net and at least one end of which being detachably connected to the stereoscopic trampoline net.

[0008] The bottom of the stereoscopic trampoline net may be one of an equilateral polygon, a rectangle, a triangle or a circle.

[0009] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to  $90^{\circ}$  and smaller than or equal to  $150^{\circ}$ .

[0010] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 90° and smaller than or equal to 135°.

[0011] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 105° and smaller than or equal to 150°.

[0012] The angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 120°.

[0013] The angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 135°.

[0014] In comparison with the prior art, the present invention has the following advantages:

[0015] The present invention adopts the design of a stereoscopic trampoline net such that the side walls of the stereoscopic trampoline net are also provided with trampoline net to form a three-dimensional spatial trampoline that effectively improves safety, increases landing area during jumps, prevents one from falling off the trampoline jumping surface, and makes trampoline jumping much more interesting. Adopting the design of a detachable trampoline net installed to the side wall of the stereoscopic trampoline net at a location where the safety exit corresponds thereto more effectively improves safety of the trampoline.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0016] The present invention is further described below with reference to the accompanying drawings and preferred embodiments thereof.

[0017] Figure 1 is an isometric view of embodiment 1 of the present invention.

[0018] Figure 2 is a plan view of embodiment 1 of the present invention.

[0019] Figure 3 is an isometric view of embodiment 2 of the present invention.

#### **DETAILED DESCRIPTION**

[0020] Embodiment 1

[0021] Shown in Figures 1 and 2 is a stereoscopic safe trampoline comprising a stereoscopic trampoline frame 1 and a stereoscopic trampoline net 2 installed inside the stereoscopic trampoline frame 1, the stereoscopic trampoline net 2 being provided with a safety exit 3 disposed at a side wall thereof, the bottom of the stereoscopic trampoline being rectangular, the safety exit 3 being provided with a convenience staircase 4 disposed therebeneath, the angle included between the side wall of the stereoscopic trampoline net 2 and the bottom of the stereoscopic trampoline net 2 is greater than or equal to  $90^{\circ}$  and smaller than  $180^{\circ}$ . In this embodiment, the angle is  $135^{\circ}$ .

[0022] The stereoscopic trampoline net 2 is connected and fixed to the stereoscopic trampoline frame 1 by means of net fixation ropes 5 disposed at the various corners there beneath. The length of the net fixation ropes 5 can be adjusted to tighten the connection between the stereoscopic trampoline net and the stereoscopic trampoline frame. The angle included between the side wall of

the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net can also be adjusted. The net fixation ropes 5 may connect using hasps, hooks, belts, nooses or springs.

[0023] The stereoscopic trampoline frame is connected and fixed to the floor by means of frame fixation ropes 6 disposed at the various corners there above. The length of the frame fixation ropes 6 can be adjusted to tighten the connection between the stereoscopic trampoline frame and the floor. The frame fixation ropes 6 may be connected to the floor using rivets, hooks, belts or nooses, thereby improving safety of the trampoline.

[0024] The bottom of the stereoscopic trampoline net may also be one of an equilateral polygon, a triangle or a circle, depending on the different environments and the requirements of different people.

[0025] The trampoline net is made from a plurality of trampoline nets pieced together, to achieve the goal of the trampoline net having a bigger usable area, with protective padding installed on each joint between adjacent trampoline nets, and the protective padding is made of cotton material.

[0026] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 90° and smaller than or equal to 150°.

[0027] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to  $90^{\circ}$  and smaller than or equal to  $135^{\circ}$ .

[0028] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to  $90^{\circ}$  and smaller than or equal to  $120^{\circ}$ 

[0029] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 105° and smaller than or equal to 150°.

[0030] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 120° and smaller than or equal to 135°.

[0031] The angle included between the side wall of the stereoscopic trampoline net and the bottom of the stereoscopic trampoline net is greater than or equal to 150° and smaller than 180°.

[0032] The angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 90°.

[0033] The angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 120°.

[0034] The angle included between the side wall of the stereoscopic trampoline frame and the horizontal plane is 135°.

[0035] Embodiment 2

[0036] As shown in Figure 3, a detachable trampoline net 7 is installed to the side wall of the stereoscopic trampoline net at a location where the safety exit corresponds thereto, the detachable trampoline net 7 being a portion of the side wall of the stereoscopic trampoline net, and at least one end of which is detachably connected to the stereoscopic trampoline net. As the material used for the trampoline net is very soft, only one end of the detachable trampoline net needs to be detachable for the safety exit to be opened. The detachable trampoline net is detachably connected to the stereoscopic trampoline net is detachably connected to the stereoscopic trampoline net needs to be detachable for the safety exit to be opened. The detachable trampoline net is detachably connected to the stereoscopic trampoline net is detachable to the stereoscopic trampoline net is detachable to the stereoscopic trampoline net by means of hasps, hooks, belts or nooses.

Drawings



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Figure 1

CIRCUSTRIX EXHIBIT 1004-0009 IPR2019-00263





Figure 2

CIRCUSTRIX EXHIBIT 1004-0010 IPR2019-00263



Figure 3

CIRCUSTRIX EXHIBIT 1004-0011 IPR2019-00263

## **Declaration/Statement of Translation**

1. I, Chen Yingsheng, hereby certify that I am a professional translator fluent in both Chinese and English and that I am competent to translate from Chinese into English.

2. I hereby certify that I prepared the foregoing translation of CN101259316A and that it is, to the best of my knowledge and belief, a true and accurate English translation of the Chinese-language document CN101259316A.

3. I declare under penalty of perjury that the foregoing is true and correct.

4. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. These statements were made with the knowledge that any willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

Executed on: June 12, 2018

Signed: Olven Juny Heng

Mr. Chen Yingsheng