



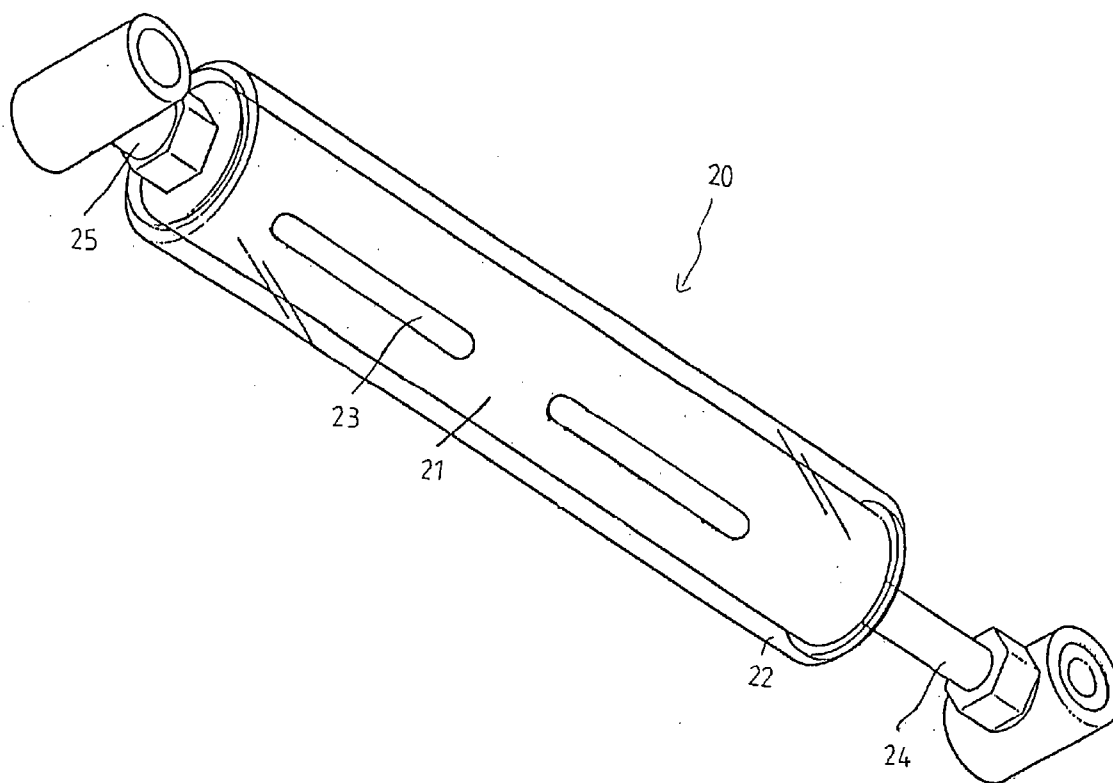
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(19) **United States**(12) **Patent Application Publication**
Chen(10) **Pub. No.: US 2008/0050253 A1**(43) **Pub. Date: Feb. 28, 2008**(54) **TREADLE TRAINING MACHINE WITH AN
OIL PRESSURE UNIT**(52) **U.S. Cl. 417/460**(76) **Inventor: Tsung-Yu Chen, Taichung (TW)**(57) **ABSTRACT**

Correspondence Address:

Tsung-Yu Chen**235 Chung-Ho, Box 8-24****Taipei**(21) **Appl. No.: 11/509,429**(22) **Filed: Aug. 25, 2006****Publication Classification**(51) **Int. Cl.**
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A treadle training machine with an oil pressure unit comprises a body; two treadles installed on the body; an oil pressure unit installed between the body and the two treadles for generating resistance force to the treadles. The oil pressure unit includes an oil pressure rod having a head at one end thereof and a closing rod portion at another end thereof; an outer sleeve located between the head and the closing rod portion and formed by molding injection; the outer sleeve being non-transparent; a plurality of slots being formed on the outer sleeve; the outer sleeve enclosing the oil pressure rod. The outer sleeve having the slots provides a beautiful outlook and has a function of heat dissipation. The outer sleeve is colored.



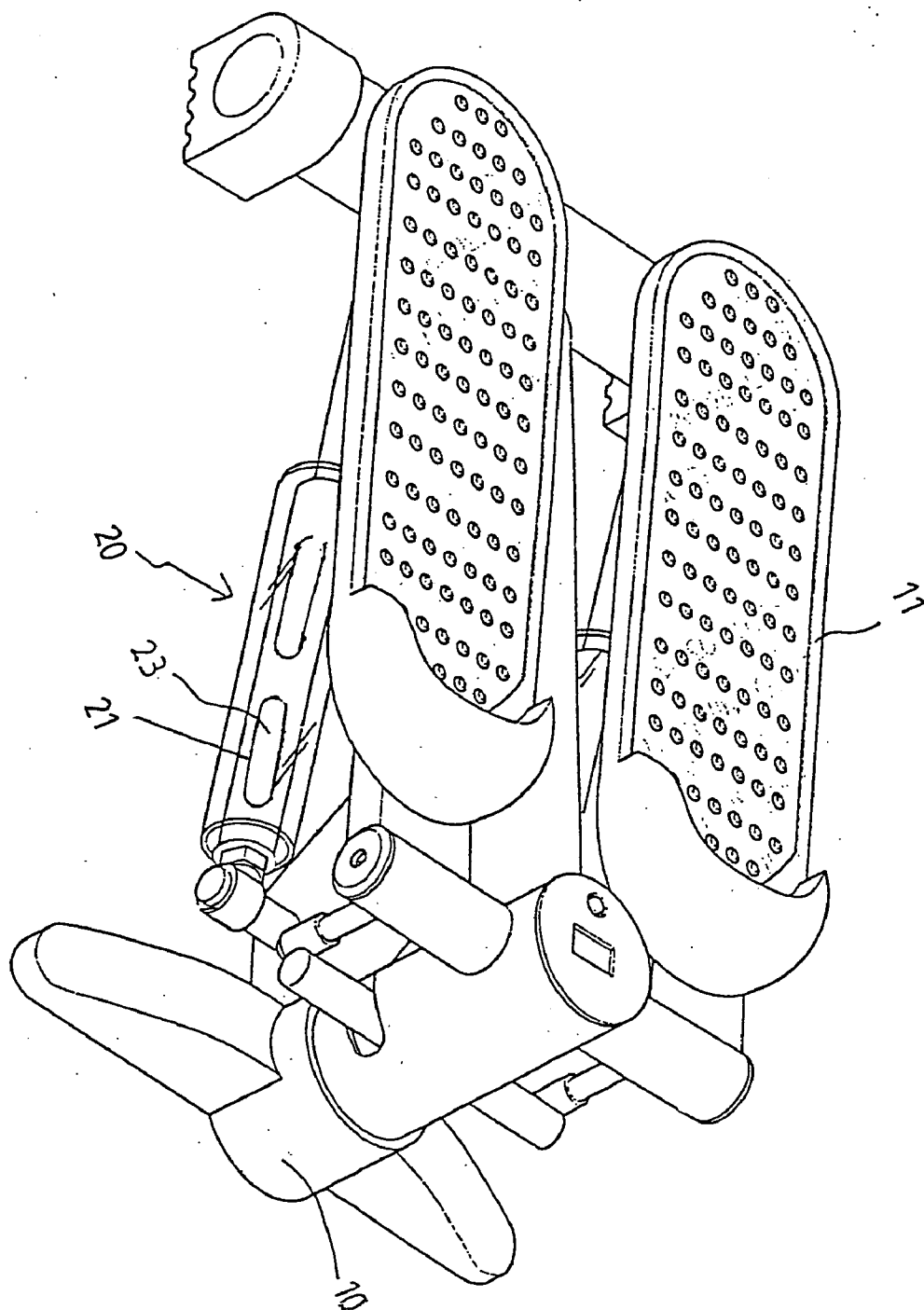


FIG. 1

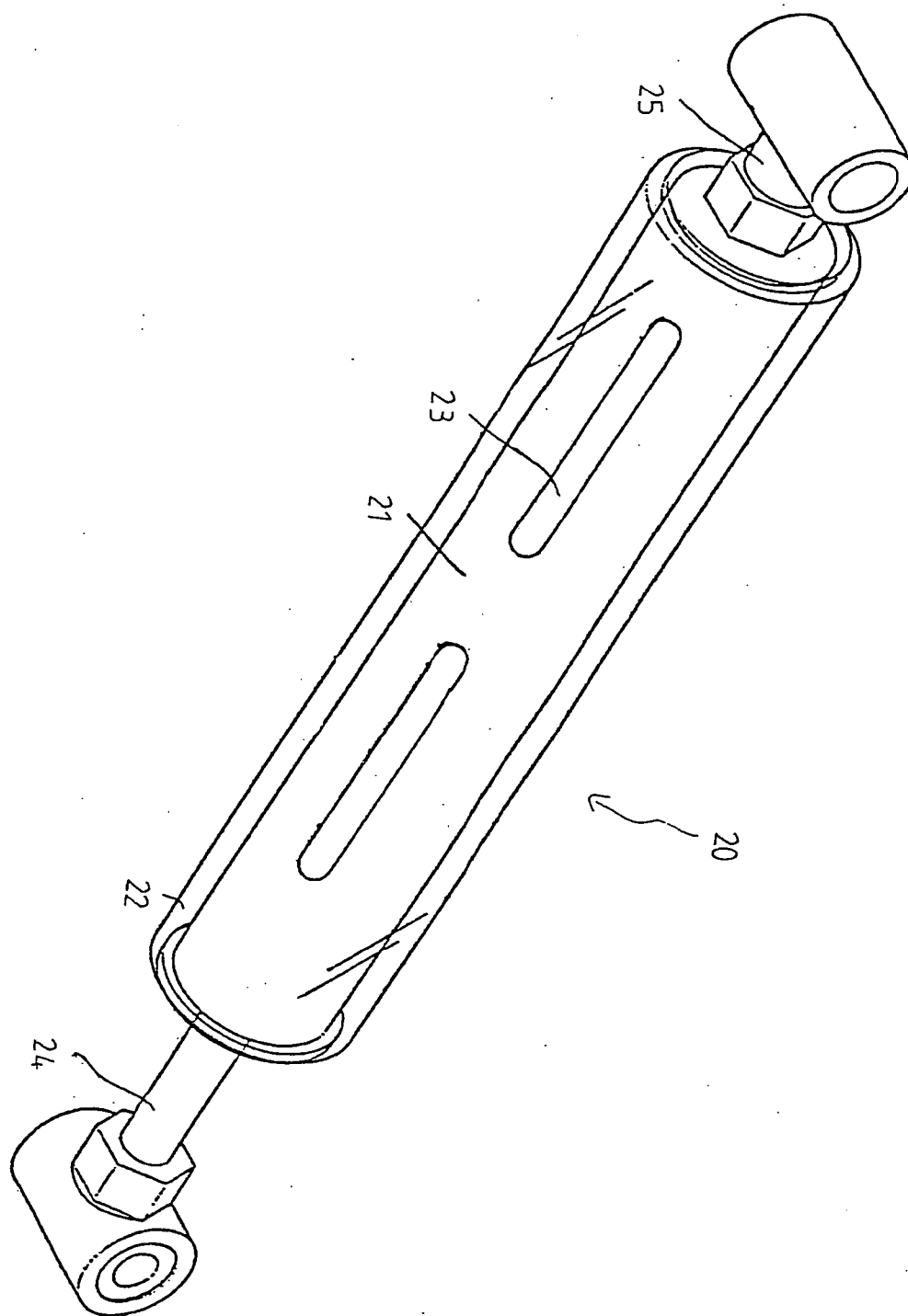


FIG. 2

TREADLE TRAINING MACHINE WITH AN OIL PRESSURE UNIT

FIELD OF THE INVENTION

[0001] The present invention relates to treadle training machines, in particular to a treadle training machine with an oil pressure unit, wherein the outer sleeve provides different feelings to users and can provide indications thereon. The heat from the oil pressure rod can be dissipated and thus the oil pressure rod will not expand. Only slightly variations are made on the outer sleeve and thus the cost is low and the structure is simple.

BACKGROUND OF THE INVENTION

[0002] The treadle training machine has an oil pressure unit. The oil pressure unit has an oil pressure rod which is enclosed by an outer sleeve. The outer sleeve has the effect of drain-proof. Generally, the outer sleeve is made of iron material.

[0003] In the prior art, the outer sleeve has the following disadvantages.

[0004] The prior art outer sleeve easily rusted and thus presents an unbeautiful outlook. Thereby the rust will fall out so as to affect the structural strength of the structure.

[0005] Generally, the outer sleeve is electroplated so as not to have the problem of rusting. However the cost is high.

[0006] In operation of the machine, the treadles are treaded continuously. Thus a great amount of heat generates. Furthermore, the iron made outer sleeve easily expands. Thus gaps thereof will enlarge and oil of the oil pressure unit will drain out.

SUMMARY OF THE INVENTION

[0007] Accordingly, the primary object of the present invention is to provide a treadle training machine with an oil pressure unit, wherein the outer sleeve provides different feelings to users and can provides indications thereon. The heat from the oil pressure rod can be dissipated and thus the oil pressure rod will not expand. Only slightly variations are made on the outer sleeve and thus the cost is low and the structure is simple.

[0008] To achieve above objects, the present invention provides a treadle training machine with an oil pressure unit. The machine comprises a body; two treadles installed on the body; an oil pressure unit installed between the body and the two treadles for generating resistance force to the treadles. The oil pressure unit includes an oil pressure rod having a head at one end thereof and a closing rod portion at another end thereof; an outer sleeve located between the head and the closing rod portion and formed by molding injection; the outer sleeve being non-transparent; a plurality of slots being formed on the outer sleeve; the outer sleeve enclosing the oil pressure rod; wherein the outer sleeve having the slots provides a beautiful outlook and has a function of heat dissipation. The outer sleeve is colored.

[0009] The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a structural schematic view of the oil pressure unit of the present invention.

[0011] FIG. 2 is a schematic view showing the outer sleeve of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0012] In order that those skilled in the art can further understand the present invention, a description will be described in the following in details. However, these descriptions and the appended drawings are only used to cause those skilled in the art to understand the objects, features, and characteristics of the present invention, but not to be used to confine the scope and spirit of the present invention defined in the appended claims.

[0013] Referring to FIG. 1, the structure of the present invention has the following elements.

[0014] A treadle body 10 is included.

[0015] Two treadles 11 are installed on the body 10.

[0016] An oil pressure unit 20 is installed between the body 10 and the two treadles 11 for generating resistance force to the treadles 11.

[0017] The oil pressure unit 20 has the following element.

[0018] An oil pressure rod 21 has a head 24 at one end thereof and has a closing rod portion 25 at another end thereof.

[0019] An outer sleeve 22 is located between the head 24 and the closing rod portion 25 and is formed by molding injection. The outer sleeve 22 is not transparent. A plurality of slots 23 are formed on the outer sleeve 22. The outer sleeve 22 encloses the oil pressure rod 21. Thus the outer sleeve 22 having the slots 23 provides a beautiful outlook and has a function of heat dissipation. Moreover, preferably, the outer sleeve 22 is colored.

[0020] In use, the slots 23 and the colored outer sleeve 22 make the user feel pleasure. Thereby the heat in the treading operation can be dissipated by heat convection. Thus the oil pressure rod 21 will not expand and the function of the oil pressure rod 21 can be performed normally.

[0021] Advantages of the present invention will be described herein.

[0022] The colored outer sleeve 22 provides different feelings to users and can provides indications thereon.

[0023] Heat from the oil pressure rod 21 can be dissipated and thus the oil pressure rod 21 will not expand.

[0024] In the present invention, only slightly variations are made on the outer sleeve 22 and thus the cost is low and the structure is simple.

[0025] Referring to FIG. 1, the structure of the present invention is illustrated.

[0026] The present invention is thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the present invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.

What is claimed is:

1. A treadle training machine with an oil pressure unit comprising:
 - a body;
 - two treadles installed on the body;
 - an oil pressure unit installed between the body and the two treadles for generating resistance force to the treadles;

the oil pressure unit including:

an oil pressure rod having a head at one end thereof and a closing rod portion at another end thereof;
an outer sleeve located between the head and the closing rod portion and formed by molding injection; the outer sleeve being non-transparent; a plurality of slots being formed on the outer sleeve; the outer

sleeve enclosing the oil pressure rod; wherein the outer sleeve having the slots provides a beautiful outlook and has a function of heat dissipation.

2. The treadle training machine with an oil pressure unit as claimed in claim 1, wherein the outer sleeve is colored.

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