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(71) Applicants:
- **Chuang, Jin Chen**
  **42083 Fong Yuan**
  **Taichung Hsien (TW)**
- **Chuang, Lung Fei**
  **42083 Fong Yuan, Taichung Hsien (TW)**

(72) Inventors:
- **Chuang, Jin Chen**
  **42083 Fong Yuan**
  **Taichung Hsien (TW)**
- **Chuang, Lung Fei**
  **42083 Fong Yuan, Taichung Hsien (TW)**

(74) Representative: **Beck & Rössig**
**European Patent Attorneys**
**Cuvilliésstrasse 14**
**81679 München (DE)**

## (54) Stationary Exerciser

(57) A stationary exerciser includes two handles pivotally coupled to a column of a base and each having an upwardly extended hand grip and an outwardly extended arm, two foot supports each having a rear portion moveable in a reciprocating action relative to the base and a front portion coupled to the arms of the handles with coupling devices, and two links pivotally coupled between the lower portions of the handles and the foot supports for maintaining the arms and the handles and the foot supports in position and for allowing the arms and the foot supports to be moved in a curved moving stroke relative to the base and for allowing the moving stroke of the foot supports to be adjusted.

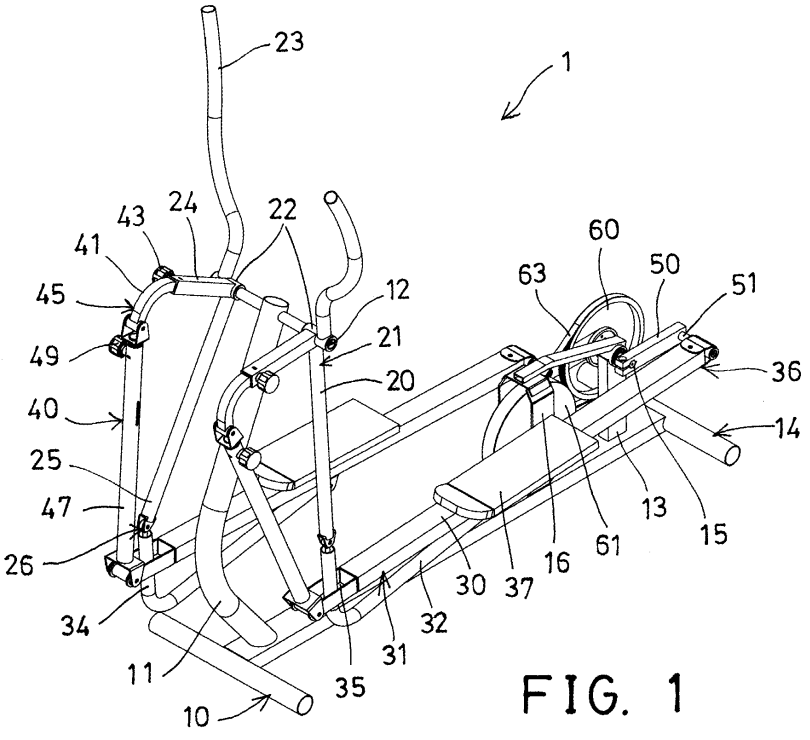


FIG. 1

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## Description

**[0001]** The invention relates to a stationary exerciser.

**[0002]** Typical stationary exercisers comprise two foot supports to be moved in an elliptical moving stroke. However, the front ends of the foot supports may not be moved up and down relative to the base.

**[0003]** The invention to provide a stationary exerciser including a front portion movable up and down in a reciprocating action.

FIGS. 1, 2 are perspective views of a stationary exerciser;

FIG. 3 is a side plan view of the stationary exerciser;

FIGS. 4, 5 are partial exploded views of the exerciser; and

FIG. 6 is a rear perspective view showing the other exerciser.

**[0004]** Referring to FIGS. 1-5, a stationary exerciser 1 comprises a column 11 extended from a base 10 for supporting a spindle 12, two handles 20 each include an upper or middle portion 21 attached to the spindle 12 with a barrel 22, a hand grip 23 and an arm 24 extended from the upper or middle portion 21. Two foot supports 30 each include a front portion 31 coupled to the arm 24 with a coupling device 40 which includes a shank 41 engaged into the arms 24 and having one or more orifices 42 for engaging with a fastener 43 that may adjustably secure the shank 41 to the arm 24, a stem 44 coupled to the free or outer end 45 of the shank 41 and having one or more apertures 46 (FIG. 5), and a tube 47 coupled to the front portion 31 of the foot support 30 and having a bore 48 for slidably receiving the stem 44 and for coupling to the arm 24.

**[0005]** Another fastener 49 may engage with the apertures 46 of the tube 47 for adjustably securing the stem 44 to the tube 47 and for adjustably securing the tube 47 and the foot support 30 to the arm 24 of the handle 20. The shank 41 may be adjustably secured to the arm 24, and/or the stem 44 may be adjustably secured to the tube 47 and the foot support 30 such that the moving stroke of the foot support 30 relative to the base 10 may be adjusted. A link 32 has one end 33 coupled to the middle or lower portion of the foot support 30, and the other end 34 coupled to the lower portion 25 of the handle 20 with a joint 26 for maintaining the arm 24 and the handle 20 and the coupling device 40 and the foot support 30 in position. The foot support 30 includes an opening 35 formed in the front portion 31 for receiving the other end 34 of the link 32, the link 32 may also be disposed beside the foot support 30 (FIG. 6) without engaging the other end 34 through the opening 35 of the foot support 30.

**[0006]** Two cranks 50 are attached to a post 13 at the rear portion 14 of the base 10 with an axle 15, and each include a rod 51 spaced from the axle 15 for coupling to the rear portion 36 of the foot support 30 and for allowing the foot supports 30 to be moved in an elliptical moving stroke. The foot supports 30 each include a foot pedal 37 to be stepped by the users. A wheel 60 is attached to the axle 15, a rotary member 61 is attached to the middle or rear portion 14 or a stud 16 of the base 10 with a shaft 62 and coupled to the wheel 60 with a coupling device or belt 63 for resisting the wheel 60 and the axle 15 and the cranks 50. The rear portions 36 of the foot supports 30 may be coupled to the rear portion 14 of the base 10 with other coupling devices 70 (FIG. 6).

## Claims

1. An exerciser comprising a base including a column, two handles each including an upper portion coupled to the column with a spindle, a hand grip, two foot supports each including a front portion and a rear portion, **characterized in that:**

   the handles each include an arm, a coupling device couples the front portions of the foot supports to the arms, and two links are coupled between the handles and the foot supports.

2. A stationary exerciser as claimed in claim 1, wherein the foot supports each include an opening for receiving the links.

3. A stationary exerciser as claimed in claim 1 or 2, wherein the links are coupled to the handles with joints.

4. A stationary exerciser as claimed in one of claims 1 to 3, wherein the handles are secured to the spindle with barrels and the arms are extended from the barrels.

5. A stationary exerciser as claimed in one of claims 1 to 4, wherein the coupling device includes two tubes coupled to the foot supports, and two shanks coupled between the tubes and the arms.

6. A stationary exerciser as claimed in claim 5, wherein the shanks are adjustably coupled to the arms.

7. A stationary exerciser as claimed in claim 5, wherein the shanks are adjustably coupled to the tubes.

8. A stationary exerciser as claimed in one of claims 1 to 7, wherein two cranks are attached to the base with an axle and each has a rod spaced away from the axle for coupling to the foot supports.

9. A stationary exerciser as claimed in one of claims 1 to 8, wherein a wheel is attached to the base with the axle.

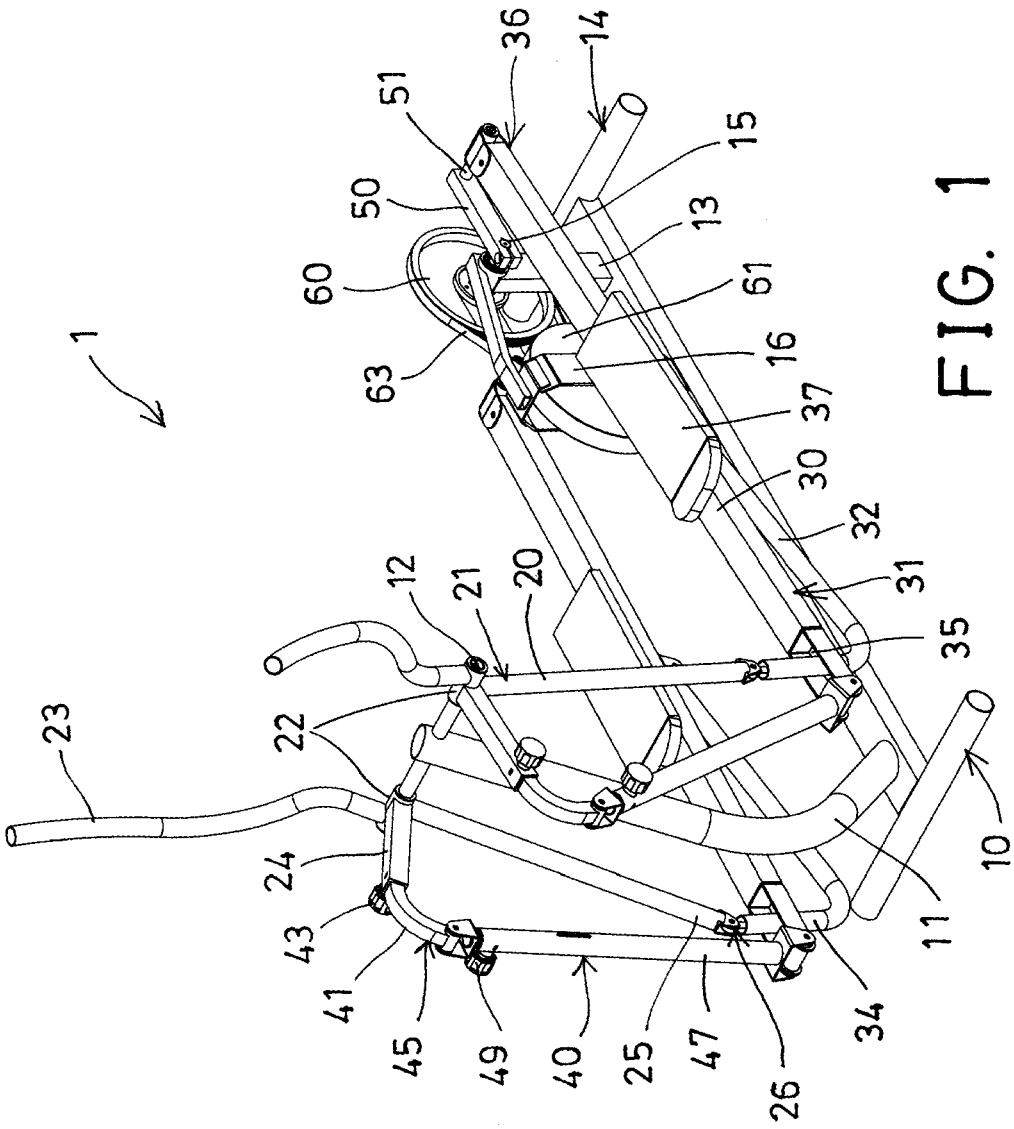
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FIG. 1

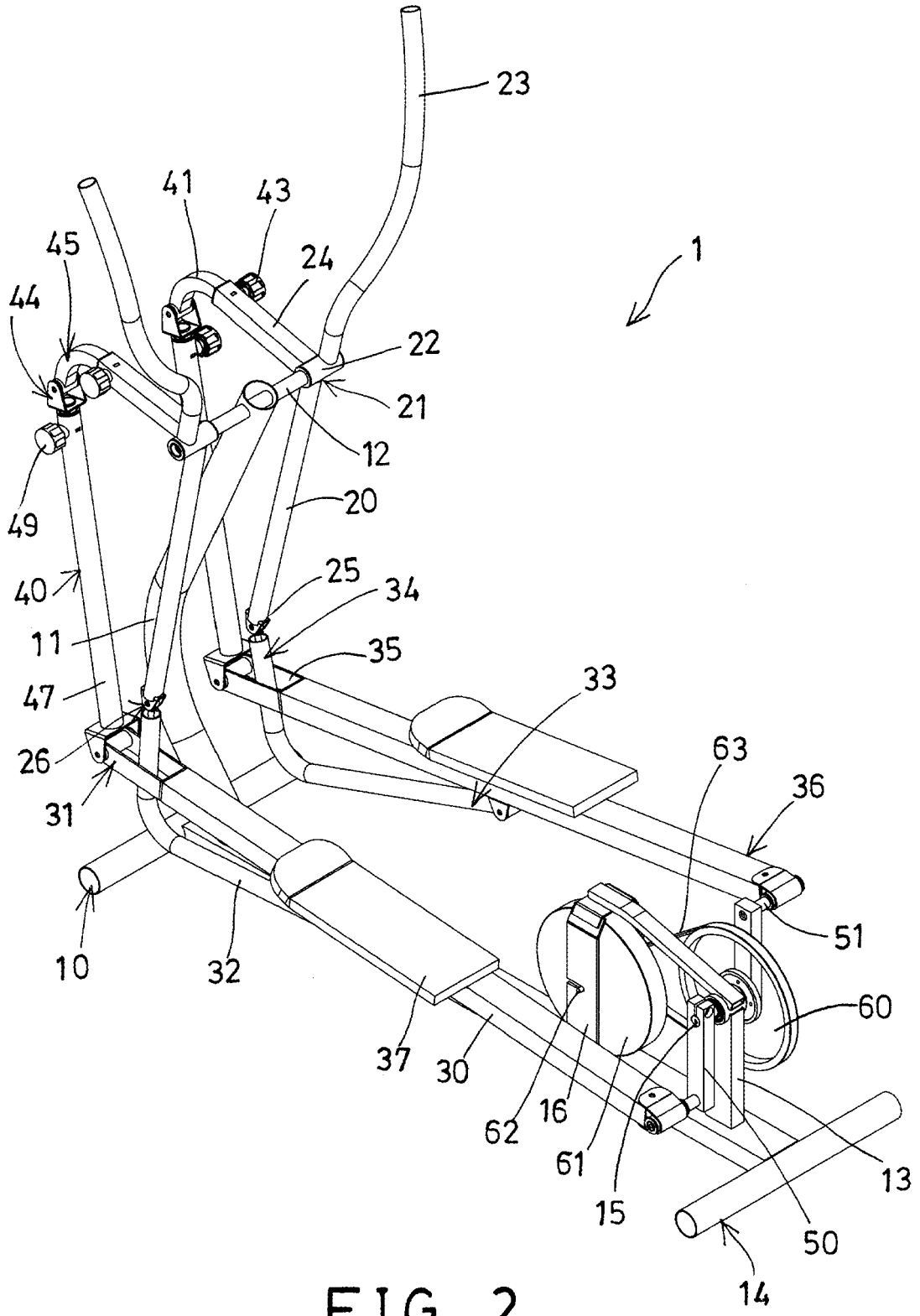
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FIG. 2

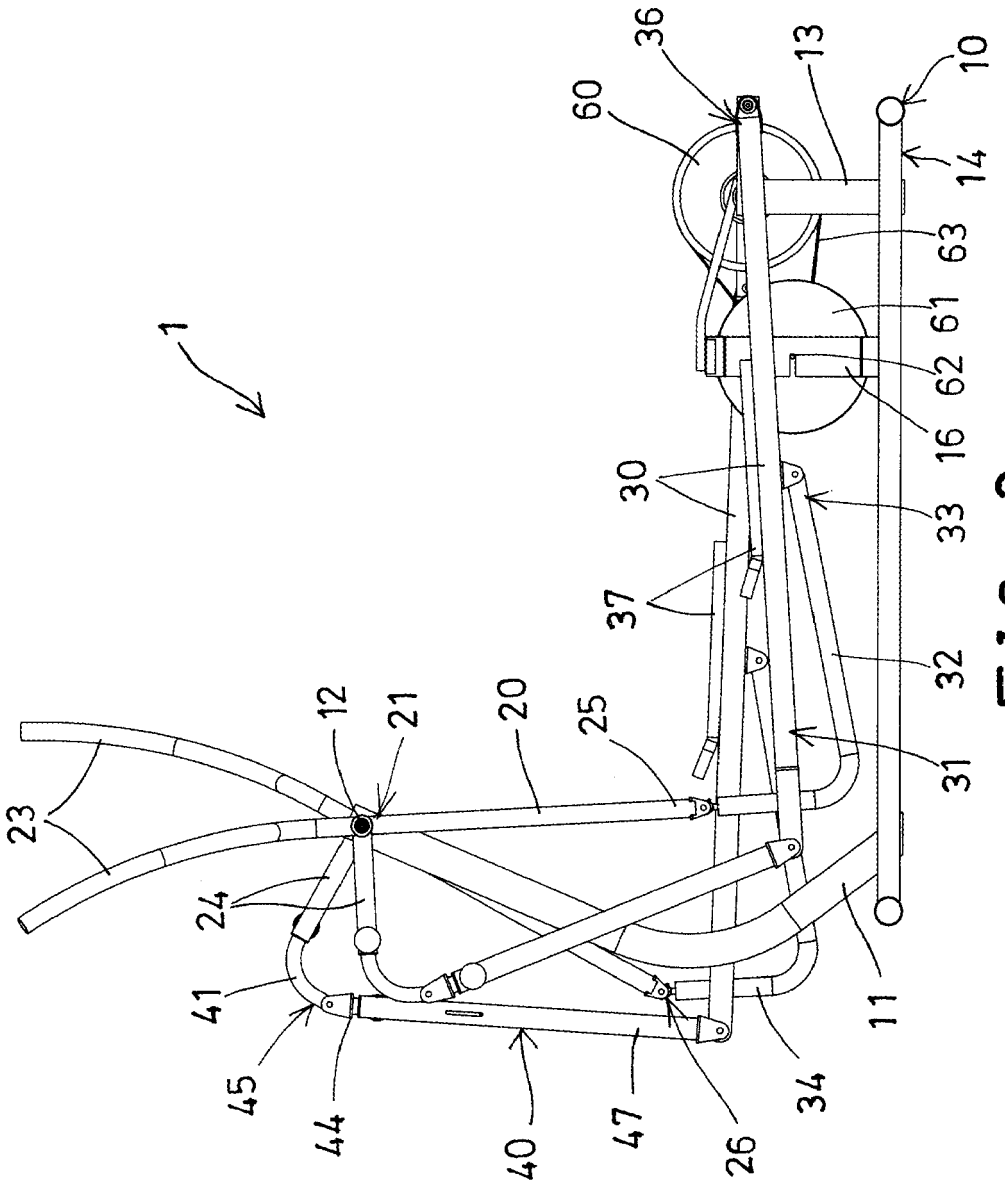
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FIG. 3

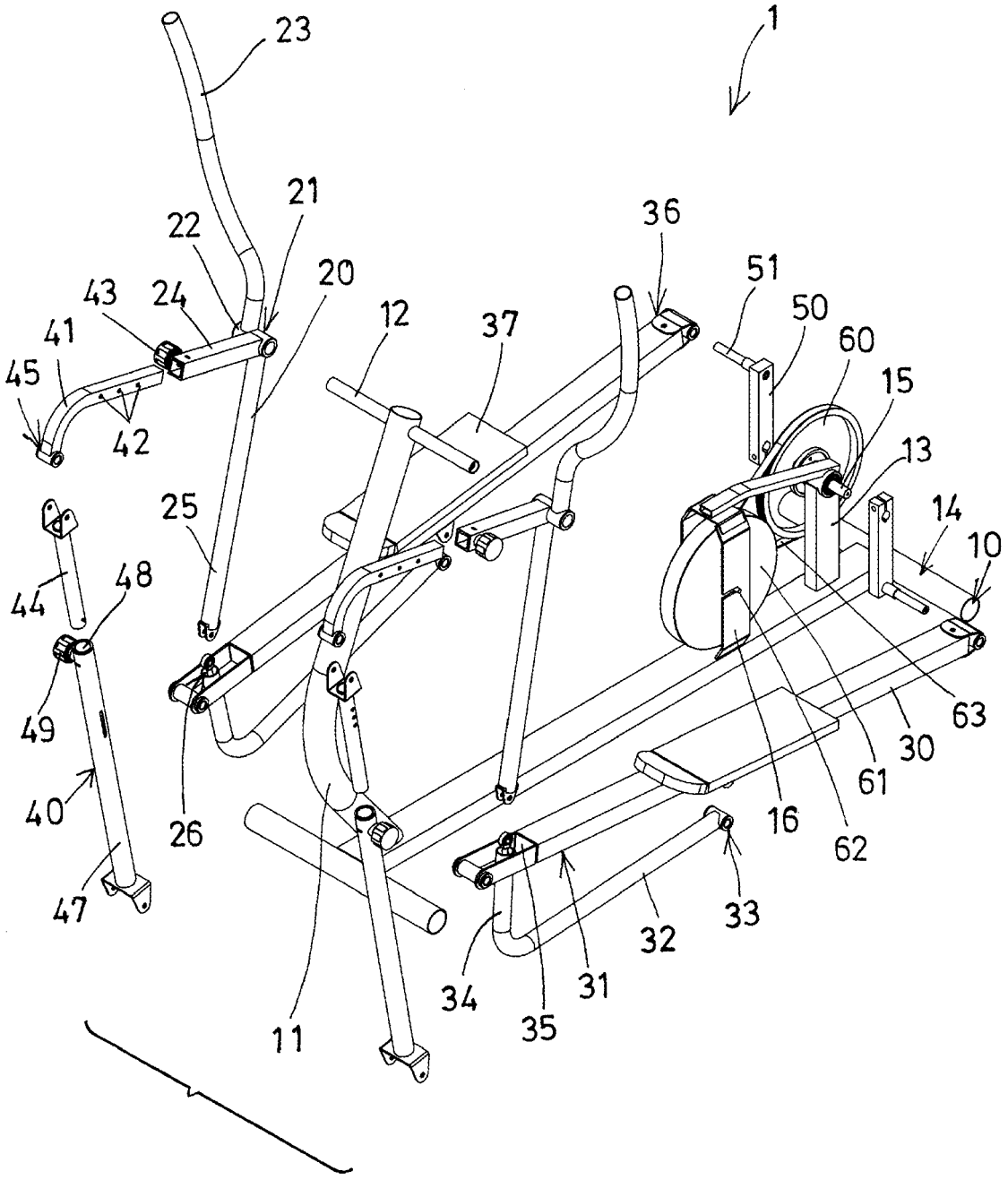
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FIG. 4

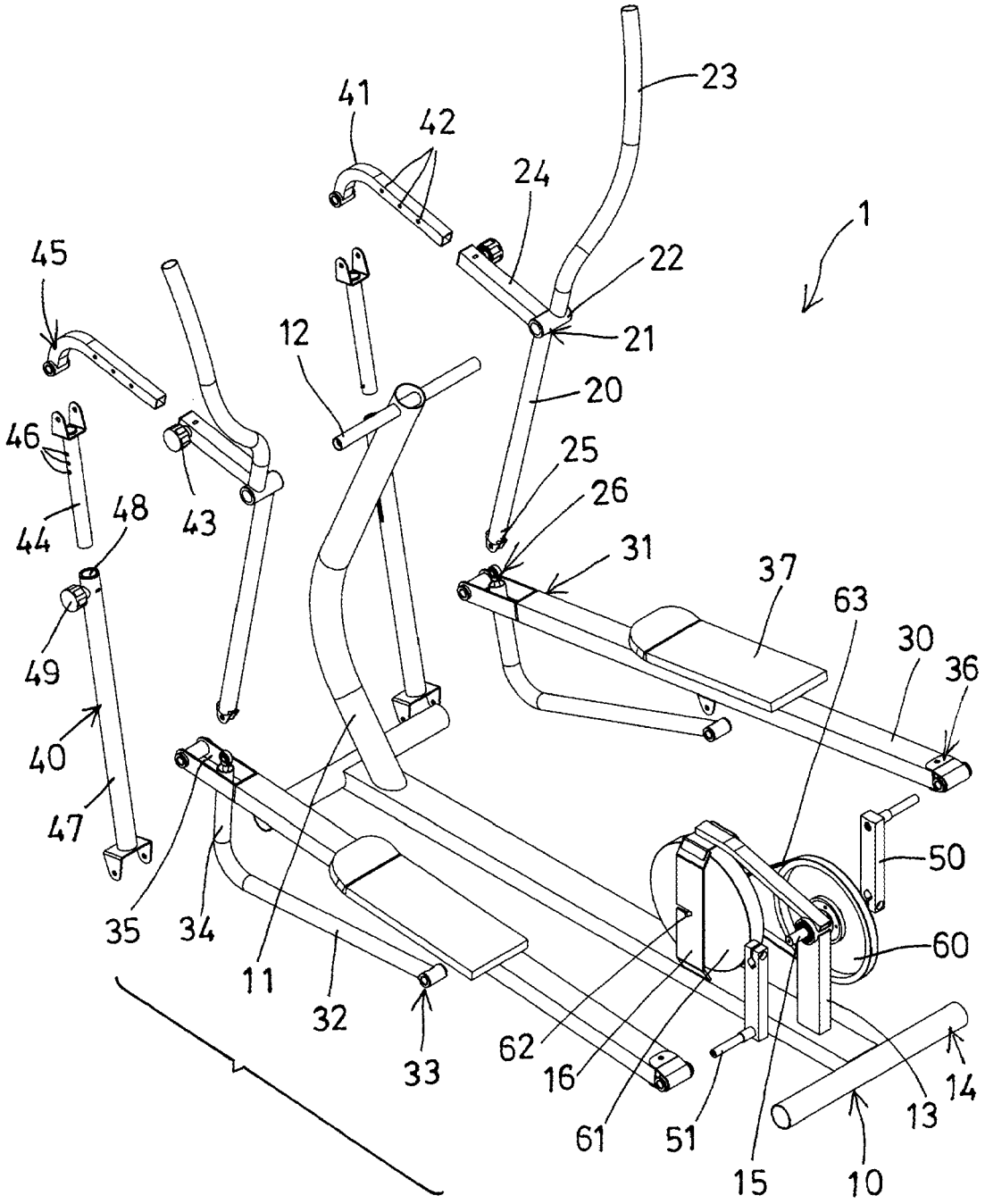
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FIG. 5

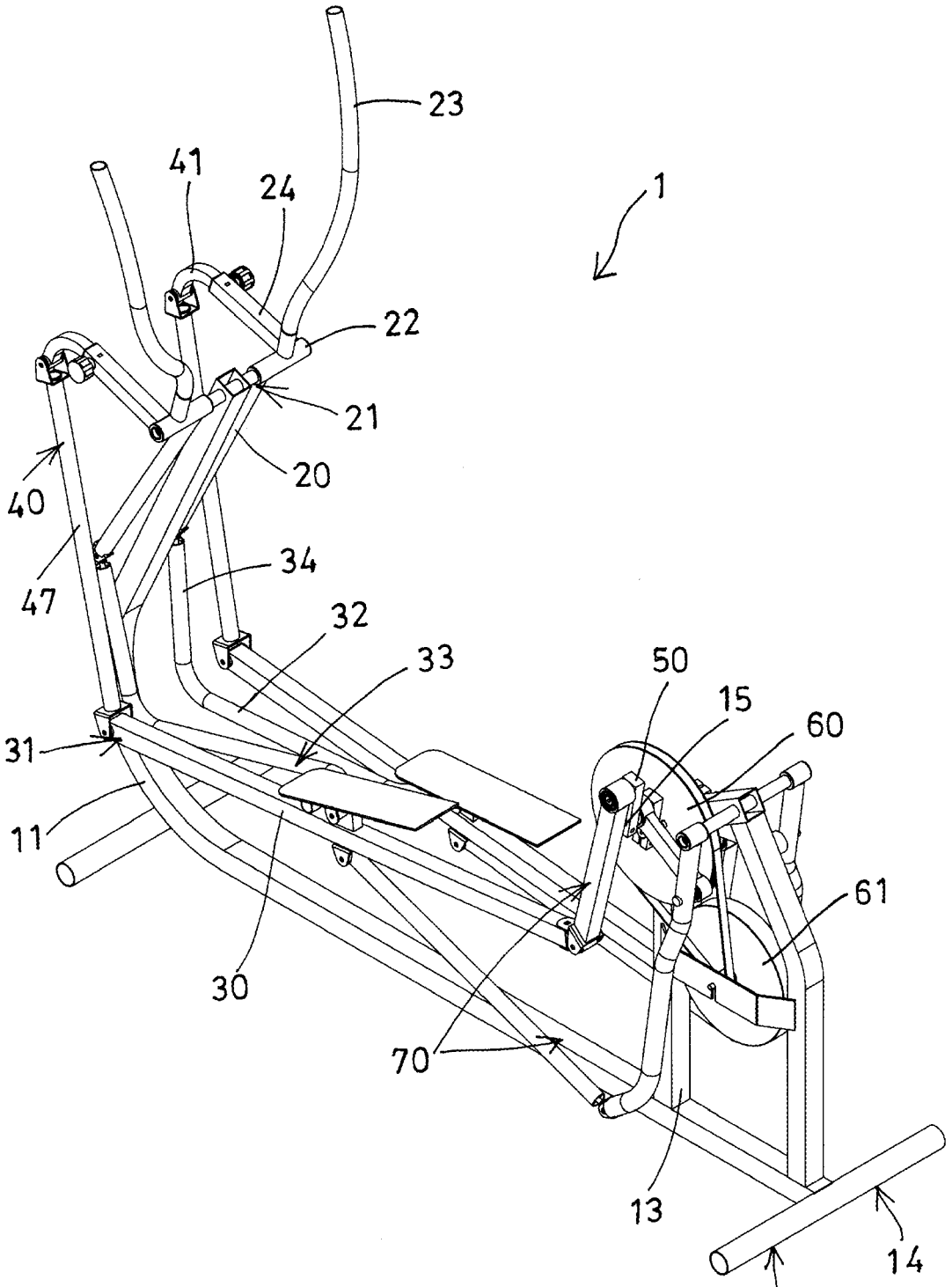


FIG. 6

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# EUROPEAN SEARCH REPORT

Application Number
EP 08 15 7367

## DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
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| | | | A63B |

The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| The Hague | 4 November 2008 | Millward, Richard |

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82