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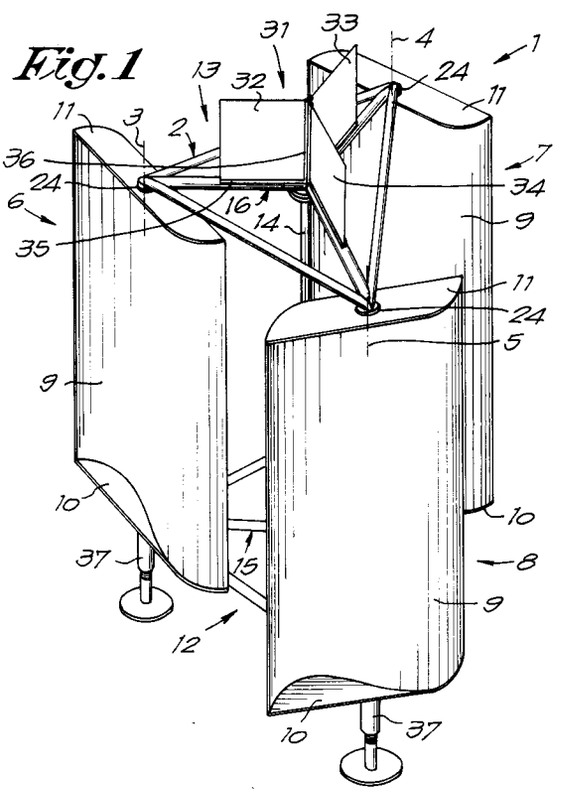
(54) Data carrier.

(57) Data carrier, characterized in that it mainly consists of a frame (2) and at least three blades (6,7,8) forming a triangle and erected along vertical shafts (3,4,5) which rotate in the wind and upon which data can be applied.

Fig.1



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The present invention concerns a data carrier, in particular an element showing several faces upon which information of any kind whatsoever can be applied, such as publicity, announcements or such.

In particular the invention concerns a data carrier with data panels which turn when being exposed to the wind.

Data carriers of the above type are known which use only one data panel which makes a turning movement when being exposed to the wind. Such a panel is disadvantageous, however, in that only little information can be provided on it.

The present invention concerns a data carrier which does nob show said disadvantage, in particular a data carrier which has several data panels.

The invention also aims a data carrier which is compact on the one hand, in other words whereby the different data panels are erected relatively close to one another, but which, on the other hand, is made such that the different data panels do not have any effect whatsoever upon each other as they rotate. The specific erection described hereafter has indeed shown that hardly any turbulence is created, as a result of which one of the data panels turns slower or faster than the other data panels.

To this end, the invention concerns a data carrier, characterized in that it mainly consists of a frame and at least three blades forming a triangle and erected along vertical shafts which rotate in the wind and upon which data can be applied.

Preferably, in order to further restrict the development of turbulence, the blades are erected such that they all turn in the same direction.

For the same reason, according to a preferred embodiment, the relation between the diameter of the turning circle of the blades and the shortest distance between two blades placed next to one another will be selected between 1.8 and 4.5. According to the most preferred embodiment, this relation is 2.4.

Also for the same reason, the shortest distance between two blades placed next to one another is preferably 15 to 35 cm. Under ideal circumstances, said distance amounts to 27 cm. Preferably, these distances are also combined with the above-mentioned relations.

According to a special embodiment, the data carrier can be disassembled, such that it can easily be transported.

The use of a frame in between which the three blades are mounted is also advantageous in that, according to a special embodiment, one or more data panels can still be placed on top of the frame and on top of the three above-mentioned blades, either fixed panels or panels in the shape of blades rotating in the wind.

In order to better explain the characteristics of the invention, by way of example only and without being limitative in any way, the following preferred embodiments are described with reference to the accompanying drawings, where:

figure 1 shows a data carrier according to the invention in perspective;

figure 2 shows a front view of the data carrier in figure 1;

figure 3 shows a section according to line III-III in figure 2;

figures 4 and 5 show views to a larger scale, and partly as a section, of the parts indicated in figure 2 with F4 and F5;

figure 6 shows a section according to line VI-VI in figure 2;

figure 7 shows a variant of the top part of the data carrier in figure 1.

As shown in figures 1, 2 and 3, the data carrier 1 according to the invention mainly consists of a frame 2 and at least three blades 6, 7 and 8 forming a triangle and rotating in the wind along vertical shafts 3, 4 and 5 serving as data panels.

Preferably, the shafts 3, 4 and 5 are situated such that their intersections with a field extending perpendicular to these shafts form the angular points of an equilateral triangle.

The blades 6-8 preferably consist of bent plates 9, which may be reinforced at the bottom and top side by means of cross plates 10 and 11. The left and right parts of the plates 9 are bent in different directions, such that when a plate 9 is exposed to the wind, one half will offer less resistance on one side of the corresponding shaft 3, 4 or 5 than the other half, as a result of which a turning moment is created.

The plates 9 can be provided with data on either side.

The blades 6-8 are preferably erected such that they turn all three in the same direction. This offers the advantage that no air pressure rises can be created between blades turning towards each other, nor any corresponding turbulence, due to which the rotation of certain blades might be hindered.

As shown in figure 3, the data carrier 1 is preferably built such that the value of the relation A/B, in other words the relation of the diameter of the turning circles of the blades 6-8 to the shortest distance between two blades 6-7, 7-8 and 6-8 situated next to one another, equals 1.8 to 4.5. According to the most preferred embodiment, the value of the relation A/B is 2.4.

The distance B preferably amounts to 15 to 35 cm. However, the most optimum effect is obtained with a distance B which equals 27 cm. More in particular, these distances are preferably combined with the above-mentioned values of the relation

A/B.

As shown in figures 1 and 2, the frame 2 preferably has two triangular chassis 12 and 13 mounted horizontally and at a distance on top of one another in between which the blades 6-8 are mounted. The chassis 12 and 13 are mutually connected by means of a central vertical support 14. The chassis 12 and 13 are each provided with a star-shaped construction 15 to this end, 16 respectively, whose centre is connected to the ends of the above-mentioned support 14. The legs of these star-shaped constructions 15 and 16 form the bisectors of the triangular chassis 12 and 13.

The data carrier 1 can preferably be disassembled, whereby at least the blades 6-8 can be removed from the frame 2.

According to the embodiment shown, the chassis 12 and 13 are attached to the ends of the support 14 such that they can be disassembled. As shown in figures 2 and 3, the chassis 12, 13 are provided to this end with mounting flanges 17 and 18 on the one hand, and the support 14 with mounting flanges 19 and 20 on the other hand, whereby the flanges 17 and 19, as well as the flanges 18 and 20 can be attached to one another by means of a number of bolts 21 and 22.

As shown in figures 4 and 5, the blades 6-8 are mounted between the chassis 12 and 13 by means of pin/bush bearings 23 and 24, such that the blades 6-8 can be easily removed as the frame 2 is disassembled.

Preferably, every bottom bearing 23 consists of a vertical pin 25 which is attached to the chassis 12 and a roller bearing 26 working in conjunction with it which is mounted in a support 27 attached on the blade 6, 7 or 8 in question.

Every top bearing 24 consists of a vertical pin 28 which is mounted on the blade 6, 7 or 8 in question and a roller bearing 29 working in conjunction with it which is mounted in a support 30 attached on the top chassis 13.

As shown in figures 1 and 2, the data carrier can also be provided with a head piece 31.

According to figures 1 and 2, this head piece 31 consists of three vertical panels 32-34 which are mounted in a non-rotatable manner on the chassis 13, in particular on the legs of the star-shaped construction 16. Each panel 32-34 is mounted in a horizontal U-shaped profile 35 and a vertical U-shaped profile 36, and can whether or not be removed from it and be replaced. As shown in figure 6, the horizontal profiles 35 are welded onto the underlying star-shaped construction 16. The vertical profiles are placed with their backs against one another.

According to a variant, the head piece 31 from figures 1 and 2 can also be mounted on the top chassis in a rotatable manner.

As shown in figure 7, the head piece 31 can also be made in the shape of a blade, for example with a similar design as the blades 6-8, such that when it is exposed to the wind, it will certainly rotate.

It is clear that the frame 2, as shown in figures 1 and 2, can be mounted on legs 37 or such like, which can be preferably adjusted in height.

The present invention is in no way limited to the embodiments described by way of example and shown in the accompanying drawings; on the contrary, such a data carrier can be made in various shapes and dimensions while still remaining within the scope of the invention.

Claims

1. Data carrier, characterized in that it mainly consists of a frame (2) and at least three blades (6,7,8) forming a triangle and erected along vertical shafts (3,4,5) which rotate in the wind and upon which data can be applied.

2. Data carrier according to claim 1, characterized in that the intersections of the above-mentioned shafts (3,4,5), with a field extending perpendicular to these shafts, form the angular points of an equilateral triangle.

3. Data carrier according to claim 1 or 2, characterized in that every blade (6,7,8) consists of a plate (9) which is opened out on either side of its shaft (3,4,5) respectively in opposite directions.

4. Data carrier according to any of the above claims, characterized in that the value of the relation A/B between the diameters (A) of the turning circles of the blades (6,7,8) and the shortest distance (B) between the blades (6,7,8) equals 1.8 to 4.5.

5. Data carrier according to claim 4, characterized in that the above-mentioned relation (A/B) equals 2.4.

6. Data carrier according to any of the above claims, characterized in that the shortest distance (B) between the blades (6,7,8) is 15 to 35 cm.

7. Data carrier according to claim 6, characterized in that the shortest distance (B) between the blades (6,7,8) is 27 cm.

8. Data carrier according to any of the above claims, characterized in that the frame (2) has two triangular chassis (12,13) in between which

the blades (6,7,8) are applied.

9. Data carrier according to claim 8, characterized in that the triangular chassis (12,13) are mutually connected by means of a central vertical support (14).

10. Data carrier according to claim 9, characterized in that in the triangular chassis (12,13), star-shaped constructions (15,16) are provided whereby the vertical support (14) is fixed with its ends between the centres of these constructions (15,16).

11. Data carrier according to any of the above claims, characterized in that the frame (2) can be disassembled, such that the blades (6,7,8) can be removed from it.

12. Data carrier according to claim 10, characterized in that the vertical support (14) and the triangular chassis (12,13) with the star-shaped constructions (15,16) mounted therein, are attached to one another such that they can be disassembled.

13. Data carrier according to any of the above claims, characterized in that the blades (6,7,8) are mounted in the frame (2) by means of pin/bush bearings (23,24).

14. Data carrier according to any of the above claims, characterized in that it is provided with a head piece (31) upon which data can also be provided.

15. Data carrier according to claim 14, characterized in that the head piece (31) consists of three vertical panels (32,33,34) erected in the form of a star which are mounted in U-shaped profiles (35,36).

16. Data carrier according to claim 14 or 15, characterized in that the head piece (31) can rotate.

17. Data carrier according to claim 14, characterized in that the head piece (31) consists of a blade rotating in the wind.

18. Data carrier according to any of the above claims, characterized in that the frame (2) is mounted on legs (37) which can be adjusted in height.

Fig. 1

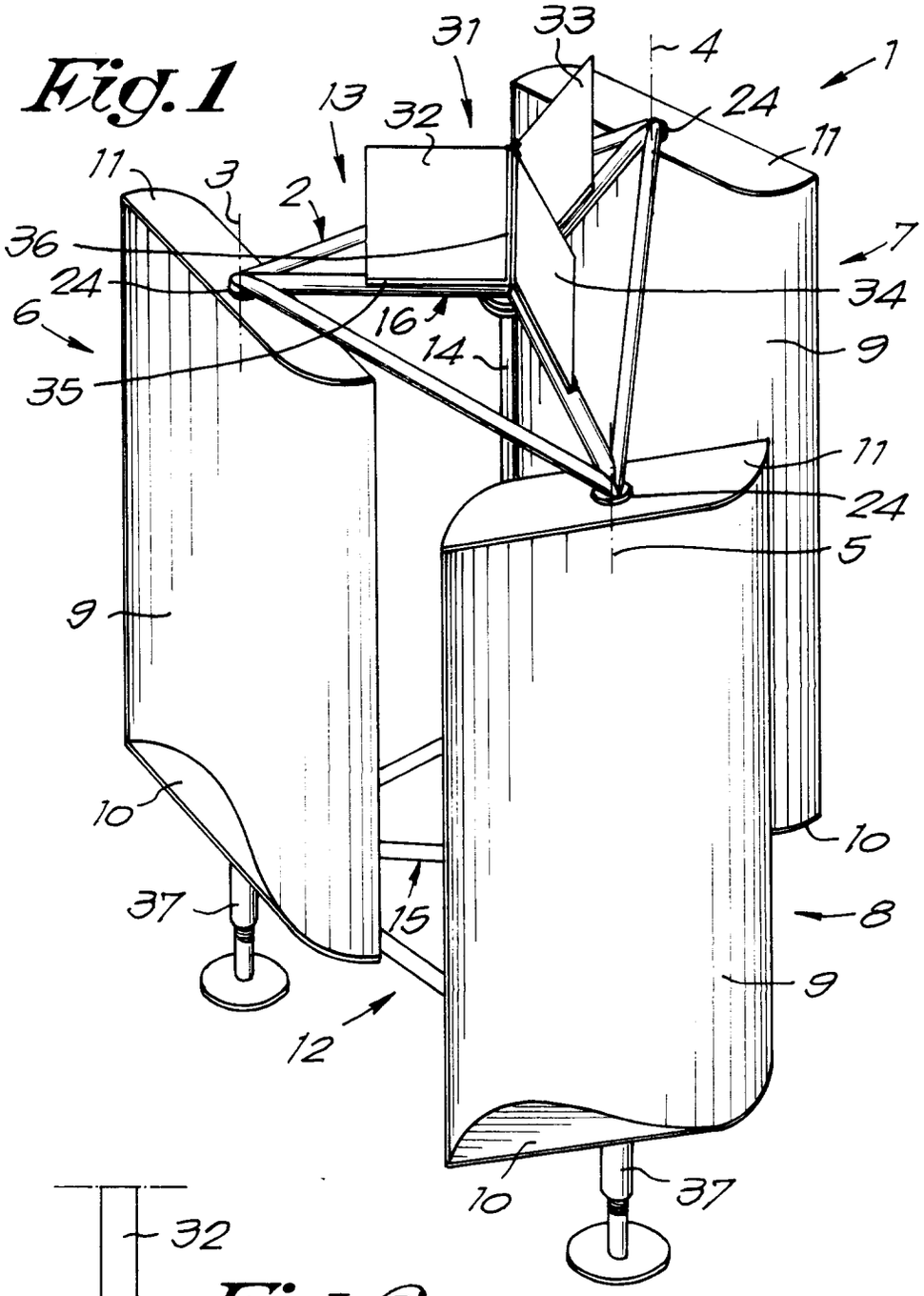


Fig. 6

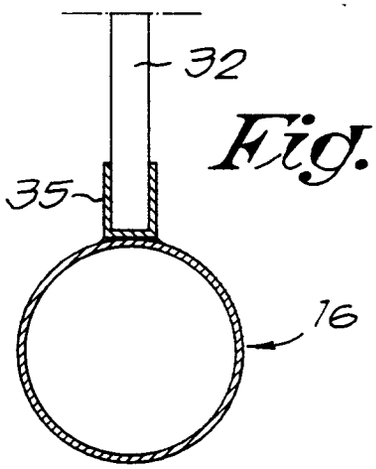
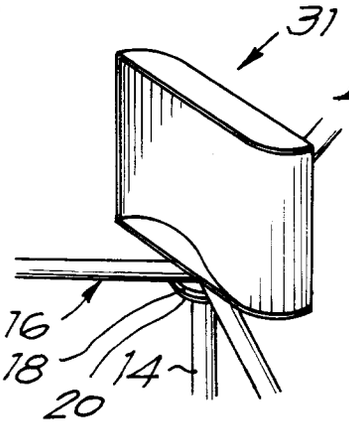
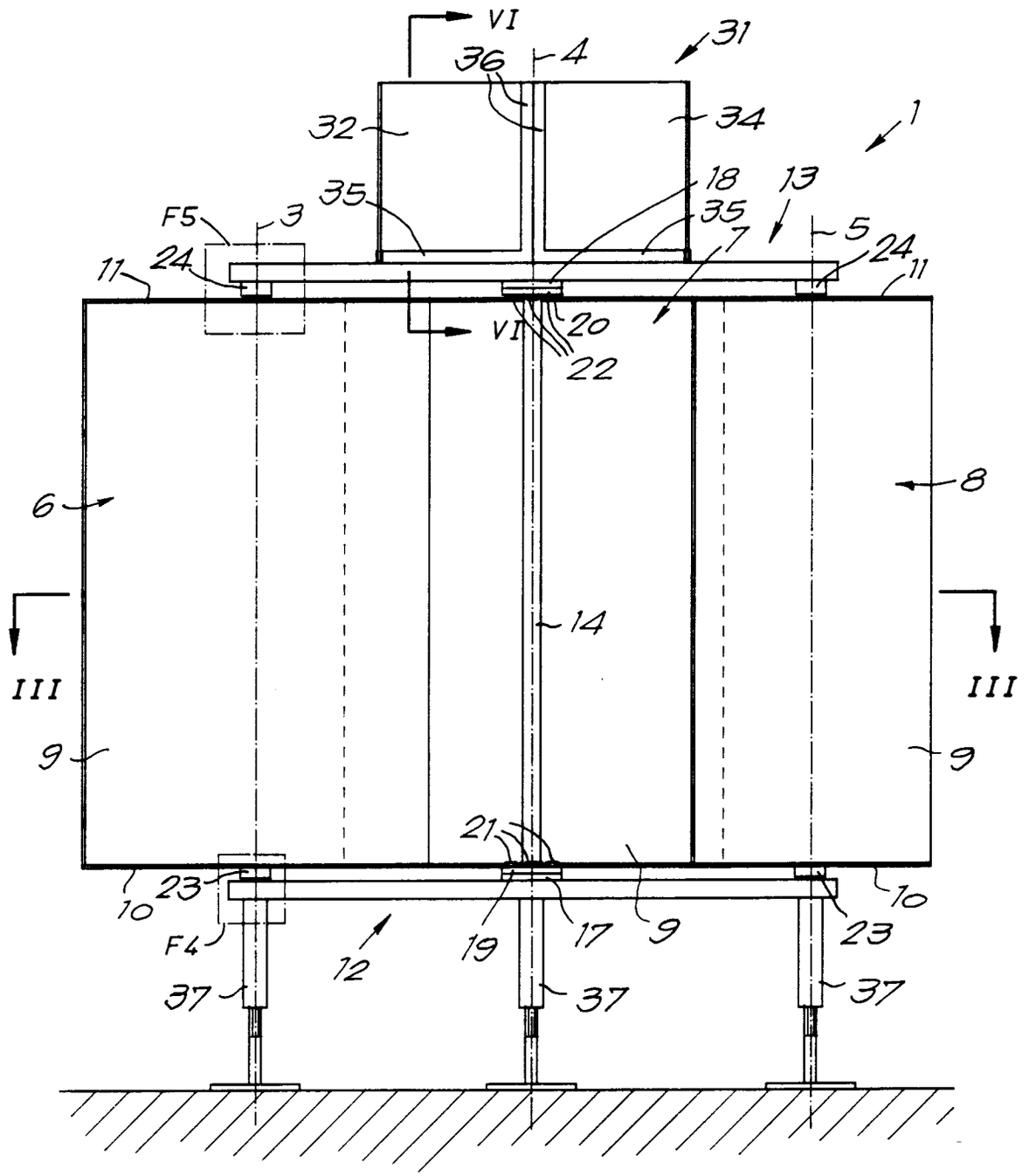


Fig. 7




VI
36
4
31
32
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1
18
13
35
35
F5
3
5
7
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24
11
11
VI
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22
6
8
III
14
III
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F4
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37

Fig. 2

Fig. 3

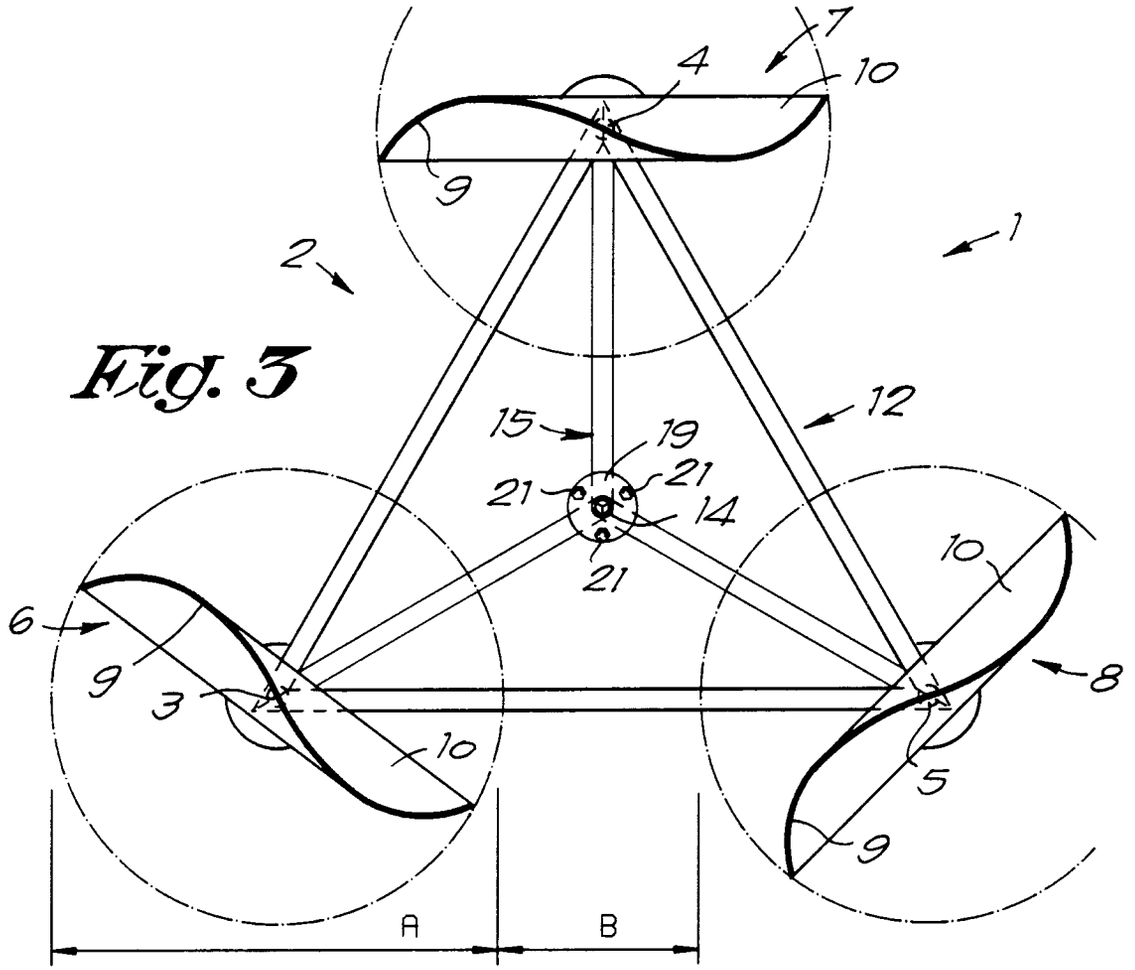


Fig. 5

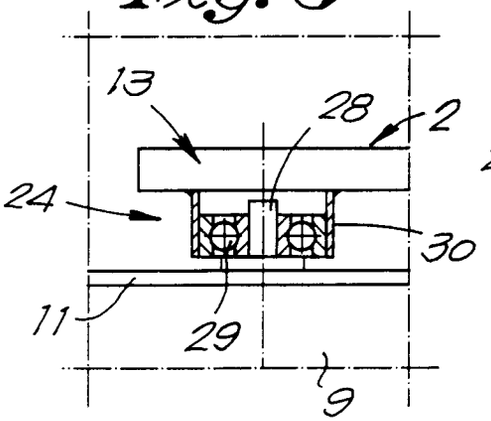
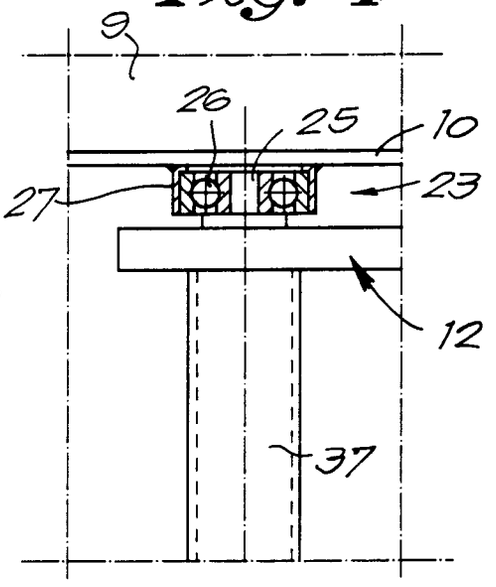


Fig. 4



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EUROPEAN SEARCH REPORT

Application Number

EP 93 20 1542

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	FR-A-1 555 528 (J. GUILLEMINOT) * claims; figure 5 * ---	1-4,8-13	G09F15/00 G09F7/22
Y	FR-A-2 653 583 (X. DELAUNAY ET AL.) * the whole document * ---	1-4,8-13	
X	FR-A-2 144 421 (W. THOMSEN) * claim 1; figures 3,6 * -----	1,8-10, 14	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G09F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	23 JULY 1993	GALLO G.G.

CATEGORY OF CITED DOCUMENTS

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