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(71) Applicant: **Choi, Chang-Gyu**
Gapyong-Kun, Kyonggy-Do (KR)

(72) Inventor: **Young-Sik, Kim**
Gapyong-Kun, Kyonggy-Do (KR)

(74) Representative:
Hengelhaupt, Jürgen, Dipl.-Ing. et al
Patentanwälte
Gulde Hengelhaupt Ziebig,
Büro Berlin-Adlershof
Rudower Chaussee 29
12489 Berlin (DE)

(54) **Decorative wooden container and method of making same**

(57) A decorative wooden container comprising: a decorative outer frame (10) having a space portion (10a) with prescribed size; and an inner component (20) that can be rotated while being attached to the space portion of the decorative outer frame (10), the spiral of Archimedes is used to cut up an arc circle (20a) which constantly increases in size is configured on the inner component (20). If the inner component is positioned horizontally to said decorative outer frame (10), then a surface of the inner component and the decorative outer frame (10) form same plane surface to use as a decoration, and when the inner component (20) is positioned vertically to the decorative outer frame (10) then the center of the inner component (20) is positioned vertically to the decorative outer frame (10) then the center of the inner component drops down as a result of the arc circle (20a) to form a step like spiral wall so that a container is created to hold articles.

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Description

BACKGROUND OF THE INVENTION:

1. Field of the Invention

[0001] The present invention relates to processing a wooden board into different sizes and shapes to create a decorative wooden container that can be used as a decoration or a container for holding articles.

2. Prior Art

[0002] Generally, material wood or wood is processed into different shapes, such as a plant, a fish or a character, to make a decorative product for hanging on the wall or place it on a table or a container for holding articles.

[0003] To make a decorative product described above, wood is cut into to a desired size and then a design is engraved on a surface with a tool such as a bite and smooth out the surface. Thereafter, a brightener is applied to polish the finished product to create a decorative product.

[0004] Still, in order to create a container from wood, wood is fixed onto a rack and hollow out a groove in which articles could be put and an outer surface is processed with a design and then polished.

[0005] As stated above, according to the prior art, a decorative product and a container are independent items, therefore procedures for producing each item is different from one another. Furthermore, different materials are used corresponding to whether the article is decorative product or a container and not only there is an increase in usage of the materials, but also massive production is difficult since expenditure of the processing time is longer because each material is processed separately according to the its usage.

SUMMARY OF THE INVENTION

[0006] The object of the present invention is to provide a decorative wooden container that possesses both decorative and container functions.

[0007] Another object of the present invention is to provide procedure in which both decoration and container to be created through a single process while minimizing the usage of materials or woods and expediting a manufacturing process to increase the productivity.

[0008] These and other objects are satisfied by a decorative wooden container comprising: a decorative outer frame having a space portion with prescribed size; and an inner component that can be rotated while being attached to the space portion of the decorative outer frame. The spiral of Archimedes is used to make an arc circle that constantly increases in size and configured on the inner component, and if the inner component is positioned horizontally to the decorative outer frame,

then a surface of the inner component and the decorative outer frame form same plane surface to use as a decoration. When the inner component is positioned vertically to the decorative outer frame then the center of said inner component drops down as a result of coil like formation of the arc circle to form a step like spiral wall so that a container is created to hold articles.

[0009] A support part, which is rotatable to be positioned vertically or horizontally to the decorative outer frame, is attached at the bottom of the decorative outer frame.

[0010] The depth of the container part of said inner component is determined by number of arc circles.

[0011] An outer shape of said inner component is same as that of the space portion, and said arc circle consists the same shape as said inner component mid can be in a shape of oval, heart, rectangle or triangle.

[0012] Other objects of the present invention are satisfied by a method for manufacturing a decorative wooden container consists with both decoration and container functions, comprising the steps of: cutting wood into a board having a prescribed site; drawing a desired design on said board and cutting along the outline of the design to make a decorative outer frame consists with a space portion; processing the surface of said decorative outer frame; cutting the design piece cut out from the decorative outer frame with the spiral of Archimedes to make arc circles; assembling the inner component and the decorative outer frame such way that the inner component is rotatable; and attaching the support part to the bottom of the decorative outer frame.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The objects and advantages of the present invention will be better understood after a reading of the following detailed description in conjunction with the accompanying drawings.

FIG. 1 is an exploded perspective view of a decorative wooden container accordance with the present invention.

FIG. 2 is a perspective view of an embodiment of the present invention.

FIG. 3 is a perspective view of the decorative wooden container in use accordance with embodiment of the present invention.

FIG. 4 is a fragmentary cross-sectional view taken in the line A-A of FIG. 3

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] As illustrated in FIG. 1, a decorative outer frame 10 comprises a space portion 10a. Although the space portion 10a is formed in an oval shape in drawings, it is not limited the particular shape and can be processed into other preferred shapes. For example,

the space portion 10a could be formed into a circular, rectangular or triangular shape.

[0015] Opposite sides of an upper portion of the space portion 10a is formed with pinholes 11 in such way that they face each other. An outer part of the decorative outer frame 10 is formed with different designs. A fish design is used as an illustration in the drawings, however, other designs such as a plant, a building or a special character could be used.

[0016] An inner component 20 is formed in an exactly same shape as the space portion 10a of the decorative outer frame 10. Preferably, a piece of material that was cut out to create the space portion 10a of the decorative outer frame 10 is used to make an inner component 20.

[0017] The spiral at Archimedes is used to make an arc circle 20a that constantly increases in size on the inner component 20 and a pair of pin holes 21 placed at opposite sides corresponding to the pin holes 11 of the decorative outer frame 10. The arc circles 20a are in a coil like formation and configured on the inner component 20. The inner component 20 is attached to the space portion 10a of the decorative outer frame 10 by pins 40 placed through the pin holes 11, 21 such that the inner component 20 can be rotated. The inner component 20 can be positioned either horizontally or vertically to the decorative outer frame 10.

[0018] Referring to FIG. 2, when the inner component 20 is positioned horizontally to the decorative outer frame 10, surfaces of the inner component 20 and the decorative outer frame 10 are combined to form a same plane surface for the decorative purpose. On the other hand, if the inner component 20 is positioned vertically to the decorative outer frame 10 as illustrated in FIG. 3, the center of the inner component 20 drops down due to the arc circle 20a creating a circular wall in a step like formation to form a container. Depth of the container could be adjusted by number of the arc circle configured on the inner component 20. Moreover, the arc circle could be in shape of an oval as in the drawings or other shapes such as a rectangle, a triangle or a circle.

[0019] A support member 30 is placed at the lower portion of the decorative outer frame 10 to provide a support and configured to fit into a support home 10b placed at the bottom of the decorative outer frame 10. The support member 30 is attached to the support home 10a with a screw 31 and it can either be positioned horizontally as shown in FIG. 2 or vertically as shown in FIG. 3 to the support home 10b.

[0020] The present invention as described above in detail can be placed in upright position on a table or other flat surfaces by using the support member 30 or hung on a wall using a holder, which is not described in the drawings, attached on the decorative outer frame 10.

[0021] Ongoing explanation is a method of making the present invention accordance with above described preferred embodiment.

[0022] First, a wooden material is cut into a board having fixed thickness and size. Thereafter, a preferred design, such as plant, fish or character, is drawn on the surface of a wooden board. A drill is used to place a hole on any one point of the outline of the design drawn on the board and a band saw machine used for cutting the wood placed on the table is used to cut a design out from the board. Engraving and polishing are applied to cut out design piece to enhance the appearance for decorative purpose. Middle portion of the cut out board is cut out into a shape of heart, rectangular, triangular, oval or other desired shape with a band saw machine to form a space portion.

[0023] The spiral of Archimedes is then used to make an arc circle that constantly increases in size which is configured on a segment cut out from the design piece to make a inner component which functions as a body of the decorative outer frame and portion that holds articles. The arc circles are formed in shape as the space portion and number of arc circles created will determine the depth of a container member. The depth of a container member should not be larger than the space portion so that it would not touch the inner surface for the decorative outer frame.

[0024] A pin, made up with the same material as the decorative outer frame, is inserted into a pinhole to assemble the inner component and the decorative outer frame and allows the inner component to rotate while being attached to the decorative outer frame. A support member is attached at the bottom of the decorative outer frame with a screw to function as a support when the decorative outer frame is placed upright position on a table or other flat surfaces.

[0025] To utilize a decorative wooden container according to the present invention as a decoration means, place the inner component 20 to the space portion 10a of the decorative outer frame 10 and insert a pin 40 into a pinhole 11 to complete the assembly process, and then rotate the support part attached at the bottom of the decorative outer frame 10 so that it is positioned vertically to the decorative outer frame 10. The rotated support part 30 provides necessary support for the decorative wooden container according to the present invention to be placed upright position on the table or other flat surfaces.

[0026] To utilize a decorative wooden container accordance with the present invention as a container, rotate the inner component 20 attached with the pin 40 to ninety degrees. When the inner component 20 is in a vertical position as to the decorative outer frame 10, the outer cover wall is formed as the center of the inner component 20 is depressed as a result of the arc circle 20a.

[0027] As illustrated in foregoing detailed descriptions, the decorative wooden container accordance with the present invention can be utilized as a decoration when the inner component 20 and the decorative outer frame 10 are placed horizontally. When the inner com-

ponent 20 is positioned vertically to the decorative outer frame 10, the decorative wooden container according to the present invention functions as a container having a member to hold articles.

[0028] Furthermore, the embodiment of the present invention allows both decoration and container to be created through a single process while minimizing the usage of materials or woods and expediting a manufacturing process to increase the productivity. 5

[0029] The present invention is not limited to the precise structure illustrated in the describe embodiments. It is intended rather that the foregoing description be regarded as illustrative of the invention rather than limiting. It is the following claims, including all equivalents, which define the true scope of the instant invention. 10 15

Claims

1. A decorative wooden container comprising: 20

a decorative outer frame having a space portion with prescribed size; and an inner component that can be rotated while being attached to the space portion of said decorative outer frame, the spiral of Archimedes is used to cut up an arc circle which constantly increases in size is configured to the inner component, if said inner component is positioned horizontally to said decorative outer frame then a surface of said inner component and said decorative outer frame form same plane surface to use as a decoration, and when said inner component is positioned vertically to said decorative outer frame then the center of said inner component drops down as a result of the arc circle to form a step like spiral wall so that a container is created to hold articles. 25 30 35

2. The decorative wooden container, as set forth in claim 1, wherein a support member, which is rotatable to be positioned vertically or horizontally to said decorative outer frame, is attached at the bottom of said decorative outer frame. 40 45

3. The decorative wooden container, as set forth in claim 1, wherein the depth of the container part of said inner component is determined by number of arc circles. 50

4. The decorative wooden container, as set forth in claim 1, wherein an outer shape of said inner component is same as that of the space portion, and said arc circle consists the same shape as said inner component and can be in a shape of oval, heart, rectangle or triangle. 55

5. A method for manufacturing a decorative wooden

container consists with both decoration and container functions, said method comprising the steps of:

cutting wood into a board having a prescribed size;

drawing a desired design on said board and cutting along the outline of the design to make a decorative outer frame consists with a space portion;

processing the surface of said decorative outer frame;

cutting the design piece that was cut out from said decorative outer frame with the spiral of Archimedes to make arc circles;

assembling said inner component and said decorative outer frame such way that said inner component is rotatable; and

attaching the support member to the bottom of said decorative outer frame.

Fig. 1

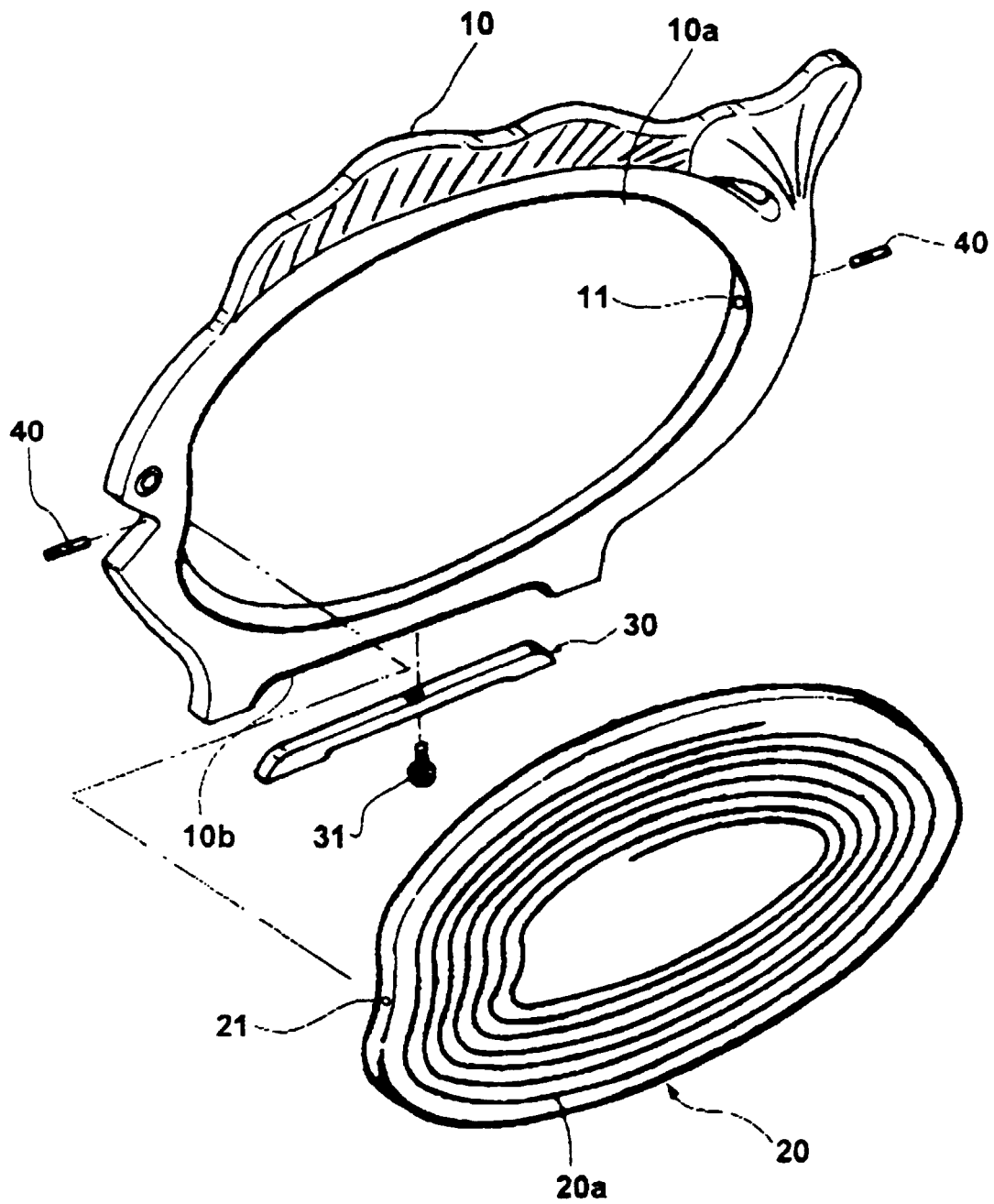


Fig. 2.

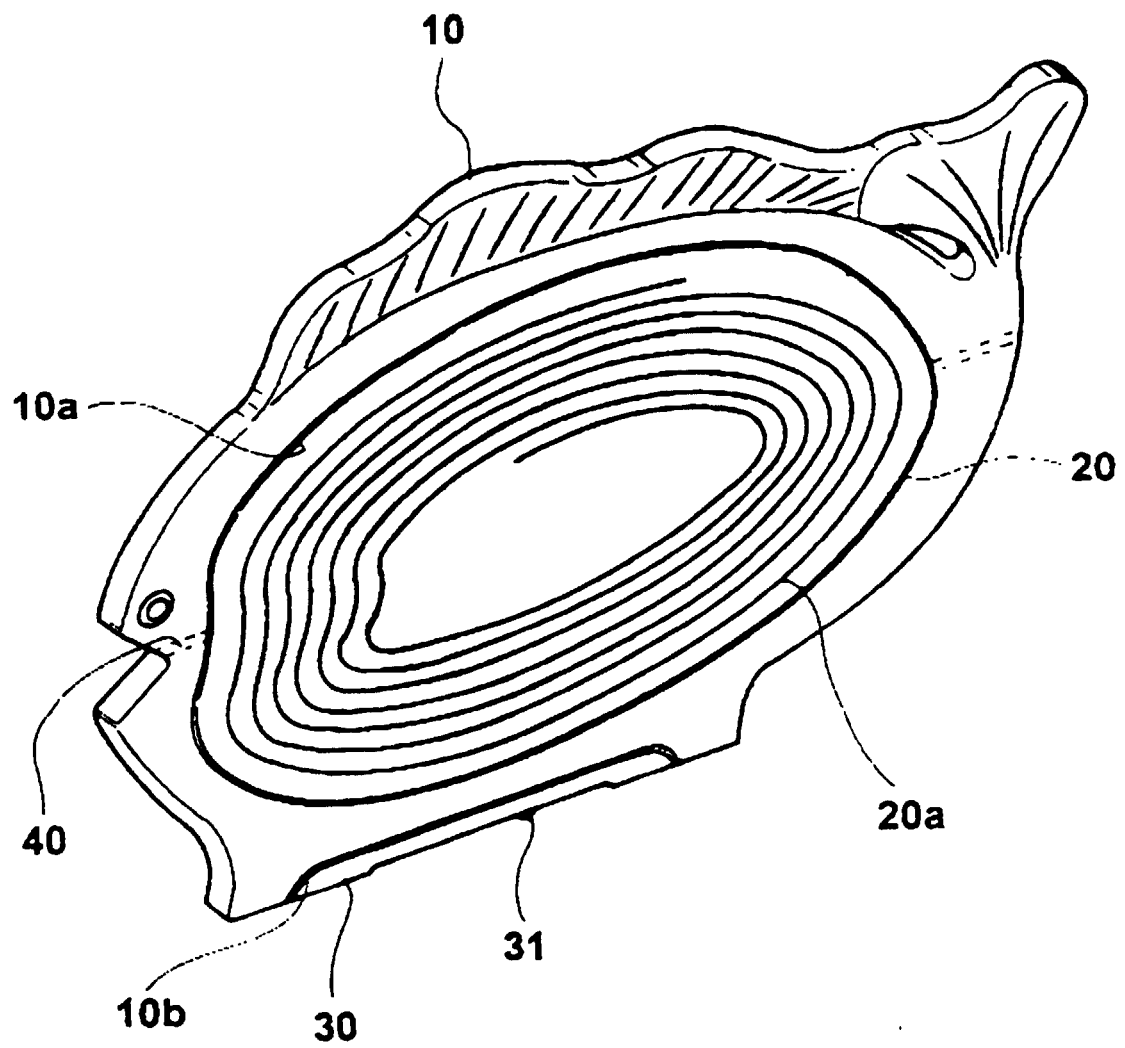


Fig. 3

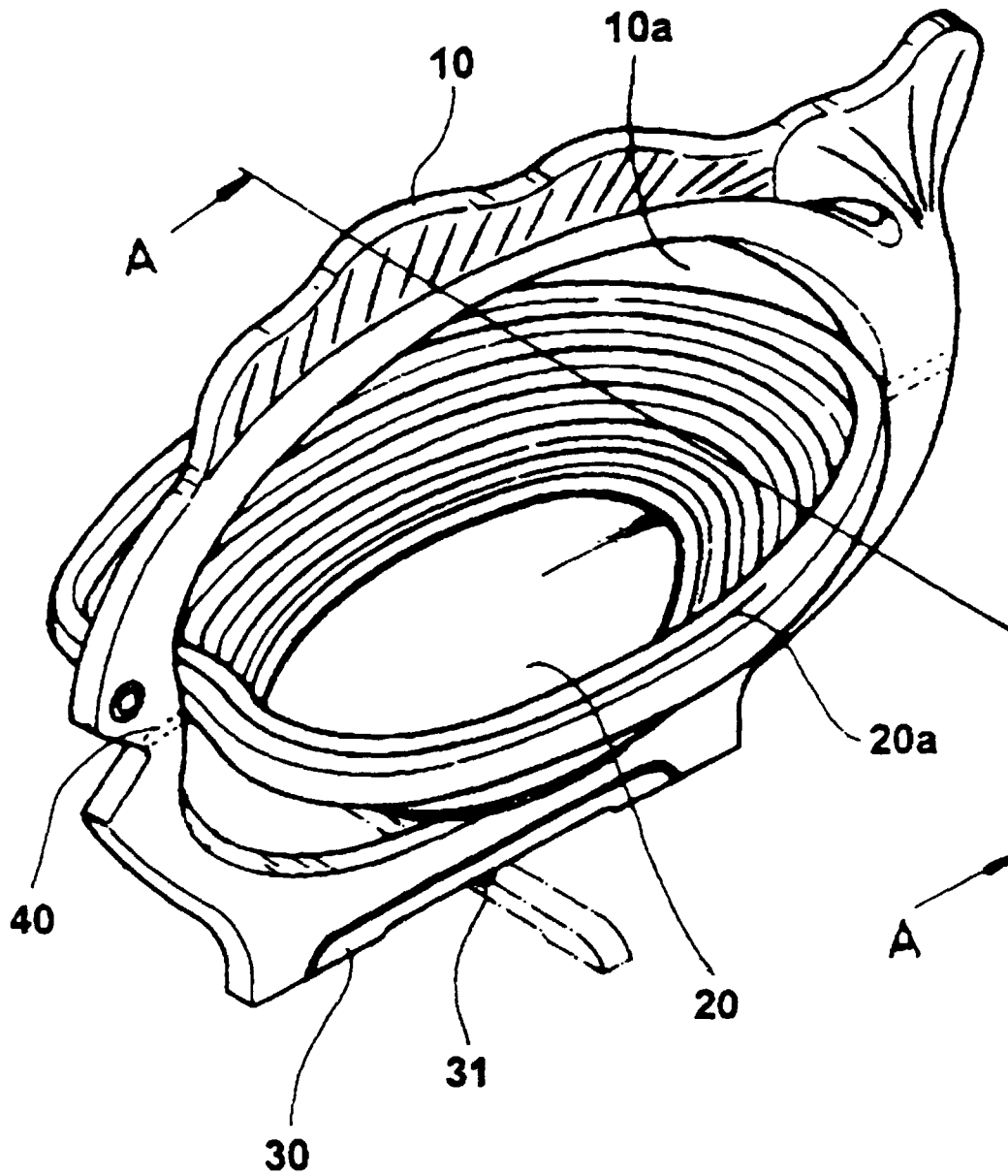
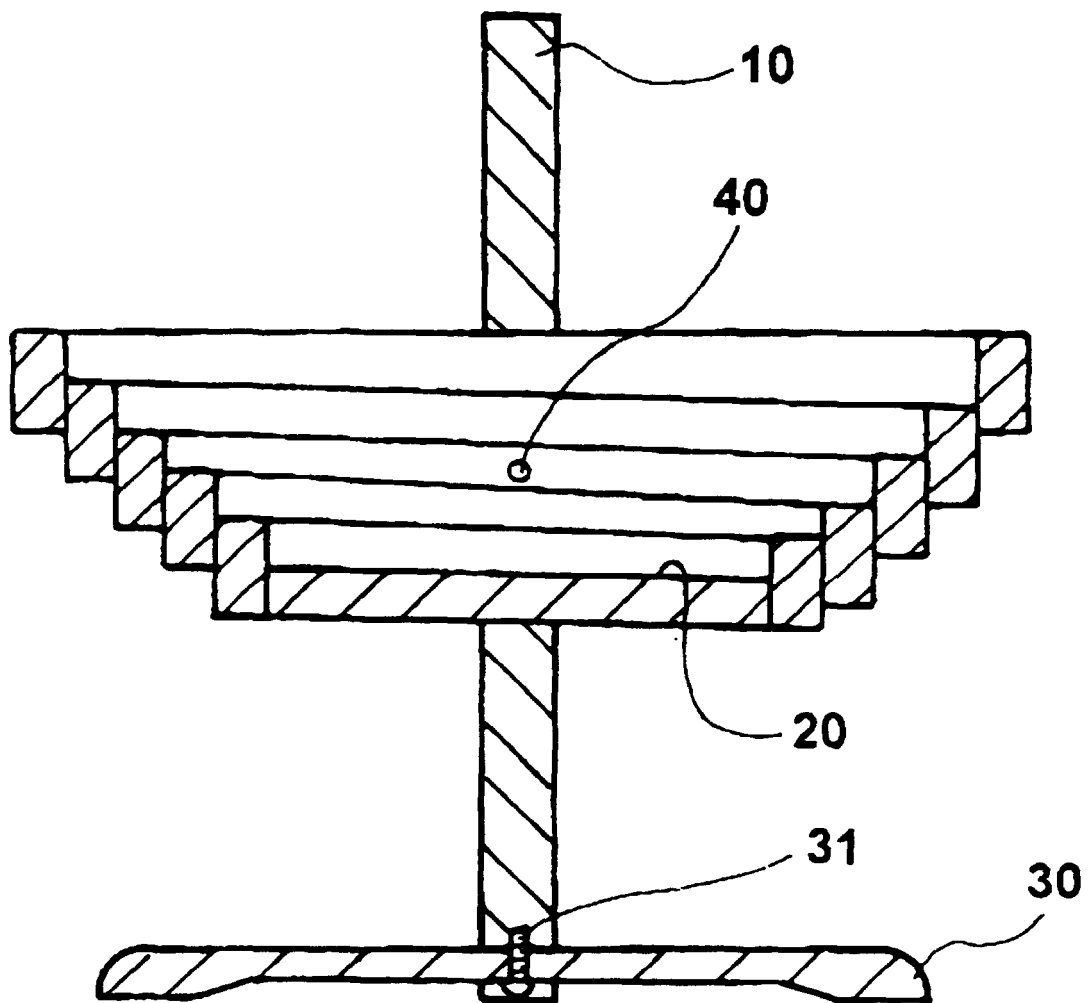


Fig. 4



EUROPEAN SEARCH REPORT

Application Number
EP 98 25 0428

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.6)
X	PATENT ABSTRACTS OF JAPAN vol. 096, no. 005, 31 May 1996 & JP 08 010131 A (NIPPON FURUUTO KK), 16 January 1996 * figures 1-4 * * abstract * -----	1-5	A47G19/00
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A47G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 May 1999	Examiner Hinrichs, W
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	