

*C. N.º*



*Design*

265027

# THE UNITED STATES OF AMERICA

**TO ALL TO WHOM THESE PRESENTS SHALL COME:**

**Whereas,** THERE HAS BEEN PRESENTED TO THE  
Commissioner of Patents and Trademarks

A PETITION PRAYING FOR THE GRANT OF LETTERS PATENT FOR AN ALLEGED NEW, ORIGINAL, AND ORNAMENTAL DESIGN FOR AN ARTICLE OF MANUFACTURE THE TITLE AND DESCRIPTION OF WHICH ARE CONTAINED IN THE SPECIFICATION OF WHICH A COPY IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PATENT AND TRADEMARK OFFICE IN THE CLAIMANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID CLAIMANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A DESIGN PATENT UNDER THE LAW.

NOW, THEREFORE, THESE Letters Patent ARE TO GRANT UNTO THE SAID CLAIMANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID CLAIMANT(S) FOR THE TERMS OF YEARS AS STATED IN THE ABOVE MENTIONED COPY OF THE SPECIFICATION, SUBJECT TO THE PAYMENT OF ISSUE FEES AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM MAKING, USING OR SELLING THE SAID DESIGN THROUGHOUT THE UNITED STATES.

*In testimony whereof I have hereunto set my hand and caused the seal of the Patent and Trademark Office to be affixed at the City of Washington this twenty-second day of June in the year of our Lord one thousand nine hundred and eighty-two, and of the Independence of the United States of America the two hundred and sixth.*

*Attest*

*Myrcilla A. Miller*  
Attesting Officer.

*James W. Smith*  
Commissioner of Patents and Trademarks.

## A TOROIDALLY - SHAPED SEAT

### ABSTRACT OF DISCLOSURE

The description of a seat shaped like a toroid or an eccentric toroid (different radial cross-sections at different angles) is presented. The person will preferably seat in the middle, with the legs over the side having the smaller radial cross-section, and back supported by the side with the largest radial cross-section, in case the toroid is eccentric. This seat can be manufactured with any upholstery material; it can be filled with styrofoam, crushed rubber foam, or any other material that provides good body support (including air or water, if the outer skin is air or water-proof). No internal frame is usually required; however a frame can be used.

### BACKGROUND OF INVENTION

Seats have been in use by mankind for thousands of years; many sizes and shapes have been fashionable throughout the centuries. Pillow chairs, also known as "bean bags" have in the past few years gained wide popularity, especially among young people looking for a relatively cheap way to furnish their living quarters or for innovative furniture. Another reason for their popularity is that pillow seats allow a wide range of seating and relaxing positions. On the negative side, one could criticize the aesthetic aspects of the common pillow seat. Most of them are characterized by a lack of shape and are aesthetically unpleasant. Additionally, the body support is very irregular.

The object of this invention is a seat that has the advantages of the pillow seat without its disadvantages. It is aesthetically very attractive and highly decorative because of its shape; it is very comfortable to sit in because it is naturally shaped in such a way to provide space for the person's "seat"; it can be fabricated with a variety of materials, does not require an internal frame (although one may be incorporated to it), provides the possibility for a variety of seating and relaxing positions with excellent back support. The overall shape can be described as "doughnut-like". An additional advantage is that it can be manufactured at a cost comparable to that of other pillow seats.

#### DESCRIPTION OF THE INVENTION

Figure 1 presents a side view of the toroidally shaped chair. The dashed lines ( 1 and 2 in Figure 1) indicate the approximate shape of the inside of the "doughnut" seat, if it is sectioned longitudinally along its center of symmetry. The sections, which were originally circular, have been deformed to adjust to the persons' back and legs. Figure 2 presents a top view of the same chair. Centrally, there is a hole. The cross-section of the chair is larger at the back than at the front. The person's seat rests over the central hole (4 in Figure 2) in the normal seating position; his (her) back leans over the portion with the largest cross-sectional area (3 in Figure 1). The radial cross-section of the toroidally shaped seat can be made circular, elliptical, or oval, depending on the final shape desired. Any upholstery material, such as plastic, leather, cloth can be used for the outer skin. The inside filling can be

made out of insulating material, crushed rubber foam, or any other material that provides good body support. If the outer skin is air or water tight, these elements can be used as inner fillings. If solid materials are used as a filling, an entry zipper, that can be placed on the bottom back part, can be used to fill the chair and make any changes. The "doughnut" seat can be manufactured in different sizes (adults and children) and shapes by changing the ratio between the diameter of the section having the smallest and that of the section having the largest cross-section.

Another attractive design is shown in Figure 3. In it, the "doughnut" chair is placed on a support whose top part makes an angle with the floor, in such a way that the back of the doughnut does not necessarily have to have a larger cross-section. Again, the longitudinal section along the inside of the doughnut is indicated by the dashed lines (5 in Figure 3). This arrangement provides a more formal sitting position with the persons' back in a more vertical position. The ramp-like support (6 in Figure 3) base is attached to the "doughnut" seat and can have another function; for instance a small cabinet can be built into its back. Wheels can be attached to its bottom to make it more mobile.

Because of its specific shape (doughnut-like) the special pillow chair described above can be completely filled and still provide good sitting support. The common pillow chairs do not have the central hole. Therefore, when left half full, they are shapeless; when filled with a soft material, so that they are full, they are excessively bulky.

The following examples are set forth to illustrate more clearly the ways by which this invention can be constructed.

#### EXAMPLE 1

Figure 4 shows a top view of the "doughnut" seat and the eight sections of "naugahyde" of which it was built. (These parts are numbered A, B, C, D, E, F, G, H in Figure 4). Figure 5 shows five different sections; sections B and H, C and G, F and D are equal. They were drawn considering them as section of cones. The dimensions of the back and front can be adjusted, as all the sides, to obtain the desired shape and size. The pieces of "naugahyde" are sown together with a double seam. A special sewing order is recommended. Sections B and H are first sown to A; sections C and G are sown to B and H, respectively; sections D and F are sown to C and G respectively; and section E is sown to D and F. Then the inside seam is made; it is sown taking the "naugahyde" out through the zipper and then bringing it back in. The double zipper is sown to the lower portion of section E. The pillow is then filled with the appropriate filling material.

#### EXAMPLE 2

Another sewing pattern is possible for the toroidally-shaped pillow chair. Strips with varying widths are sown together, so that all seams are along the circumference of the chair.

Although the invention has been described with reference to specific materials, embodiments and details, various modifications and changes, within the scope of this invention, it will be apparent

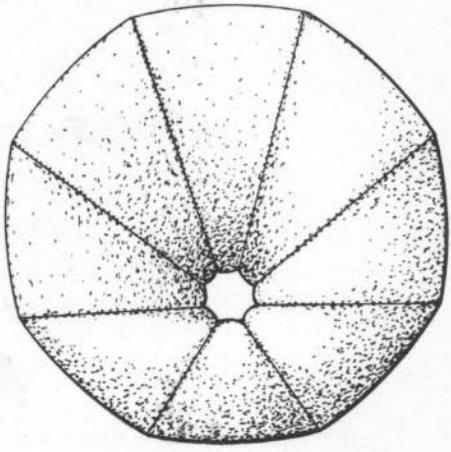
to one skilled in the art, are contemplated and can be embraced in the invention.

### CLAIMS

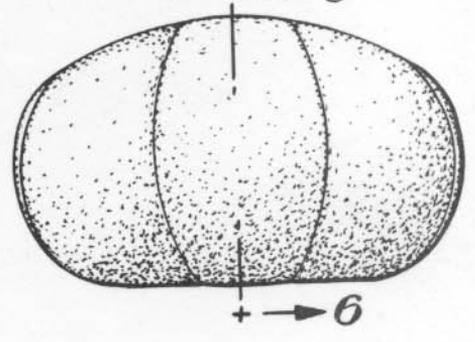
#### I Claim:

1. A chair with a special shape that is similar to a "doughnut". Its geometrical shape can be described as toroidal, and it may have different radial cross-sections at different angles taken around its center.
2. The above "doughnut chair" can rest on the floor, or on a ramp-like support. In the latter case, the ramp-like support can have an additional function, such as a magazine stack.

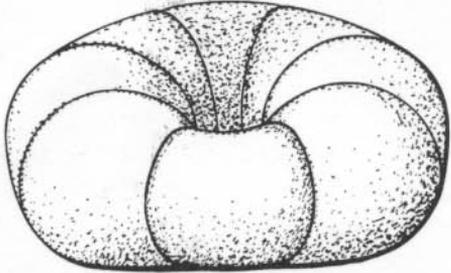
*Fig. 2.*



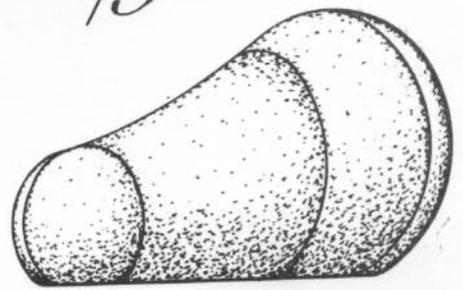
*Fig. 4.*



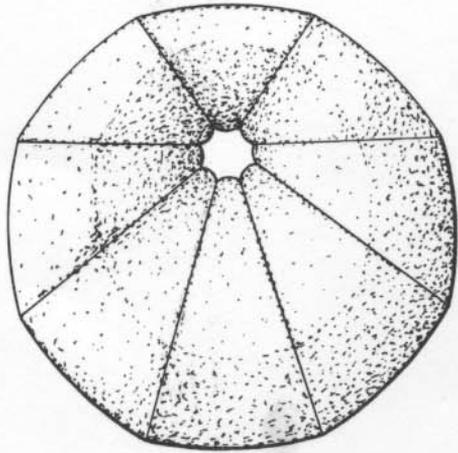
*Fig. 1.*



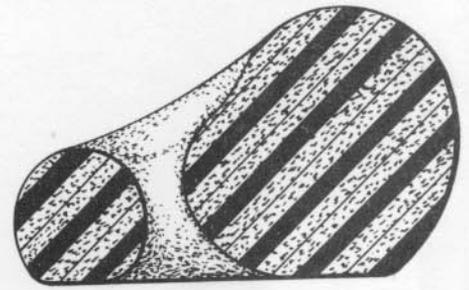
*Fig. 3.*



*Fig. 5.*



*Fig. 6.*



- [54] SEAT
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- [73] Assignees: **Samuel V. Abramo; John G. Abramo**, both of Wilmington, Del. ; a part interest
- [\*\*] Term: **14 Years**
- [21] Appl. No.: **140,775**
- [22] Filed: **Apr. 16, 1980**
- [51] Int. Cl. .... **D6-01**
- [52] U.S. Cl. .... **D6/37**
- [58] Field of Search ..... **D6/26, 32-36, D6/47, 58, 67, 71**

3,899,210 8/1975 Samhammer ..... D6/37 X

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Domus Cat., 7-1968, p. 26, Lounge Chair right center  
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 Industrial Design, 2-1966, p. 63, Chair at right center.  
*Primary Examiner*—Bruce W. Dunkins  
*Attorney, Agent, or Firm*—Abramo & Abramo

**CLAIM**

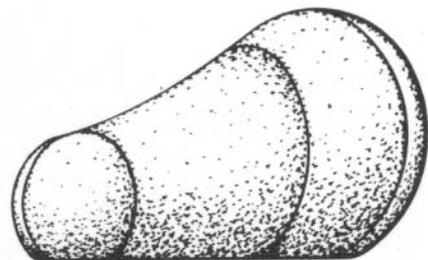
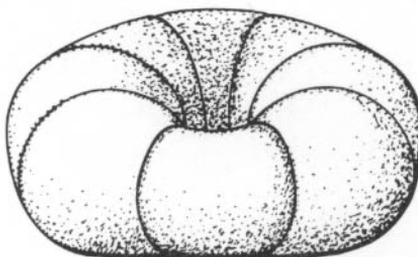
[57] The ornamental design for a seat, as shown.

**DESCRIPTION**

FIG. 1 is a front elevational view of the seat.  
 FIG. 2 is a top plan view thereof.  
 FIG. 3 is a side elevational view thereof.  
 FIG. 4 is a rear elevational view thereof.  
 FIG. 5 is a bottom plan view thereof.  
 FIG. 6 is a cross-sectional view taken through FIG. 4 along line 6-6.

[56] **References Cited**  
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- D. 244,569 6/1977 Laroye ..... D6/67



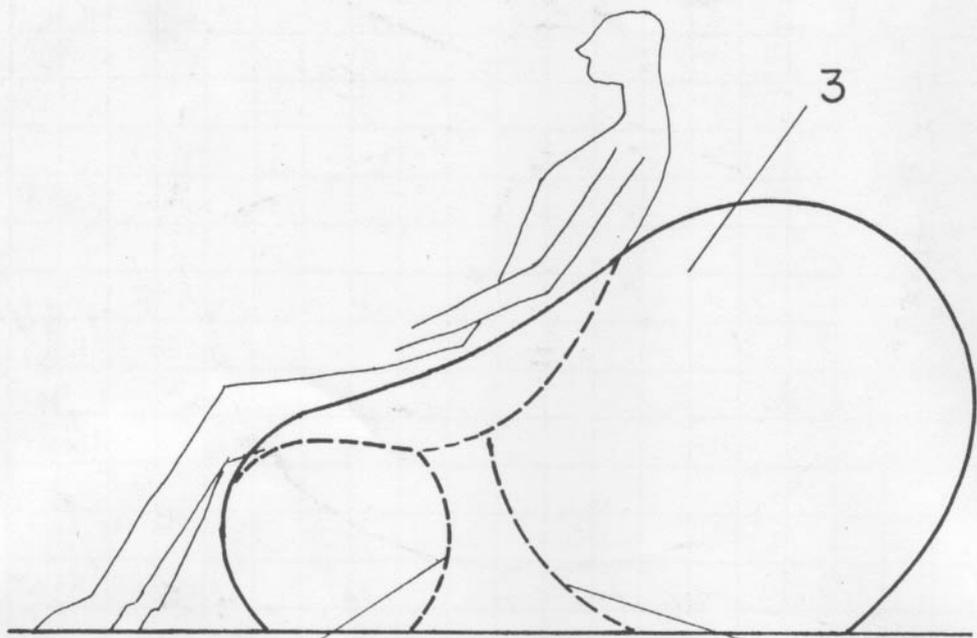


FIGURE 1  
SIDE VIEW

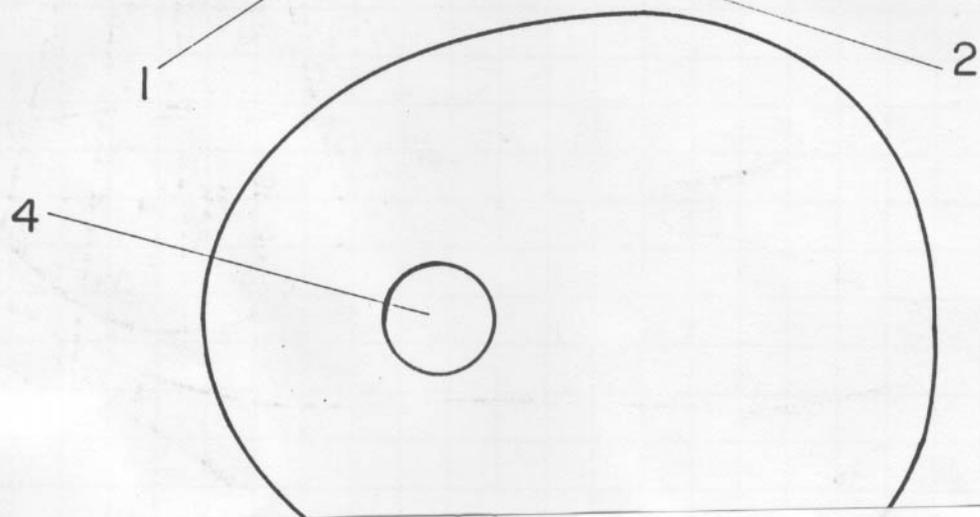


FIGURE 2  
TOP VIEW

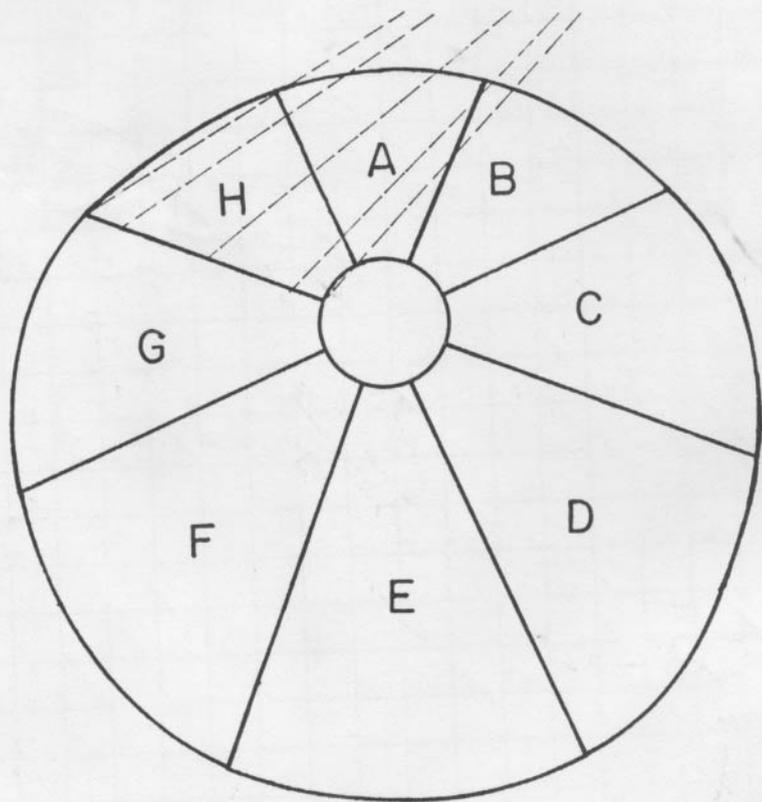


FIGURE 4

