United States Patent [19]

Maggs

[11] **3,893,731**

[45] **July 8, 1975**

[54] **ADJUSTABLE COUCH WITH ACOUSTICAL HEAD REST**

[76] Inventor: **Richard G. Maggs**, 4050 La Junta Dr., Claremont, Calif. 91711

[22] Filed: **Oct. 9, 1973**

[21] Appl. No.: **404,266**

[52] **U.S. Cl.** **297/456**; 5/12; 5/355; 297/396; 297/445; 297/DIG. 1

[51] **Int. Cl.** **A47c 7/2**; A47c 7/14

[58] **Field of Search** ..... 297/396, 452–456, 297/460, DIG. 1, DIG. 2; 5/12, 345, 355, 66

[56] **References Cited**

UNITED STATES PATENTS

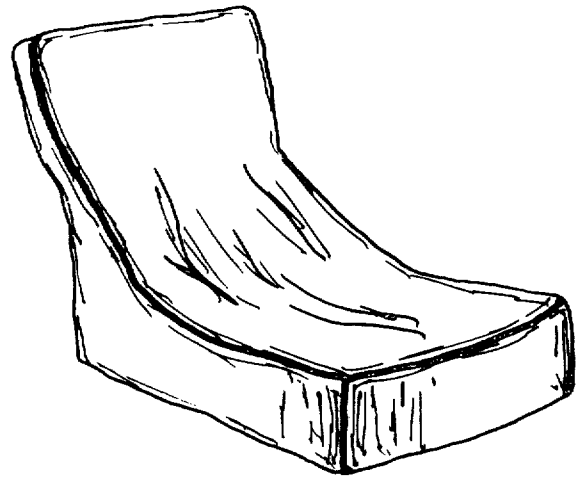
74,340	2/1868	Gilbert	297/DIG. 2
3,156,500	11/1964	Kerr	297/396 X
3,535,716	10/1970	Greiner	5/66
3,629,882	12/1971	Thorne	5/345 R
3,642,323	2/1972	Taylor	297/456
3,680,917	8/1972	Harris	297/456
3,766,577	10/1973	Stewart	5/12 R

Primary Examiner—Casmir A. Nunberg
Attorney, Agent, or Firm—Lyon & Lyon

[57] **ABSTRACT**

A couch comprising a bag partially filled with spherical pellets of foamed plastic and a head rest in the form of a foamed plastic block having a side exposed to the pellets within the couch bag, the shape of the couch bag being changeable by body pressure of the user whereby the spherical pellets may be caused to exert a force on the head rest to move the head rest into an upright head supporting position or into a range of inclined positions; the head rest containing speakers for the transfer of sound to a person reclining against the head rest.

3 Claims, 9 Drawing Figures



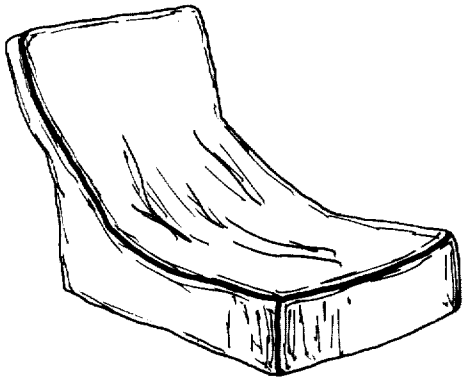


FIG. 1

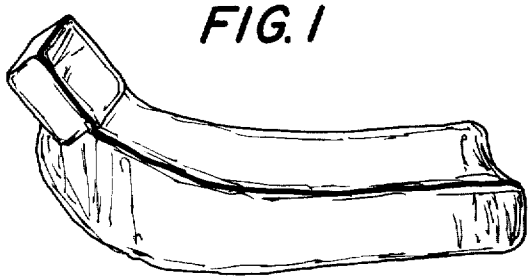


FIG. 2

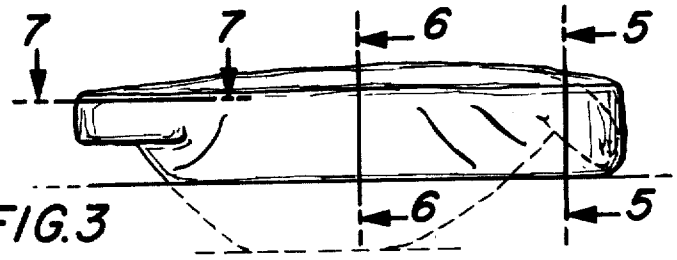


FIG. 3

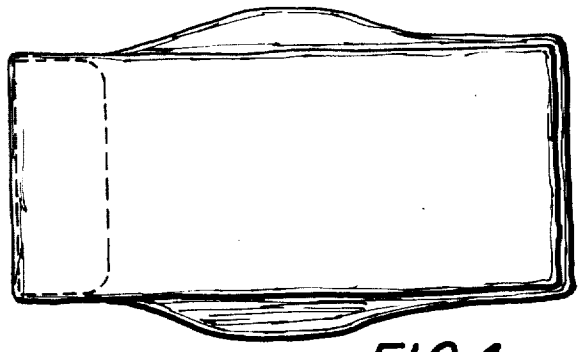


FIG. 4

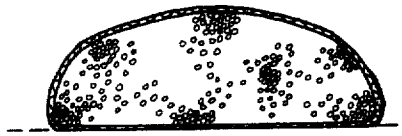


FIG. 6

FIG. 5

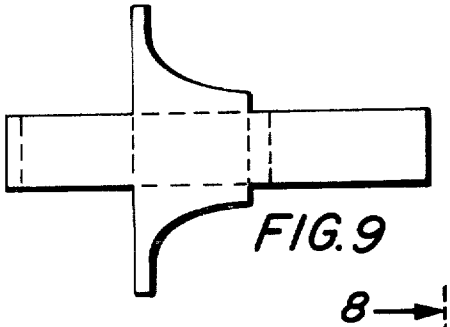


FIG. 9

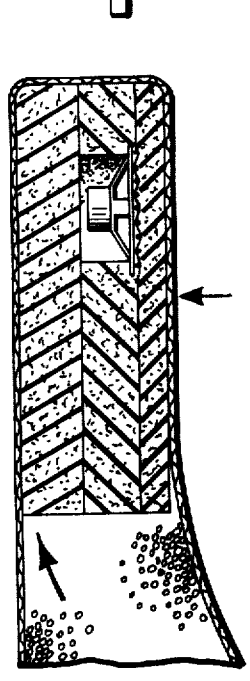


FIG. 8

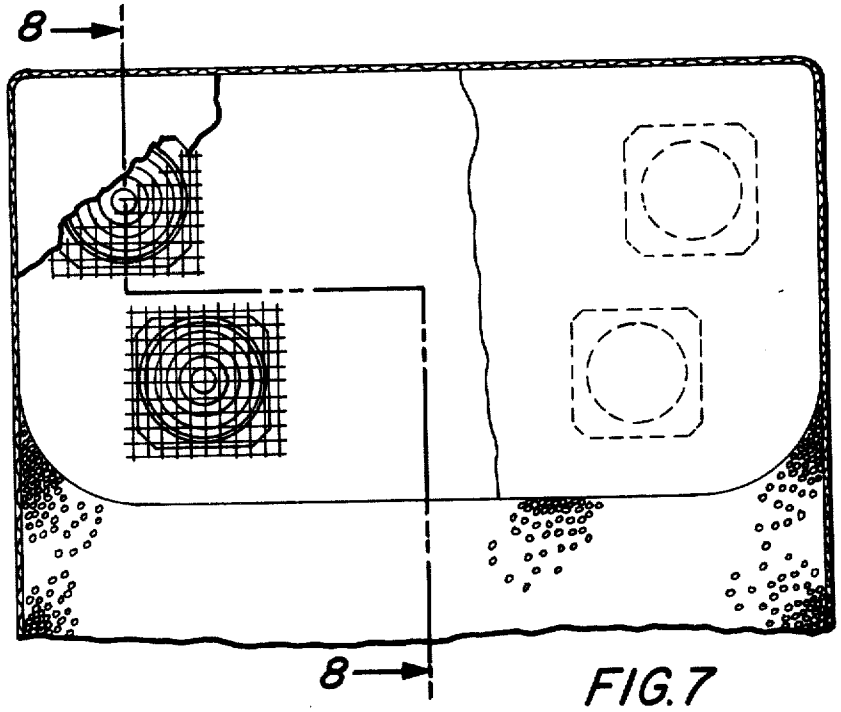


FIG. 7

ADJUSTABLE COUCH WITH ACOUSTICAL HEAD REST

BACKGROUND OF THE INVENTION

So called "bean bag" couches or pads have had substantial commercial success. Such a couch comprises a circular bag filled or almost filled with spherical foamed plastic particles, usually of different size varying between an eighth of an inch to a half inch in diameter. Such bags can be varied in shape by body pressure. However, this type of couch offers little or no head support and is not capable, for example, of supporting a person in an upright position to the extent of supporting the head, or providing a means for the support of sound producing means adjacent the head.

SUMMARY OF THE INVENTION

The present invention is directed to an adjustable couch utilizing mobile pellets and is summarized in the following objects.

First, to provide an adjustable couch including a bag containing mobile foamed plastic pellets and forming a seat cushion portion and back supporting cushion portion so constructed that a person, by application of body pressure, may adjust the back rest cushion portion between an essentially horizontal position and an essentially vertical position.

Second, to provide an adjustable couch as indicated in the preceeding object wherein the back supporting portion includes a novely arranged head rest cushion block which is manipulated by force exerted by the mobile pellets in response to application of body pressure.

Third, to provide an adjustable couch as indicated in the preceeding object wherein the head rest cushion block is arranged to receive small speakers in such a manner as to be heard by a person resting thereon with minimum sound dispersion outwardly from the couch.

DESCRIPTION OF THE FIGURES

FIG. **1** is a perspective view of the adjustable couch with the back portion in its raised condition.

FIG. **2** is a perspective view thereof with the back portion in an intermediate position.

FIG. **3** is a side view thereof with the couch as shown in a flat condition and indicating by broken lines, the shape of the couch in side aspect after the footing end is raised and the mobile pellets contained therein have been caused to flow by gravity towards the head end of the couch prior to using the couch.

FIG. **4** is a plan view of the couch corresponding to the solid line position of the couch shown in FIG. **3.**

FIG. **5** is a transverse sectional view taken through **5—5** of FIG. **3,** the wall thickness of the couch bag being exaggerated for purposes of illustration.

FIG. **6** is a transverse sectional view taken through **6—6** of FIG. **3.** FIG. **7** is an enlarged fragmentary sectional view taken through **7—7** of FIG. **3** showing particularly the head rest and showing the head rest in its upright position corresponding to FIG. **1.**

FIG. **8** is a fragmentary sectional view thereof taken through **8—8** of FIG. **7.**

FIG. **9** is a reduced developed view of the couch bag.

The adjustable couch includes a bag member **1** formed of fabric material or plastic material or a combination of both materials. Referring to FIG. **9,** the bag member includes side members **2** each having a concave margin, a bottom member **3,** back side **4,** a top edge **5,** a front edge **6,** and a top panel **7.** Except for the side members **2,** other parts of the bag member are of uniform width.

The top edge **5,** the adjacent portions of the side members **2,** as well as the adjacent portions of the back side **4** and top panel **7** form a head rest compartment **8** which receives a head rest cushion block **9** comprising a back panel **10,** a center panel **11,** and a front panel **12.** The panels are formed of a resilient foamed plastic material, the front panel being relatively soft while the back and center panel may be formed of somewhat stiffer material.

The bag member, except for the head rest compartment **8,** is filled with mobile pellets **13** which may be formed of foamed plastic material. The pellets may vary in size from an eighth of an inch in diameter to three-eighths of an inch, the percentage of each size being selected to provide maximum mobility. Such pellets are commonly used for the packaging of delicate instruments. Also such pellets have been used in the so called "bean bag" cushions as well as pillows. An appropriate opening, not shown, is provided for introducing the pellets into the bag member, which opening may be permanently sealed or closed by a slide fastener. Preferably, a dual slide fastener, that is an inter- and outer- side fastener is provided, to minimize the chance that the contents may escape from the bag. The pellets are not packed tightly in the bag.

Operation of the adjustable couch is as follows:

One convenient way of manipulating the couch is to pick up the foot end so that the pellets move by gravity toward the head end of the couch as indicated by broken lines in FIG. **3.** A person then sits on the midportion of the couch with his feet overlying the foot end. By appropriate body movement, a depression is formed in the midportion of the bag member which causes the back supporting portion of the couch to arch upwardly as indicated in FIG. **2.** Further manipulation causes the back portion to assume almost a vertical position as indicated in FIG. **1.** Similarly, by movement of the legs, the seat portion of the couch may be manipulated for maximum comfort.

By reason of the fact that the cushion block **9** completely fills the compartment **8,** the cushion block functions as a unit. By position of a downward and rearward body thrust, the pellets exert a pressure indicated generally by the arrow **14** in FIG. **8** so as to tilt the head rest cushion block toward a vertical position. If the head and shoulders are pressed against the head rest block and adjacent portion of the back of the bag member, as indicated by the arrows **15,** the head rest and the back portion of the couch may be moved from the position shown in FIG. **1** toward the position shown in FIG. **2.**

The head rest may serve an added purpose without interfering with the adjustment of the couch. That is, the head rest cushion block may be equipped with speakers **16.** Two speakers may be provided for stereo use of four speakers for four channel use. These are positioned in pockets formed in the lateral portions of the central head rest block. Each speaker opening is covered by a supporting wire frame **18** and the front panel is sufficiently thick that no discomfort results should one press his head against the wire frame.

Having fully described my invention it is to be understood that I am not to be limited to the details herein

set forth, but that my invention is of the full scope of the appended claims.

I claim:

1. A couch structure, comprising:

a. a bag member including side walls of greater dimension at their central portions and lesser dimension at their end portions, and a botton wall, back wall, end walls and top wall of essentially uniform width;

b. mobile pellets contained in the bag member;

c. the bag member being dimensioned to receive a person thereon, and the mobile pellets being responsive to body pressure so as to permit the upper surface of the bag member to conform to a person supported thereon;

d. a head rest extension formed by an end wall and adjacent end portions of the side walls, back wall and top wall of the bag member and forming a compartment exposed to the interior of the bag member;

e. and a cushion block filling the compartment and presenting an end surface exposed to the mobile pellets whereby a varying direction of force exerted by the pellets against the end surface of the cushion block due to body movement on the bag member causes the head rest to tilt as a unit.

2. A couch structure, as defined in claim 1, wherein:

a. the cushion block is formed of foamed plastic material;

b. and a pair of speakers are embedded therein at laterally portions of the central portion of the cushion.

3. A couch structure, comprising:

a. a bag member;

b. mobile pellets contained therein;

c. the bag member including a mobile seat cushion portion and a mobile back cushion portion merging with the seat cushion portion, the bag member increasing in thickness toward the juncture of the seat cushion portion and back cushion portion;

d. the pellets being responsive to body pressure of a person supported on the bag member to shift the back cushion portion between an essentially horizontal position and an essentially vertical position;

e. the mobile back cushion portion including an extension forming compartment open toward the mobile seat cushion portion;

f. a cushion block formed of foamed plastic laminations including an intermediate lamination having at least one speaker cavity therein, said cushion block being disposed in the compartment, the bottom side of the cushion block being subject to force exerted by the pellets to tilt the extension and cushion block therein as a unit in response to shifting of the direction and area in which force is applied to the mobile seat cushion portion;

g. and a speaker mounted in the cavity.

* * * * *