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(12) **United States Design Patent** (10) **Patent No.:** **US D976,344 S**  
**Whalen et al.** (45) **Date of Patent:** **\*\* Jan. 24, 2023**

(54) **ENCLOSURE OF A DAP UNWEIGHTING SYSTEM**

FOREIGN PATENT DOCUMENTS

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CN 104800047 A 7/2015  
JP 2001112686 A 4/2001  
(Continued)

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OTHER PUBLICATIONS

Showa Denki Taiwan, “**てらすウォーカー**, **取扱説明書・注意書**” (“Terasu Walker, Instruction Manual”), May 14, 2015, Taiwan.  
(Continued)

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(\*\*) Term: **15 Years**

(57) **CLAIM**

(21) Appl. No.: **29/807,230**

The ornamental design for an enclosure of a DAP unweighting system, as shown and described.

(22) Filed: **Sep. 9, 2021**

**DESCRIPTION**

(51) **LOC (14) Cl.** ..... **21-02**

(52) **U.S. Cl.**  
USPC ..... **D21/669**; D21/694

(58) **Field of Classification Search**  
USPC ..... D21/668, 669, 662, 694, 678, 686, 697; 128/202.12, 205.26; 482/5, 27, 54, 57, 482/111; D14/356, 388  
CPC ..... A63B 22/02; A63B 21/00181; A63B 2225/60; A63B 2208/03; A63B 22/0023; A63B 2208/053; A63B 2208/056; A63B 22/0605; A63B 22/0664; A63B 2220/56; A63B 69/0064; A63B 23/04; A61H 3/008;  
(Continued)

FIG. 1 is a front perspective view of an enclosure of a dap unweighting system showing our new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a right side view thereof;  
FIG. 5 is a left side view thereof;  
FIG. 6 is a top view thereof;  
FIG. 7 is a bottom view thereof; and,  
FIG. 8 is a front perspective view thereof depicted with an example user in a usage condition.

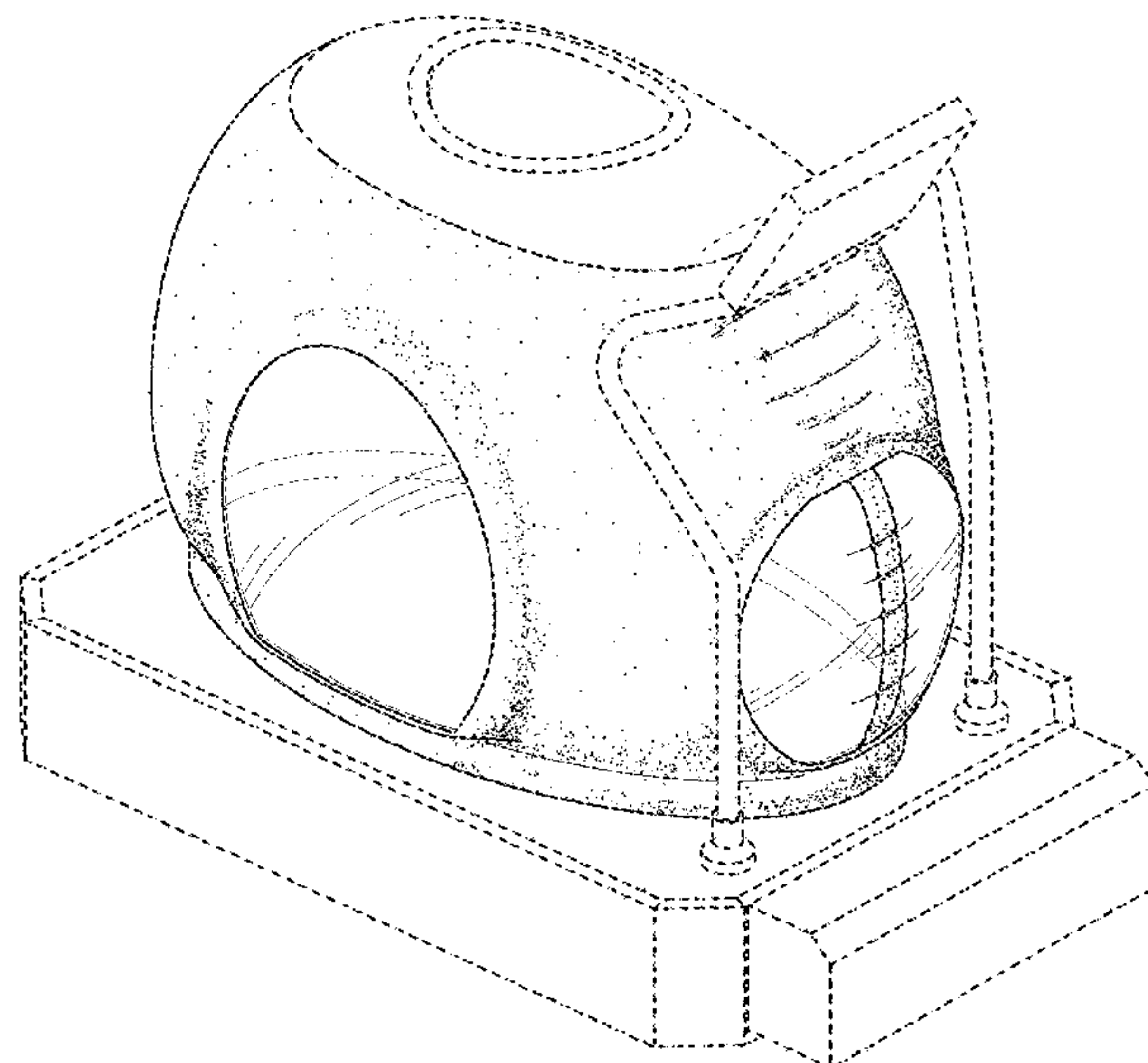
The dash-dot-dash broken lines immediately adjacent to the shaded area define the bounds of the claimed design and form no part thereof. The solid line immediately adjacent to the shaded area at the bottom of the enclosure defines a lower boundary of the claimed design. The evenly-spaced broken line showing of the remainder of the differential air pressure unweighting system and the dash-dot-dash broken line showing of the example user form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,095,561 A \* 6/1978 Ruetenik ..... A01K 15/027 119/700  
D259,367 S \* 5/1981 Talbot ..... D21/669  
(Continued)

**1 Claim, 8 Drawing Sheets**



(58) **Field of Classification Search**  
 CPC ..... A61H 1/0214; A61H 2201/1261; A61H  
 1/0262  
 See application file for complete search history.

7,762,930 B2 7/2010 Egger  
 7,837,597 B2 11/2010 Reyes et al.  
 8,075,453 B1 12/2011 Wilkinson  
 8,272,998 B2\* 9/2012 Macartney ..... A01K 15/027  
 119/702

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,332,217 A \* 6/1982 Davis ..... A61D 11/00  
 119/700  
 4,576,376 A \* 3/1986 Miller ..... A63B 22/02  
 482/111  
 4,614,337 A \* 9/1986 Schonenberger ..... A63B 22/02  
 482/54  
 4,759,544 A \* 7/1988 Diaz ..... A63B 22/16  
 482/57  
 4,776,581 A \* 10/1988 Shepherdson ..... A63B 22/02  
 D24/188  
 4,776,582 A 10/1988 Ramhorst  
 D304,222 S \* 10/1989 Keller ..... D21/669  
 4,938,469 A \* 7/1990 Crandell ..... A63B 22/025  
 4/492  
 5,108,088 A \* 4/1992 Keller ..... A63B 22/02  
 482/4  
 5,109,837 A \* 5/1992 Gamow ..... A62B 31/00  
 128/200.24  
 5,133,339 A \* 7/1992 Whalen ..... A63B 21/00181  
 482/52  
 5,207,622 A 5/1993 Wilkinson et al.  
 5,295,929 A \* 3/1994 Weisz ..... A63B 22/02  
 482/111  
 D347,912 S \* 6/1994 Golden ..... D21/669  
 D350,421 S \* 9/1994 Brubaker ..... D30/160  
 D355,003 S \* 1/1995 Edwards ..... D21/694  
 D355,660 S \* 2/1995 Holmes ..... D21/828  
 D363,067 S \* 10/1995 Holmes ..... D14/356  
 D370,508 S \* 6/1996 Drennan ..... D21/669  
 D370,509 S \* 6/1996 Gillott ..... D21/669  
 D374,046 S \* 9/1996 Drennan ..... D21/669  
 D384,712 S \* 10/1997 Scott ..... D21/668  
 D420,713 S \* 2/2000 Afilani ..... D21/669  
 D424,139 S \* 5/2000 Gwin ..... D21/669  
 6,352,078 B1\* 3/2002 Harvey ..... A61G 10/026  
 128/200.24  
 6,666,831 B1\* 12/2003 Edgerton ..... A63B 69/0064  
 600/595  
 D495,384 S 8/2004 Rolfes  
 D497,961 S 11/2004 Rolfes  
 6,837,186 B1\* 1/2005 Terao ..... A01K 15/027  
 119/701  
 D515,153 S \* 2/2006 Rolfes ..... D21/697  
 D531,238 S \* 10/2006 Hoggan ..... D21/697  
 7,141,007 B2\* 11/2006 Egger ..... A63B 22/0605  
 482/57  
 D534,973 S \* 1/2007 Flick ..... D21/669  
 D538,863 S \* 3/2007 Hoggan ..... D21/694  
 D558,936 S \* 1/2008 Tamura ..... D30/160  
 7,536,977 B1\* 5/2009 Williams ..... A01K 15/027  
 119/700

8,464,716 B2 6/2013 Kuehne et al.  
 D695,856 S 12/2013 Jacobs et al.  
 8,840,572 B2 9/2014 Whalen et al.  
 8,900,098 B2 12/2014 Egan  
 D725,721 S \* 3/2015 Azoulay ..... D21/662  
 D726,845 S 4/2015 Hubler et al.  
 D728,045 S 4/2015 Hubler et al.  
 D739,902 S 9/2015 Hubler et al.  
 9,272,175 B2 3/2016 Egan  
 D787,516 S \* 5/2017 Goetgeluk ..... D21/324  
 9,642,764 B2 5/2017 Kuehne et al.  
 10,004,056 B2 6/2018 Whalen et al.  
 D837,312 S \* 1/2019 Lisi ..... D21/669  
 D844,160 S \* 3/2019 Bajard ..... D24/204  
 D848,685 S \* 5/2019 Song ..... D21/669  
 D870,730 S \* 12/2019 Wang ..... D21/828  
 D870,827 S \* 12/2019 Wang ..... D14/388  
 D876,557 S \* 2/2020 Tajima ..... D21/678  
 10,843,036 B2 11/2020 Bayerlein et al.  
 D915,529 S 4/2021 Johnson et al.  
 D955,486 S \* 6/2022 Wang ..... D21/325  
 2007/0054783 A1\* 3/2007 Egger ..... A63B 24/00  
 601/1  
 2007/0109259 A1\* 5/2007 Liu ..... G06F 3/011  
 345/156  
 2014/0111424 A1\* 4/2014 Goetgeluk ..... A63B 69/0064  
 345/156  
 2014/0113775 A1\* 4/2014 Egan ..... A63B 23/02  
 482/54  
 2014/0194252 A1 7/2014 Arimoto et al.  
 2015/0378239 A1 12/2015 Zhou et al.  
 2016/0008650 A1\* 1/2016 Jue ..... A63B 21/4009  
 482/54  
 2016/0038071 A1\* 2/2016 Williams ..... A61B 5/6888  
 482/52  
 2017/0128769 A1 5/2017 Long et al.  
 2018/0157318 A1\* 6/2018 Wang ..... A63B 71/0054  
 2019/0099315 A1\* 4/2019 Kuehne ..... A63B 22/0235  
 2019/0255381 A1\* 8/2019 Bayerlein ..... A63B 22/025  
 2019/0392939 A1 12/2019 Basta et al.  
 2020/0384309 A1 12/2020 Long et al.  
 2021/0187348 A1 6/2021 Phillips et al.

FOREIGN PATENT DOCUMENTS

JP 2002360644 A 12/2002  
 JP D1395000 8/2010

OTHER PUBLICATIONS

Showa Denki Taiwan, "Showa For Medical", Oct. 16, 2014, Taiwan.  
 Federal Laboratory Consortium for Technology Transfer, Newslink,  
 "Assistive Technology 'Miracles' at VA Centers of Excellence," vol.  
 15, No. 12, Nov. 1999.

\* cited by examiner



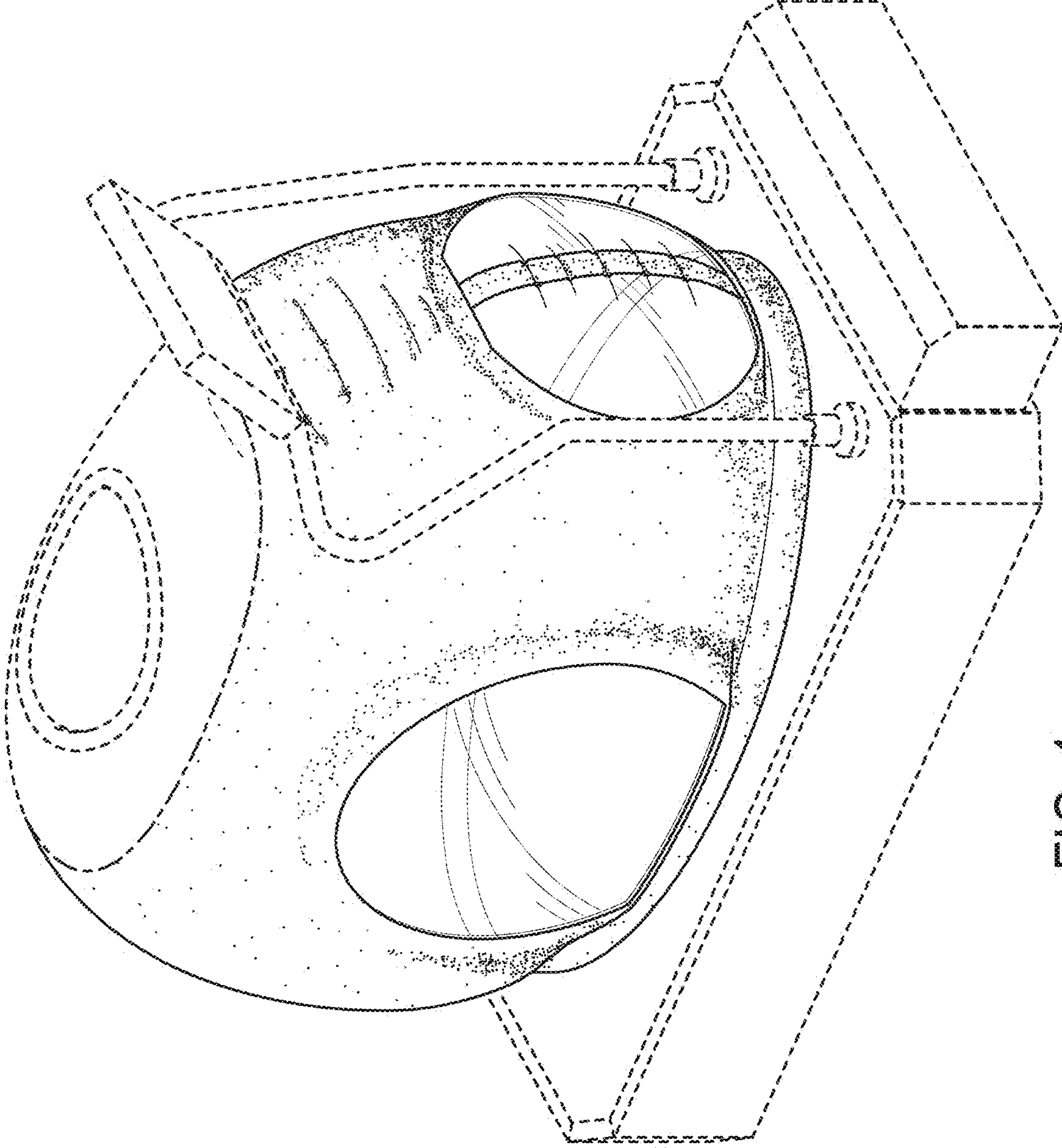


FIG. 1

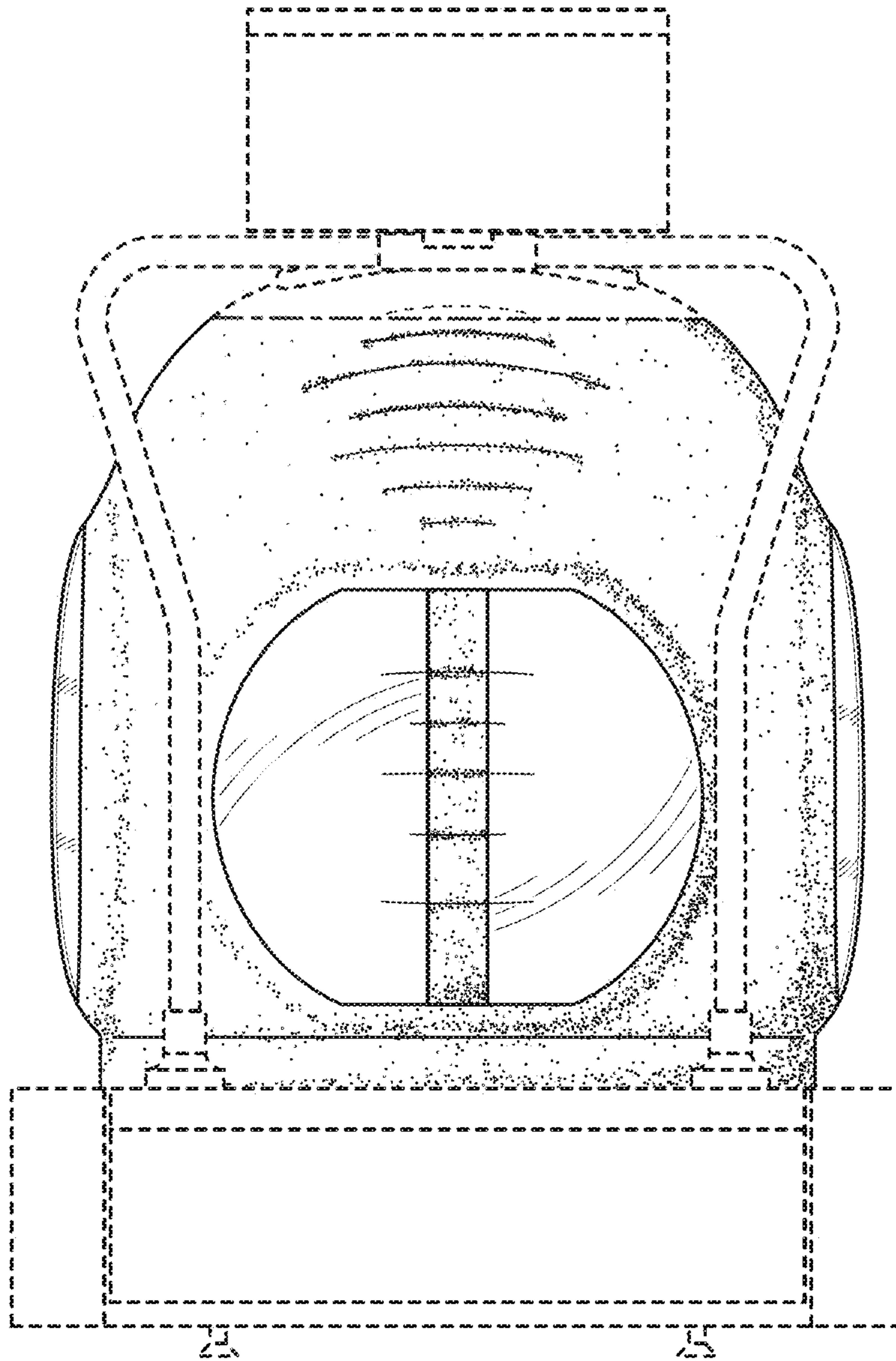


FIG. 2

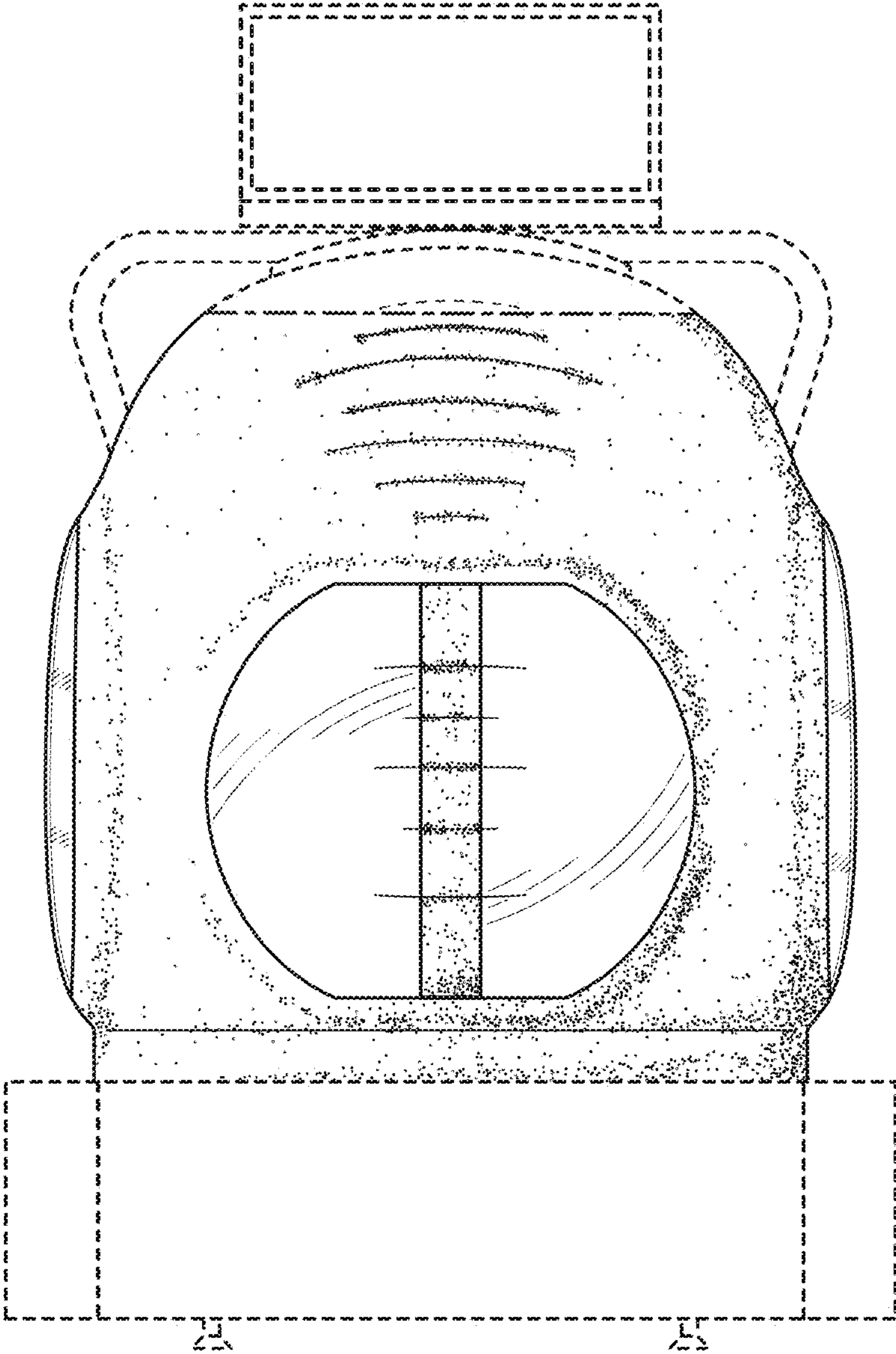


FIG. 3

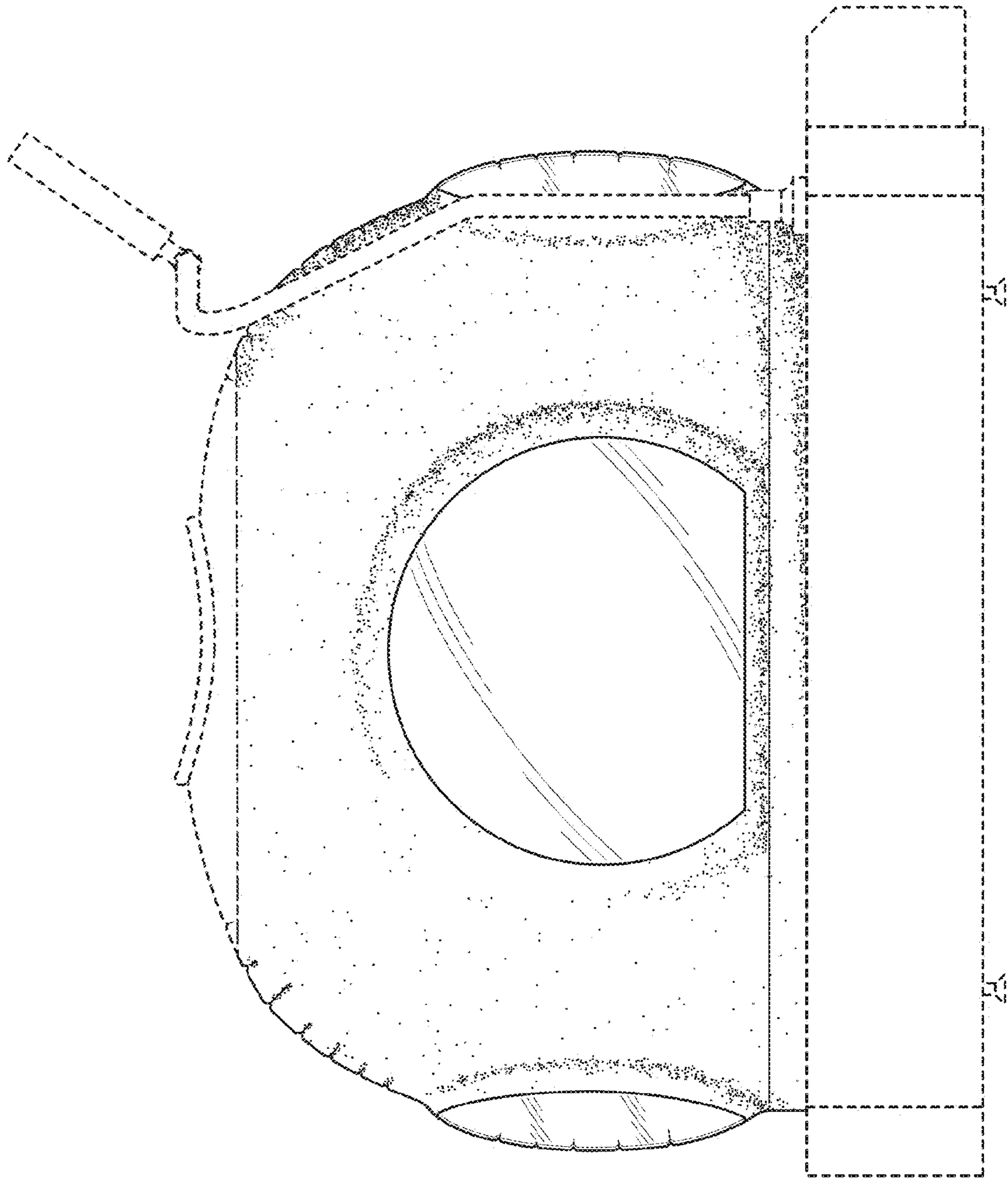


FIG. 4



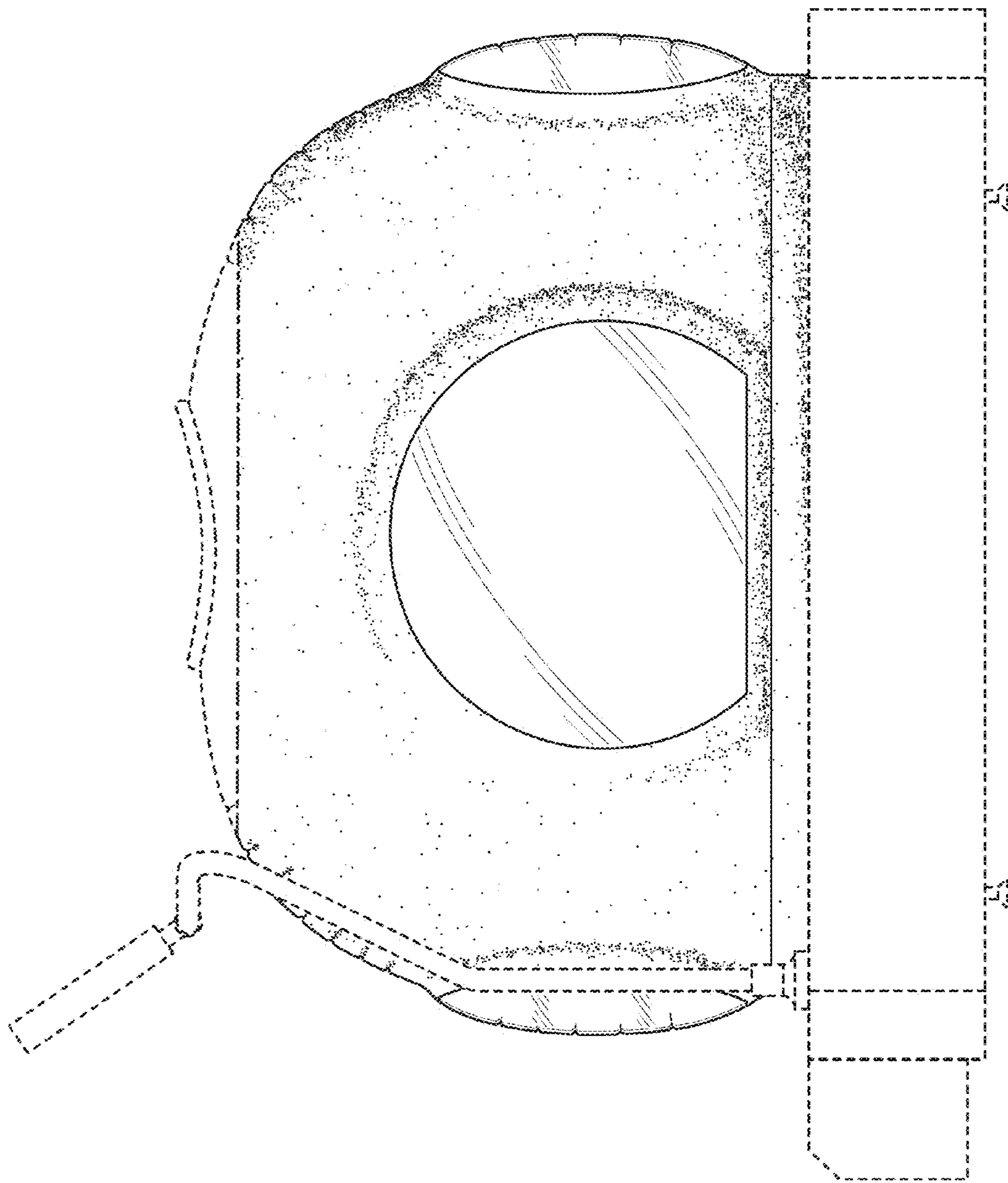


FIG. 5

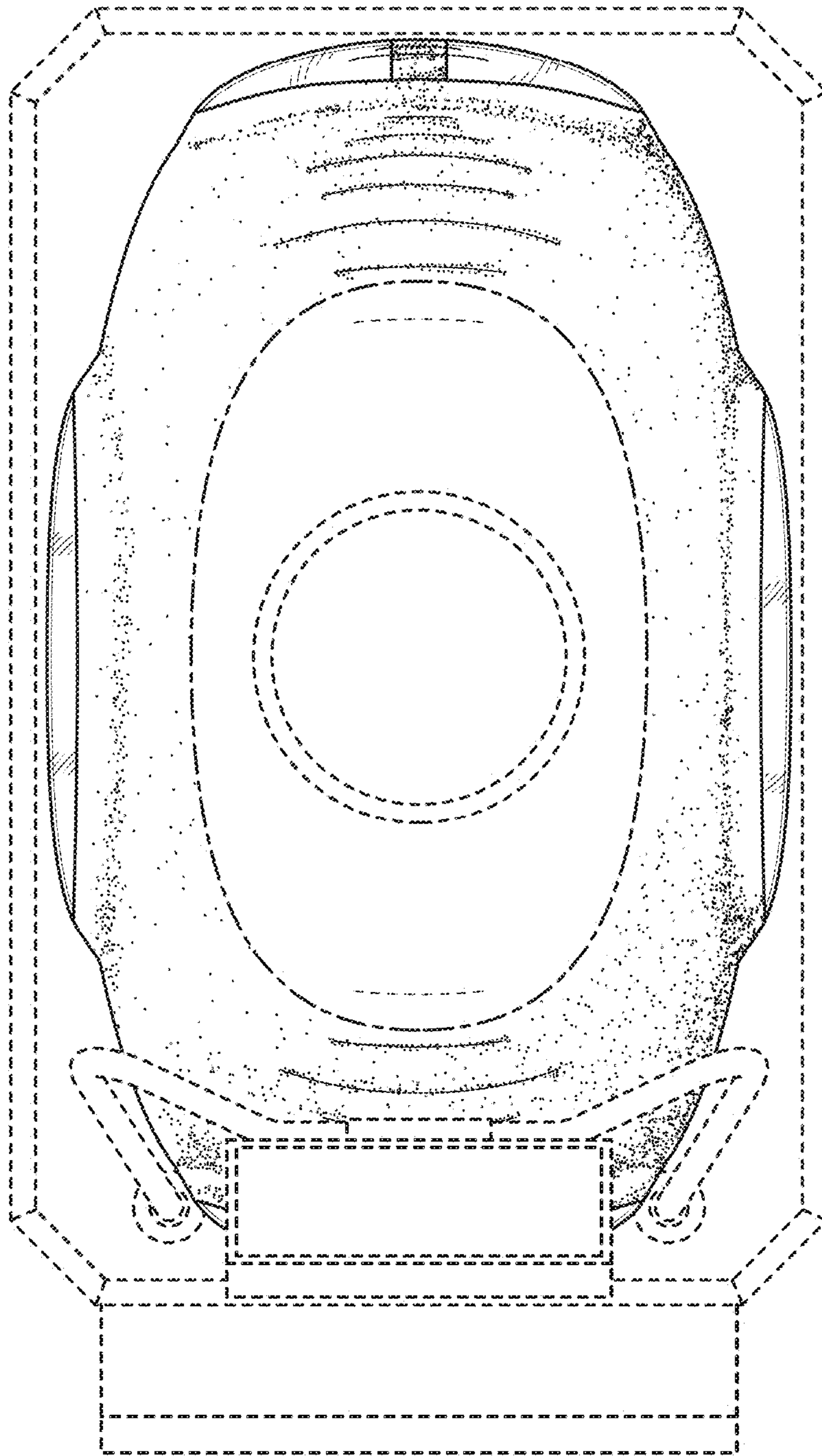


FIG. 6



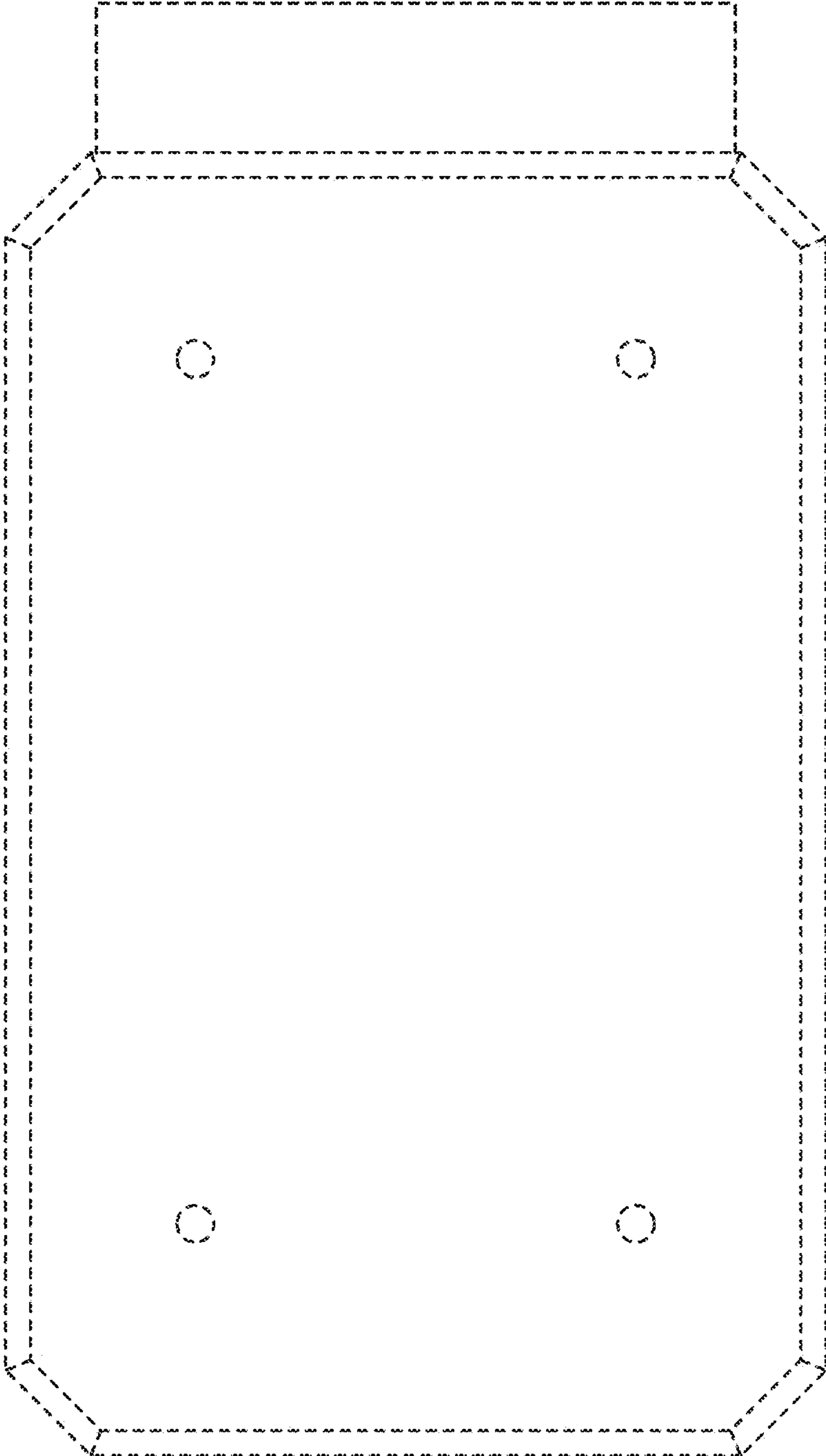


FIG. 7

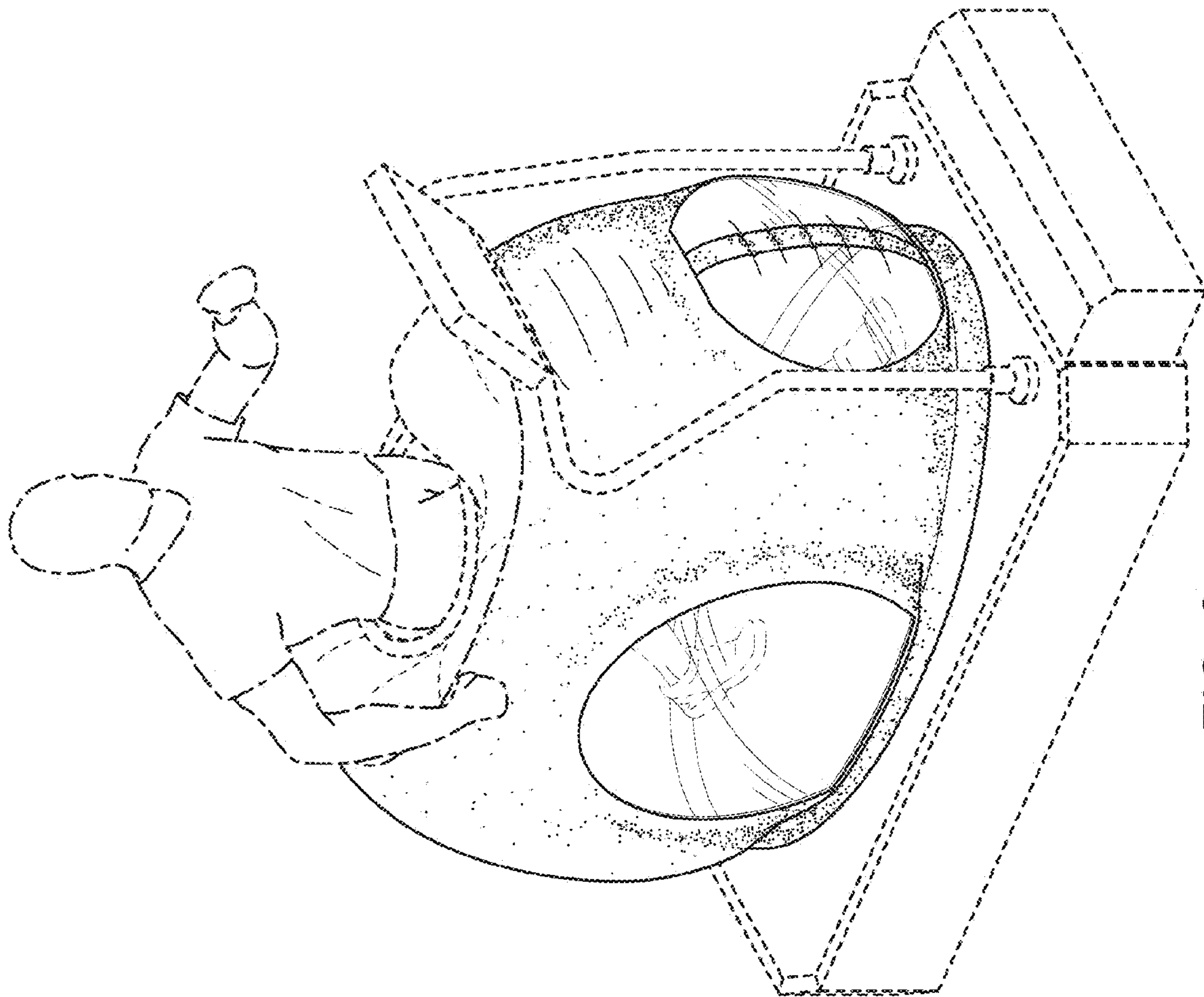


FIG. 8