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(12) **United States Design Patent** (10) **Patent No.:** **US D945,599 S**
Rosenberg et al. (45) **Date of Patent:** **** Mar. 8, 2022**

(54) **RESPIRATOR** 2,444,417 A * 7/1948 Bierman A62B 18/00
128/201.19

(71) Applicant: **Grove Biomedical, LLC**, Waccabuc, NY (US) 2,798,483 A 7/1957 Kashima
2,928,387 A 3/1960 Layne
(Continued)

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FOREIGN PATENT DOCUMENTS

CN 306121074 * 10/2020
CN 306958041 * 11/2021
(Continued)

OTHER PUBLICATIONS

(73) Assignee: **Grove Biomedical, LLC**, Waccabuc, NY (US) Canopy (available [online]) Retrieved from the internet Jan. 7, 2022 from URL: <https://www.onecanopy.com/> (Year: 2022).*
(Continued)

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

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(51) **LOC (13) Cl.** **29-02**

(52) **U.S. Cl.**
USPC **D24/110.1**; D29/108

(58) **Field of Classification Search**
USPC D24/110, 110.1–110.6; D29/108
CPC . A41D 13/11; A41D 13/1107; A41D 13/1115; A41D 13/1123; A41D 13/113; A41D 13/1138; A41D 13/1146; A41D 13/1153; A41D 13/1161; A41D 13/1169; A41D 13/1176; A62B 18/00; A62B 18/02; A62B 18/025; A62B 23/00; A61M 16/06
See application file for complete search history.

(57) **CLAIM**

The ornamental design for a respirator, as shown and described.

DESCRIPTION

This application is related to U.S. application Ser. No. 16/918,702, filed Jul. 1, 2020, the contents of which are incorporated by reference herein in their entirety.

FIG. 1 is a perspective view of a respirator, illustrating our new design;

FIG. 2 is a front elevational view;

FIG. 3 is a rear elevational view;

FIG. 4 is a right-side elevational view;

FIG. 5 is a left-side elevational view;

FIG. 6 is a top plan view; and,

FIG. 7 is a bottom plan view.

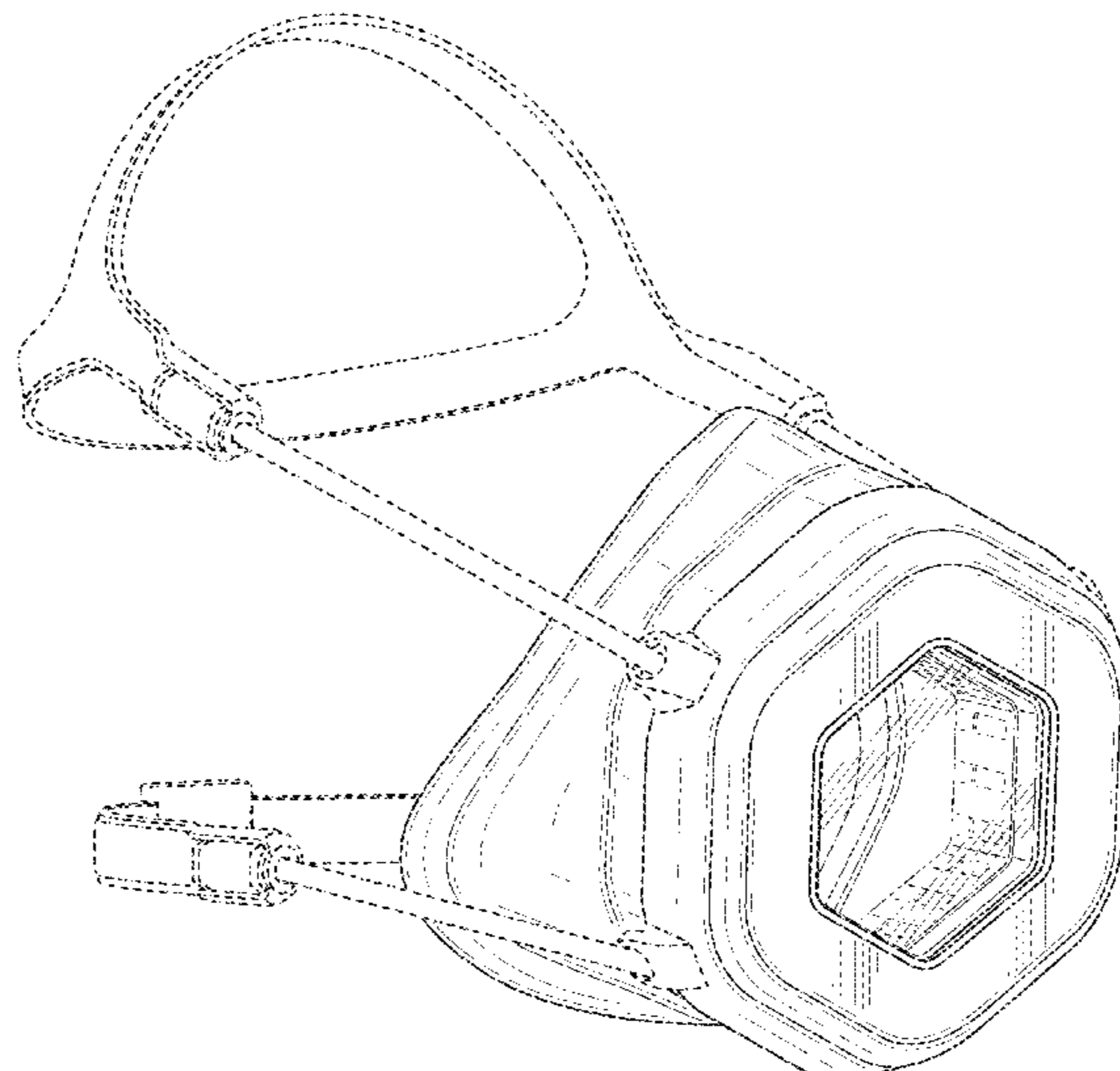
In the figures, the broken lines indicate environmental structure that forms no part of the claim.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D57,528 S * 4/1921 Knoblock D24/110.1
2,067,822 A * 1/1937 Biederman A62B 18/025
128/206.17
2,166,164 A * 7/1939 Lehmborg A62B 18/025
128/206.24

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,072,119 A * 1/1963 Matheson A62B 23/02
128/206.17
4,179,274 A * 12/1979 Moon A62B 23/02
128/206.17
4,549,543 A * 10/1985 Moon A62B 18/025
128/206.12
4,573,464 A * 3/1986 Yo A62B 18/10
128/206.15
4,793,343 A * 12/1988 Cummins, Jr. ... A61M 16/1075
128/203.27
4,898,311 A 2/1990 Boyer
5,372,130 A * 12/1994 Stern A62B 18/006
128/205.25
6,497,232 B2 12/2002 Fecteau et al.
7,036,508 B2 5/2006 Kwok
9,457,207 B2 10/2016 Waterford
10,945,469 B1 * 3/2021 Rosenberg A41D 13/1161
2004/0221849 A1 11/2004 Shue et al.
2006/0230485 A1 10/2006 Lee
2010/0269831 A1 * 10/2010 Skov A62B 18/10
128/206.15
2012/0234319 A1 9/2012 Eifler
2014/0216476 A1 8/2014 Brace et al.
2015/0047642 A1 2/2015 Tucker et al.
2015/0053206 A1 2/2015 Seppälä et al.
2016/0030779 A1 2/2016 Twu et al.
2017/0007861 A1 1/2017 Parham et al.
2017/0119106 A1 5/2017 Leslie
2021/0298385 A1 * 9/2021 Hays A62B 23/025

2021/0307414 A1 * 10/2021 Korathu-Larson
A41D 13/1138
2021/0316170 A1 * 10/2021 Domoy A62B 23/025
2021/0353972 A1 * 11/2021 Adam B01D 46/0004

FOREIGN PATENT DOCUMENTS

CN 307007132 * 12/2021
CN 307022578 * 12/2021
EM 008710958-0014 * 12/2021
JP D1703048 * 12/2021
KR 301136278.0000 * 11/2021
WO WO-D213749-001 * 9/2021

OTHER PUBLICATIONS

Jelli M1 (available [online] Jul. 2, 2021) Retrieved from the internet Jan. 10, 2022 from URL: <https://www.amazon.com/Jelli-M1-Transparent-Breathable-Adjustable/dp/B091SQ2GQH/> (Year: 2021).*
Jinjiums Clear Face Coverings (available online Oct. 27, 2020) Retrieved from the internet Jan. 10, 2022 from URL: <https://www.amazon.com/jinjiums-Alternatives-Transparent-Respirator-Comfortable/dp/B08Q8DXVXH/> (Year: 2020).*
Peters, Adele. "This reusable mask is designed to fix the 28 major problems with the N95," Fast Company. Internet. Available at https://www.fastcompany.com/90542976/this-reusable-mask-is-designed-to-fix-the-28-major-problems-with-the-n95?partner=rss&utm_source=rss&utm_medium=feed&utm_campaign=rss+fastcompany&utm_content=rss, Aug. 24, 2020.

* cited by examiner

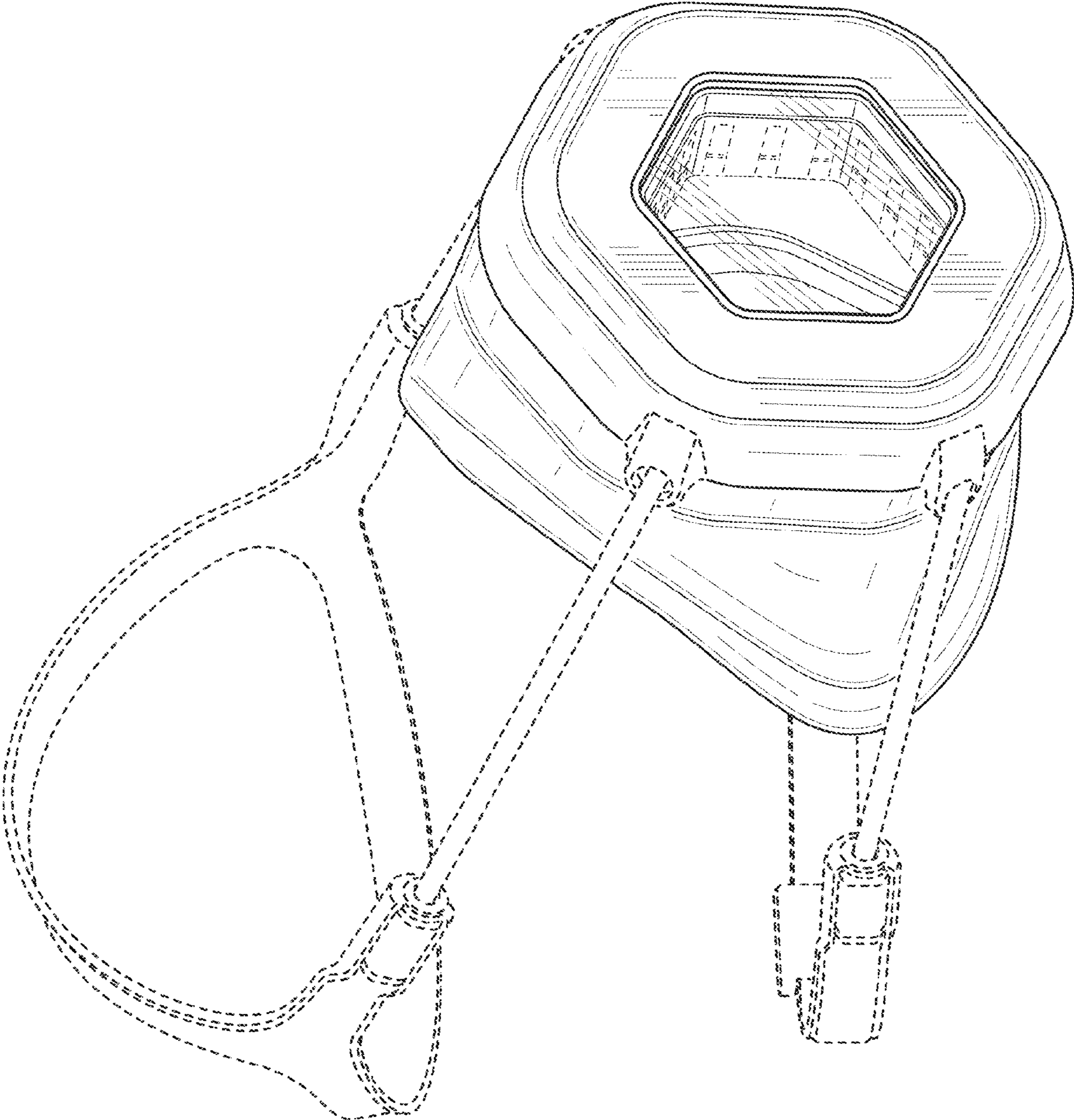


FIG. 1

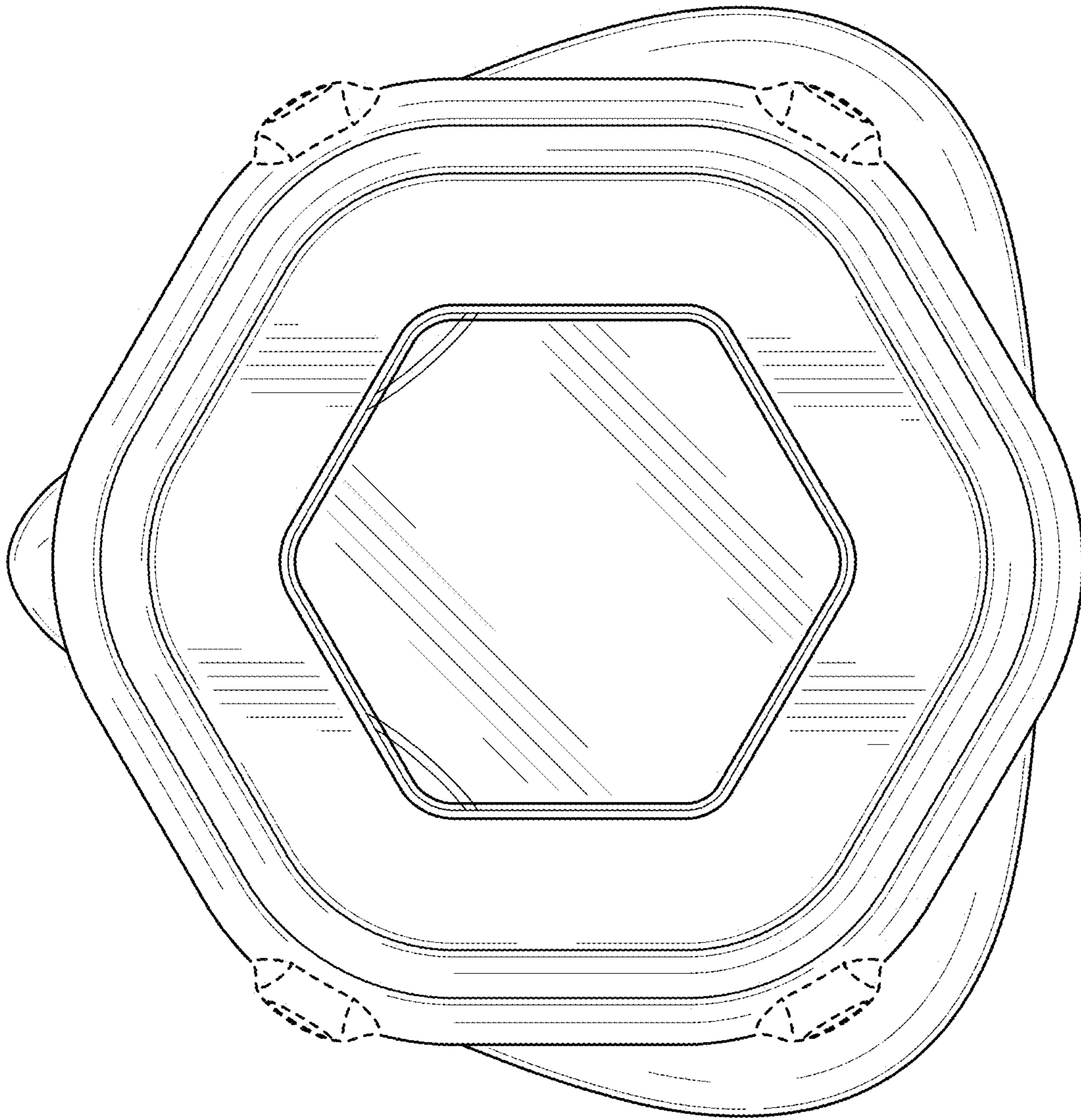


FIG. 2

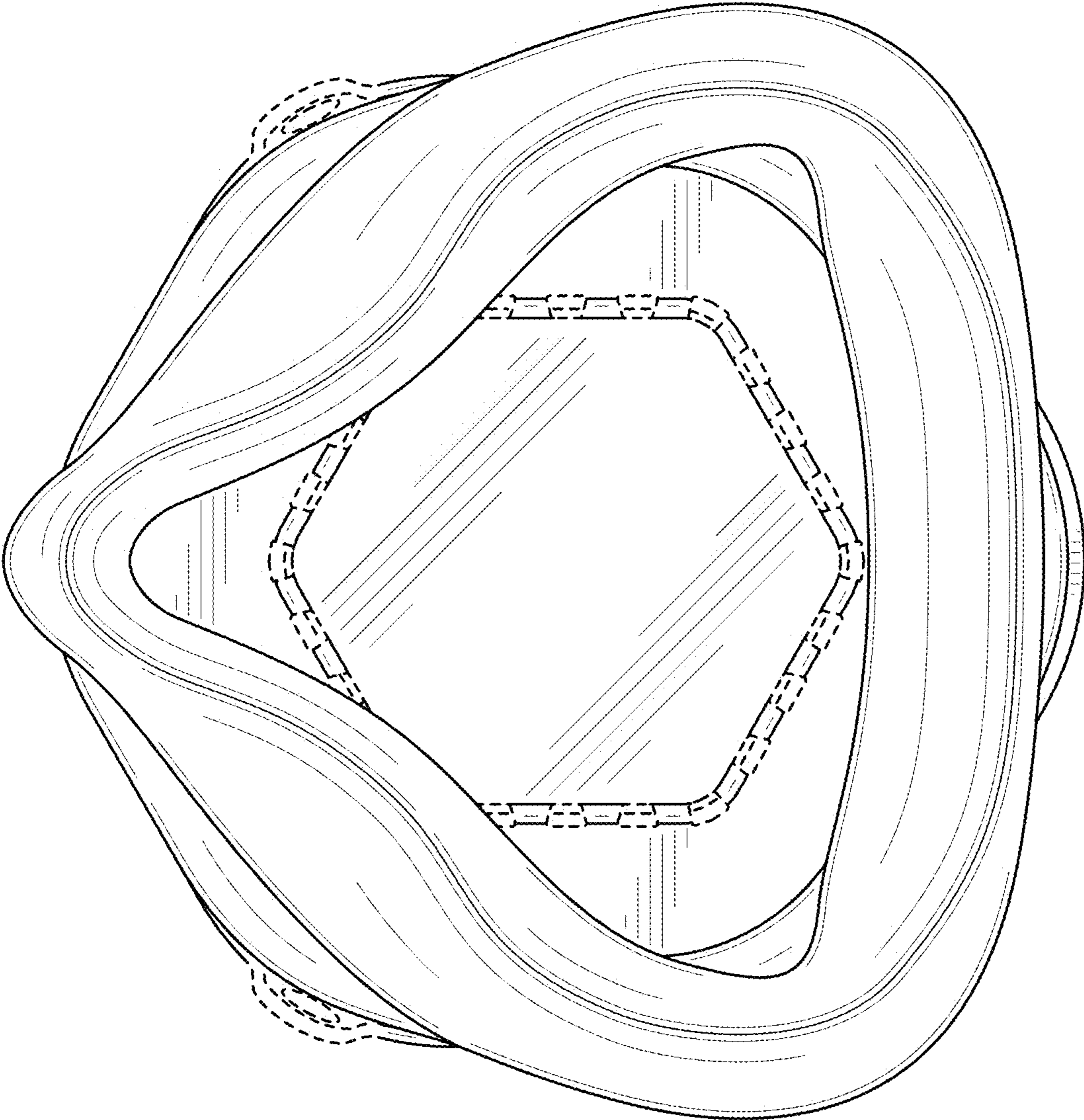


FIG. 3

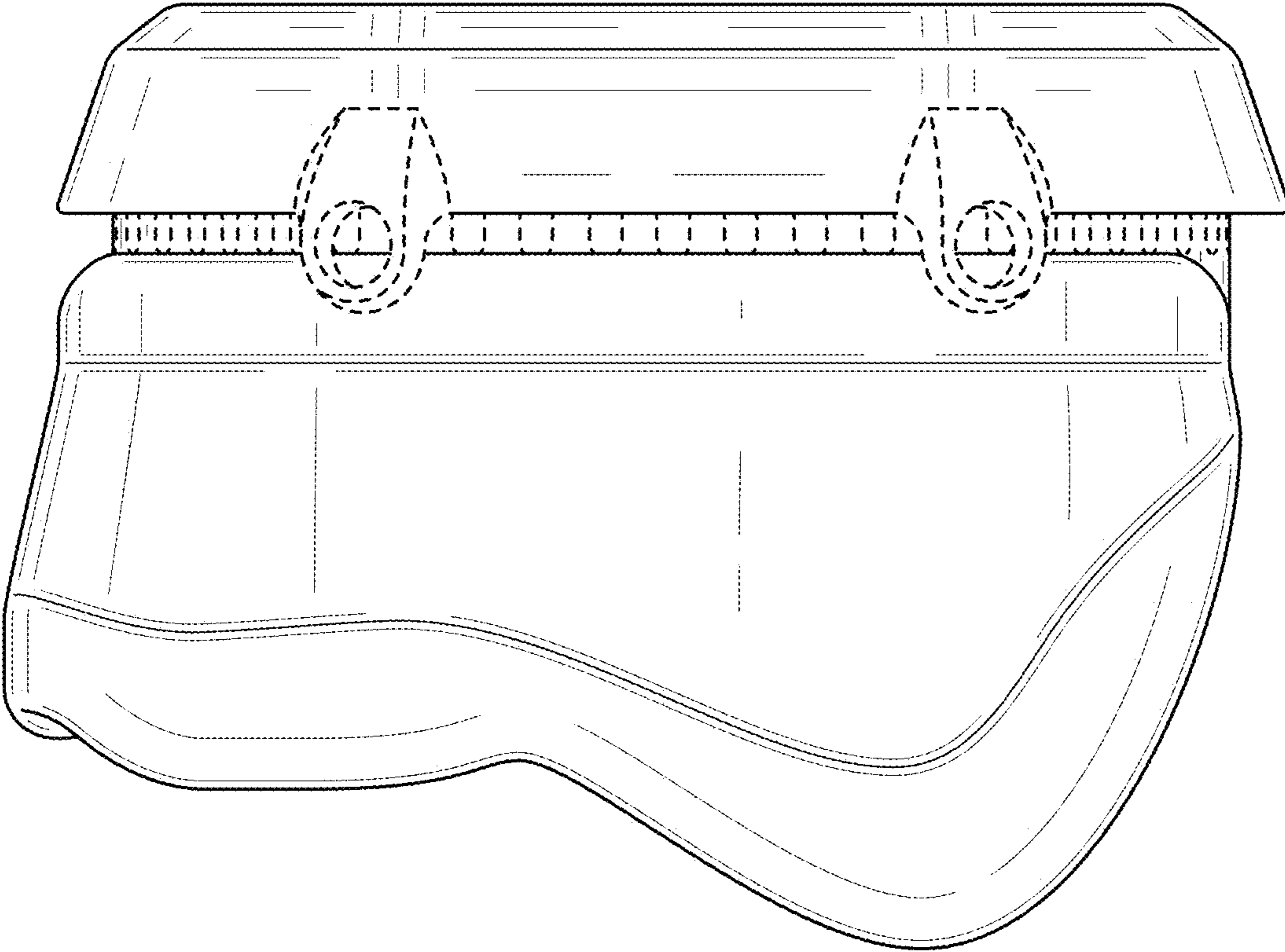


FIG. 4

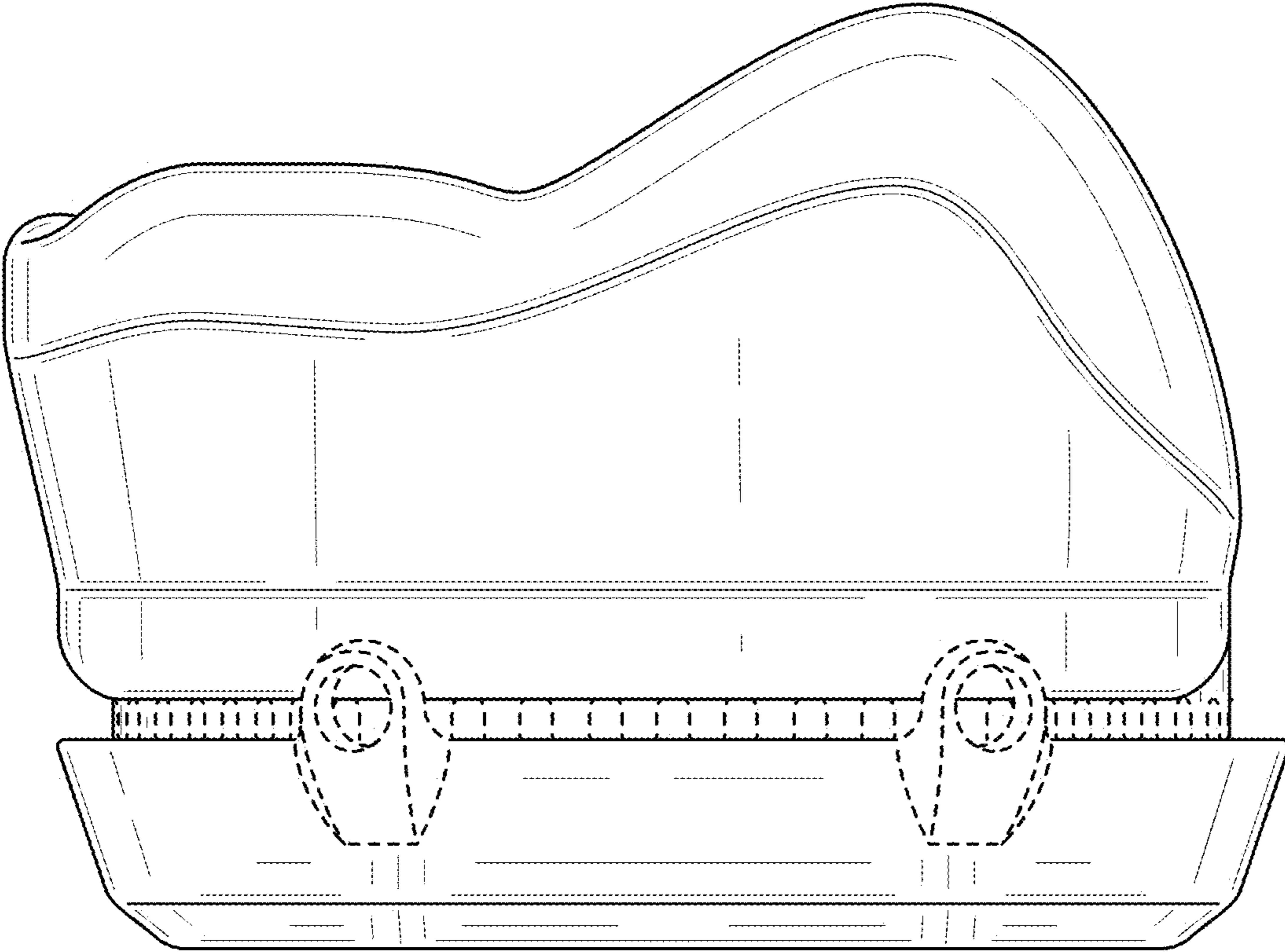


FIG. 5

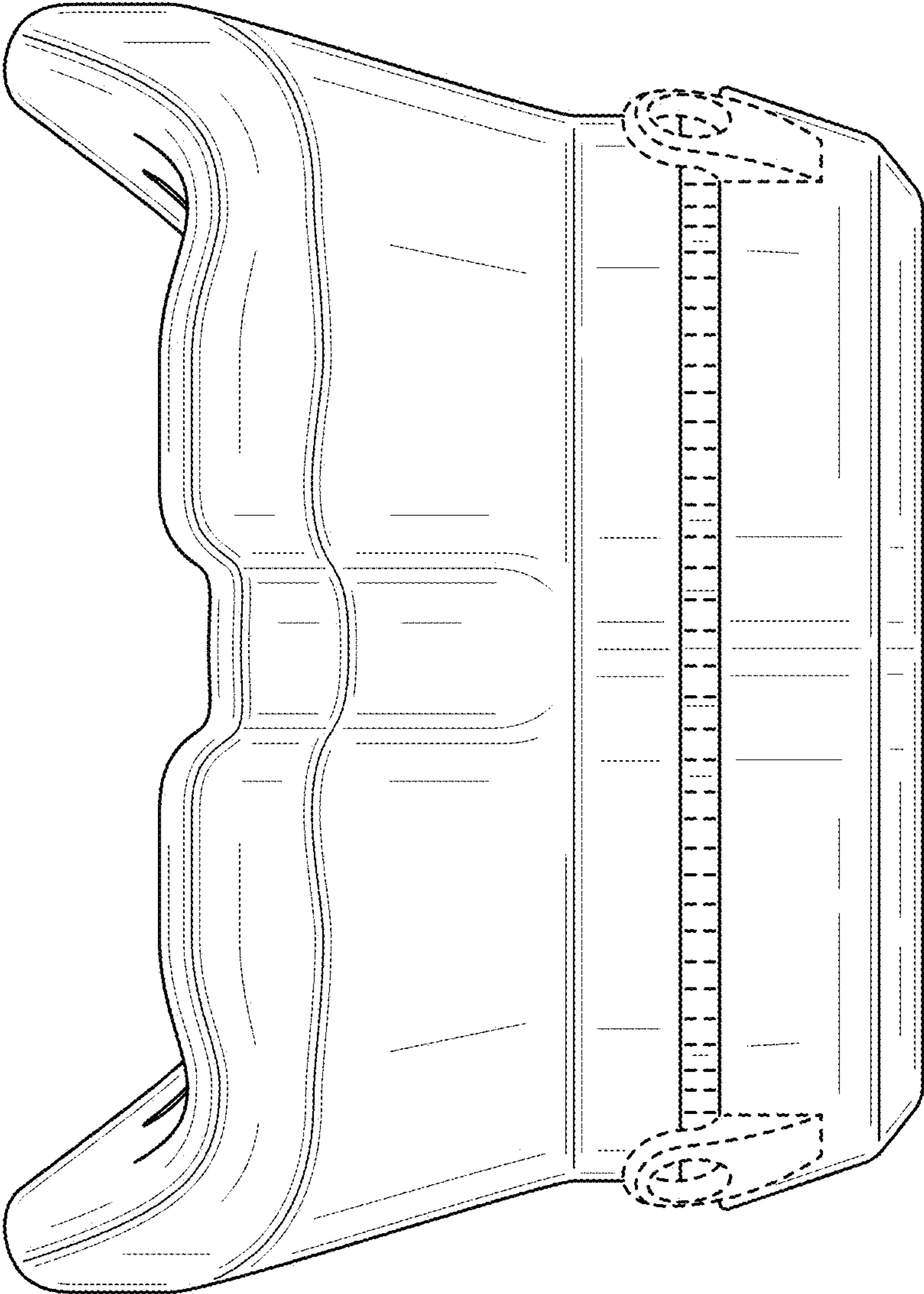


FIG. 6

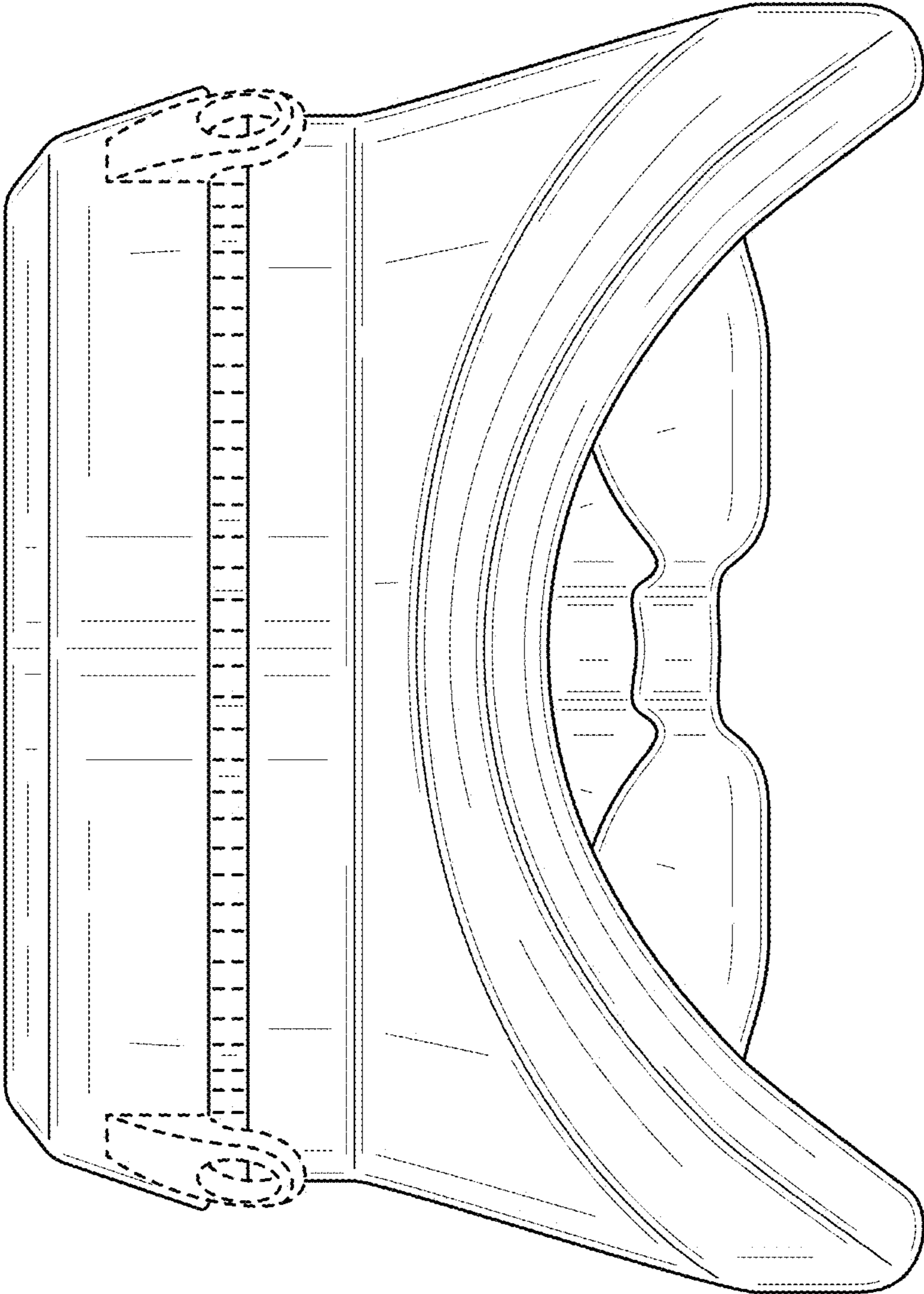


FIG. 7