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(12) **United States Design Patent**
Gallagher et al.

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- (54) **LEAK DETECTION APPARATUS**
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- (**) Term: **15 Years**
- (21) Appl. No.: **29/739,790**
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- (51) **LOC (13) Cl.** **10-05**
- (52) **U.S. Cl.**
USPC **D10/101; D10/96**
- (58) **Field of Classification Search**
USPC D10/75-82, 104.1, 56, 106.91, 106.9,
D10/106.4, 67, 65, 61, 85, 86, 96-103;
D8/382-386; D23/262-264
CPC ... B23K 33/008; F01N 13/14; F01N 2470/06;
B21C 37/151; Y10T 29/49398; F17D
5/06; F16L 9/18; F16L 55/1022; F16L
2201/30; F16L 23/032; G01M 3/18;
G01M 3/00; G01F 23/02; G01F 1/05;
G01F 1/22; G01F 1/26; G01F 1/28; G01F
15/06; G01F 23/0015
See application file for complete search history.

D726,288 S * 4/2015 Sisk D23/263
D832,123 S * 10/2018 Nakai D10/96
D834,976 S * 12/2018 Cooper D10/96
(Continued)

FOREIGN PATENT DOCUMENTS

CN 305903128 * 12/2019
CN 305967116 * 4/2020
(Continued)

OTHER PUBLICATIONS

Dorman Store,Evaporative Emissions System Leak Detection Pump,
Date first available Nov. 1, 2010, [online]retrieved Oct. 7, 2021,avail-
able from https://www.amazon.com/Dorman-310-207-Fuel-Vapor-Detection/dp/B000TYQ92A/ref=sr_1_8?crd=3MVQ85IJCT RTP &dchild=1&keywords=leak+detection+pump&qid=1633635852&s (Year: 2010).
(Continued)

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(57) **CLAIM**

The ornamental design for a leak detection apparatus, as shown and described.

DESCRIPTION

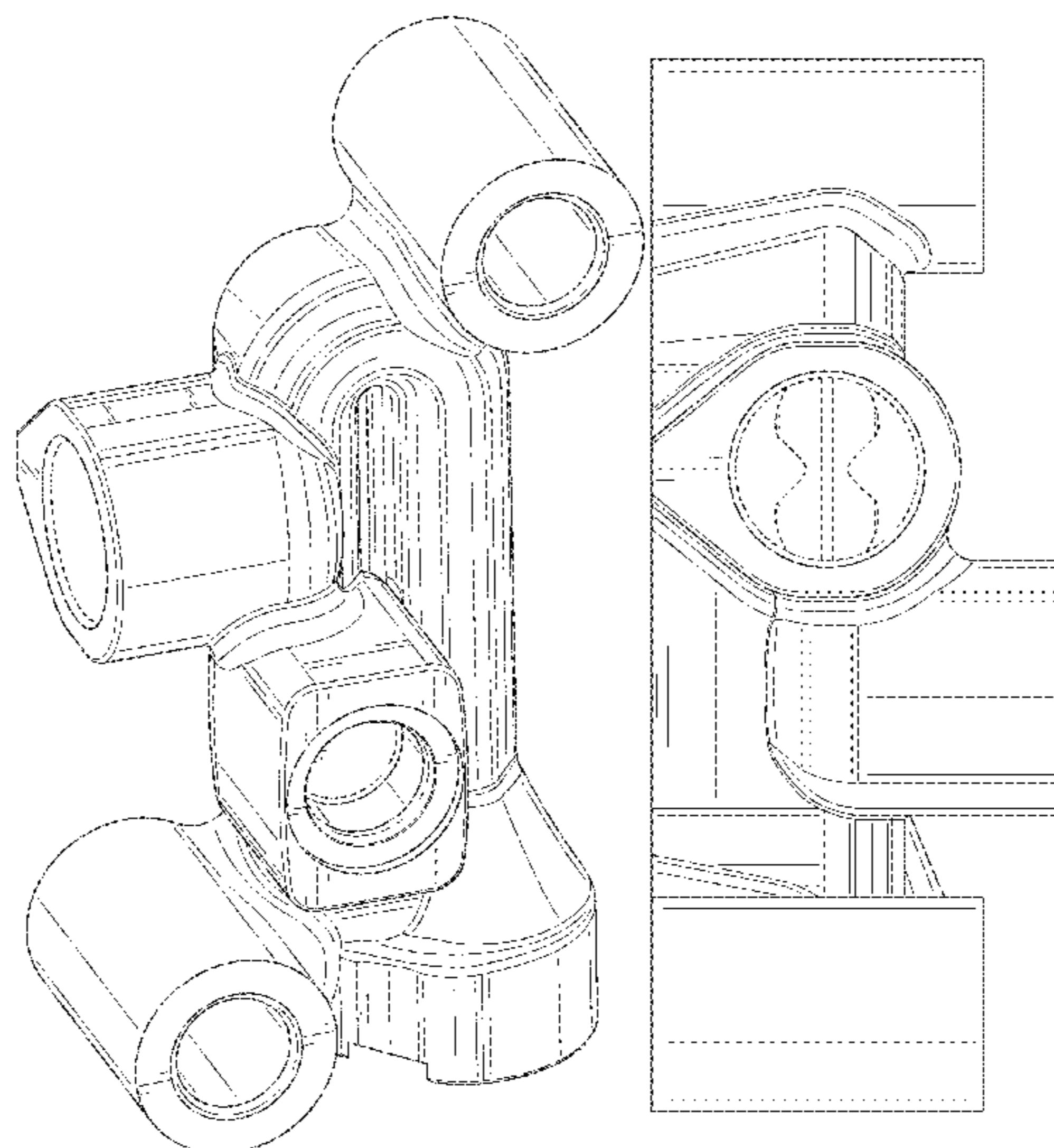
FIG. 1 is a front-top-left perspective view of a leak detection apparatus according to the present invention.
FIG. 2 is a front view of the leak detection apparatus.
FIG. 3 is a rear view of the leak detection apparatus.
FIG. 4 is a left side view of the leak detection apparatus.
FIG. 5 is a right side view of the leak detection apparatus.
FIG. 6 is a top view of the leak detection apparatus; and,
FIG. 7 is a bottom view of the leak detection apparatus.
The broken lines in FIGS. 1, 2, 4, and 7 of the drawings illustrate portions of the leak detection apparatus that form no part of the claimed design.

1 Claim, 6 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

D337,959 S * 8/1993 Lawhon D10/103
D608,231 S * 1/2010 Fauveau D10/101
D710,226 S * 8/2014 Furey D10/96



(56)

References Cited

U.S. PATENT DOCUMENTS

D845,805 S * 4/2019 Williams D10/96
D867,913 S * 11/2019 Hietala D10/96
D885,170 S * 5/2020 McMullin D8/382
D902,253 S * 11/2020 Now D15/5
2001/0037836 A1 * 11/2001 Yoshitoshi B21C 37/151
138/115
2020/0191679 A1 * 6/2020 Wang G01M 3/00
2020/0200329 A1 * 6/2020 Valentin de Oliveira
F17D 5/06

FOREIGN PATENT DOCUMENTS

EM 008400568-0001 * 7/2020
EM 008338016-0001 * 12/2020
EM 008355861-0001 * 12/2020
KR 300747213.0000 * 6/2014
KR 301058239.0000 * 8/2019

OTHER PUBLICATIONS

Aqua Cure, Leak Arresting Device 1/4" PF , [online]retrieved Oct. 7, 2021, available from <https://www.aquacure.co.uk/water-leak-detection-equipment/leak-detection-device-14-pf-1d1> (Year: 2021).*

* cited by examiner

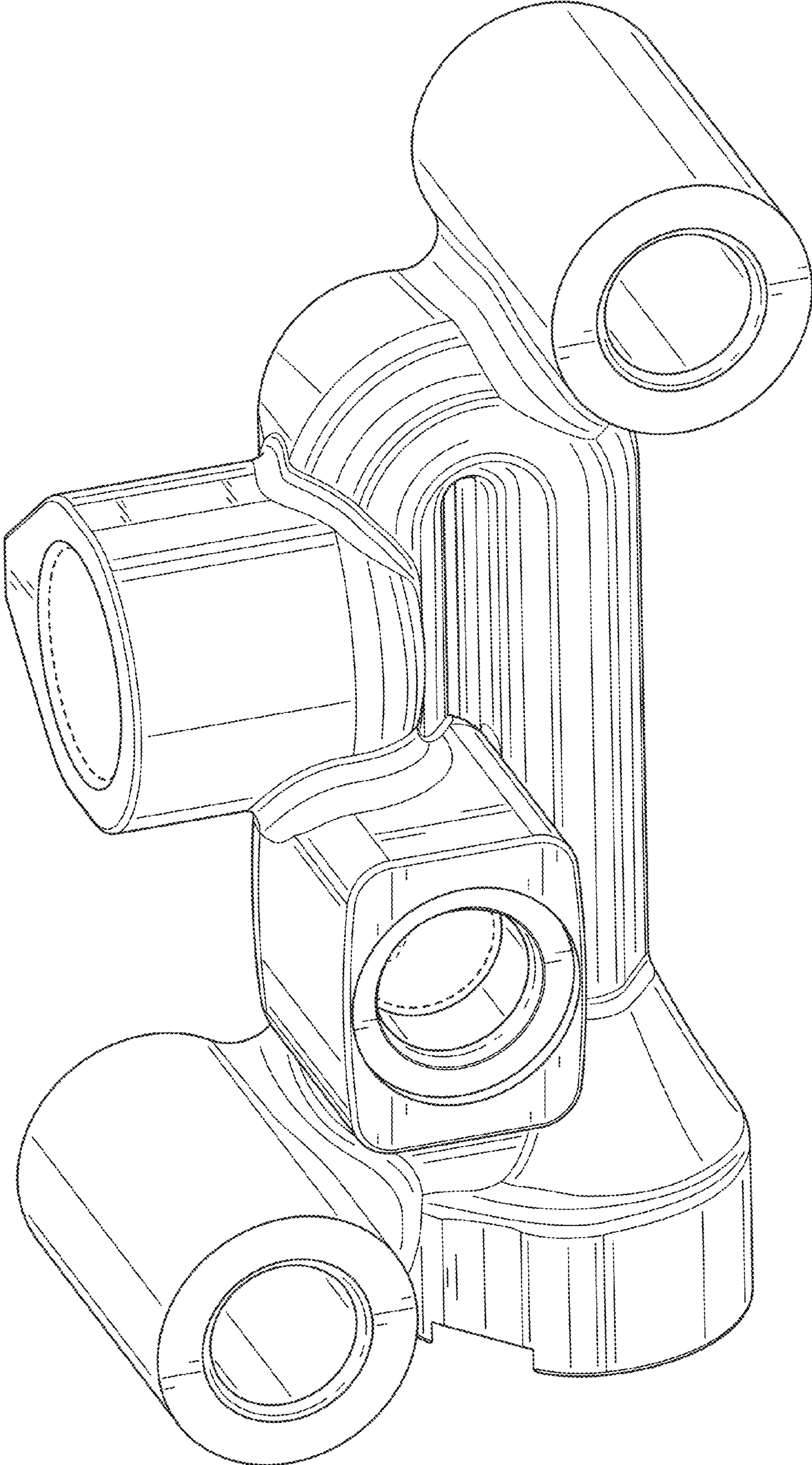


FIG. 1

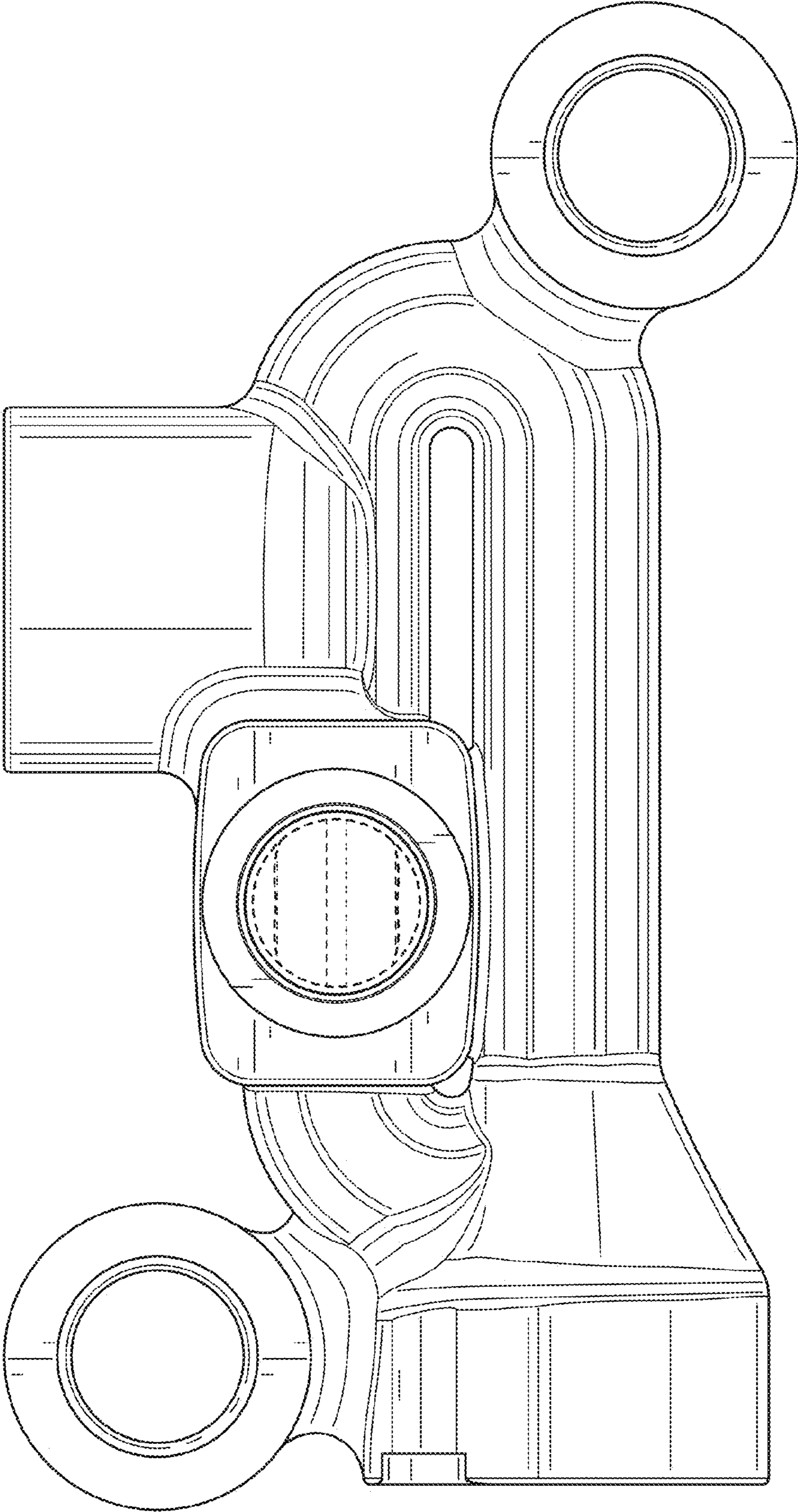


FIG. 2

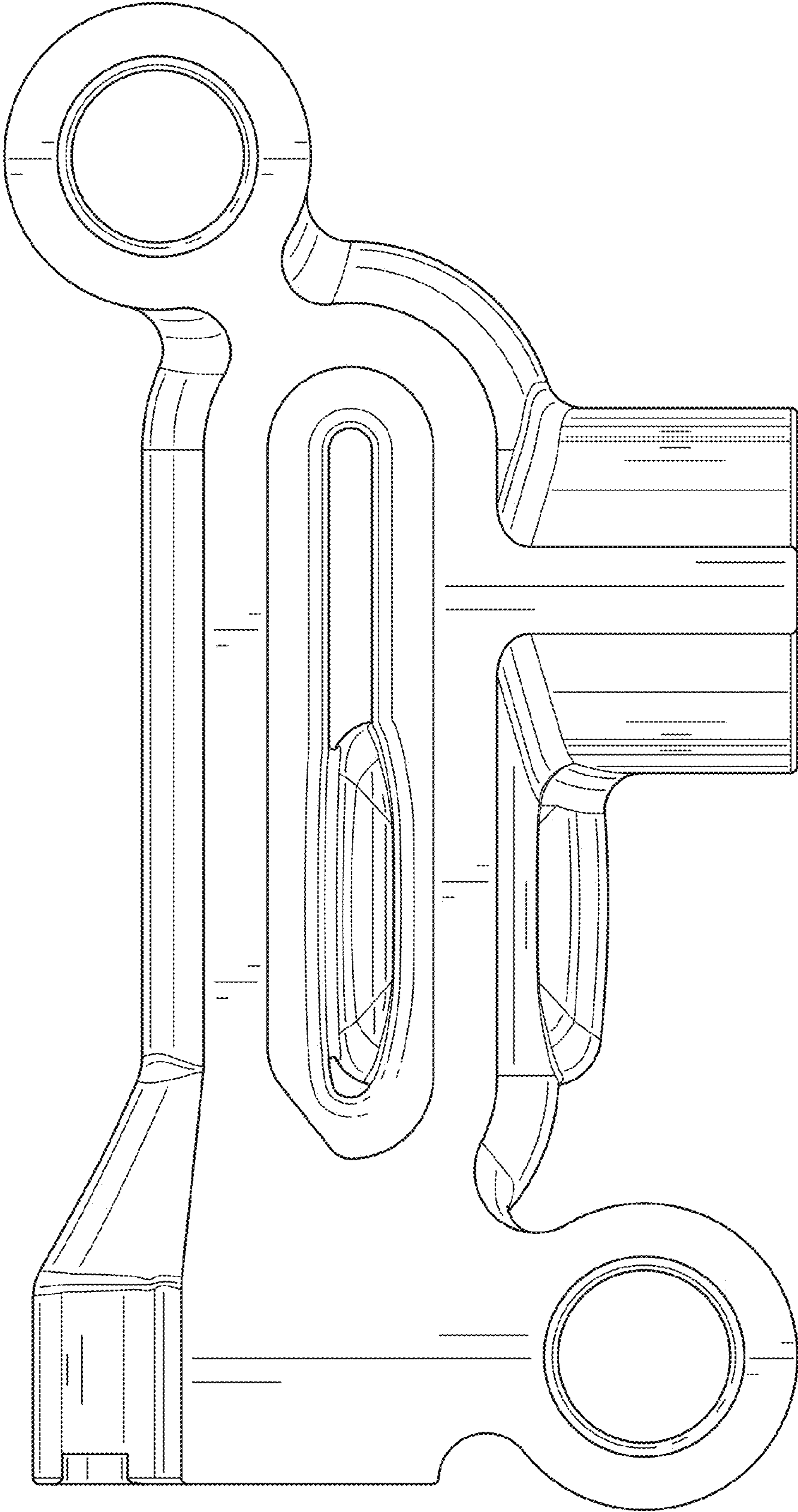


FIG. 3

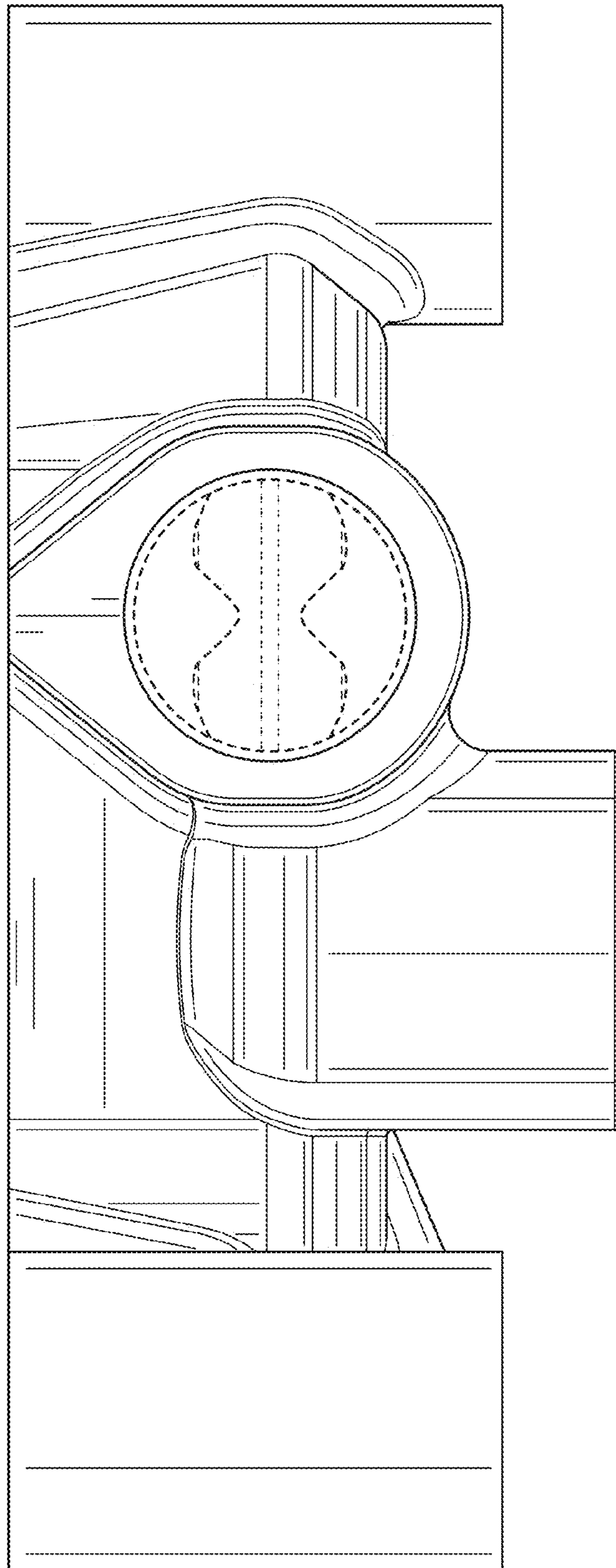


FIG. 4

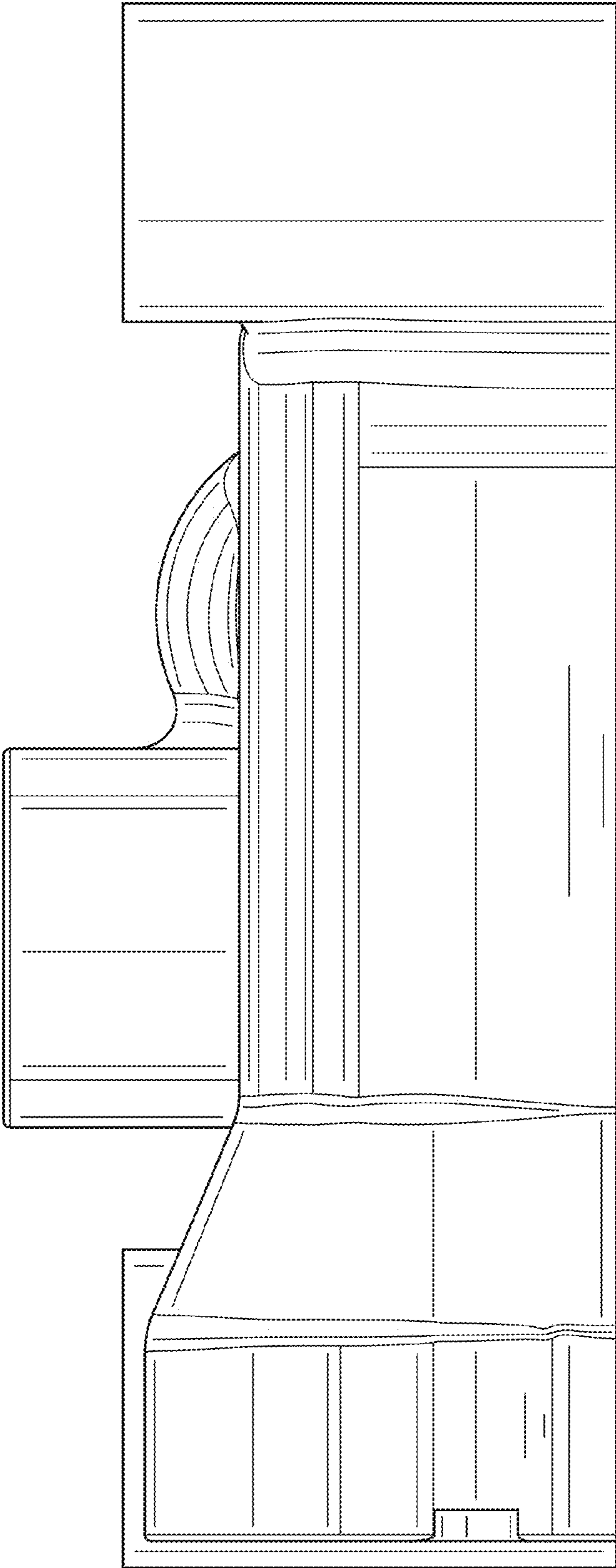


FIG. 5

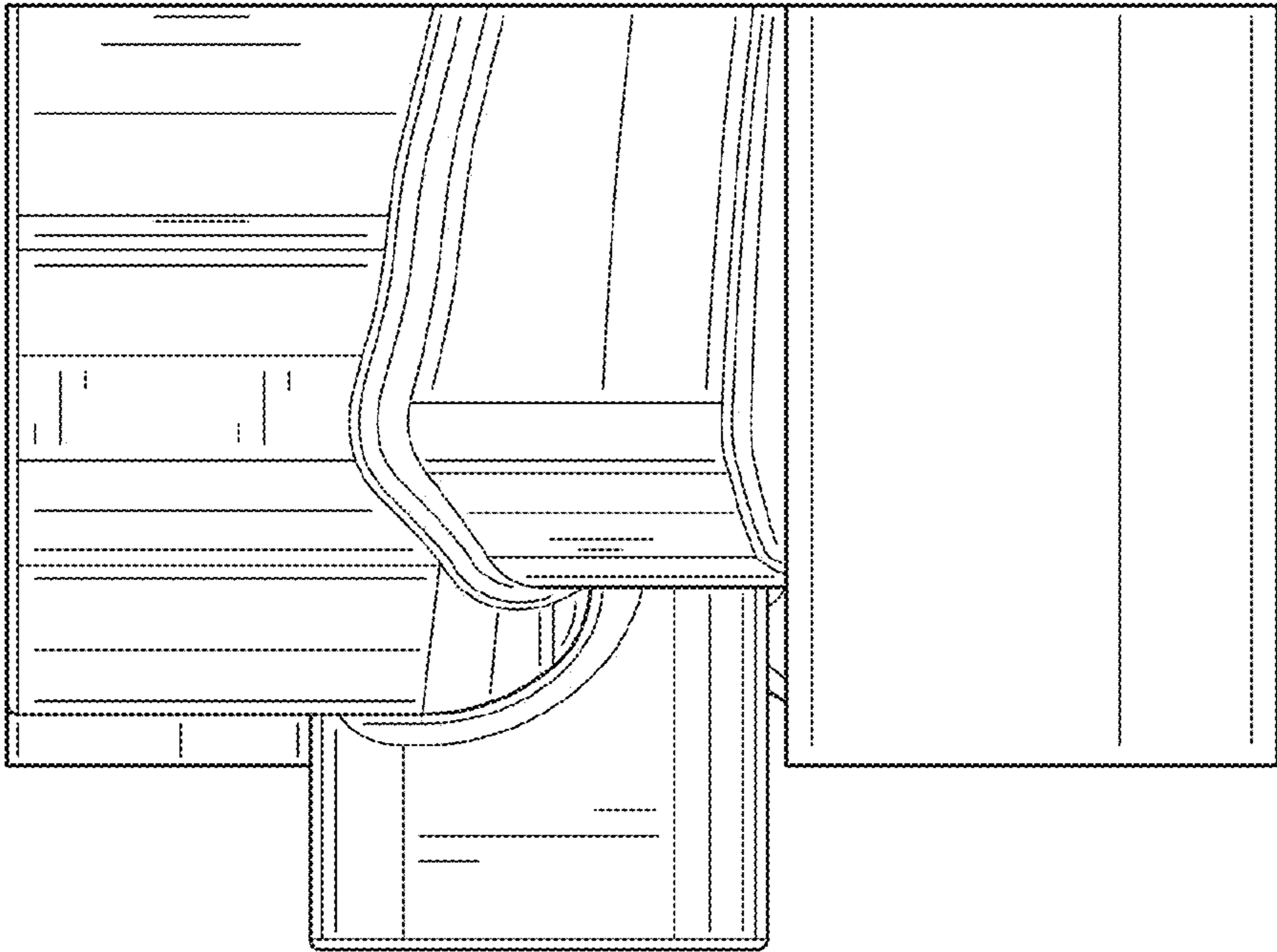


FIG. 6

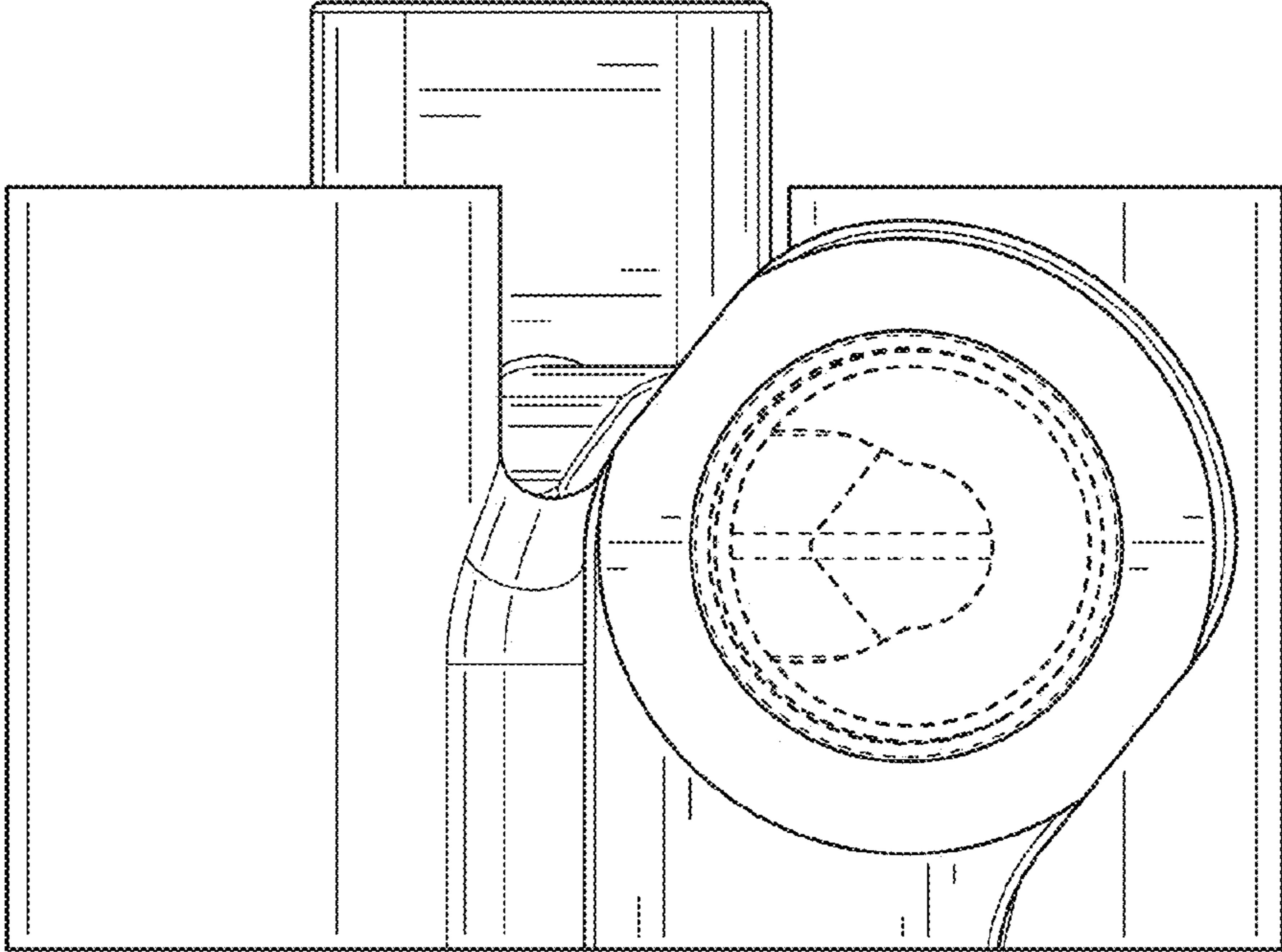


FIG. 7