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

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(54) **FLOW CELL CARTRIDGE**

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

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(51) **LOC (13) Cl.** **24-99**

(52) **U.S. Cl.**
USPC **D24/232; D24/224**

(58) **Field of Classification Search**
USPC D24/107, 108, 119, 121, 162, 169, 186,
D24/201, 216–232; D10/75, 80, 81
CPC G01N 2035/00306; G01N 2035/00326;
G01N 2035/00336; G01N 2035/00029;
G01N 2035/0401; G01N 2035/0403;
G01N 2035/0405; G01N 2035/00019;
G01N 35/021; G01N 35/026; G01N
35/028; G01N

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D333,630 S 3/1993 Marks
D351,913 S 10/1994 Hieb et al.
(Continued)

FOREIGN PATENT DOCUMENTS

CN 304787602 8/2018
JP D1585148 9/2017

(Continued)

OTHER PUBLICATIONS

G4212-60032—3.7mm HDR max light cartridge cell. Online, published date unknown. Retrieved on Apr. 12, 2021 from URL: https://www.chromtech.com/g4212-60032-37mm-hdr-max-light-cartridge-cell.*

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(57) **CLAIM**

We claim the ornamental design for a flow cell cartridge, as shown and described.

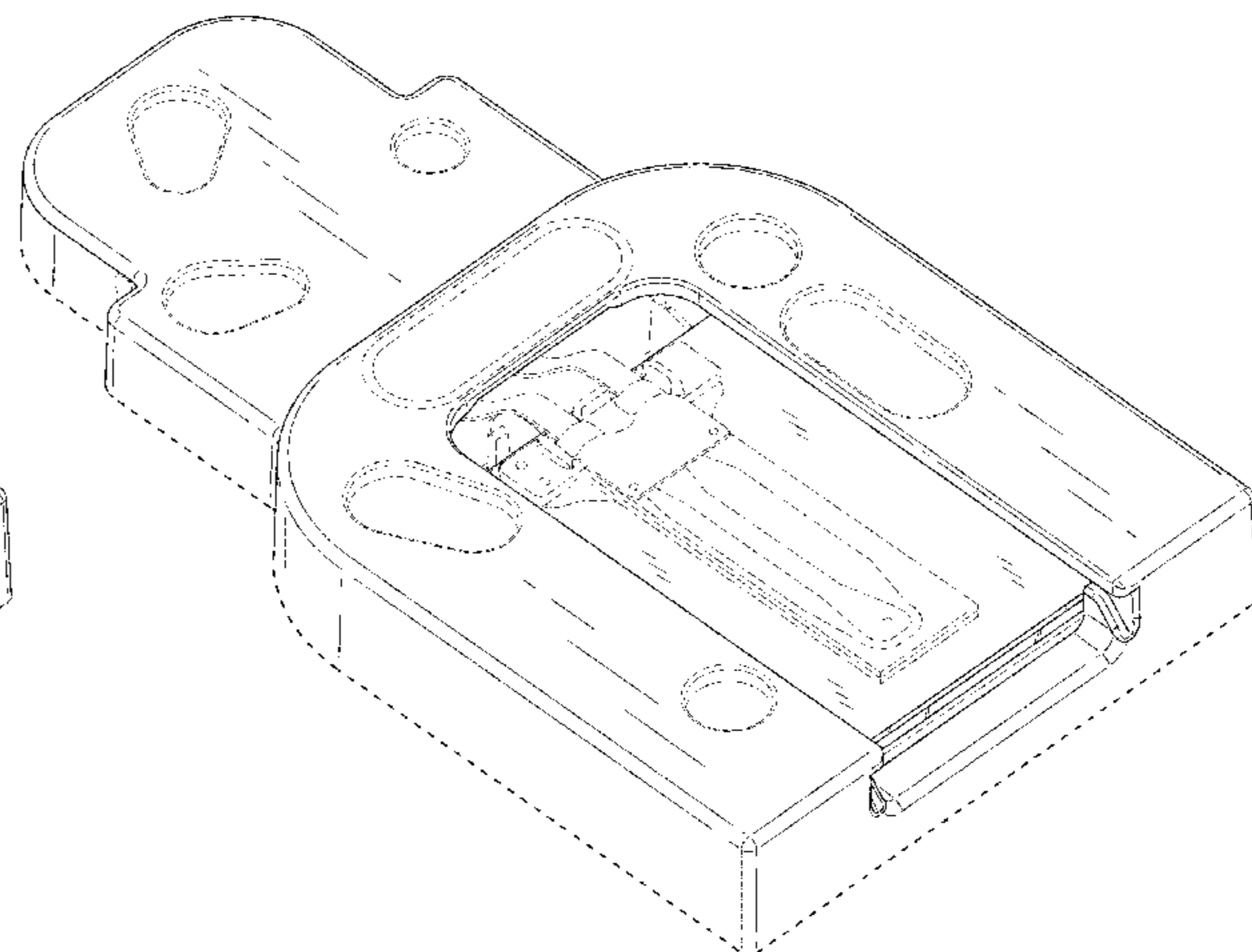
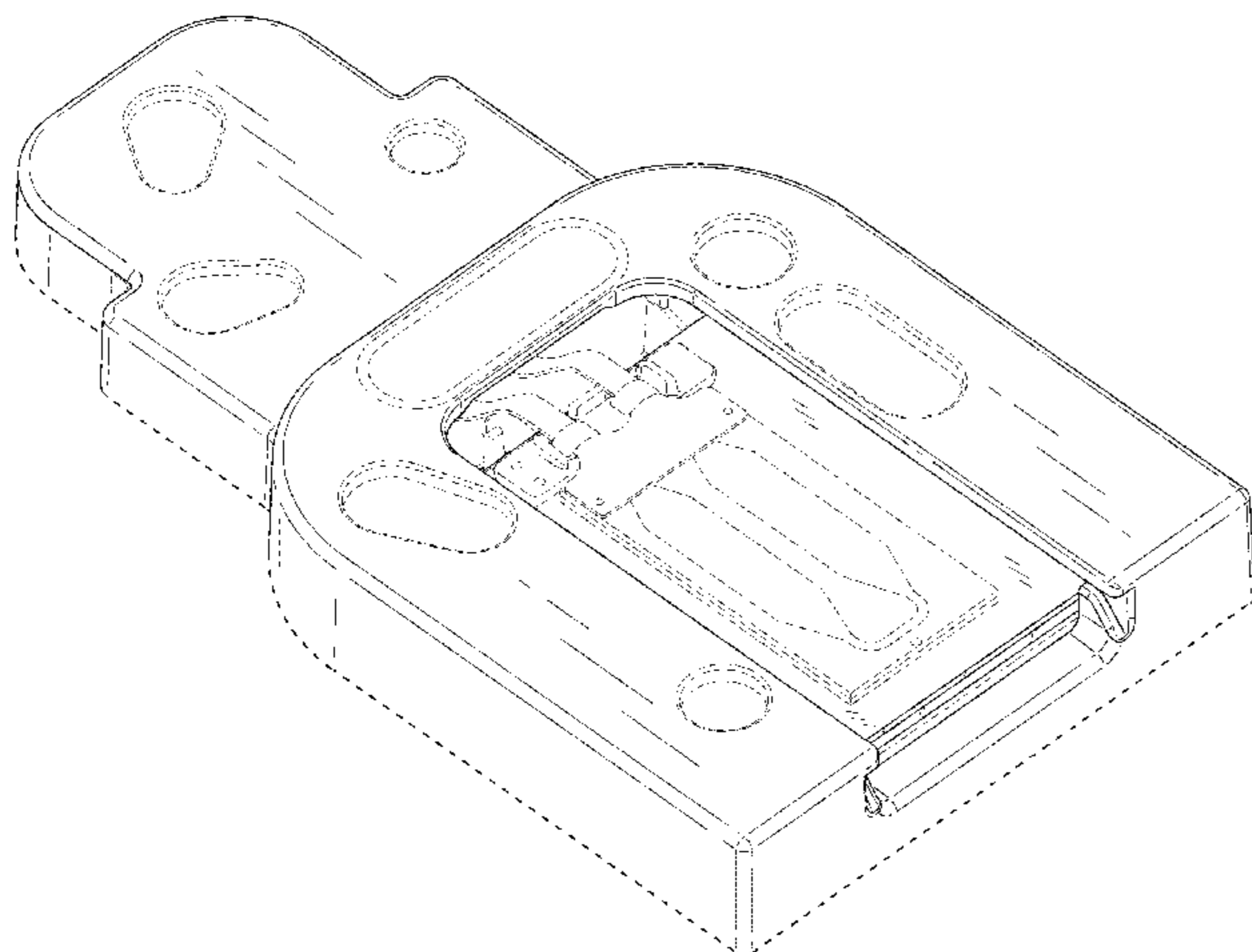
DESCRIPTION

FIG. 1 is a top, rear perspective view of a flow cell cartridge comprising our new design;
FIG. 2 is a top plan view of the design in FIG. 1;
FIG. 3 is a bottom plan of the design of FIG. 1;
FIG. 4 is a left side elevational view of the design of FIG. 1;
FIG. 5 is a right side elevational view of the design of FIG. 1;
FIG. 6 is a front elevational view of the design of FIG. 1;
FIG. 7 is an enlarged rear elevational view of the design of FIG. 1;
FIG. 8 is a top, rear perspective view of an alternate design of the view shown in FIG. 1;
FIG. 9 is a top plan view of the design in FIG. 8; and,
FIG. 10 is an enlarged rear elevational view of the design of FIG. 8.

The bottom plan, left and right side elevational, and front views of the alternate embodiment shown in FIG. 8 are identical to FIGS. 3-6.

The evenly broken lines shown in the drawings illustrate portions of the flow cell cartridge that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



(58) **Field of Classification Search**
 CPC 35/04; G01N 1/22; G01N 27/44791; B01L
 2300/0809; B01L 2300/0816; B01L
 2300/0822; B01L 2300/0832; B01L
 2300/0806

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D438,632 S * 3/2001 Miller D24/216
 D438,633 S * 3/2001 Miller D24/216
 D473,318 S * 4/2003 Barbera-Guillem D24/216
 D491,273 S * 6/2004 Biegler D24/216
 D559,995 S * 1/2008 Handique D24/232
 D566,291 S * 4/2008 Parunak D24/224
 D639,975 S 6/2011 Doyle et al.
 D685,494 S * 7/2013 Oonuma D24/216
 D686,311 S * 7/2013 Mori D24/108
 D697,198 S * 1/2014 Amirouche D24/108
 D729,403 S 5/2015 Hage et al.
 D745,698 S 12/2015 Hage et al.
 D750,272 S 2/2016 Hage et al.
 D752,770 S 3/2016 Kuhn et al.
 D768,870 S 10/2016 Kuhn et al.
 D784,551 S * 4/2017 Todd D24/224
 D785,811 S 5/2017 Watts et al.
 D794,817 S 8/2017 Yi et al.
 D794,818 S 8/2017 Yi et al.
 D794,819 S 8/2017 Yi et al.
 D799,056 S * 10/2017 Bourgeois D24/224
 D800,336 S 10/2017 Chang et al.
 D800,912 S 10/2017 Uzri et al.
 D806,890 S * 1/2018 Williams D24/216
 D812,242 S * 3/2018 Chang D24/224
 D812,767 S * 3/2018 Osmus D24/225
 D819,829 S 6/2018 Osmus et al.
 D825,078 S 8/2018 Osmus et al.
 D840,050 S 2/2019 Schulz et al.
 D843,009 S 3/2019 Watts et al.
 D851,275 S 6/2019 Spuhler et al.
 10,343,160 B2 7/2019 Lemoine et al.
 D856,527 S * 8/2019 Kaplan D24/225
 D861,914 S 10/2019 Blake et al.
 D864,411 S 10/2019 Dangelo et al.
 D864,412 S 10/2019 Dangelo et al.
 D865,213 S 10/2019 Dangelo et al.

D865,214 S 10/2019 Dangelo et al.
 D865,215 S 10/2019 Dangelo et al.
 D875,271 S 2/2020 Ringold et al.
 D877,356 S 3/2020 Clive-Smith et al.
 D886,901 S * 6/2020 Hussey D18/56
 2010/0143963 A1 * 6/2010 Pollack B01L 3/502792
 435/29
 2015/0118739 A1 * 4/2015 Kobayashi B01L 3/5027
 435/287.2
 2016/0175840 A1 * 6/2016 Ingber B01L 3/502715
 422/502
 2016/0375438 A1 * 12/2016 Marcy B01L 3/50273
 506/39
 2017/0016060 A1 1/2017 Sabounchi et al.
 2017/0209865 A1 7/2017 Carrano et al.
 2018/0117587 A1 5/2018 Lemoine et al.
 2018/0185849 A1 * 7/2018 Kaplan B01L 9/527
 2020/0110108 A1 4/2020 Cox-Muranami et al.
 2020/0171502 A1 6/2020 Kumar et al.
 2020/0217740 A1 * 7/2020 Holst G01M 3/047

FOREIGN PATENT DOCUMENTS

RU 109136 S 6/2018
 TW D191690 7/2018

OTHER PUBLICATIONS

Osmus et al., "Reagent Cartridge", U.S. Appl. No. 29/714,653, filed Nov. 25, 2019.
 Osmus et al., "Reagent Cartridge", U.S. Appl. No. 29/714,705, filed Nov. 25, 2019.
 Taylor et al., "Flow Cell Cartridge", U.S. Appl. No. 29/714,671, filed Nov. 25, 2019.
 Taylor et al., "Flow Cell", U.S. Appl. No. 29/714,672, filed Nov. 25, 2019.
 Osmus et al., "Sequencing Cartridge Assembly", U.S. Appl. No. 29/714,661, filed Nov. 25, 2019.
 Taylor et al., "Cartridge Cover", U.S. Appl. No. 29/714,669, filed Nov. 25, 2019.
 Osmus et al., "Reagent Cartridge", U.S. Appl. No. 29/714,656, filed Nov. 25, 2019.
 Osmus et al., "Reagent Cartridge", U.S. Appl. No. 29/714,706, filed Nov. 25, 2019.
 Taylor et al., "Flow Cell Cartridge", U.S. Appl. No. 29/714,665, filed Nov. 25, 2019.

* cited by examiner

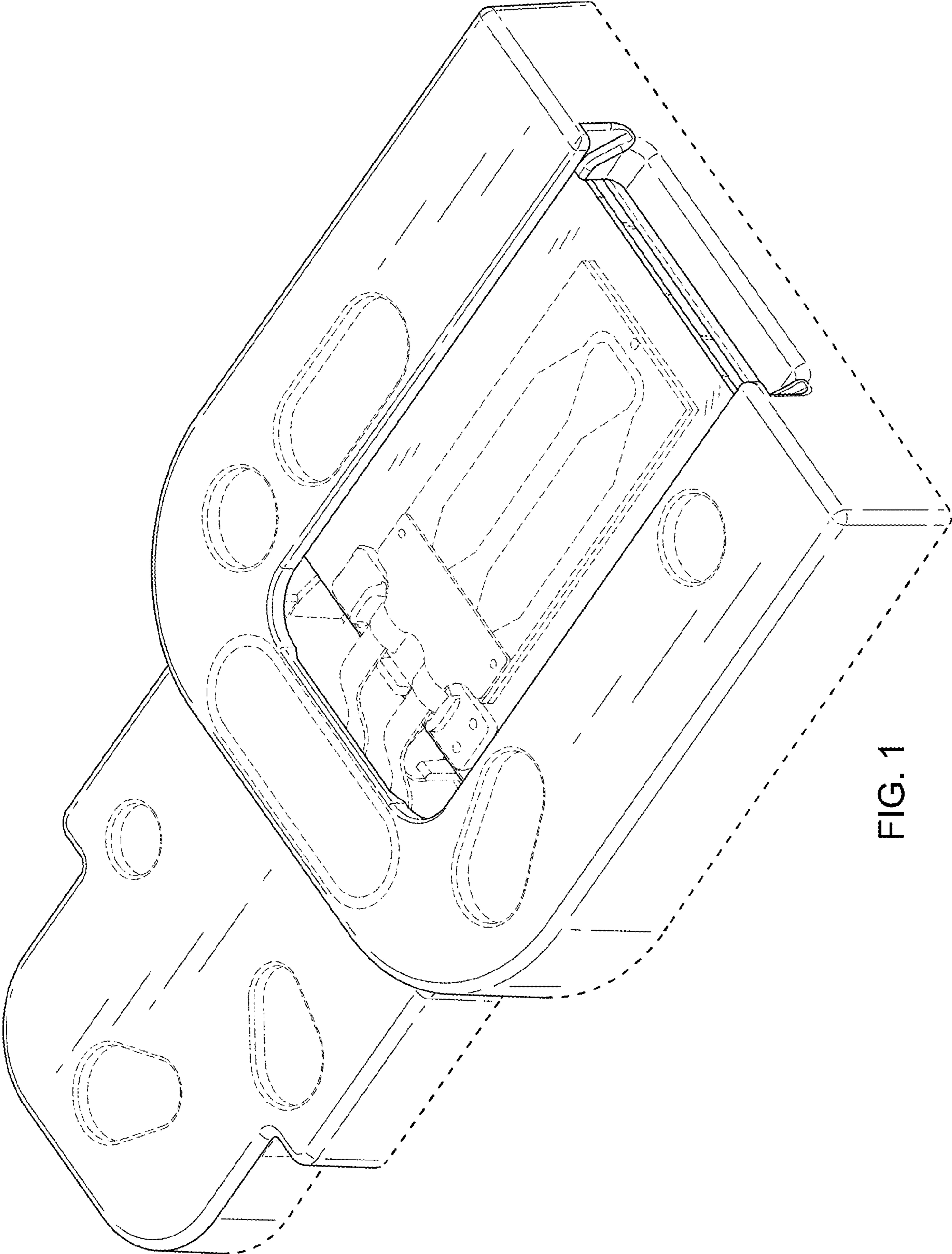


FIG. 1

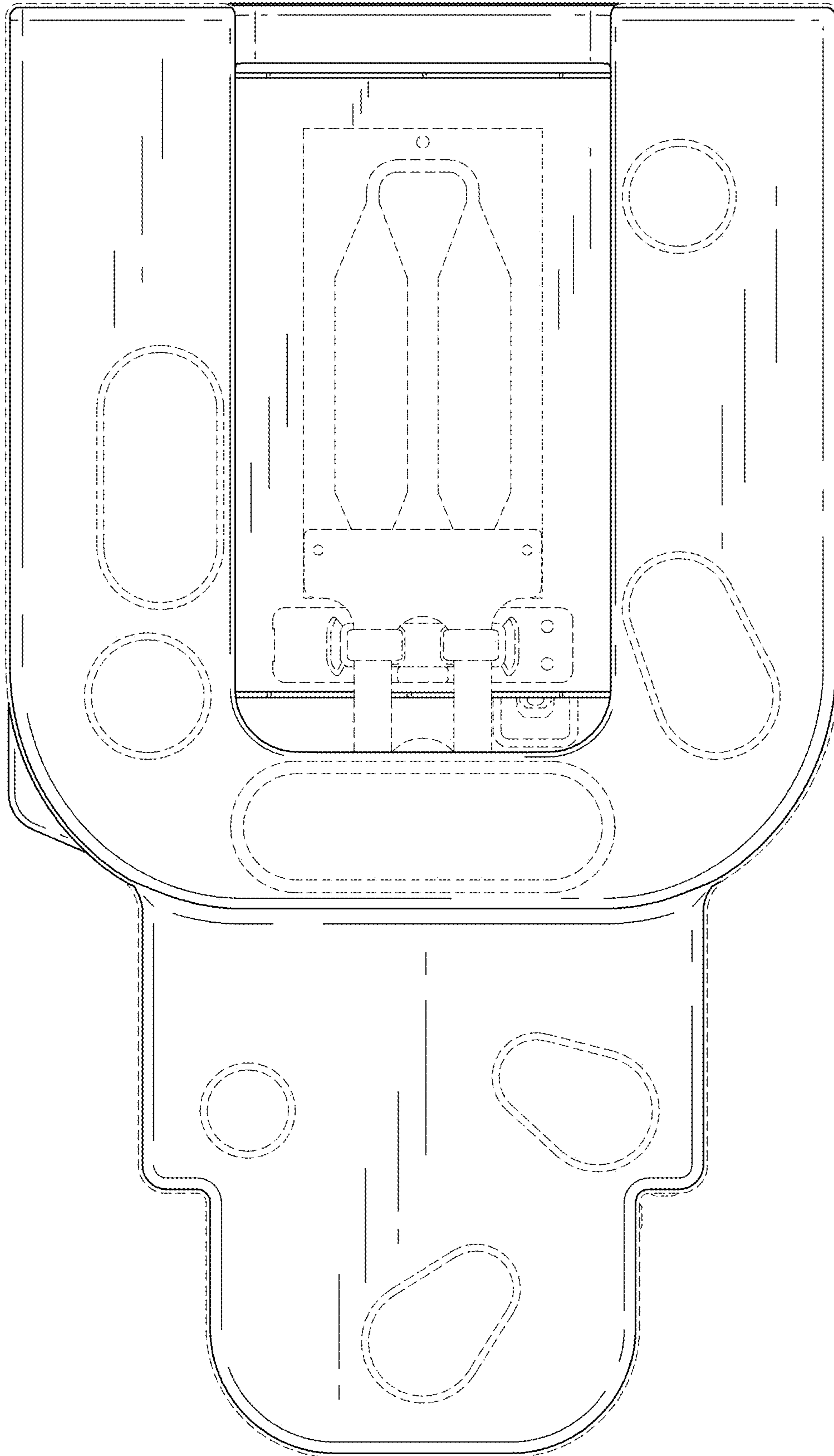


FIG. 2

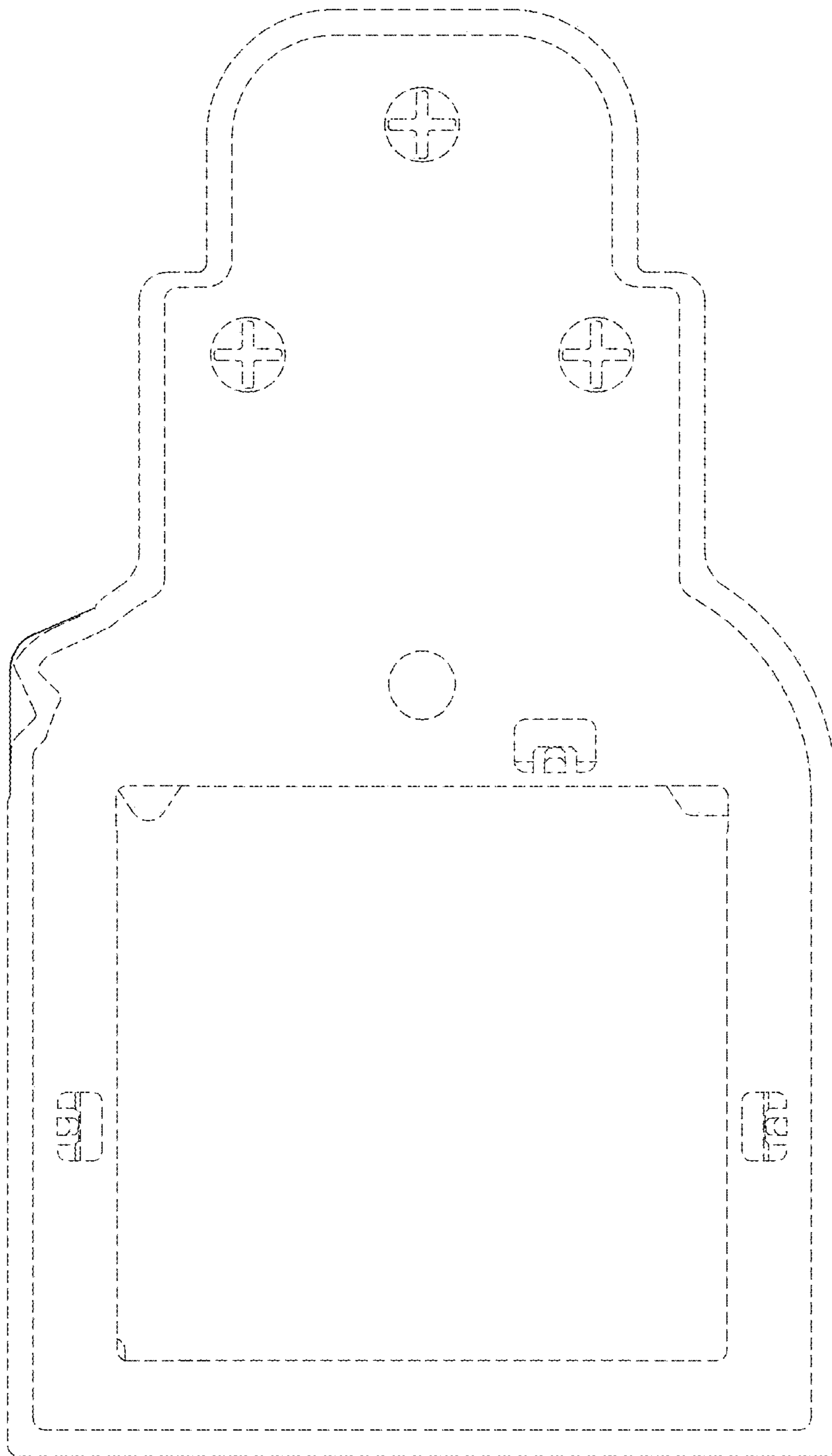


FIG. 3

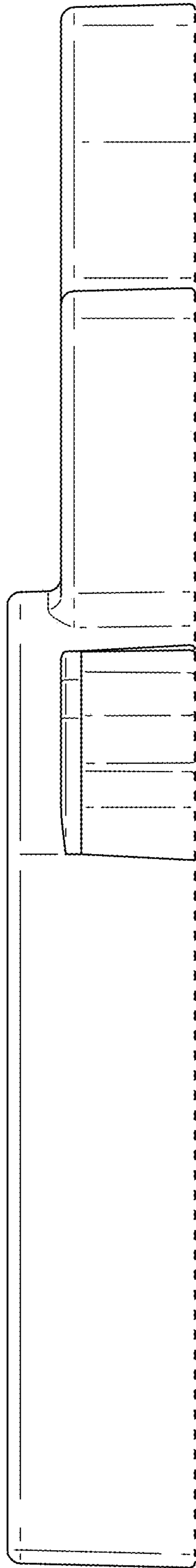


FIG. 4

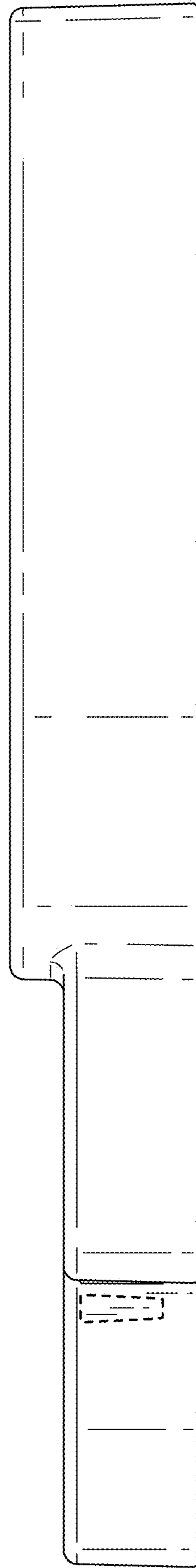


FIG. 5

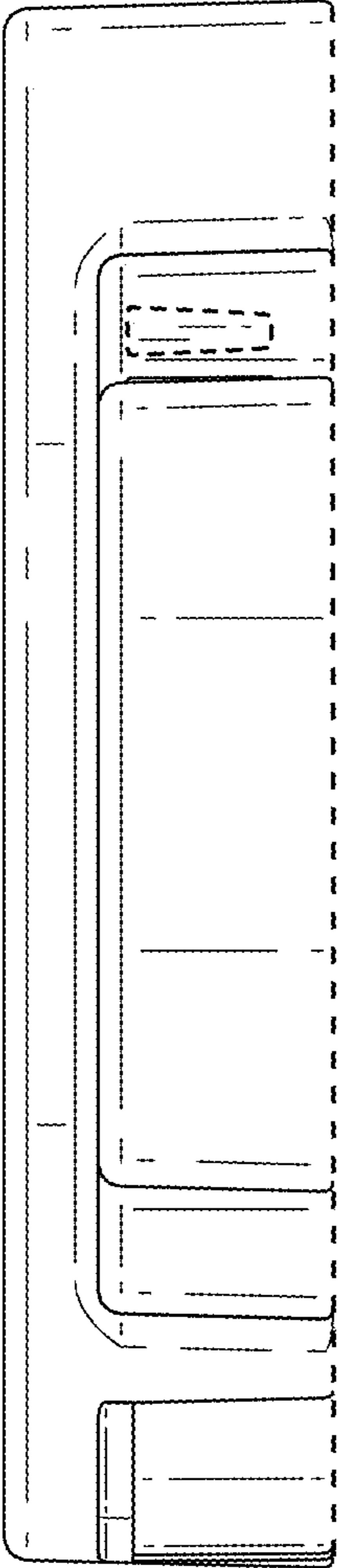


FIG. 6

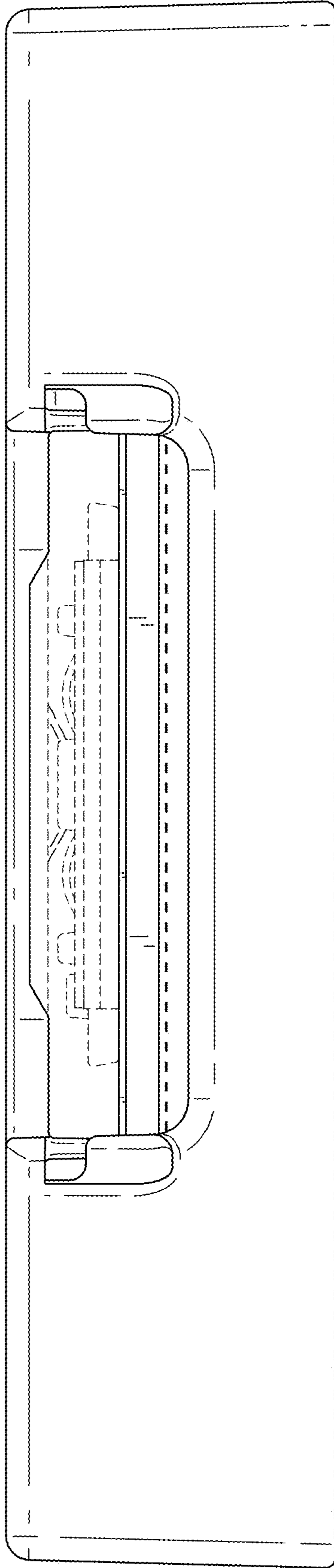


FIG. 7

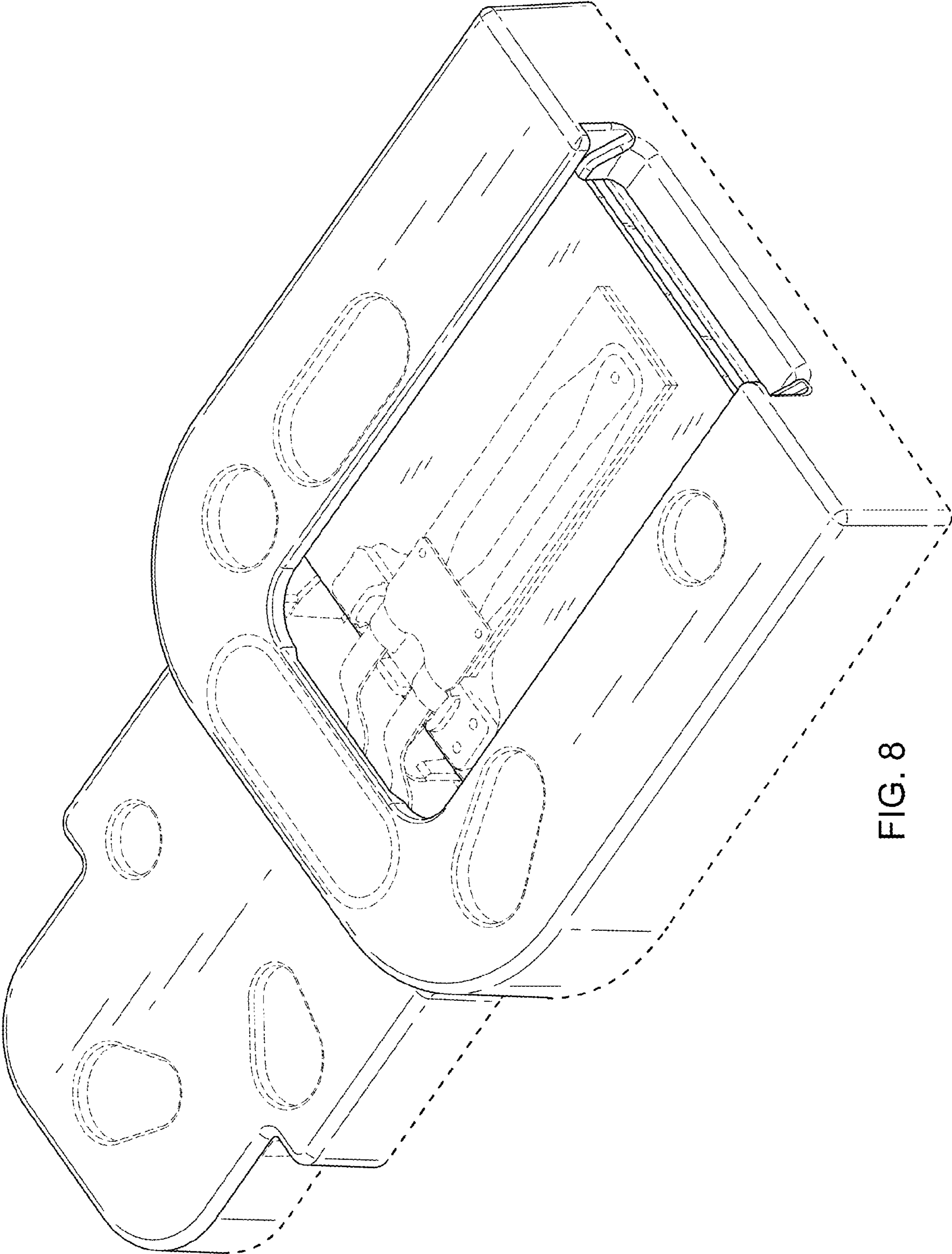


FIG. 8

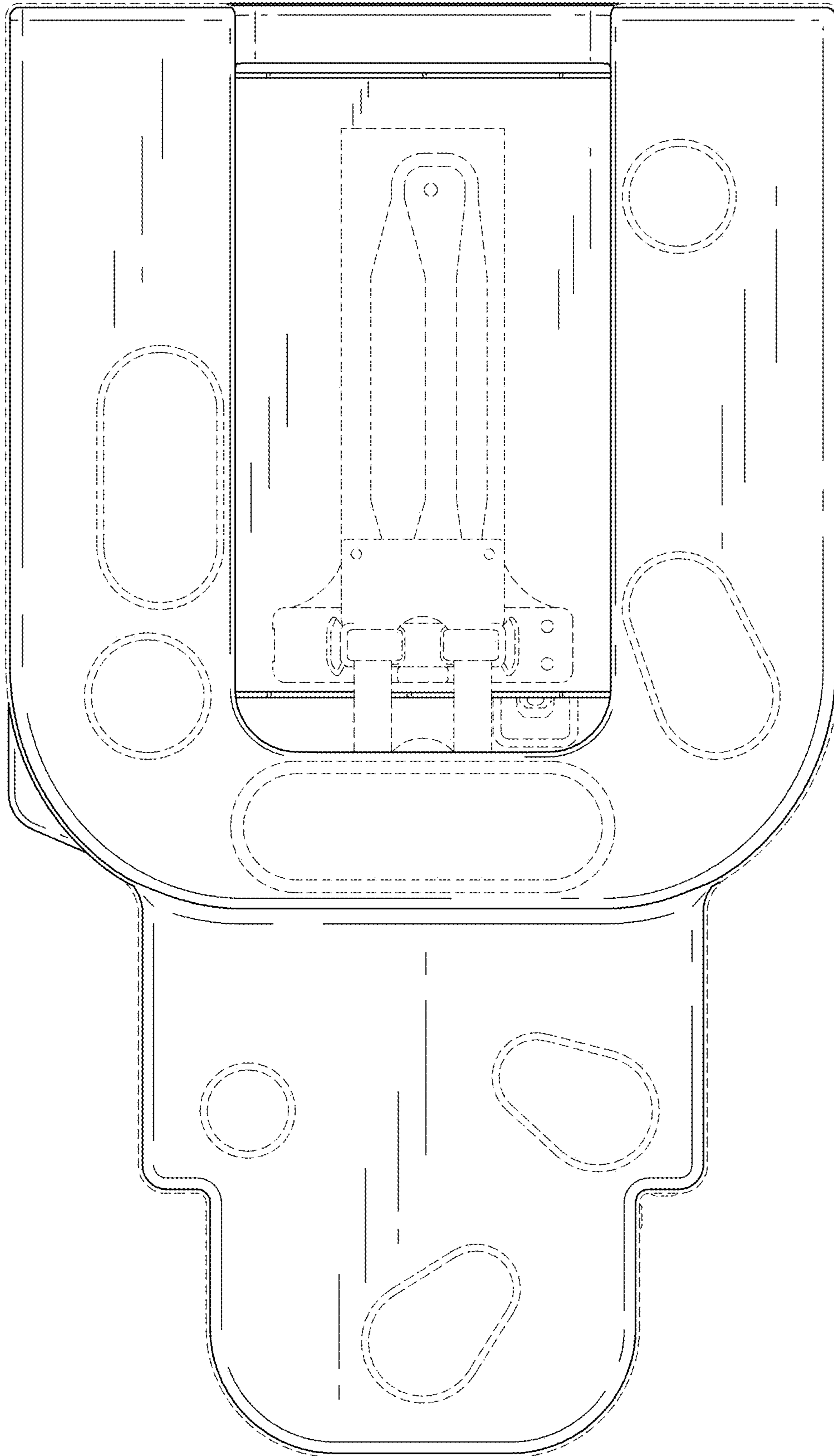


FIG. 9

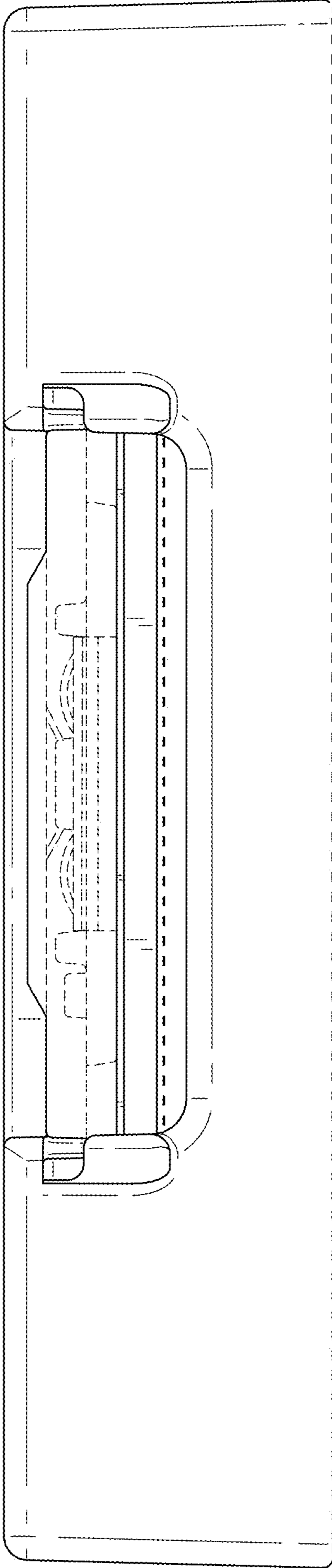


FIG. 10