



US00D980168S

(12) **United States Design Patent** (10) **Patent No.:** **US D980,168 S**  
**Chan et al.** (45) **Date of Patent:** **\*\* Mar. 7, 2023**

(54) **PLUG**  
(71) Applicant: **Amphenol Corporation**, Wallingford, CT (US)  
(72) Inventors: **David Chan**, Xiamen (CN); **Wonder Wang**, Xiamen (CN); **Bob Tang**, Xiamen (CN); **Martin Li**, Xiamen (CN); **Smith Wu**, Xiamen (CN); **Jason Si**, Toronto (CA); **Sam Kocsis**, Nashua, NH (US); **Ba Pham**, Toronto (CA); **Brian Kirk**, Amherst, NH (US)  
(73) Assignee: **Amphenol Corporation**, Wallingford, CT (US)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/753,723**  
(22) Filed: **Oct. 1, 2020**

**Related U.S. Application Data**

(62) Division of application No. 29/665,308, filed on Oct. 2, 2018, now Pat. No. Des. 902,158, which is a division of application No. 29/575,639, filed on Aug. 26, 2016, now Pat. No. Des. 835,045.  
(51) **LOC (14) Cl.** ..... **13-03**  
(52) **U.S. Cl.**  
USPC ..... **D13/147**  
(58) **Field of Classification Search**  
USPC ..... D13/103, 107, 110, 112, 118, 120, 121, D13/123, 133, 137.1, 145-147, 149-156, D13/158, 173, 177, 184, 199, 242; D14/240, 242, 432-435, 435.1, 436-438  
CPC ..... H01R 13/6585; H01R 13/6473; H01R 13/6593; H01R 13/6594; H01R 13/6599; H01R 12/721

See application file for complete search history.

(56) **References Cited**  
U.S. PATENT DOCUMENTS

D322,604 S 12/1991 Komatsu  
D580,359 S 11/2008 Su et al.  
D583,766 S 12/2008 Chiang  
D598,862 S 8/2009 Chen  
(Continued)

FOREIGN PATENT DOCUMENTS

CN 203574938 U 4/2014  
JP D1495825 S 4/2014  
(Continued)

OTHER PUBLICATIONS

Amphenol. A Series Family. No date specified. <https://www.amphenol-sine.com/a-series-connectors> (Year: 0).\*  
(Continued)

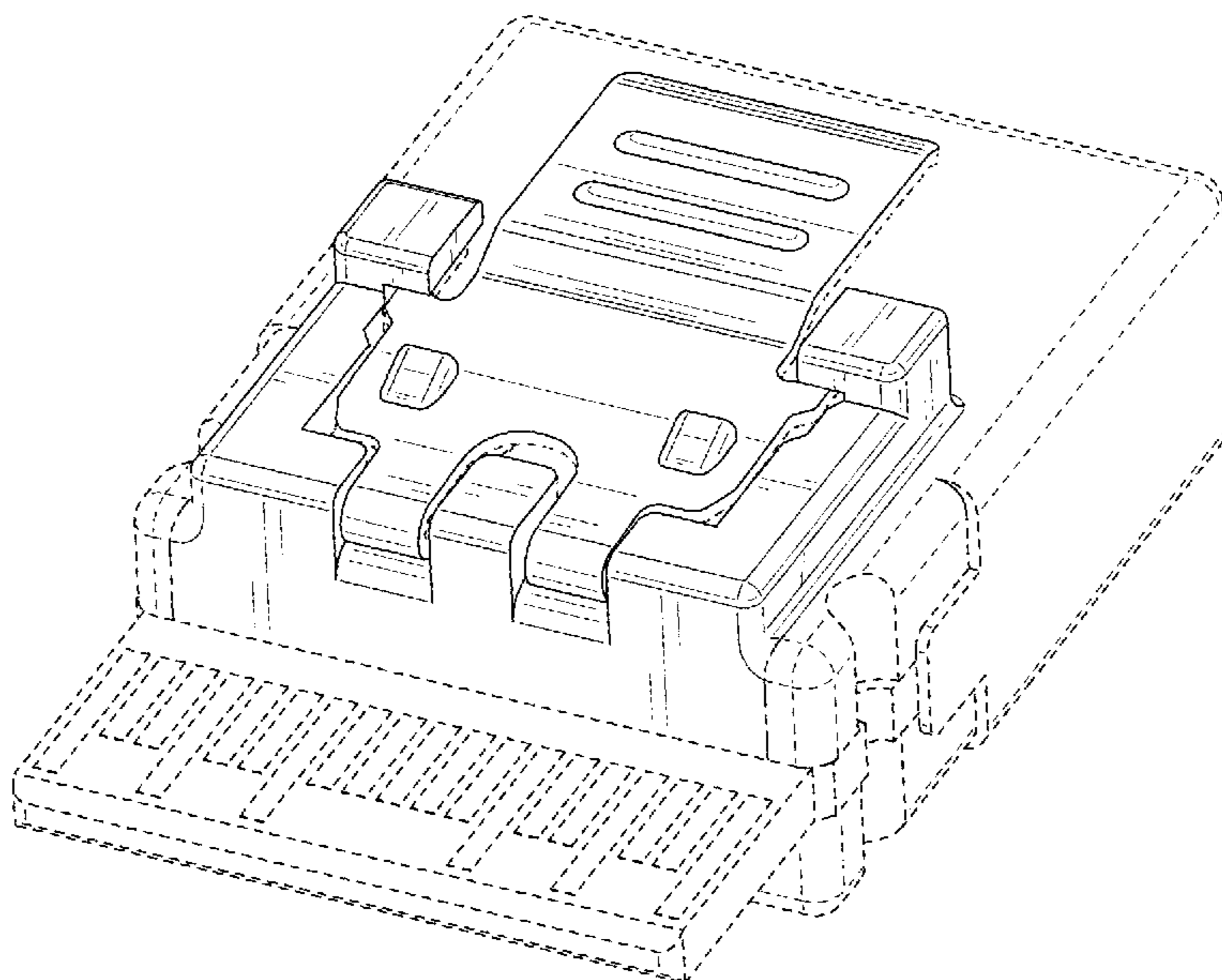
*Primary Examiner* — Darcey E Gottschalk  
(74) *Attorney, Agent, or Firm* — Wolf, Greenfield & Sacks, P.C.

(57) **CLAIM**  
The ornamental design for a plug, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, right side perspective view of a plug showing our new design;  
FIG. 2 is a front elevation view thereof;  
FIG. 3 is a rear elevation view thereof;  
FIG. 4 is a left side elevation view thereof;  
FIG. 5 is a right side elevation view thereof;  
FIG. 6 is a top plan view thereof; and,  
FIG. 7 is a bottom plan view thereof.  
The dashed broken lines of the figures represent portions of the plug that form no part of the claimed design. The dash-dot broken lines define boundaries of the claimed design, and form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D601,505 S 10/2009 Fukazawa et al.  
 D626,077 S 10/2010 Huang  
 D627,738 S 11/2010 Luo  
 D671,896 S 12/2012 Wang et al.  
 D680,497 S 4/2013 Lan et al.  
 D698,733 S 2/2014 Yokoyama  
 D698,734 S 2/2014 Yokoyama  
 D699,192 S 2/2014 Takenaga et al.  
 D703,615 S 4/2014 Takenaga et al.  
 D706,221 S 6/2014 Grant et al.  
 D719,922 S 12/2014 Yokoyama  
 D721,657 S 1/2015 Yamaguchi  
 D722,026 S 2/2015 Yokoyama  
 D726,657 S 4/2015 Takenaga et al.  
 D729,173 S 5/2015 Fukumoto  
 9,450,344 B2 9/2016 Cartier, Jr. et al.  
 D812,013 S 3/2018 Kirk et al.  
 D812,568 S 3/2018 Kirk et al.  
 D812,569 S 3/2018 Kirk et al.  
 D813,170 S 3/2018 Chan et al.  
 D818,965 S 5/2018 Chan et al.  
 D835,045 S 12/2018 Chan et al.  
 D841,587 S \* 2/2019 Terajima ..... D13/133  
 D841,594 S 2/2019 Chan et al.  
 D842,814 S \* 3/2019 Tsai ..... D13/147  
 D850,384 S 6/2019 Kirk et al.  
 D867,301 S \* 11/2019 Saitou ..... D13/147  
 D870,669 S 12/2019 Katagiyama et al.  
 D873,219 S 1/2020 Sasaki  
 D873,773 S 1/2020 Cao  
 D877,703 S \* 3/2020 Holub ..... D13/147  
 D899,376 S 10/2020 Chan et al.  
 D902,158 S \* 11/2020 Chan ..... D13/147  
 D909,977 S \* 2/2021 Nakamura ..... D13/154  
 D915,285 S \* 4/2021 Oosaka ..... D13/133  
 D924,139 S \* 7/2021 Jayme ..... D13/133  
 D924,160 S \* 7/2021 Oosaka ..... D13/147  
 D924,161 S \* 7/2021 Sato ..... D13/147  
 D924,162 S \* 7/2021 Yokoyama ..... D13/147  
 D924,163 S \* 7/2021 Yokoyama ..... D13/147  
 D924,164 S \* 7/2021 Shimomaki ..... D13/147  
 D937,778 S \* 12/2021 Tada ..... D13/133

D941,249 S \* 1/2022 Obata ..... D13/147  
 D959,381 S \* 8/2022 Yamamoto ..... D13/133  
 D960,099 S \* 8/2022 Yanase ..... D13/133  
 D960,105 S \* 8/2022 Imamura ..... D13/133  
 D960,841 S \* 8/2022 Kan ..... D13/147  
 D961,523 S \* 8/2022 Gonzalez ..... D13/147  
 D964,291 S \* 9/2022 Faith ..... D13/147  
 2009/0137157 A1 5/2009 Swanger et al.  
 2014/0364006 A1\* 12/2014 Lo ..... H01R 13/6461  
 439/607.01  
 2016/0134040 A1\* 5/2016 Phillips ..... H01R 12/721  
 439/374  
 2016/0226166 A1\* 8/2016 Beaman ..... H01R 12/721  
 2017/0054246 A1\* 2/2017 Yao ..... H01R 13/502  
 2017/0207570 A1\* 7/2017 Guo ..... H01R 13/5216  
 2017/0365950 A1 12/2017 Matsuura et al.  
 2018/0034201 A1 2/2018 Sekino et al.  
 2018/0034203 A1 2/2018 Sekino et al.  
 2018/0145449 A1\* 5/2018 Wei ..... H01R 24/60  
 2018/0212364 A1\* 7/2018 Huang ..... H01R 13/64  
 2019/0123490 A1\* 4/2019 Zhao ..... H01R 13/6585  
 2020/0194932 A1\* 6/2020 Henry ..... H01R 13/6275  
 2020/0235535 A1\* 7/2020 Tsai ..... H01R 13/42  
 2021/0083434 A1\* 3/2021 Gailus ..... H01R 13/6474  
 2021/0175651 A1\* 6/2021 Nagae ..... H01R 13/639

FOREIGN PATENT DOCUMENTS

TW D152287 S1 4/2012  
 TW D148301 S1 7/2012  
 TW D151643 S 2/2013  
 TW D151644 S 2/2013  
 TW D154040 S1 6/2013  
 TW D172199 S1 6/2014  
 TW D161661 S 7/2014

OTHER PUBLICATIONS

U.S. Appl. No. 29/665,308, filed Oct. 2, 2018, Chan et al.  
 [No Author Listed] A Series Family. Amphenol. <https://www.amphenol-sine.com/a-series-connectors>. Dated 2018; last accessed Feb. 13, 2020, 7 pages.

\* cited by examiner

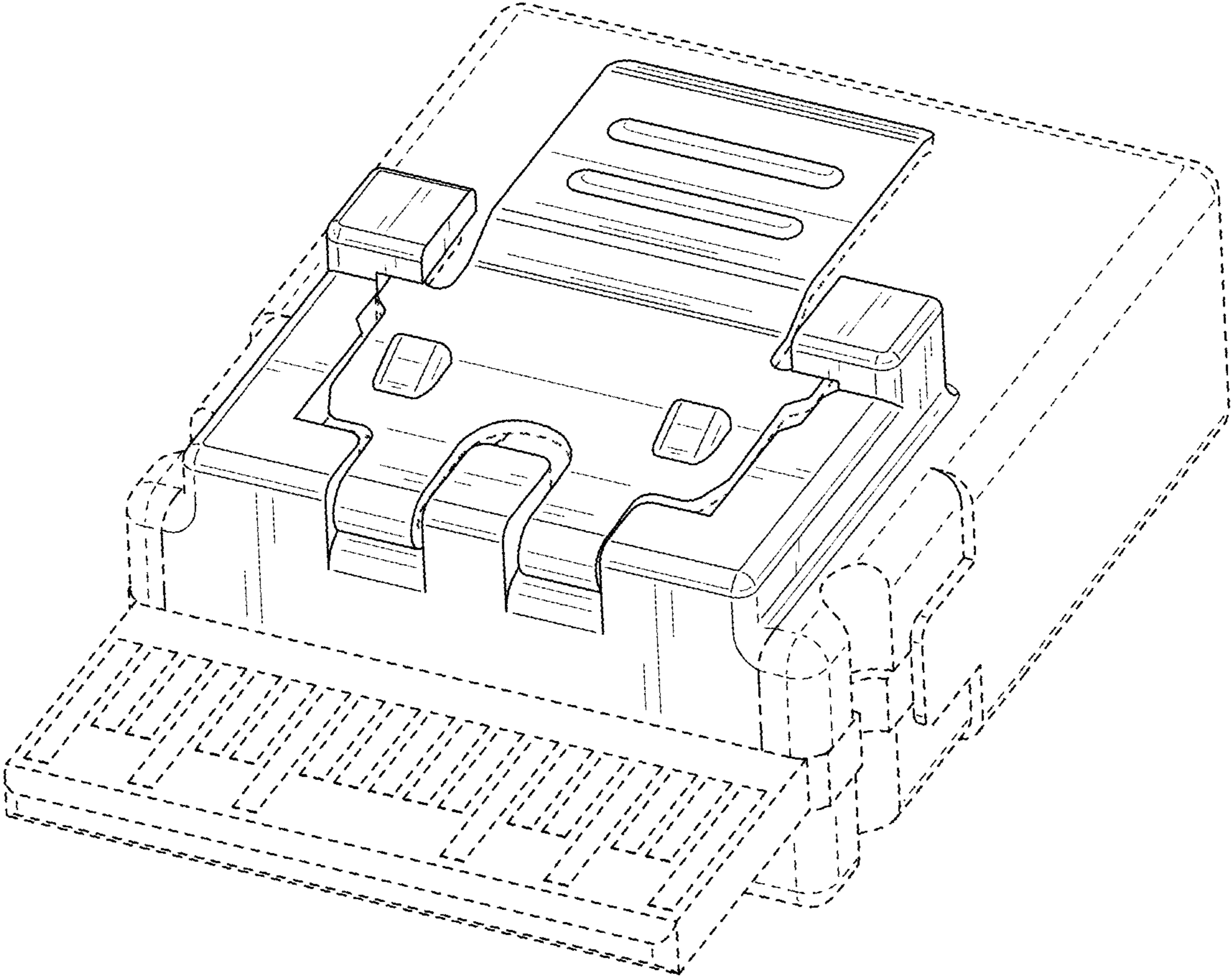


FIG. 1



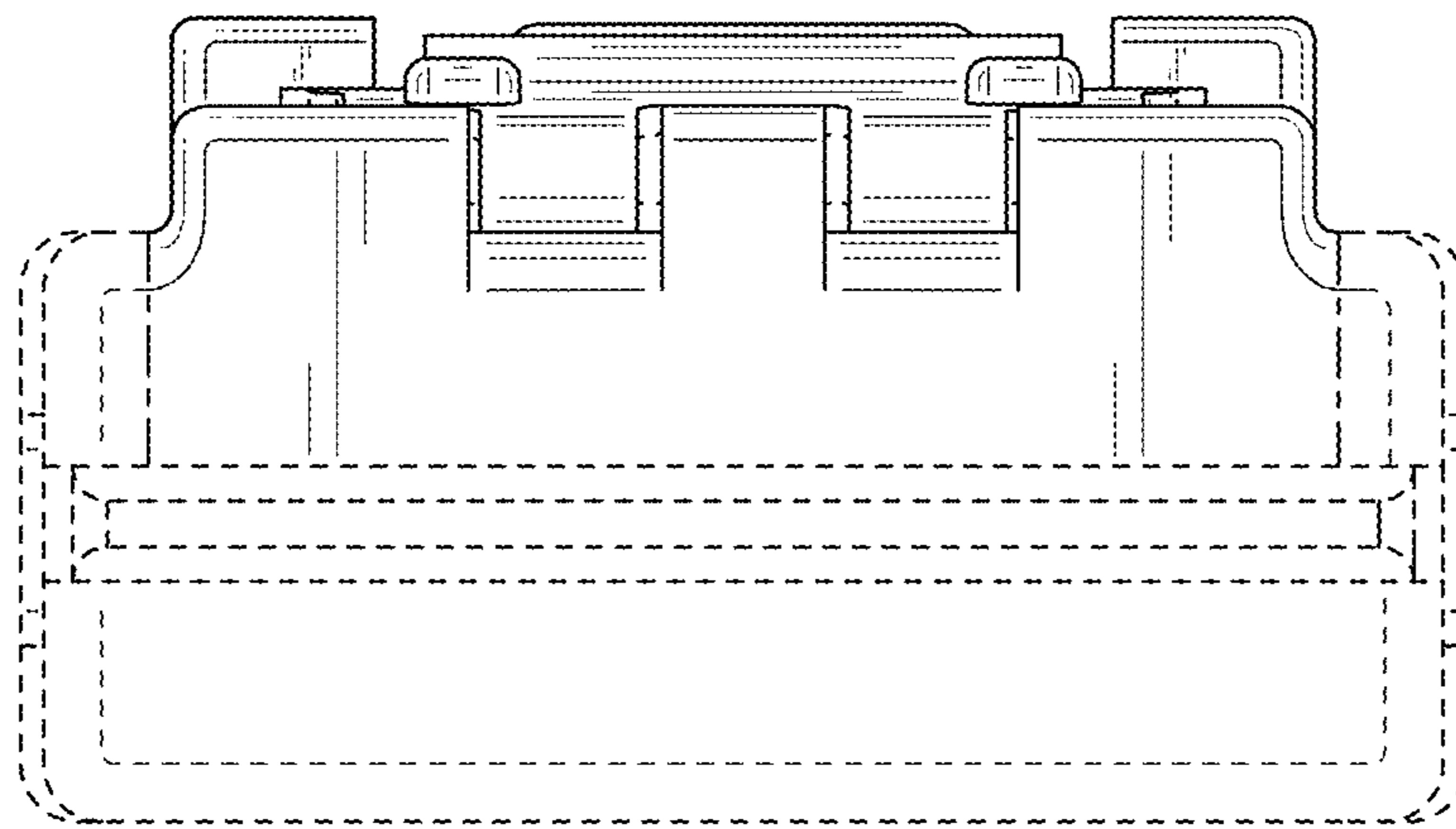


FIG. 2

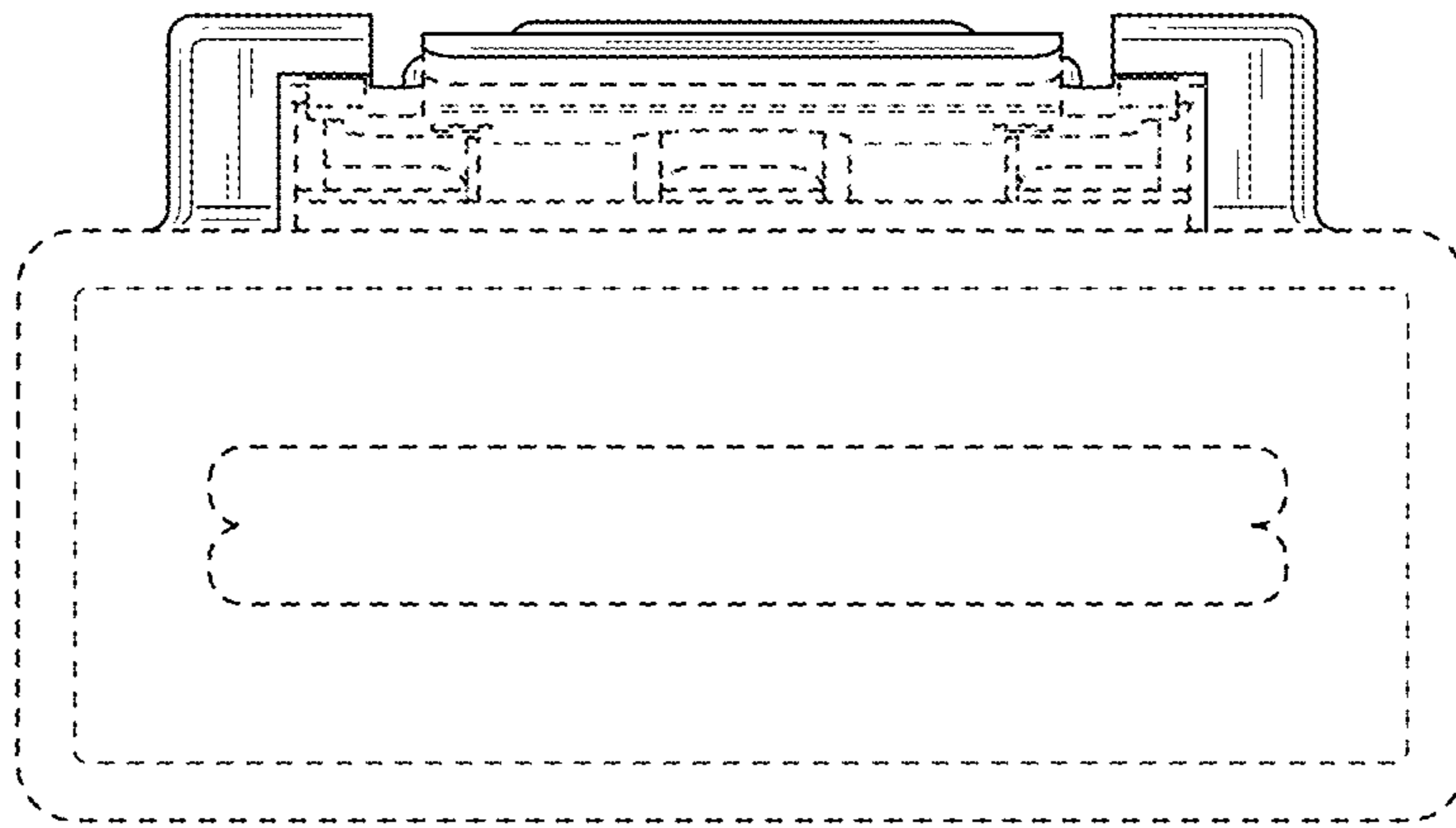


FIG. 3

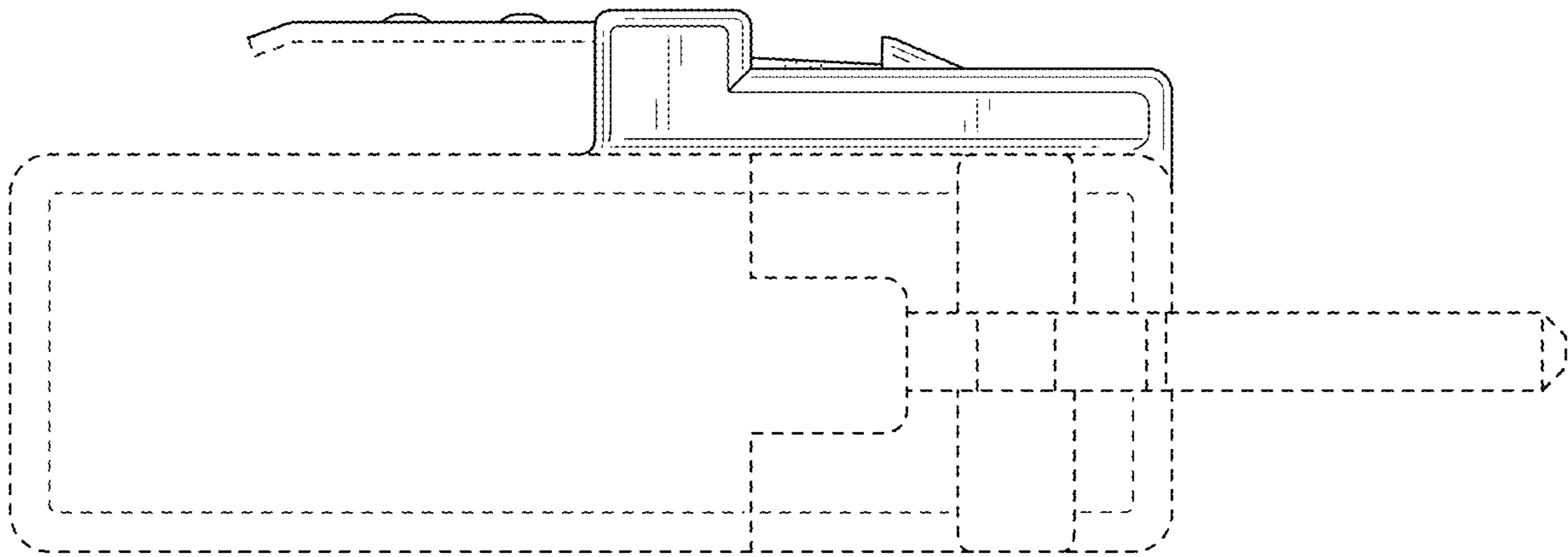


FIG. 4

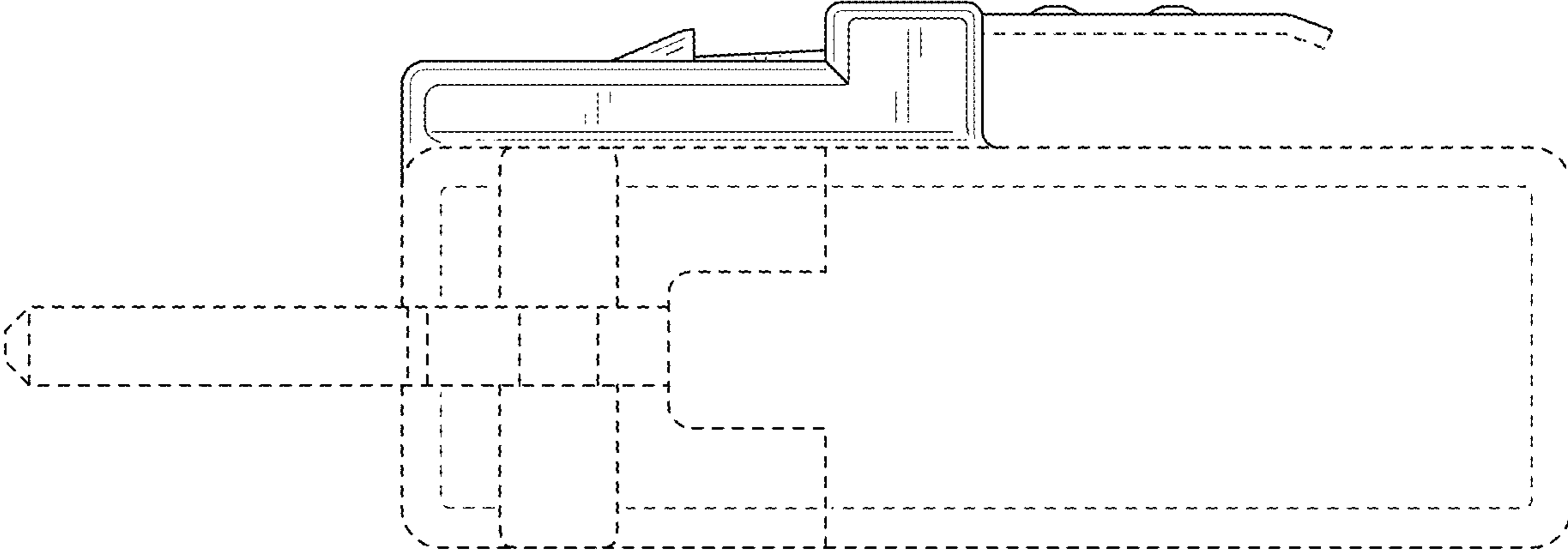


FIG. 5

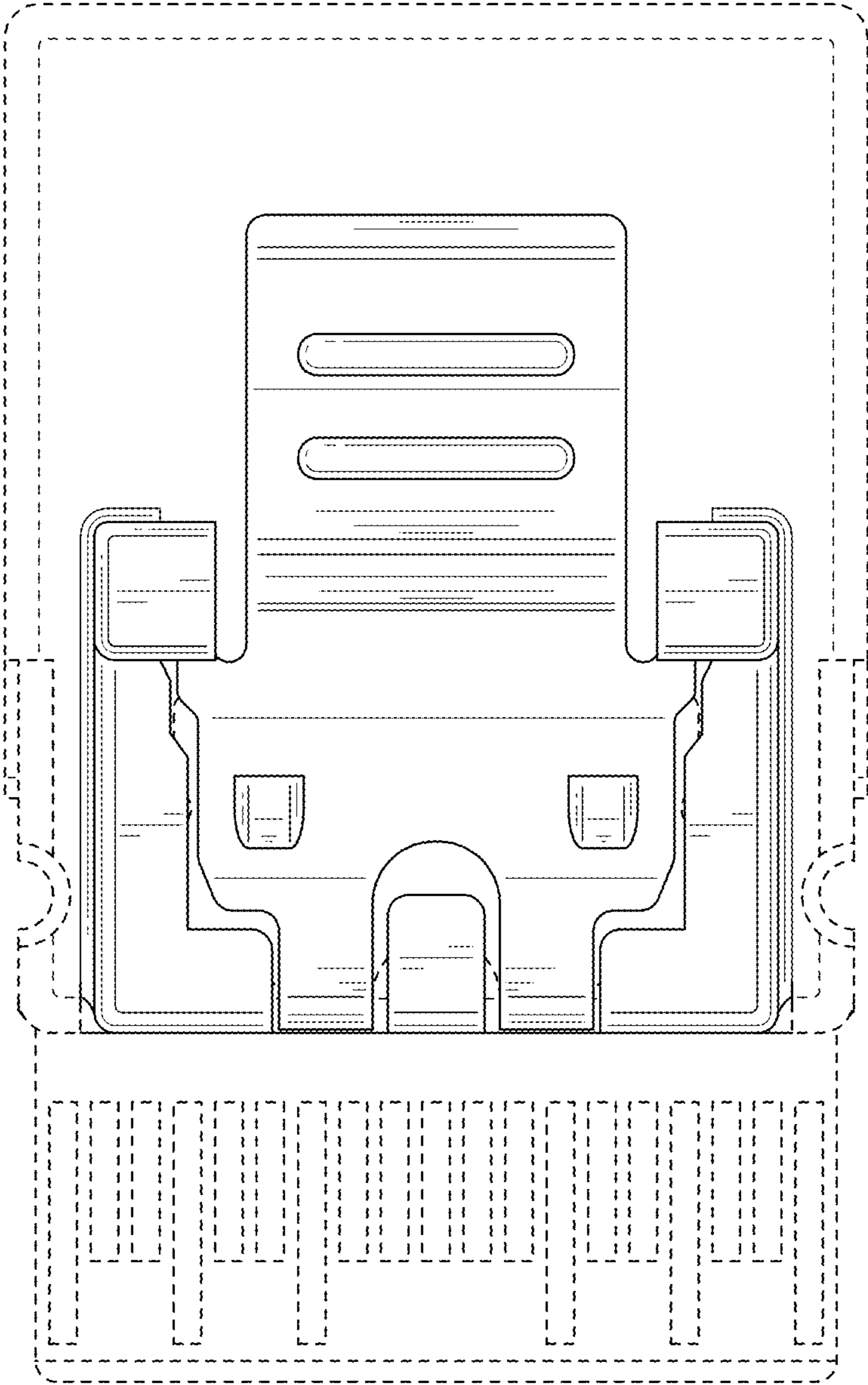


FIG. 6



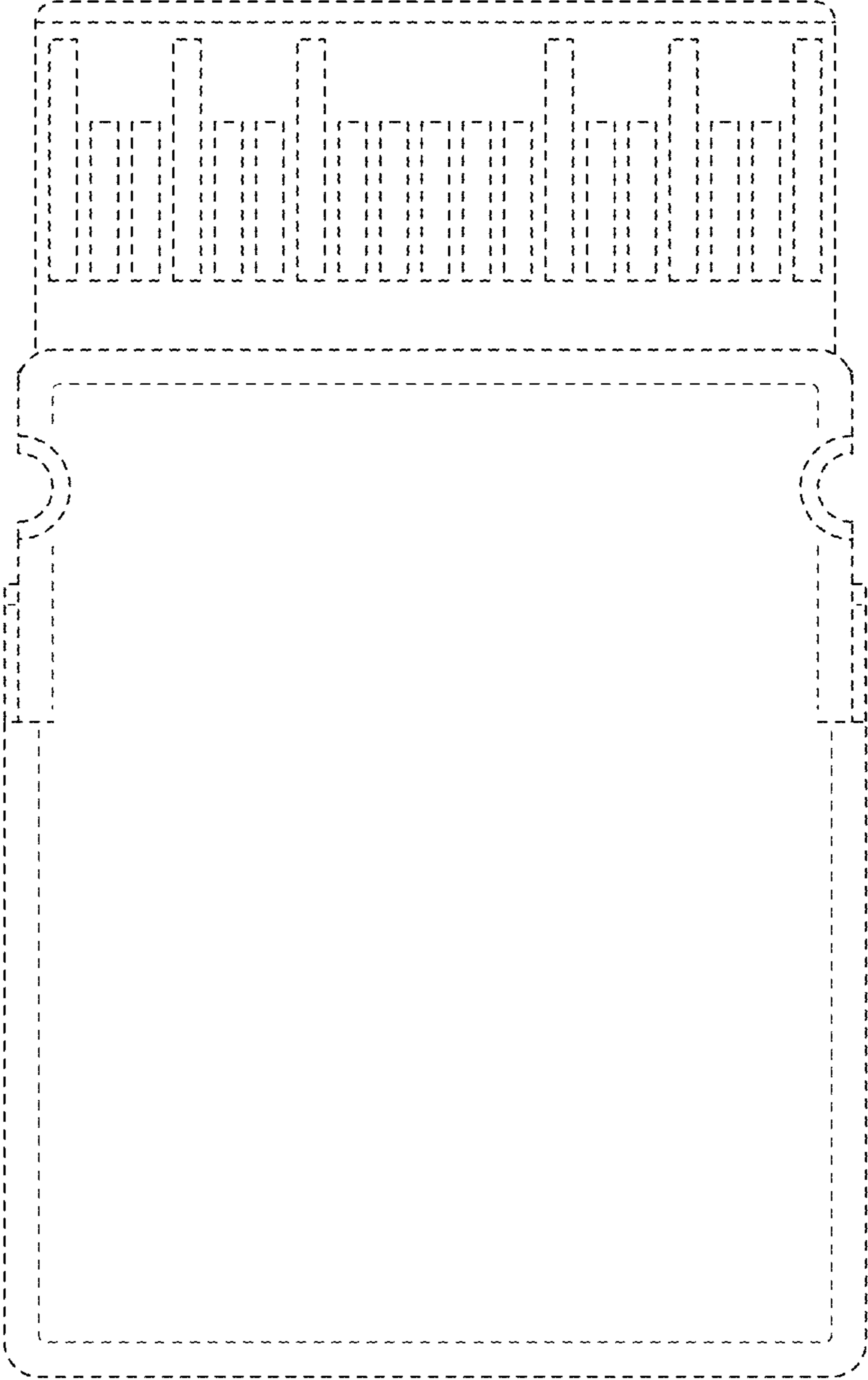


FIG. 7