

US00D849119S

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

(10) **Patent No.:** **US D849,119 S**

(45) **Date of Patent:** **\*\* May 21, 2019**

(54) **DRIVING UNIT FOR A CAMERA LENS**

(71) Applicant: **TDK TAIWAN CORP.**, Taoyuan (TW)

(72) Inventors: **Shang-Yu Hsu**, Taipei (TW); **Yi-Ho Chen**, Taipei (TW); **Shih-Ting Huang**, Taipei (TW); **Yu-Huai Liao**, Taipei (TW); **Yi-Hsin Nieh**, Taipei (TW); **Shao-Chung Chang**, Taipei (TW); **Kuo-Chun Kao**, Taipei (TW); **Shin-Hua Chen**, Taipei (TW); **Kuan-Hung Chen**, Taipei (TW); **Chen-Hsien Fan**, Taipei (TW)

(73) Assignee: **TDK TAIWAN CORP.**, Yangmei Taoyuan (TW)

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

(21) Appl. No.: **29/626,011**

(22) Filed: **Nov. 14, 2017**

(51) **LOC (11) Cl.** ..... **16-05**

(52) **U.S. Cl.**  
USPC ..... **D16/219**

(58) **Field of Classification Search**  
USPC ..... D16/200–204, 208, 218, 219; 340/932.2, 340/933, 937; 348/143, 148, 151, 348/373–376; 396/419, 427, 428, 396/537–541  
CPC ..... G03B 15/03; G03B 17/02; G03B 17/04; G03B 17/48; G03B 17/56; G03B 19/04; G08G 1/0175; H04N 5/2251; H04N 5/2252; H04N 5/2253; H04N 5/2254; H04N 2101/00; B60R 1/00

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D489,388 S \* 5/2004 Saito ..... D16/200  
D496,062 S \* 9/2004 Yamakami ..... D16/200

D496,382 S \* 9/2004 Yamakami ..... D16/200  
D510,376 S \* 10/2005 Yamakami ..... D16/200  
D511,182 S \* 11/2005 Kato ..... D16/200  
D515,610 S \* 2/2006 Yamakami ..... D16/200  
D564,562 S \* 3/2008 Honma ..... D16/200  
D598,039 S \* 8/2009 Owada ..... D16/134

(Continued)

*Primary Examiner* — Ramzi S Almatrahi

(74) *Attorney, Agent, or Firm* — Muncy, Geissler, Olds & Lowe, P.C.

(57) **CLAIM**

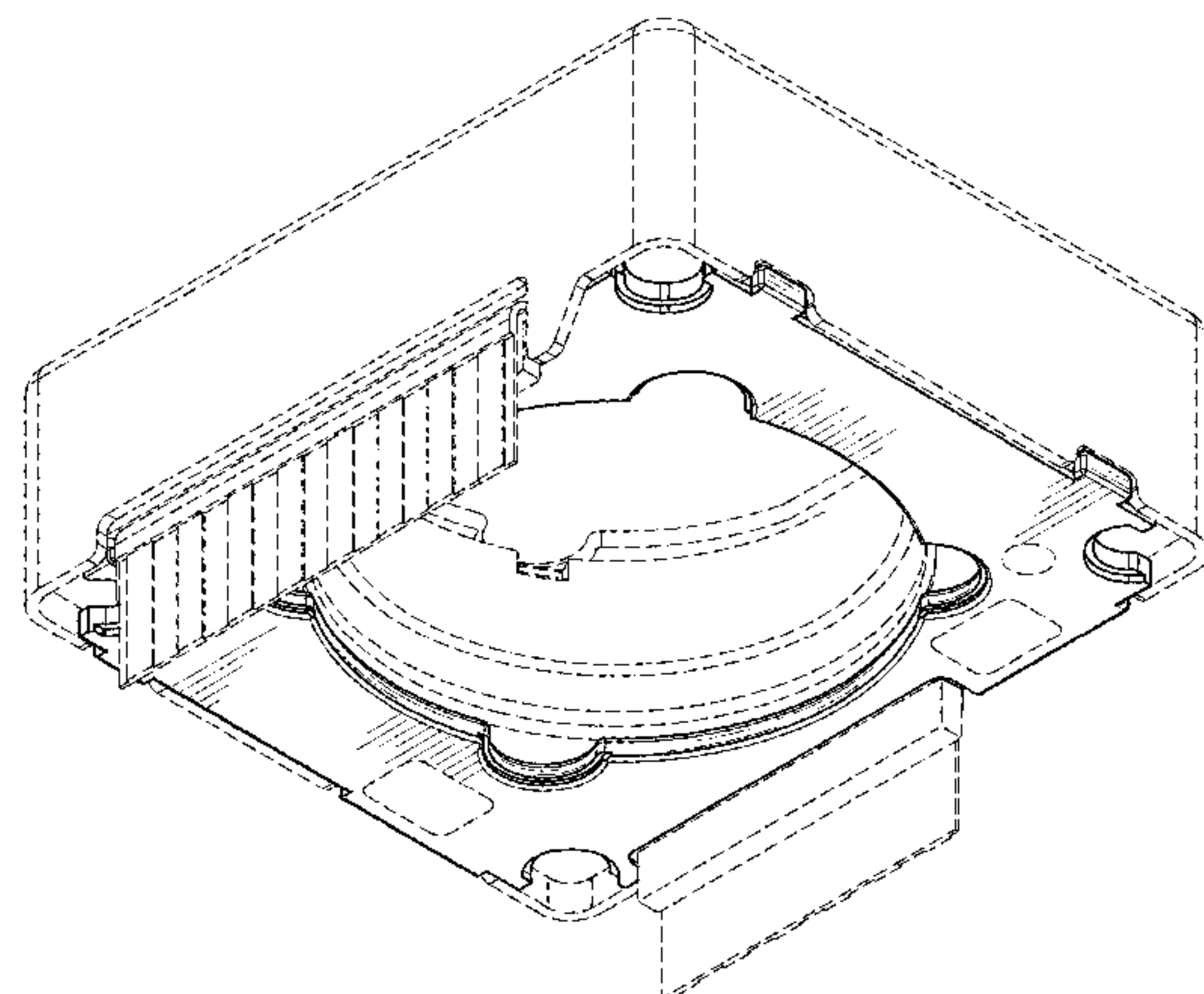
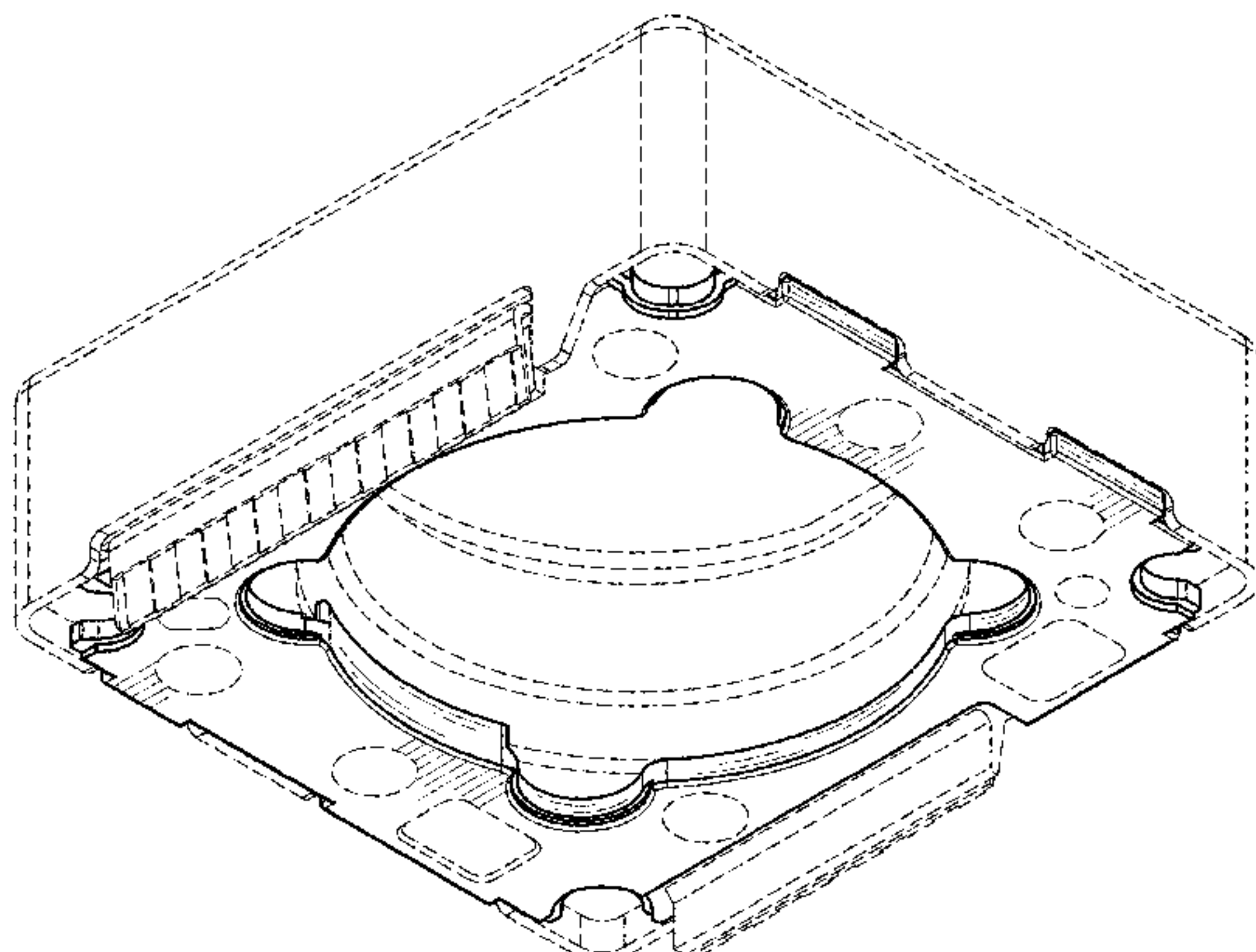
The ornamental design for a driving unit for a camera lens, as shown and described.

**DESCRIPTION**

FIG. 1 is a bottom perspective view of a first embodiment of a driving unit for a camera lens showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a rear elevational view thereof; FIG. 4 is a left side elevational view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; FIG. 8 is a top perspective view thereof; FIG. 9 is a bottom perspective view of a second embodiment of a driving unit for a camera lens showing our new design; FIG. 10 is a front elevational view thereof; FIG. 11 is a rear elevational view thereof; FIG. 12 is a left side elevational view thereof; FIG. 13 is a right side elevational view thereof; FIG. 14 is a top plan view thereof; FIG. 15 is a bottom plan view thereof; and, FIG. 16 is a top perspective view thereof.

The broken lines depict portions of the driving unit for a camera lens in which the design is embodied that form no part of the claimed design.

**1 Claim, 12 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D699,775 S \* 2/2014 Li ..... D16/200  
D699,776 S \* 2/2014 Li ..... D16/200  
D699,777 S \* 2/2014 Li ..... D16/200  
D736,297 S \* 8/2015 Kawasaki ..... D16/200  
D774,584 S \* 12/2016 Walters ..... D16/200  
2013/0182179 A1\* 7/2013 Page ..... H04N 5/2253  
348/373  
2014/0168509 A1\* 6/2014 Lee ..... H04N 5/2256  
348/374  
2016/0341975 A1\* 11/2016 Kim ..... G02B 27/646  
2017/0245360 A1\* 8/2017 Jung ..... H04M 1/0264

\* cited by examiner

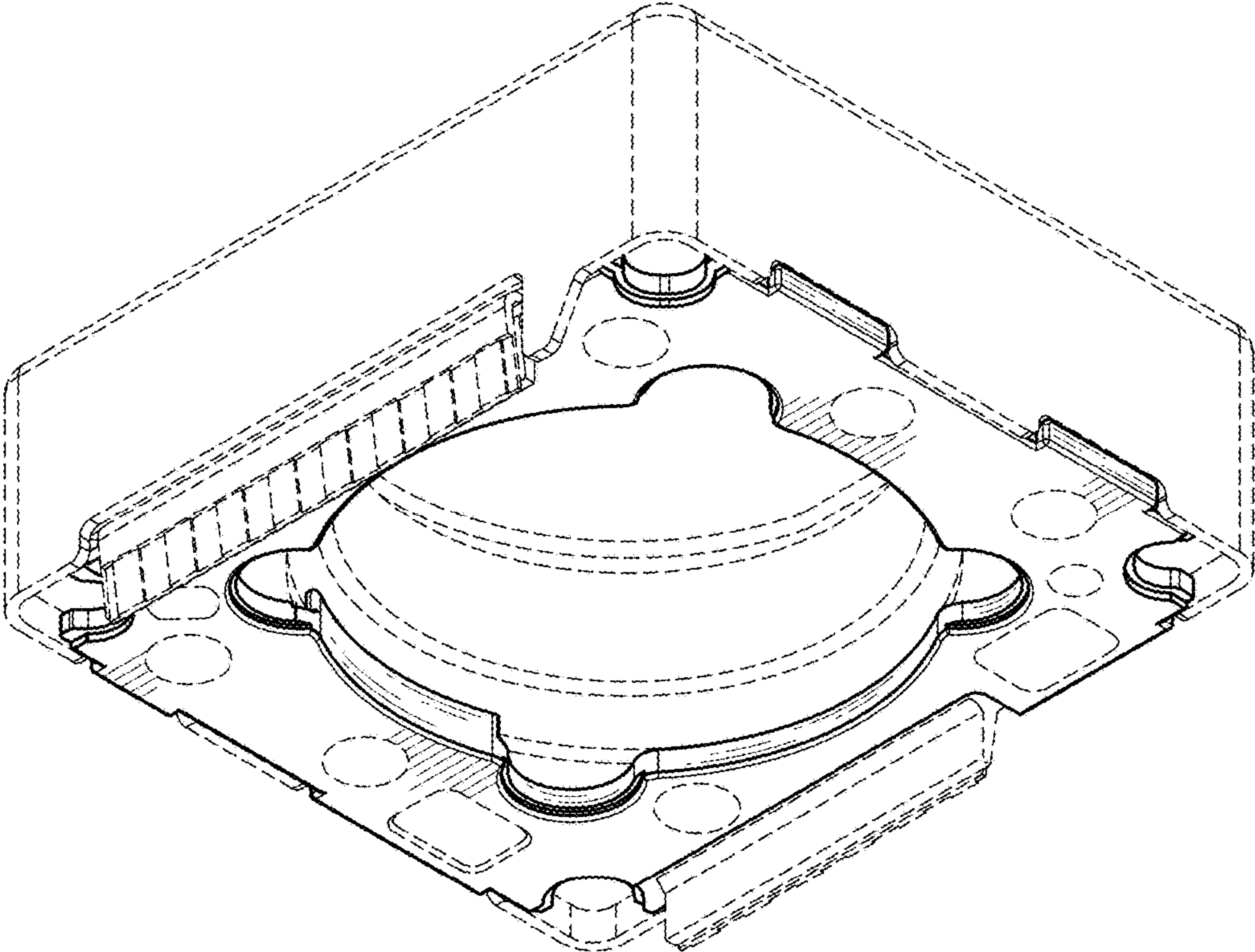


FIG. 1

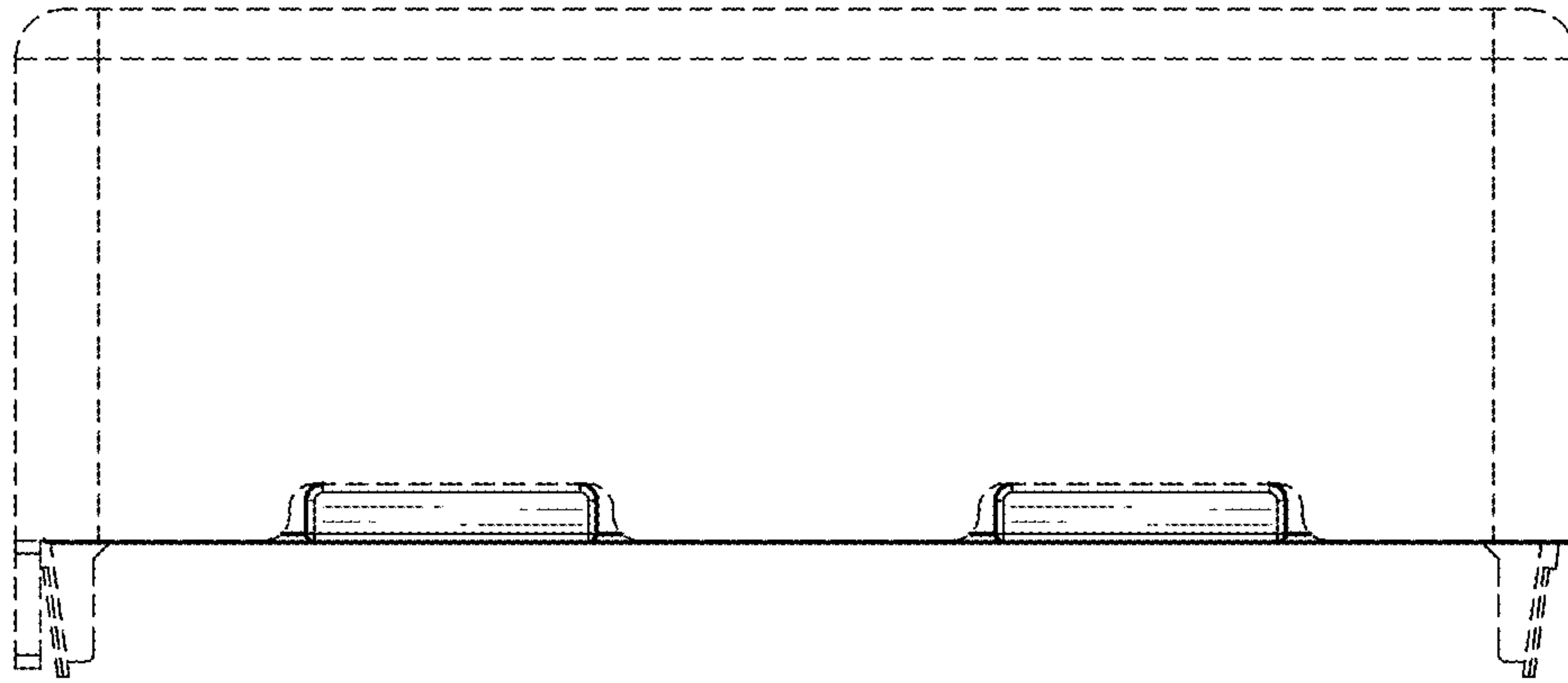


FIG. 2

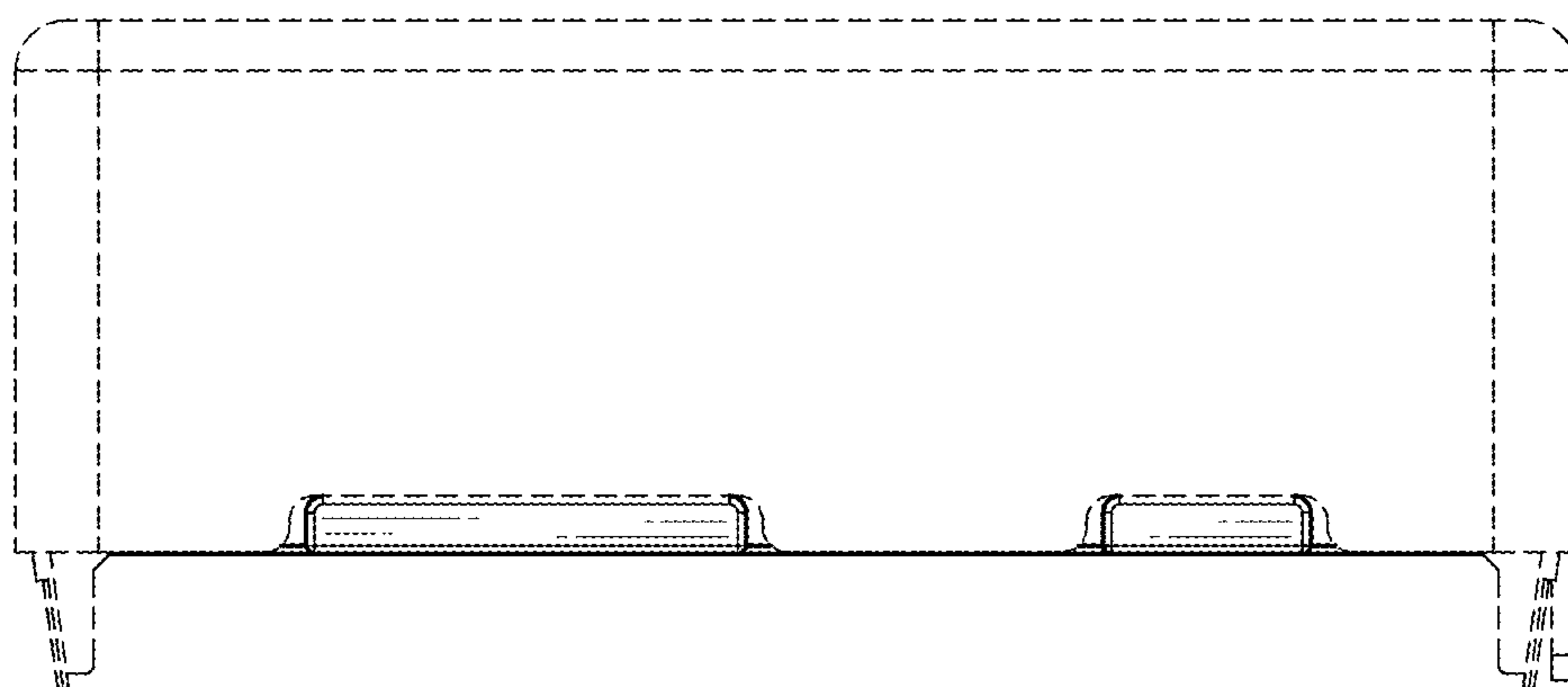


FIG. 3

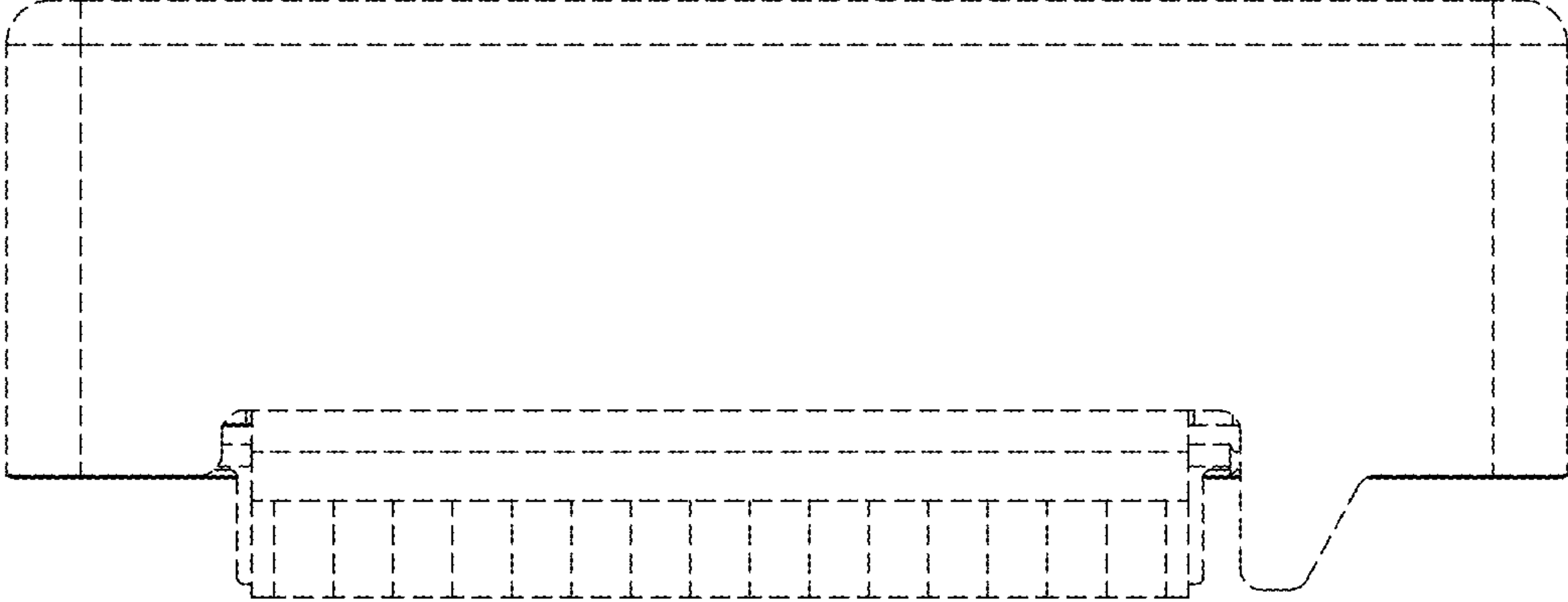


FIG. 4

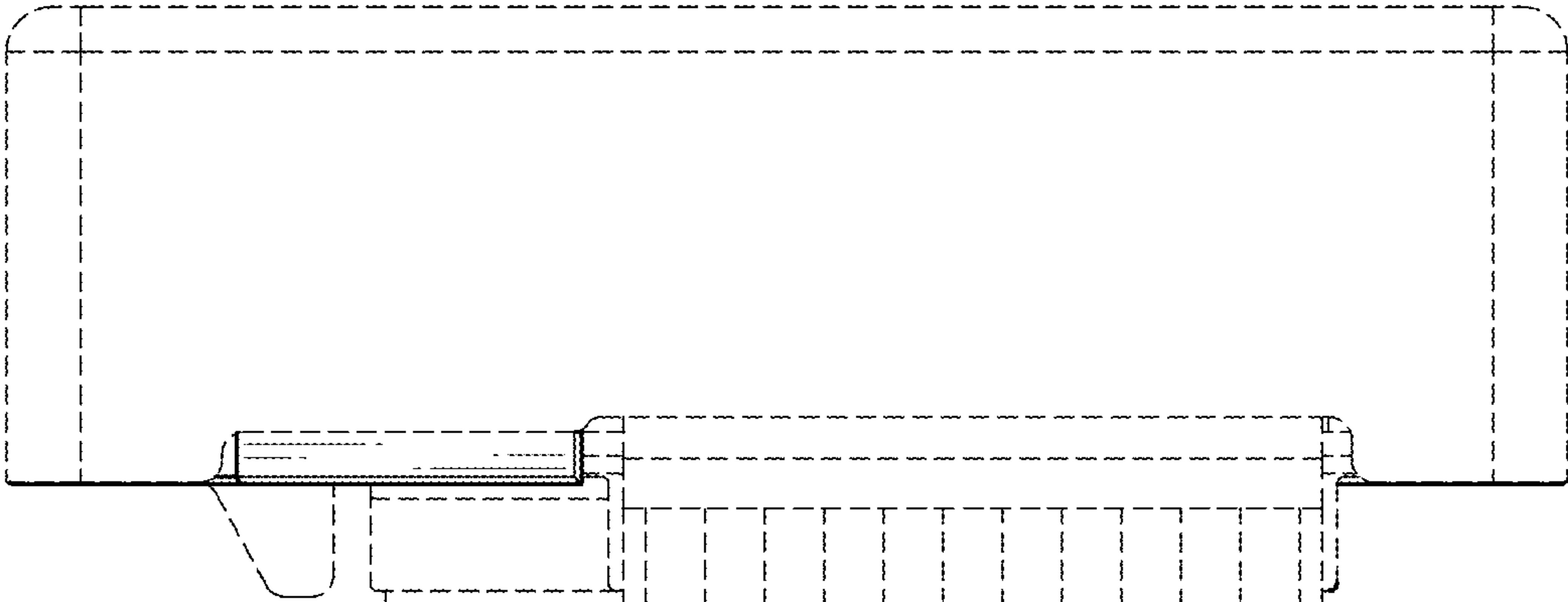


FIG. 5



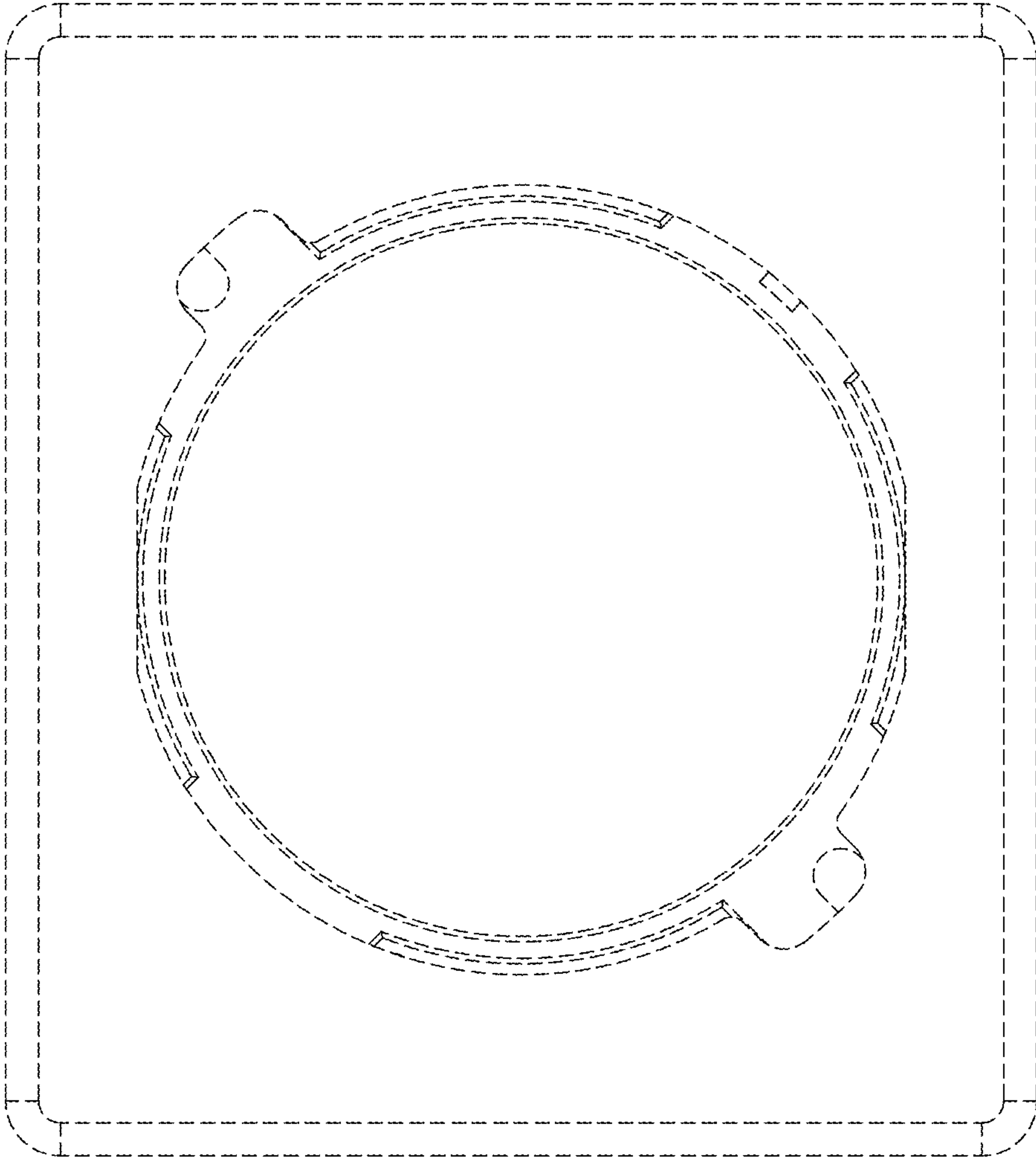


FIG. 6

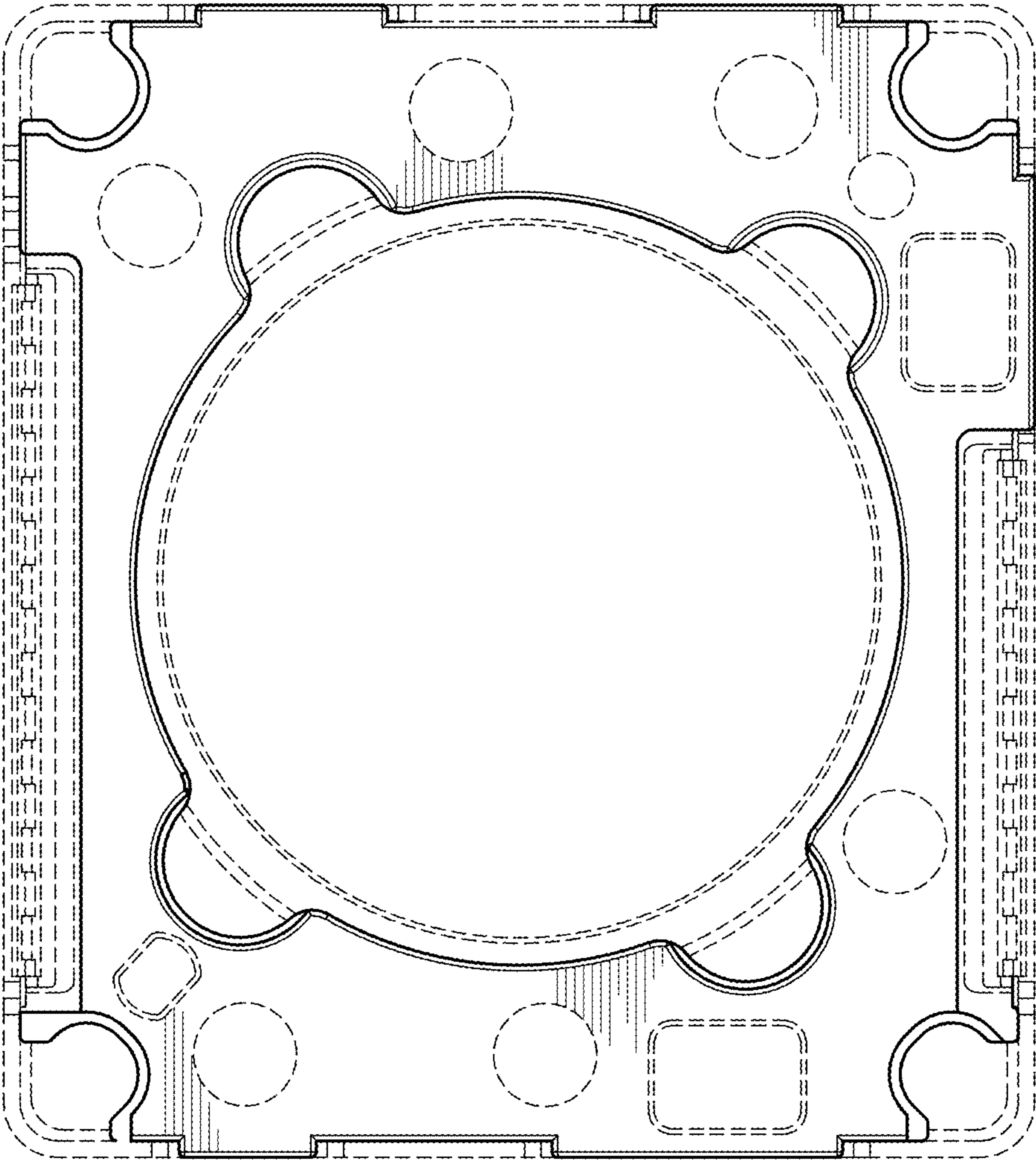


FIG. 7

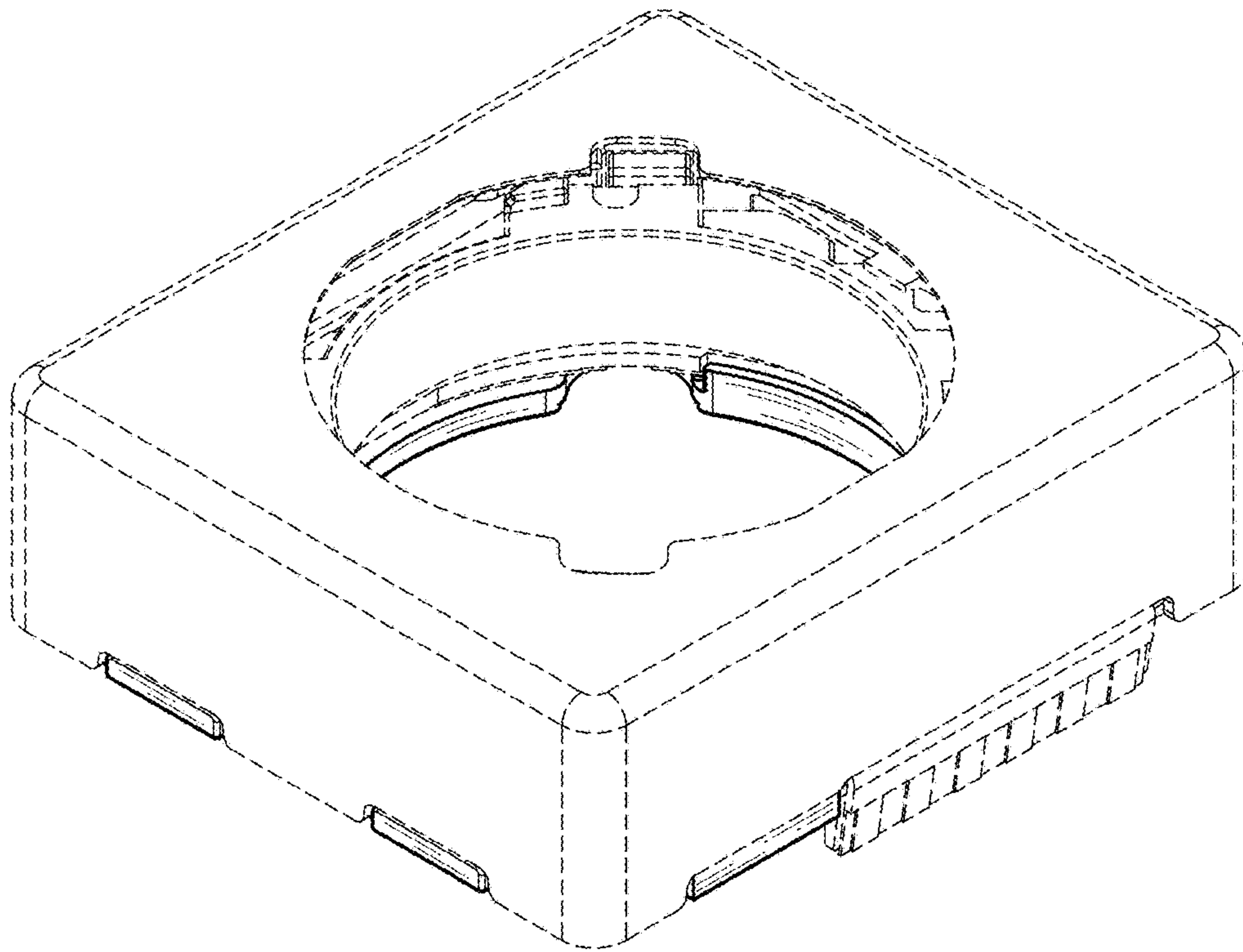


FIG. 8



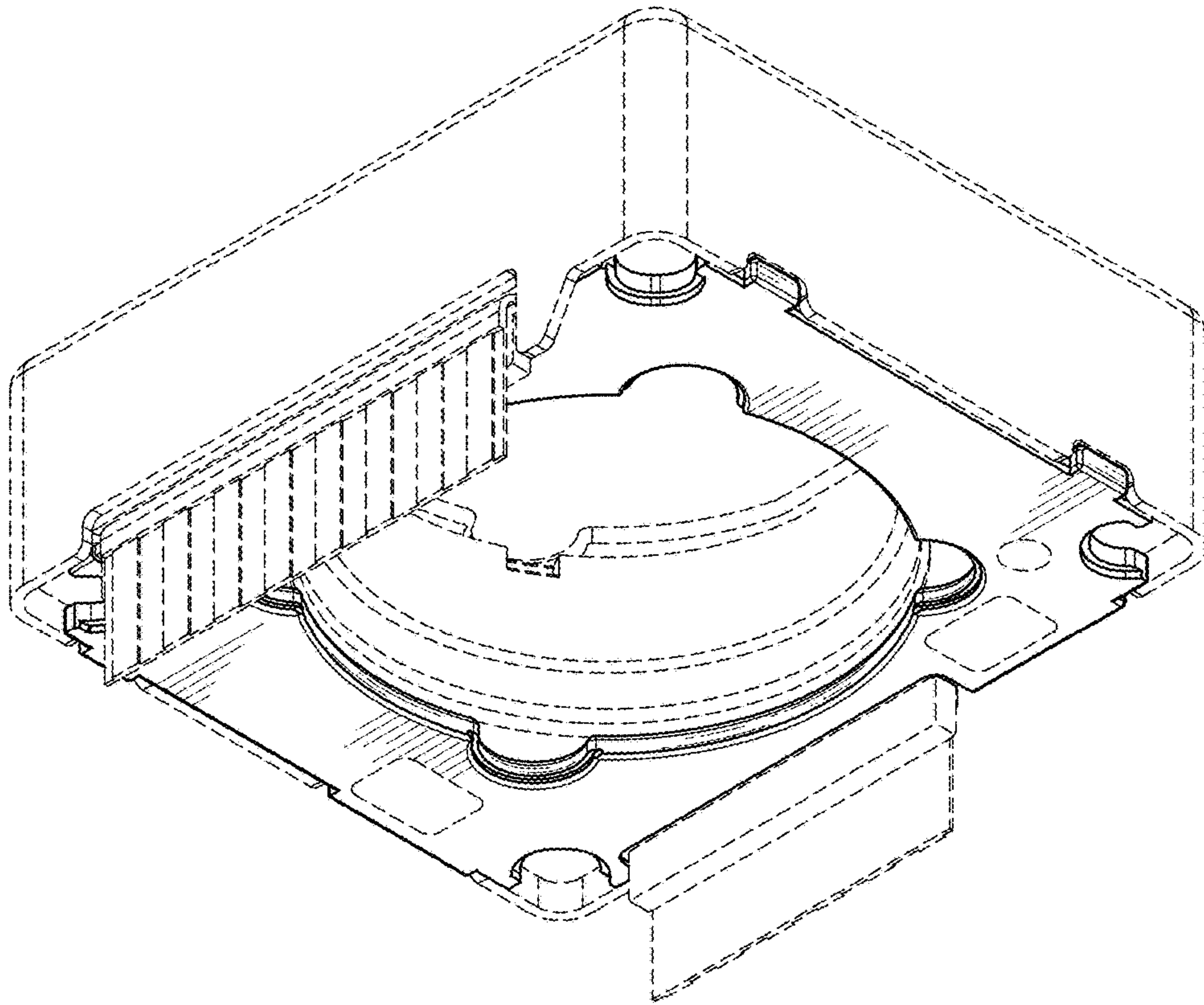


FIG. 9

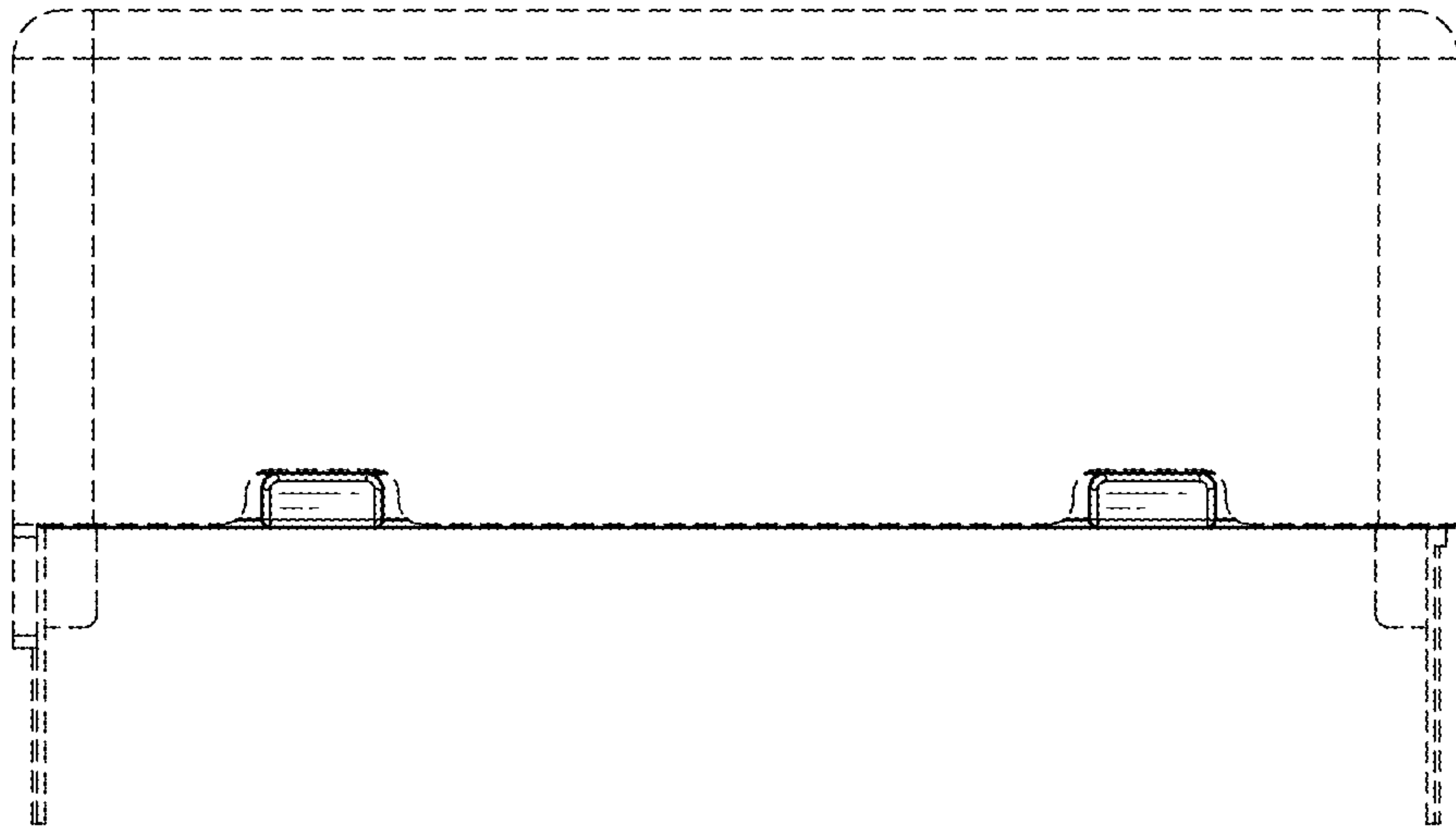


FIG. 10

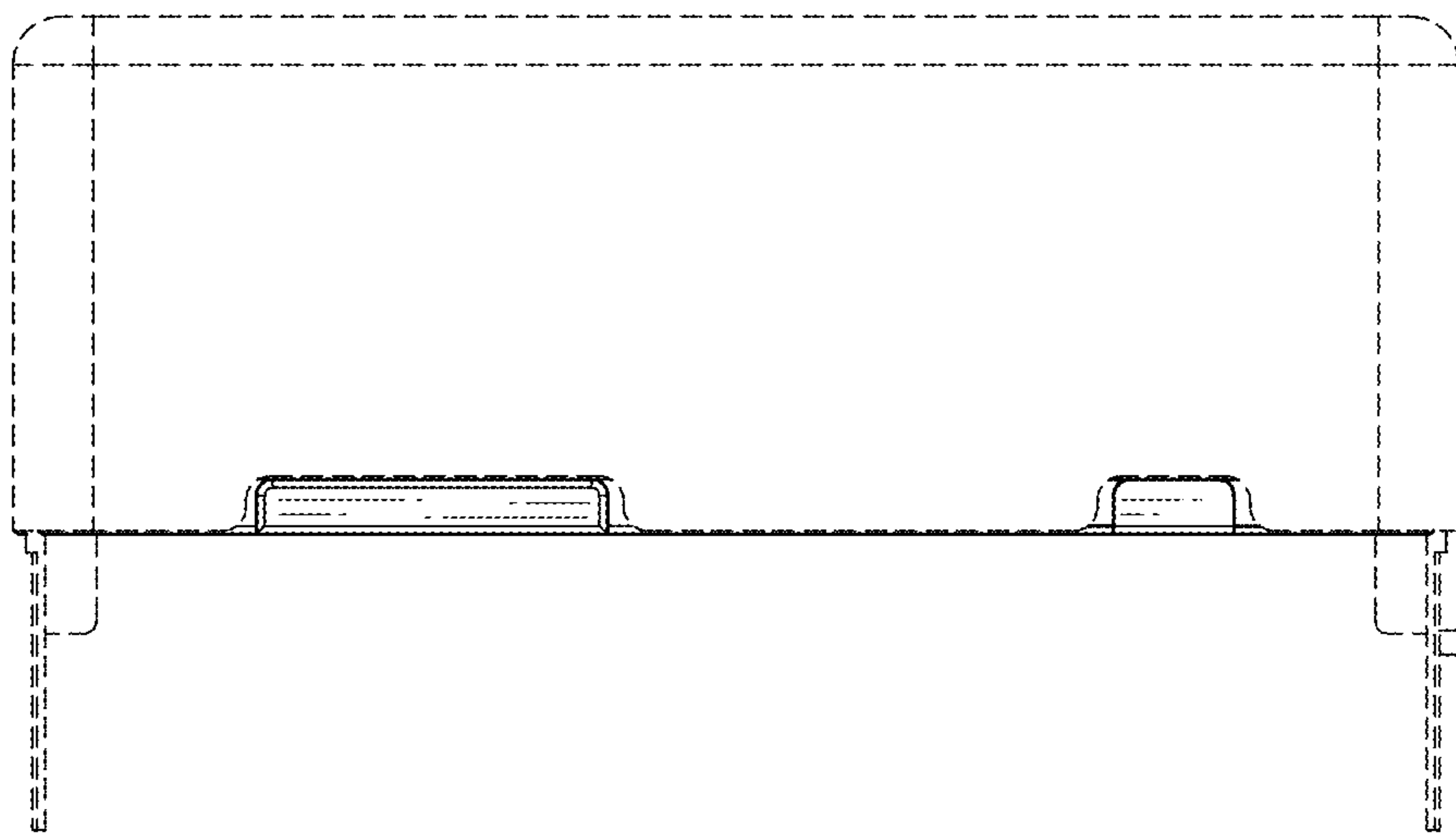


FIG. 11

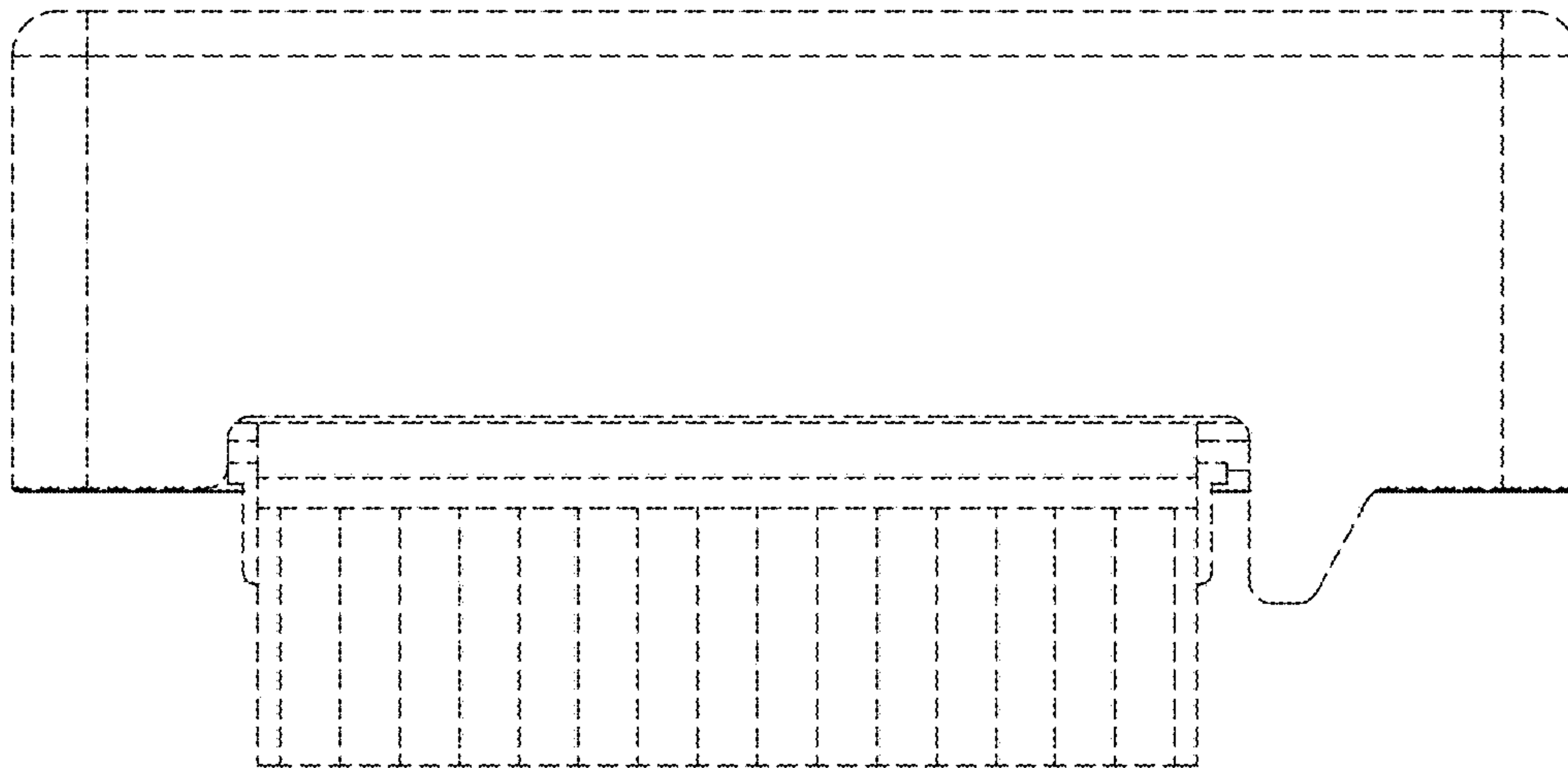


FIG. 12

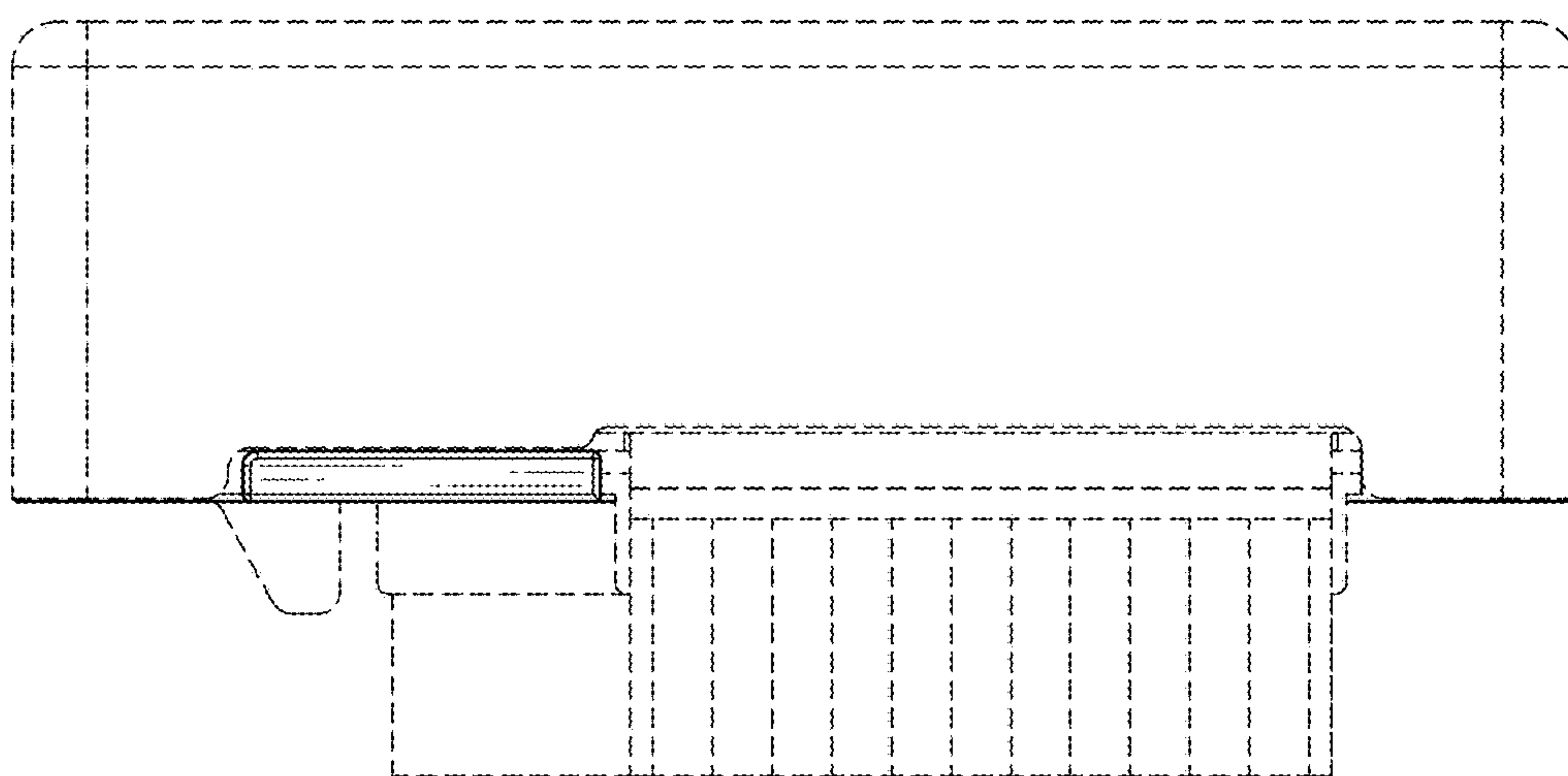


FIG. 13

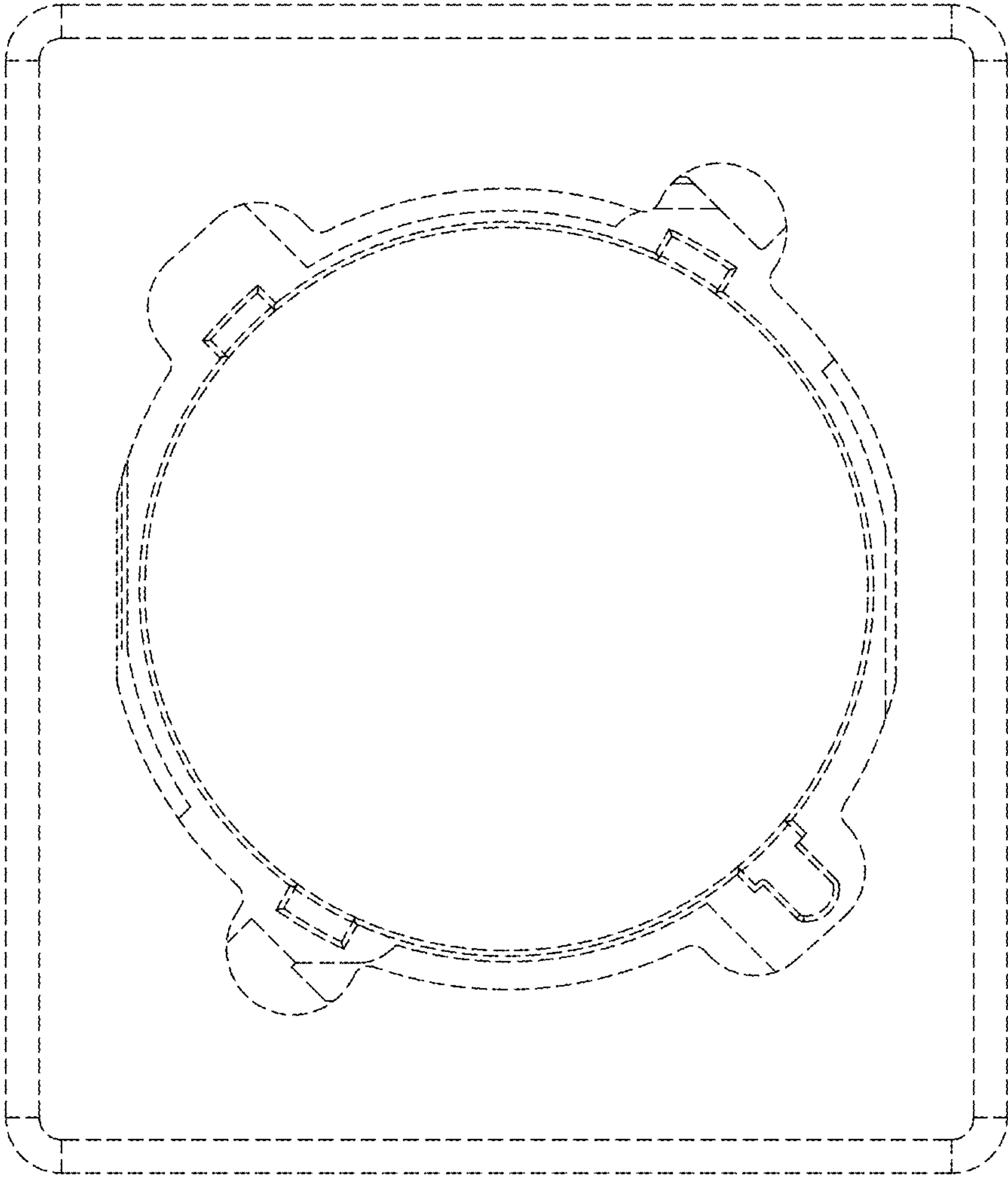


FIG. 14

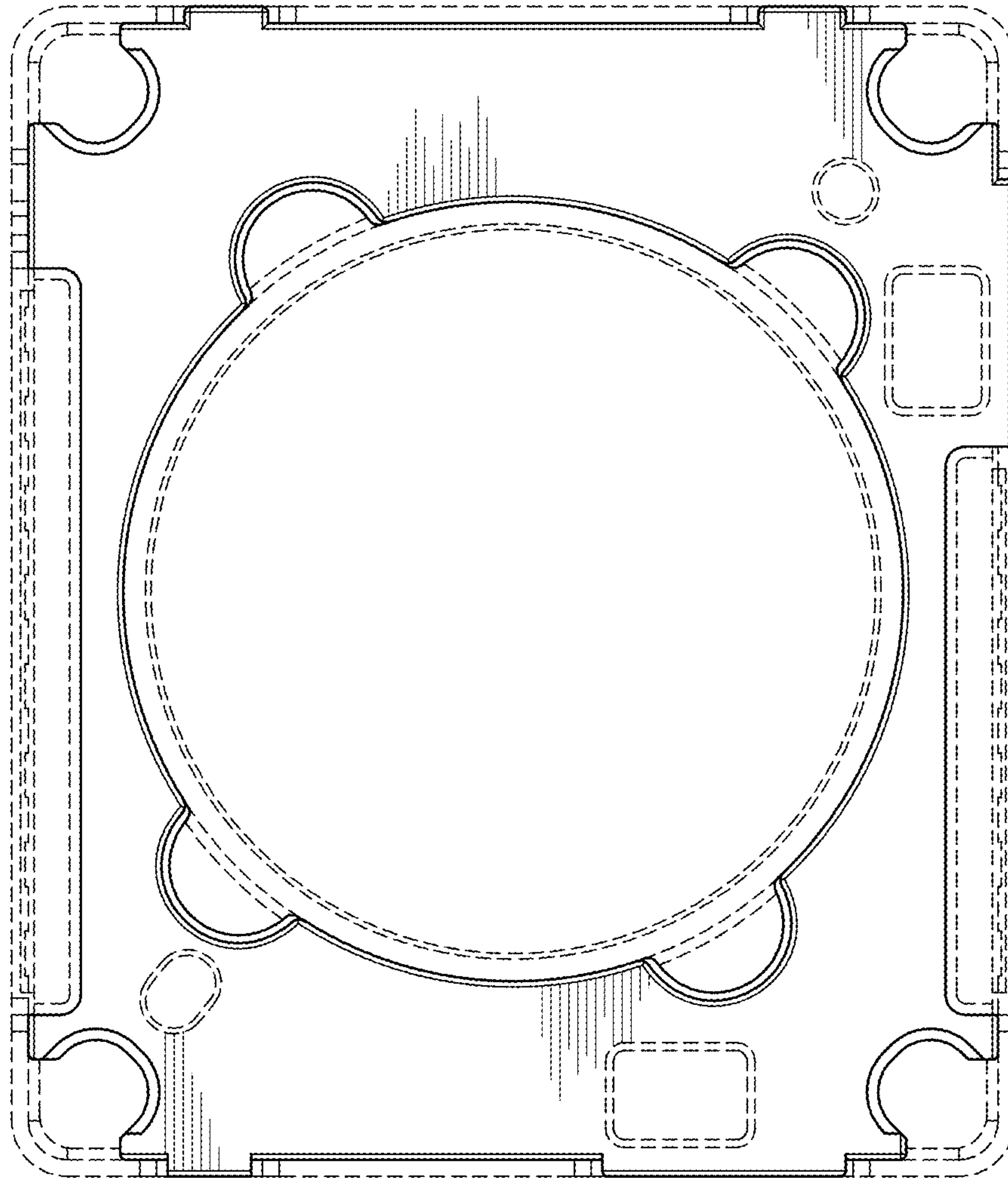


FIG. 15



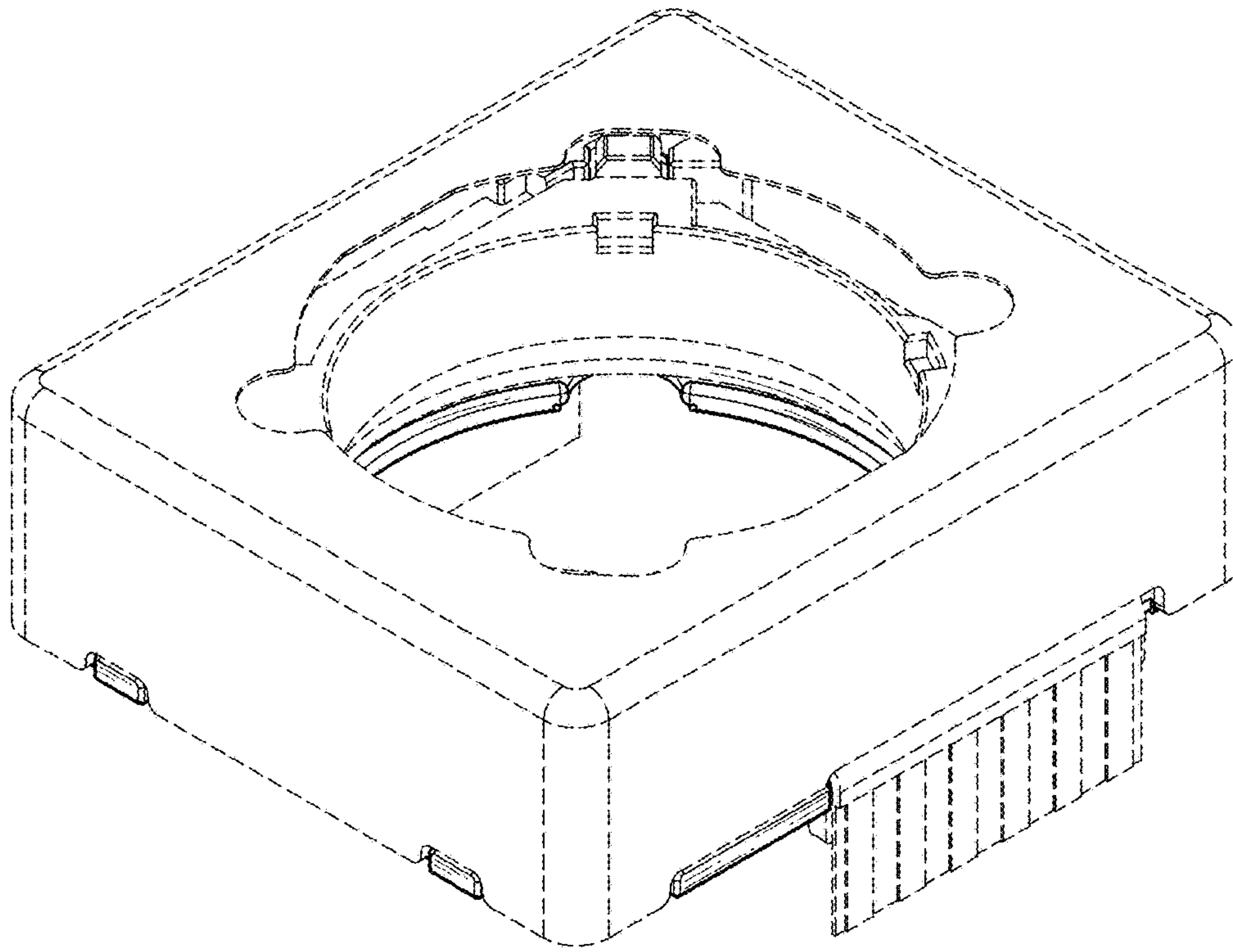


FIG. 16