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

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

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

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

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(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)

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(57) **CLAIM**

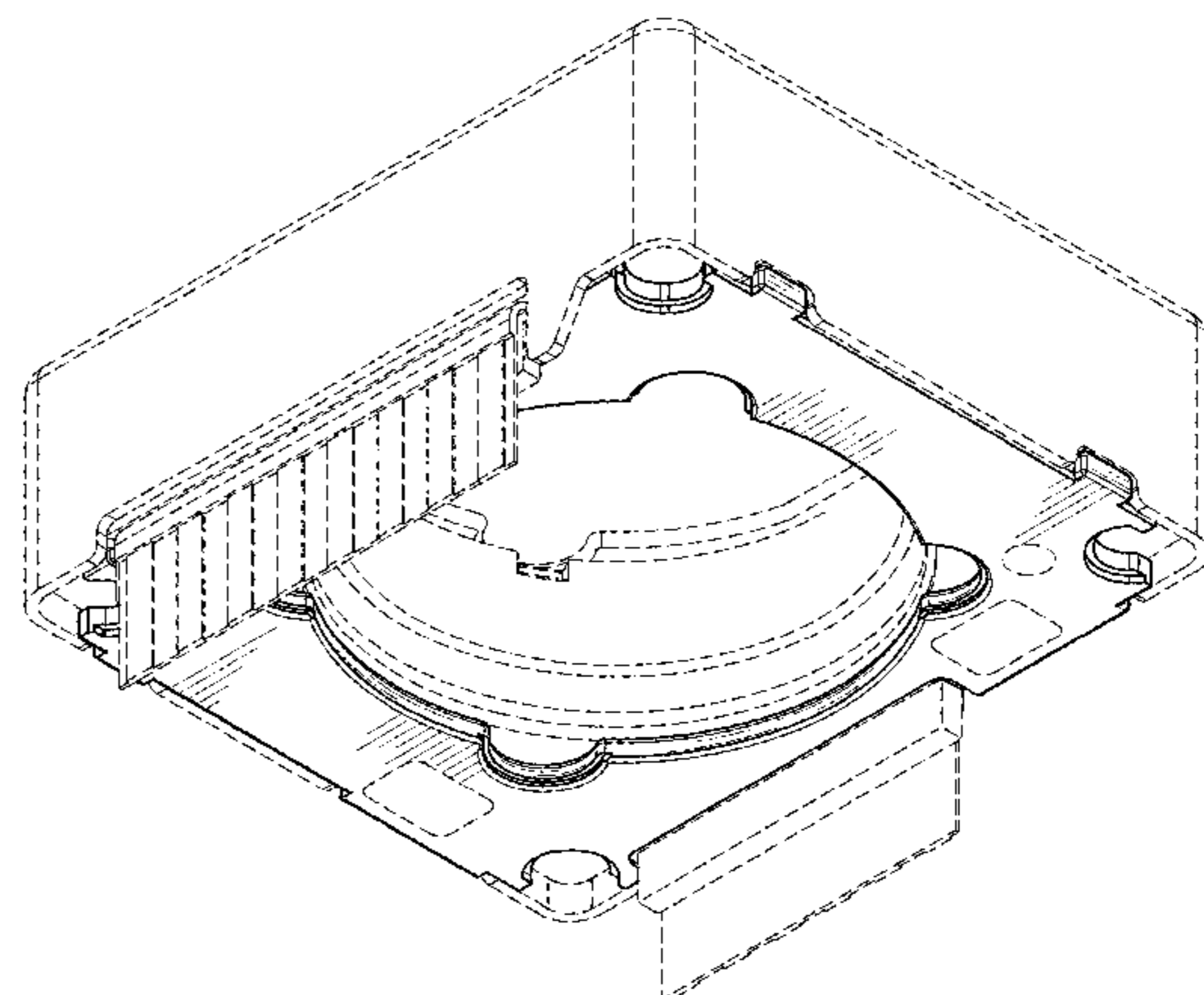
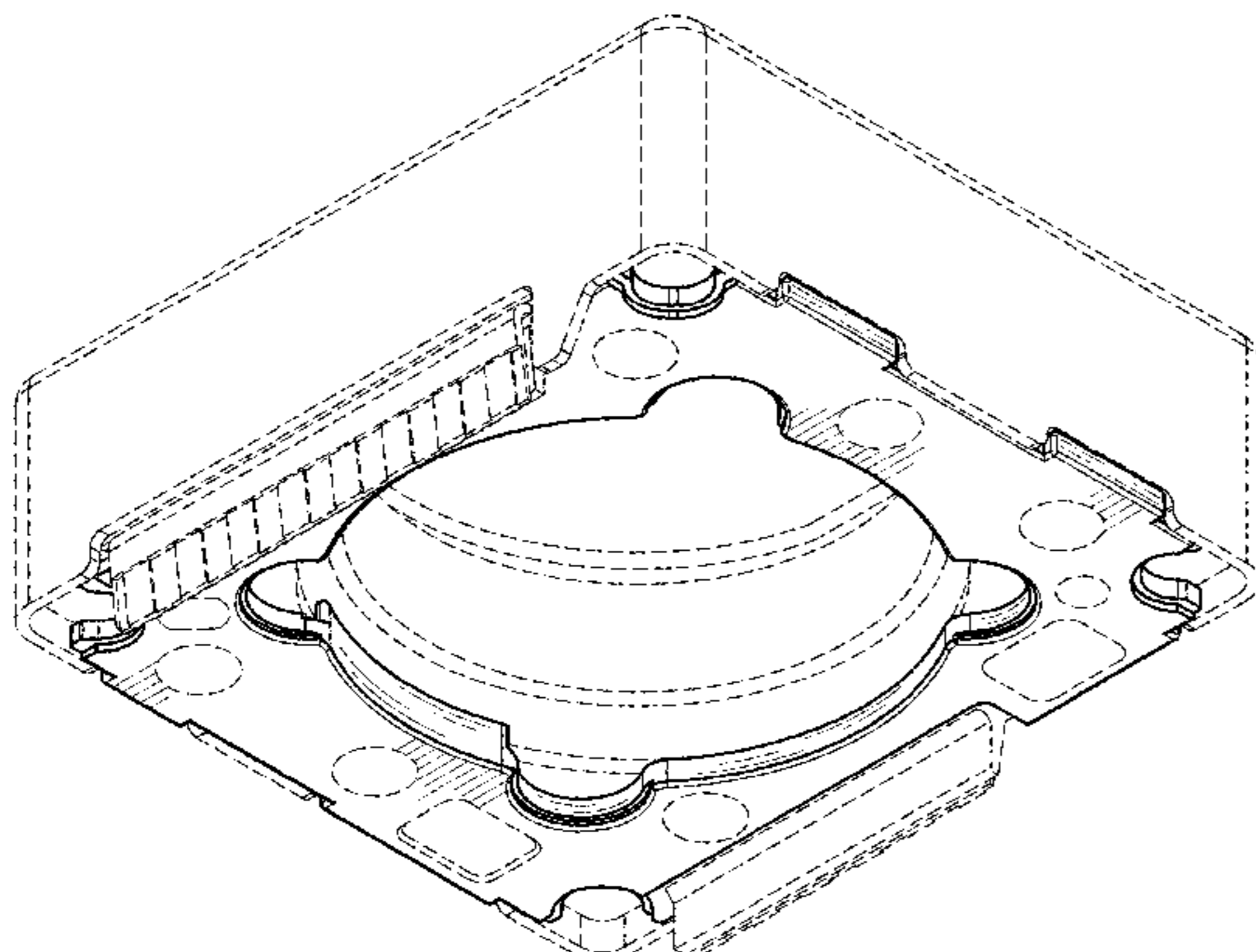
The ornamental design for a driving unit for a camera lens, as shown and described.

**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

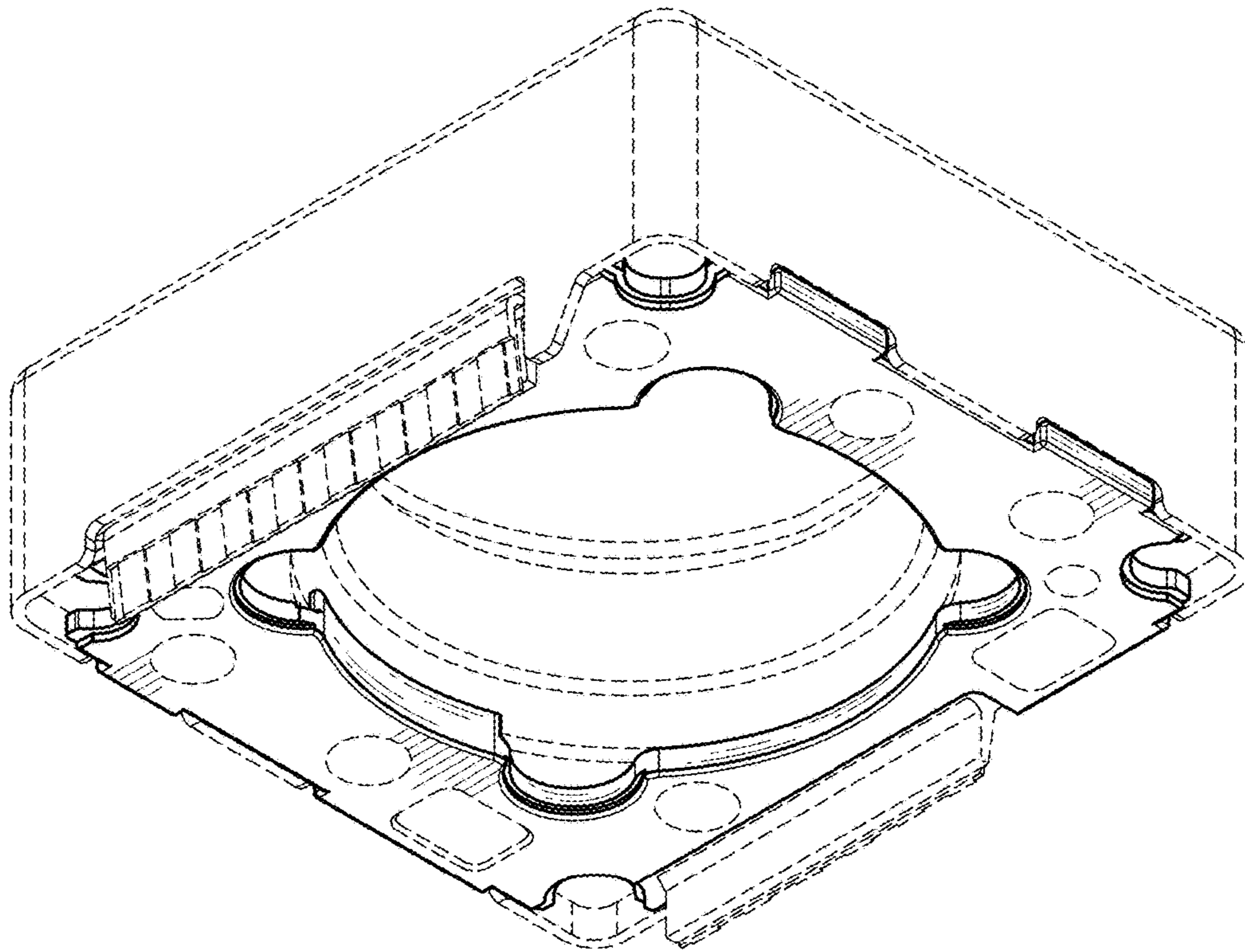


FIG. 1

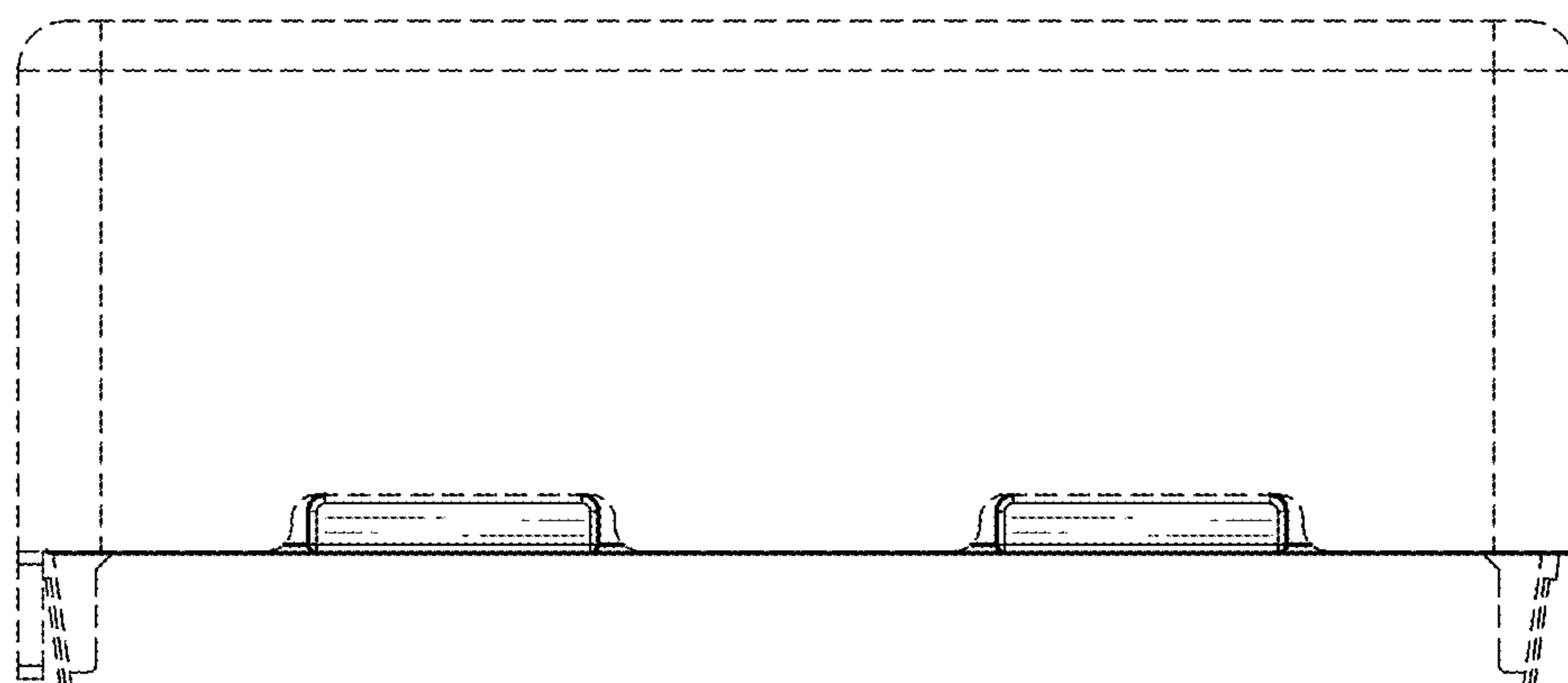


FIG. 2

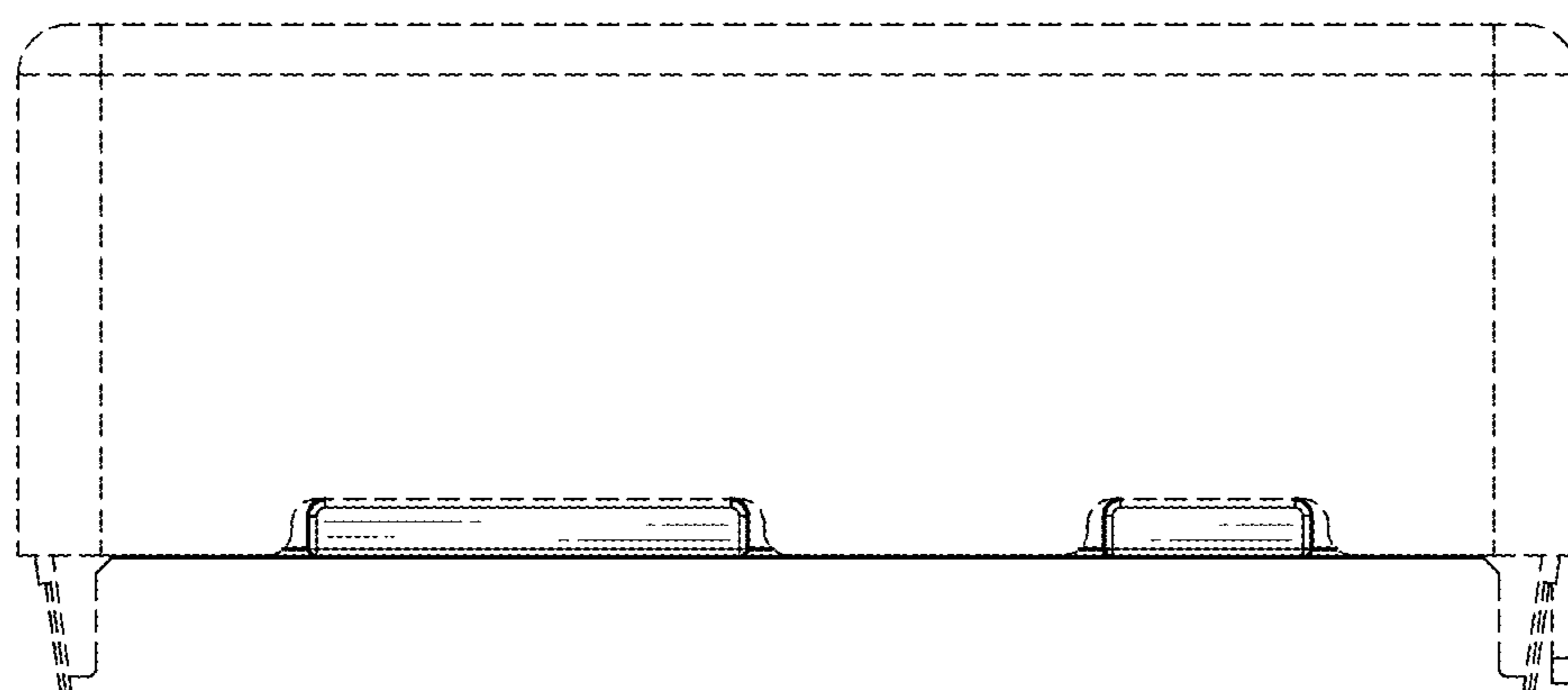


FIG. 3

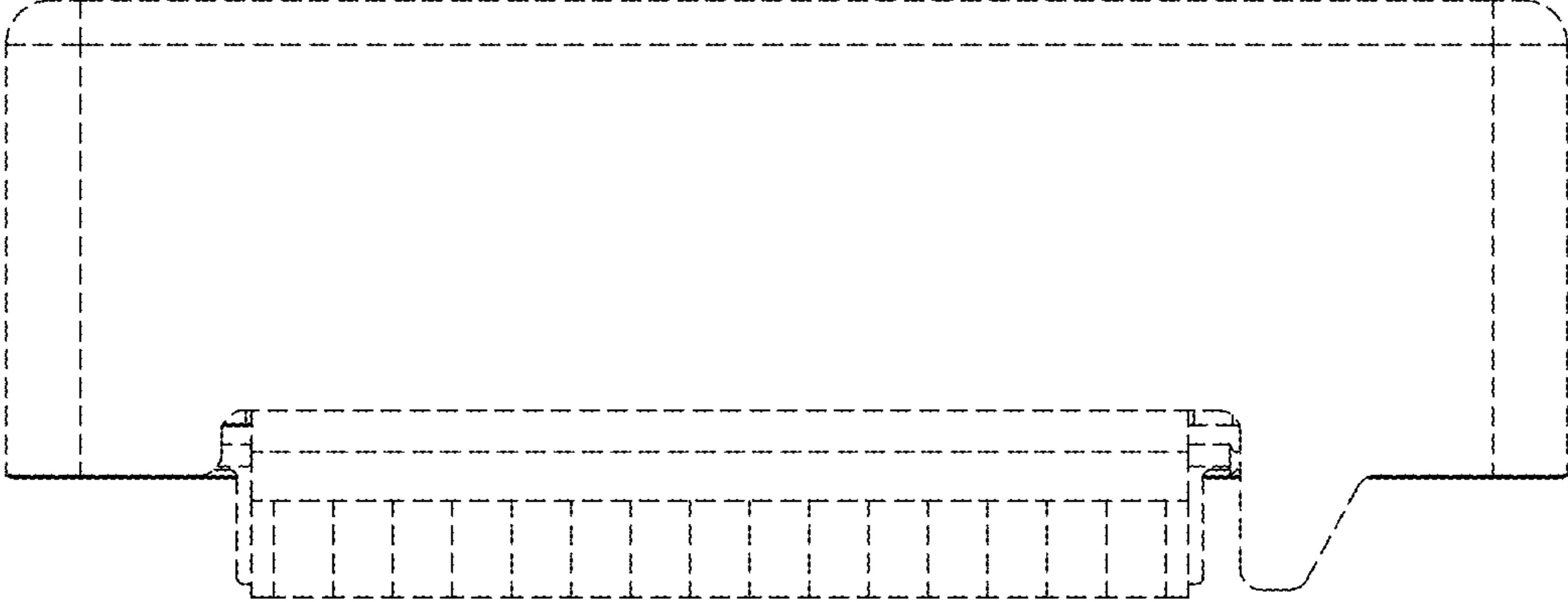


FIG. 4

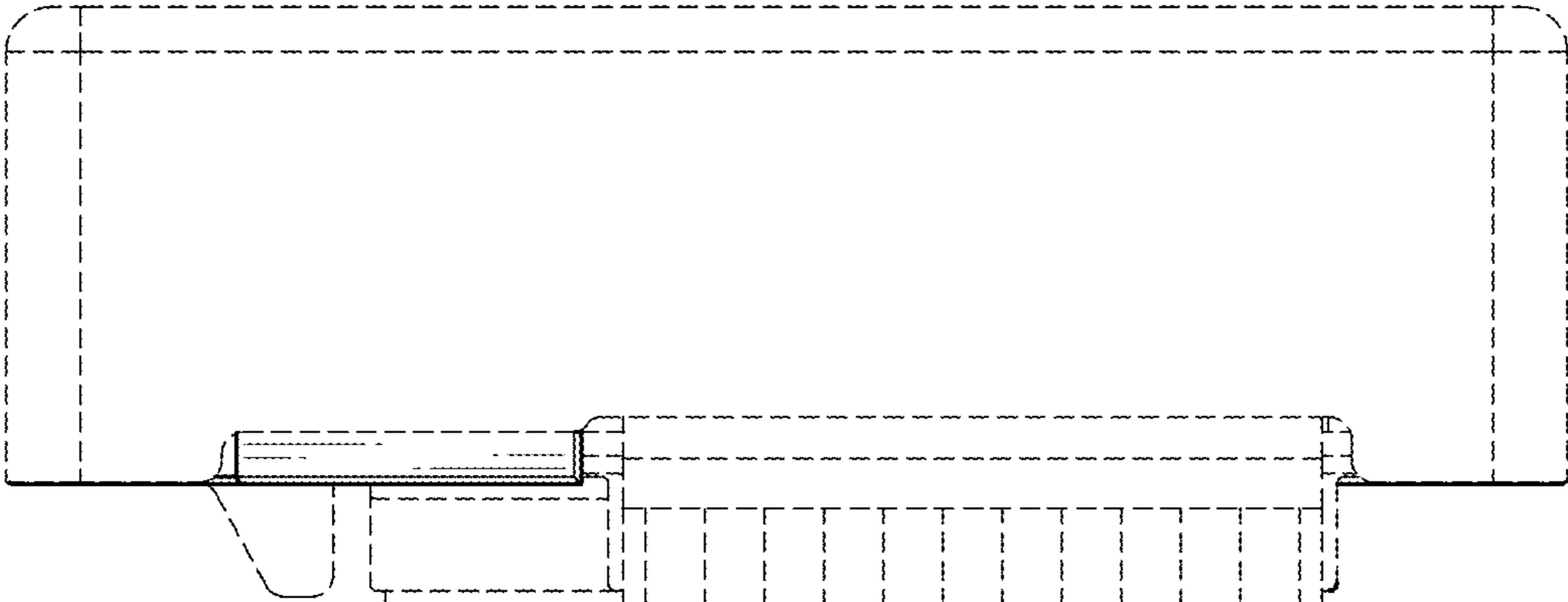


FIG. 5

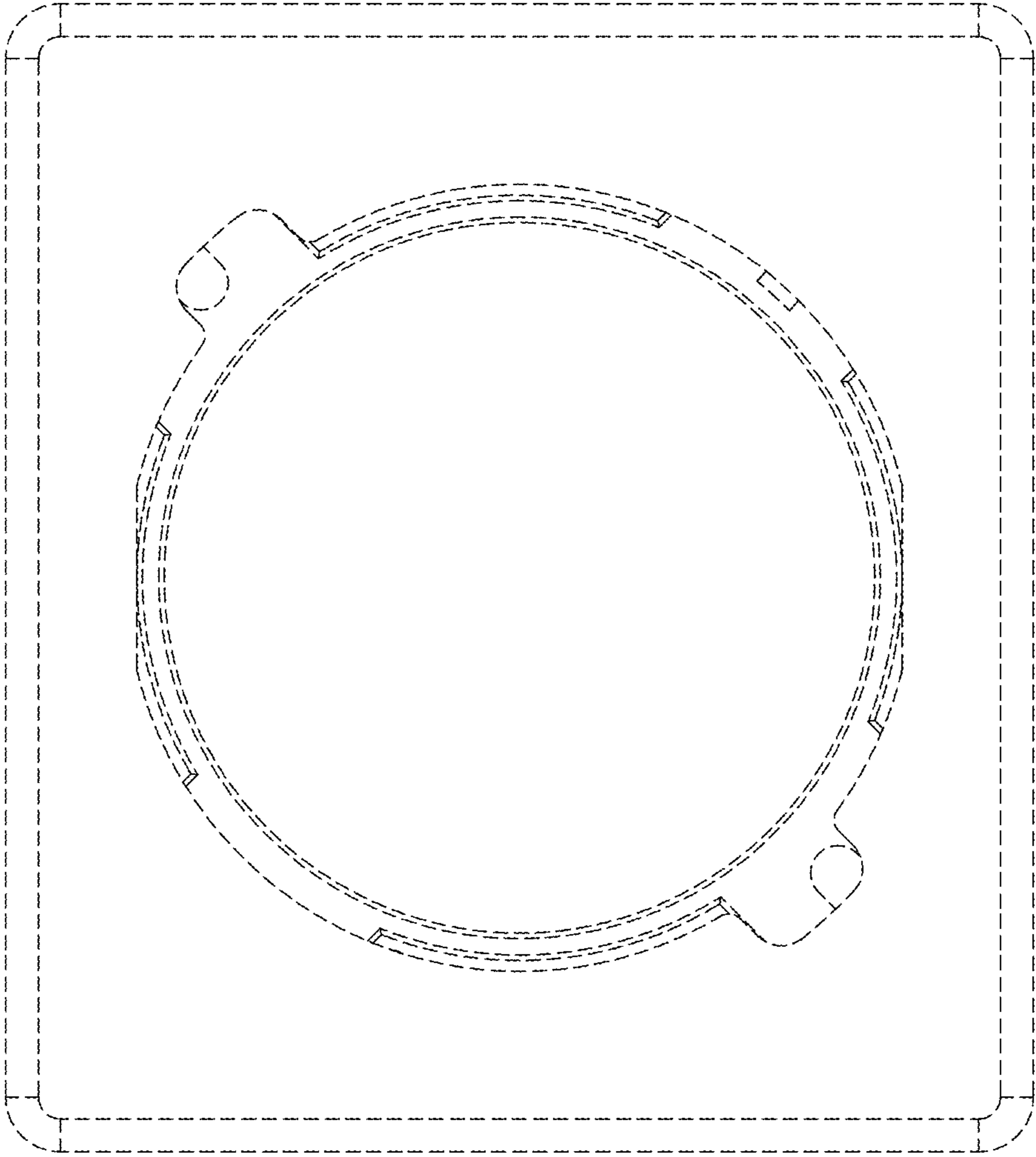


FIG. 6

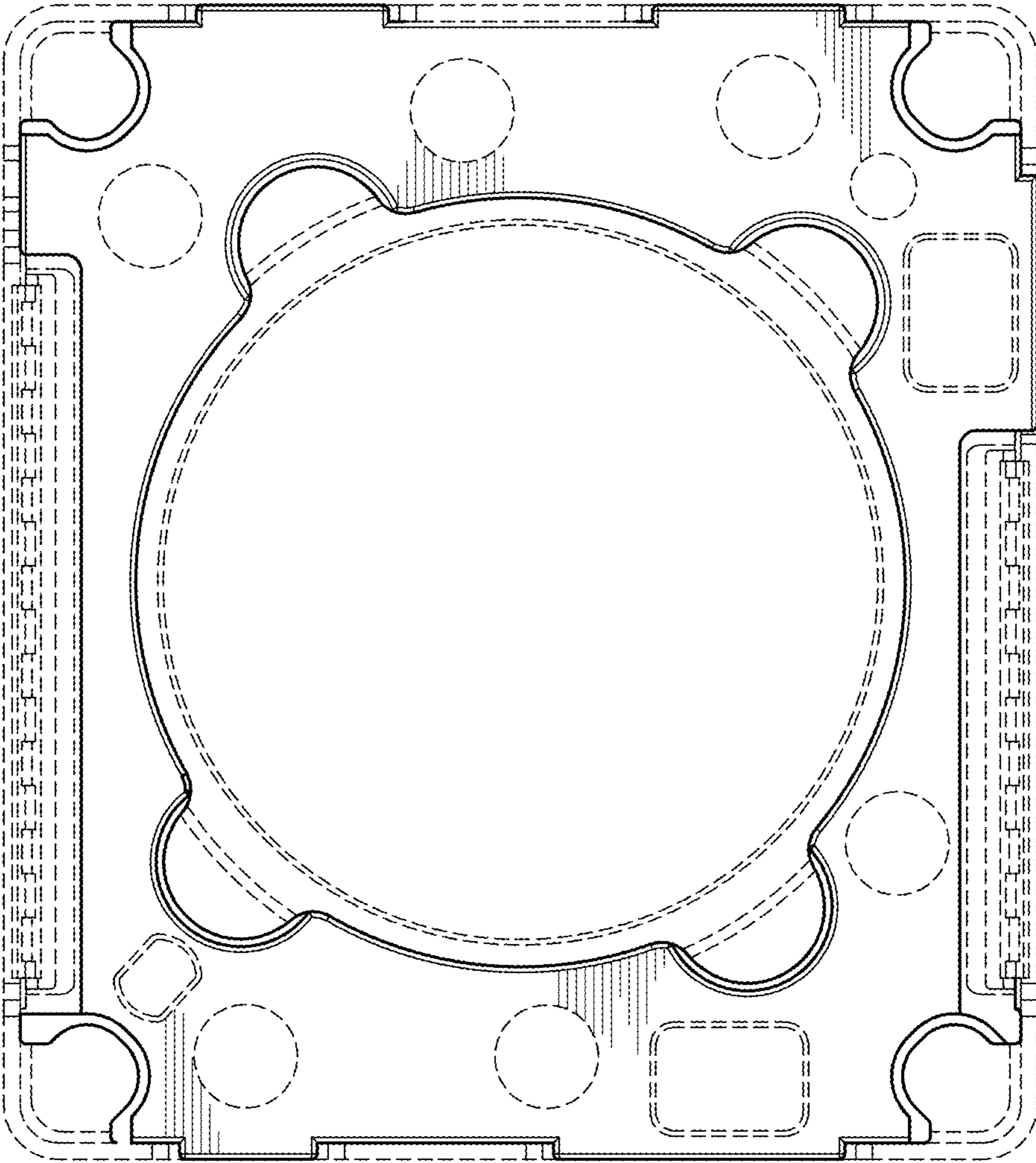


FIG. 7

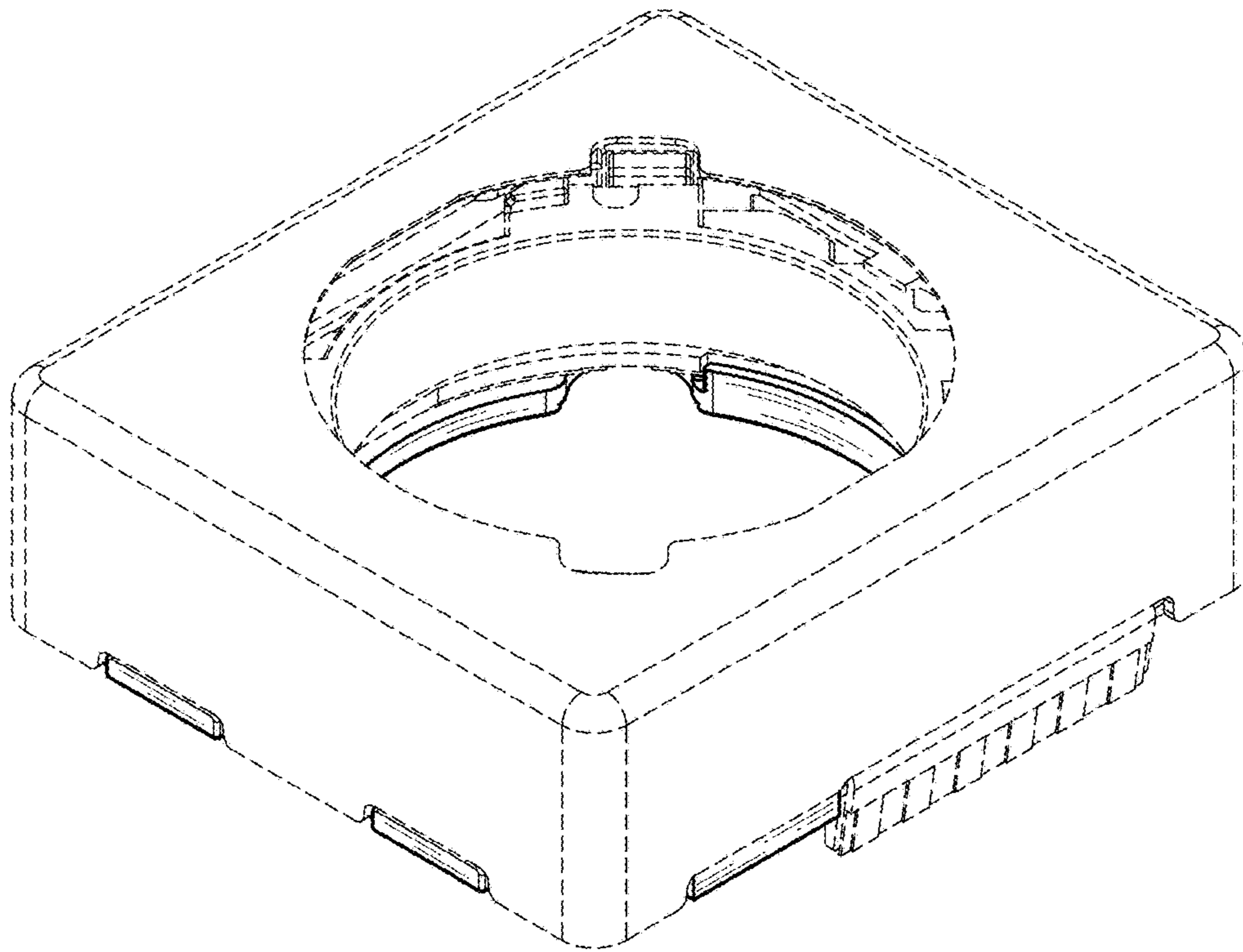


FIG. 8



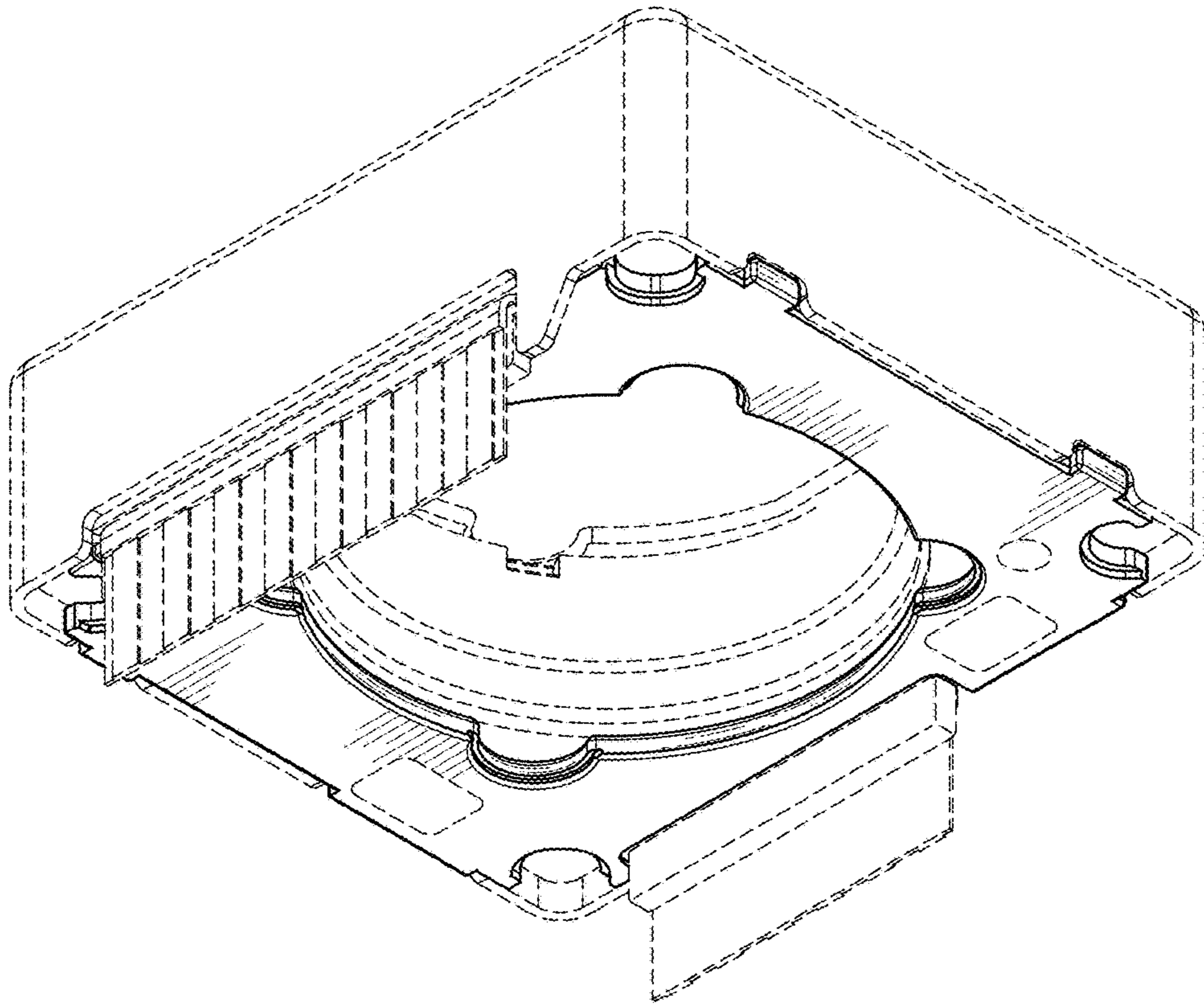


FIG. 9

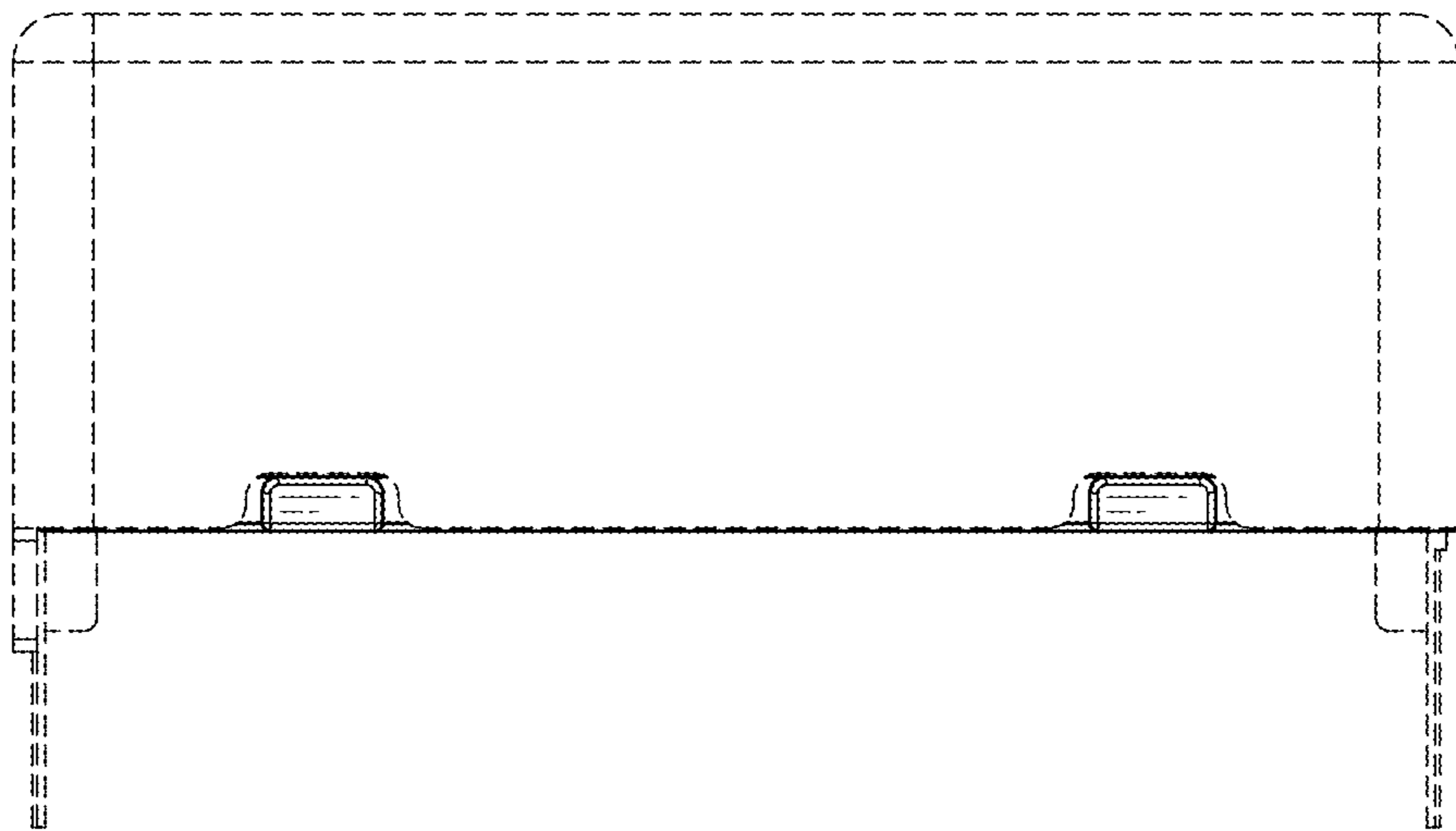


FIG. 10

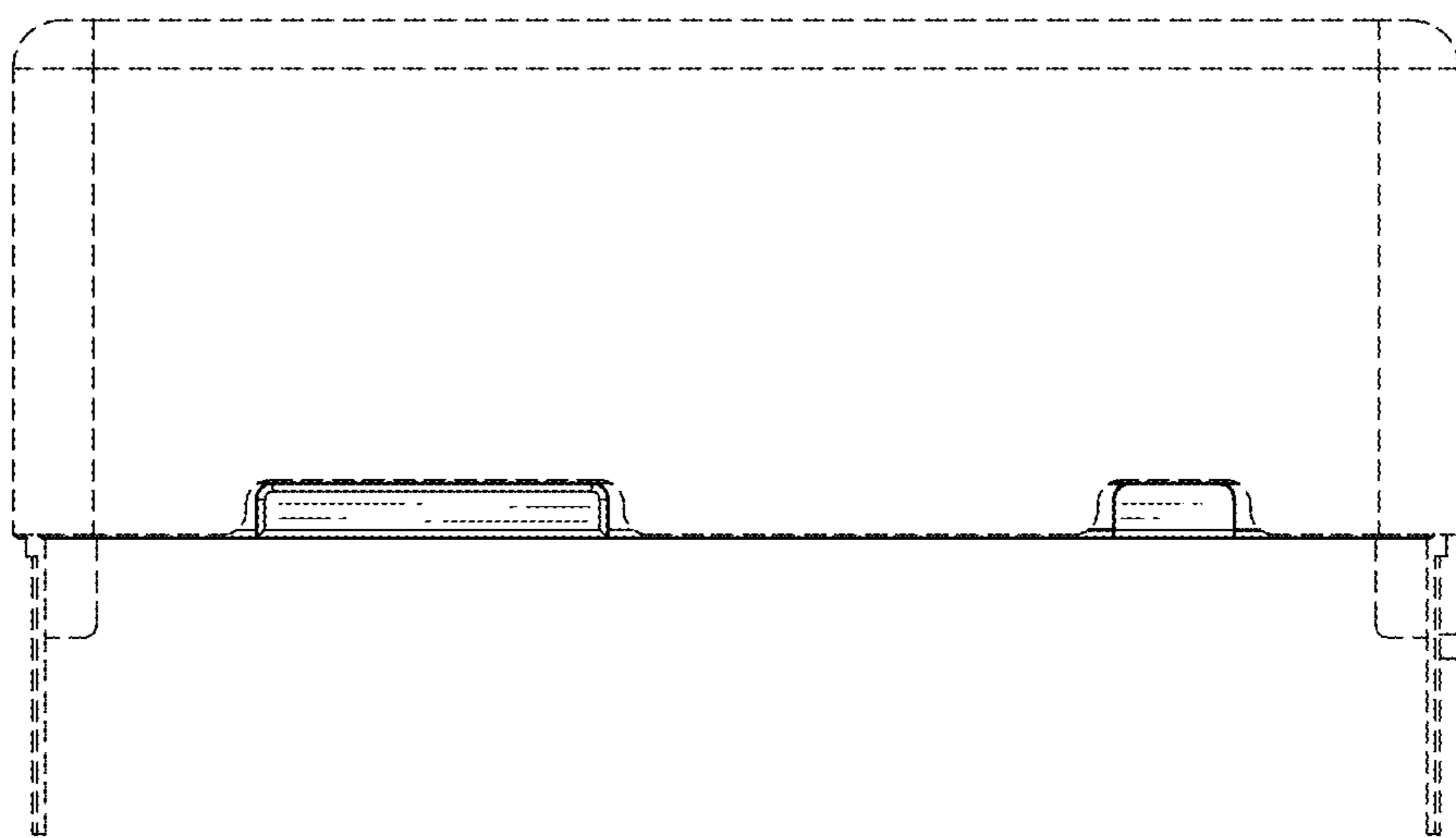


FIG. 11

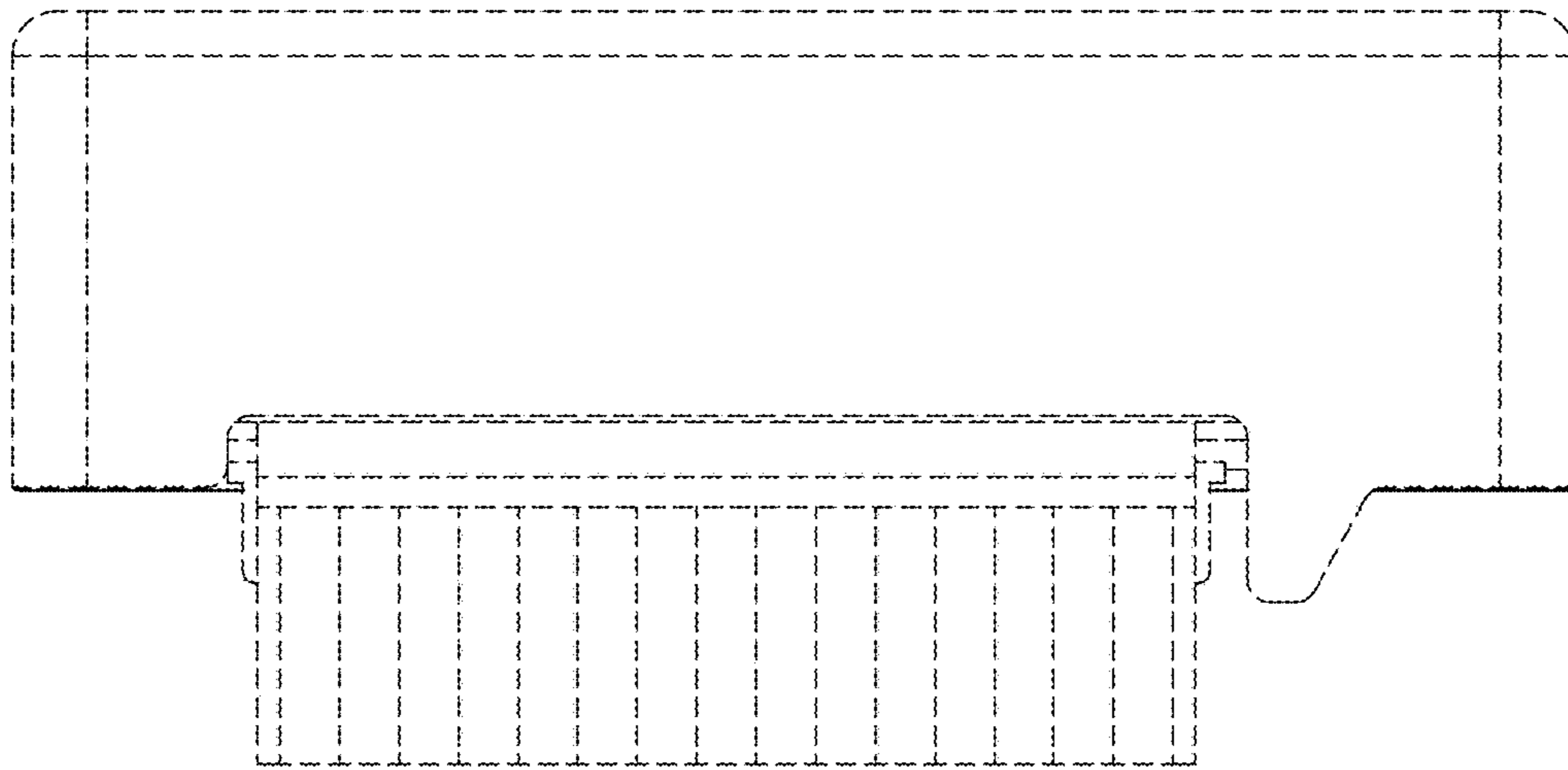


FIG. 12

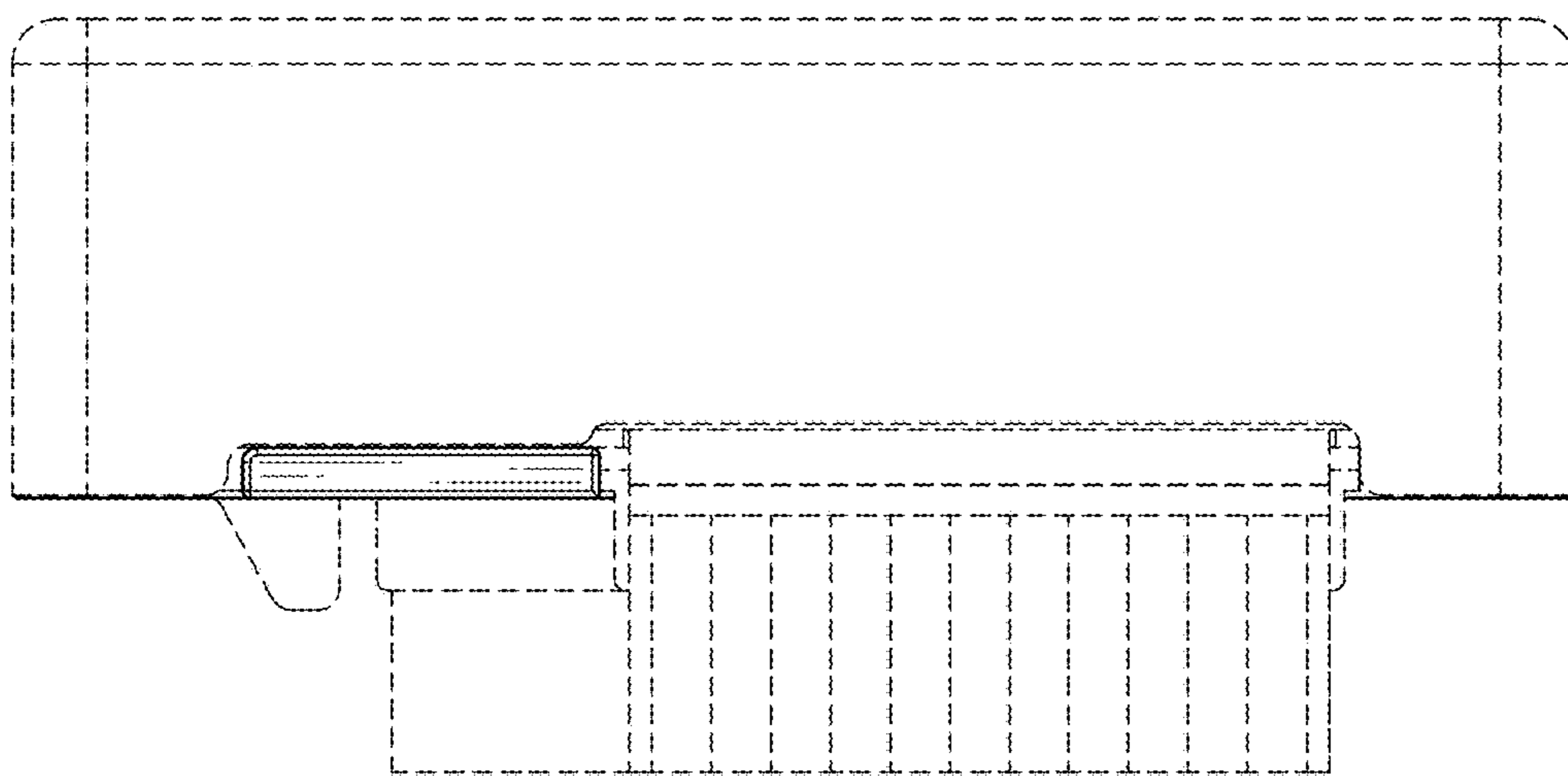


FIG. 13

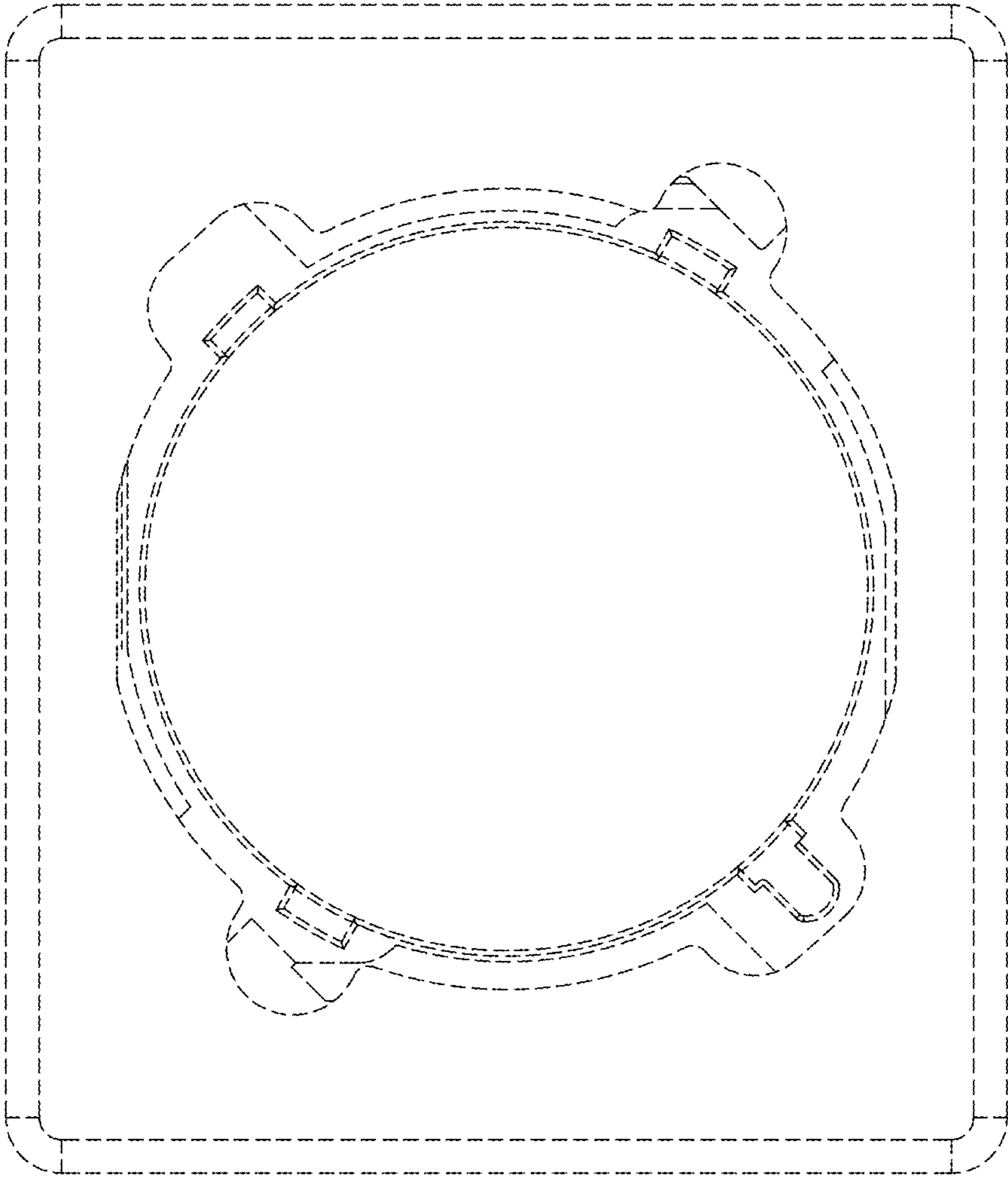


FIG. 14

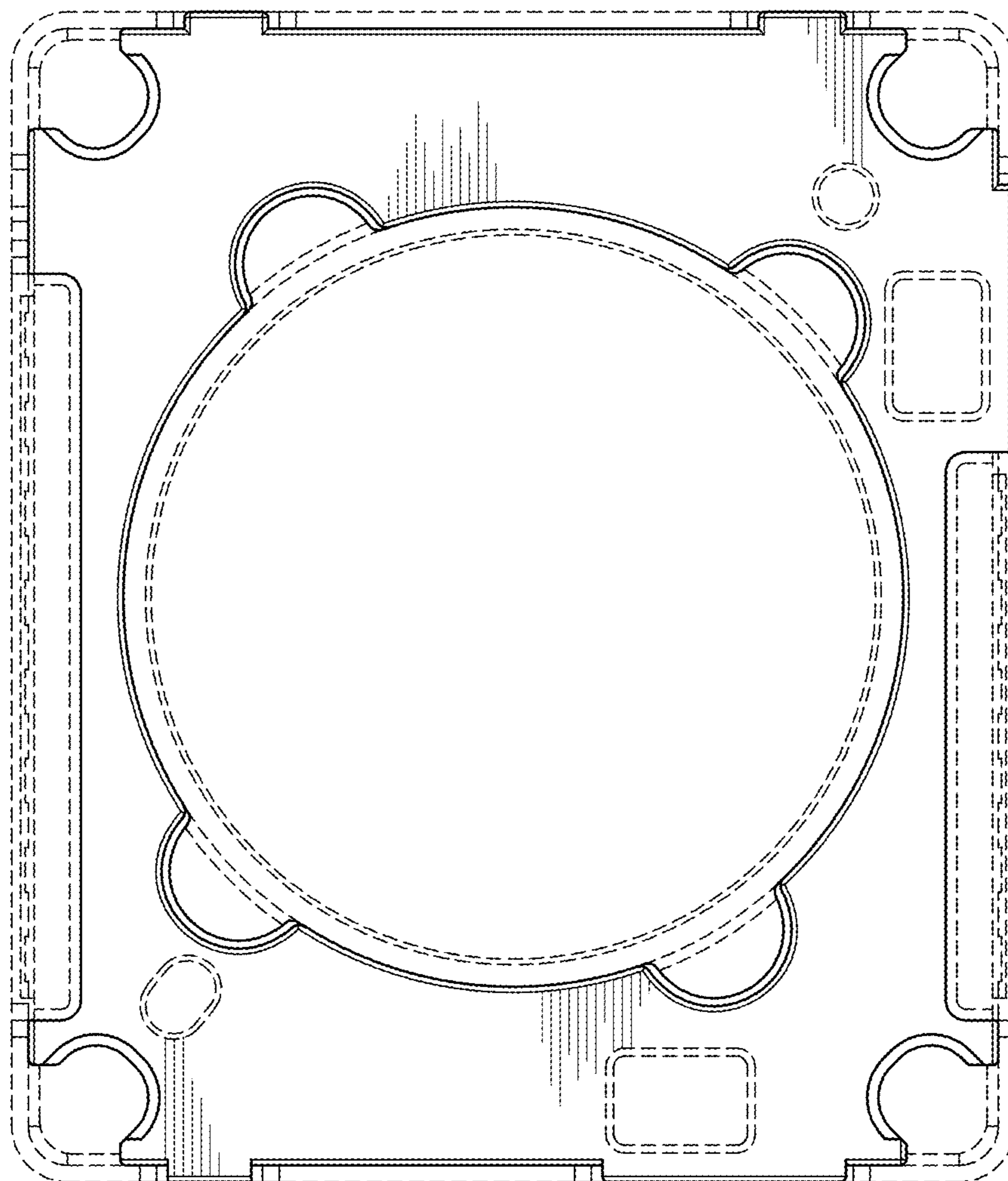


FIG. 15

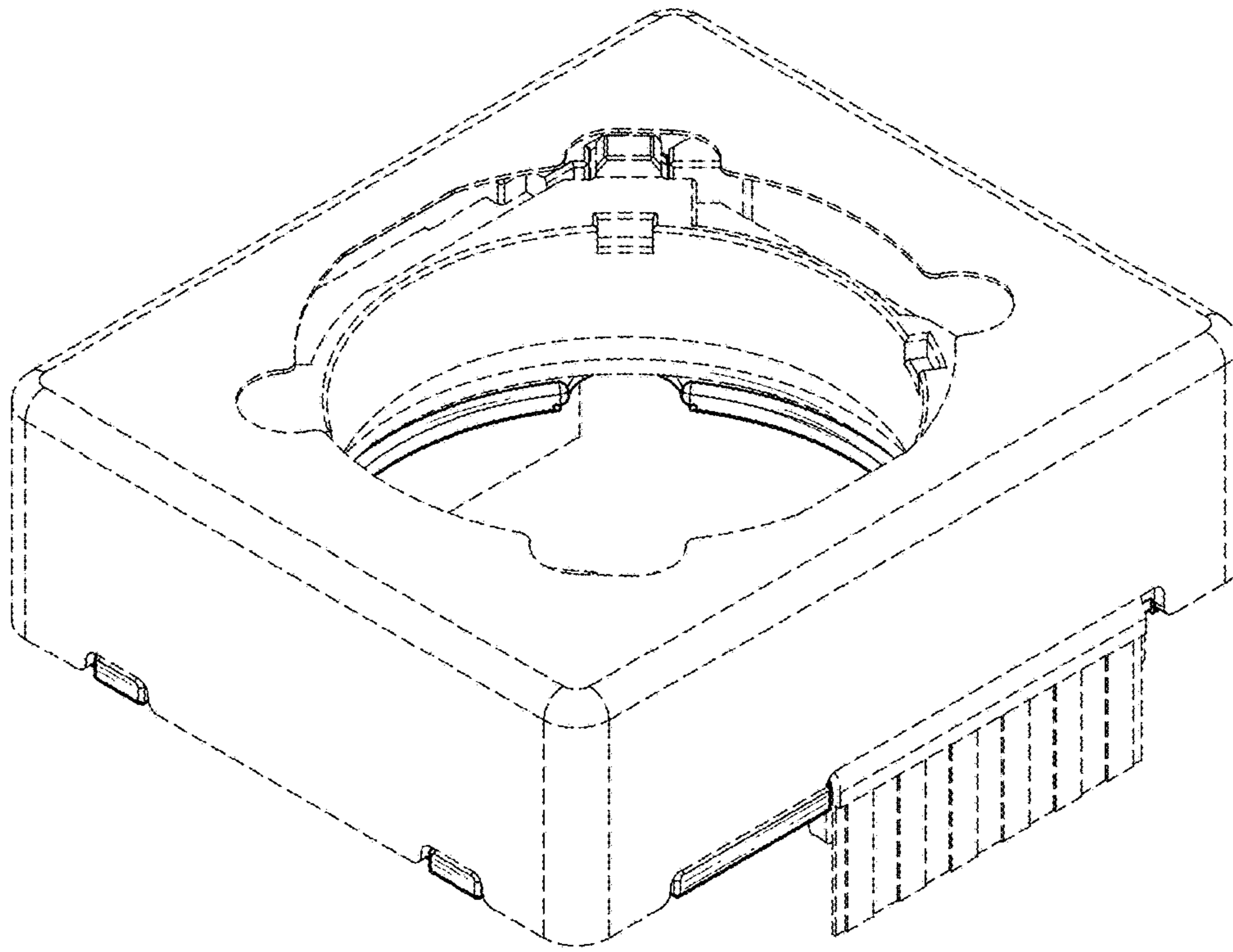


FIG. 16