



US00D802567S

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

(10) **Patent No.:** **US D802,567 S**

(45) **Date of Patent:** **** Nov. 14, 2017**

- (54) **ANTENNA**
- (71) Applicant: **Airgain, Incorporated**, San Diego, CA (US)
- (72) Inventors: **Bei Zheng**, Zhang Jia Gang (CN);
Xiangjie Bian, Zhang Jia Gang (CN);
Simon Yang, Carlsbad, CA (US)
- (73) Assignee: **Airgain Incorporated**, San Diego, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/533,408**
- (22) Filed: **Jul. 16, 2015**
- (51) **LOC (10) Cl.** **14-03**
- (52) **U.S. Cl.**
USPC **D14/230**
- (58) **Field of Classification Search**
USPC D14/230, 231, 232, 233, 234, 235, 236,
D14/237, 238, 138, 299, 358; D12/42,
D12/43
CPC H01Q 7/00; H01Q 13/10; H01Q 9/285;
H01Q 19/30; H01Q 19/12; H01Q 1/38;
H01Q 1/36; H01Q 1/42; H01Q 1/242;
H01Q 1/243; H01Q 1/2266
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS
- 7,061,437 B2 6/2006 Lin et al.
- 7,148,849 B2 12/2006 Lin
- 7,215,296 B2 5/2007 Abramov et al.
- D546,821 S 7/2007 Oliver
- D549,696 S 8/2007 Oshima et al.
- 7,333,067 B2 2/2008 Hung et al.
- 7,336,959 B2 2/2008 Khitrik et al.
- D573,589 S 7/2008 Montgomery et al.
- 7,405,704 B1 7/2008 Lin et al.

- 7,477,195 B2 1/2009 Vance
- D592,195 S 5/2009 Wu et al.
- 7,570,215 B2 8/2009 Abramov et al.
- D599,334 S 9/2009 Chiang
- D606,053 S 12/2009 Wu et al.
- D607,442 S 1/2010 Su et al.
- D608,769 S 1/2010 Bufe
- D612,368 S 3/2010 Yang et al.
- 7,705,783 B2 4/2010 Rao et al.
- 7,729,662 B2 6/2010 Abramov et al.
- D621,819 S 8/2010 Tsai et al.
- 7,843,390 B2 11/2010 Liu
- D633,483 S 3/2011 Su et al.
- D635,127 S 3/2011 Tsai et al.
- 7,907,971 B2 3/2011 Salo et al.
- D635,560 S 4/2011 Tsai et al.
- D635,963 S 4/2011 Podduturi
- D635,964 S 4/2011 Podduturi

(Continued)

Primary Examiner — Jennifer Rivard
Assistant Examiner — Jerry Hsu
 (74) *Attorney, Agent, or Firm* — Clause Eight IPS;
 Michael Catania

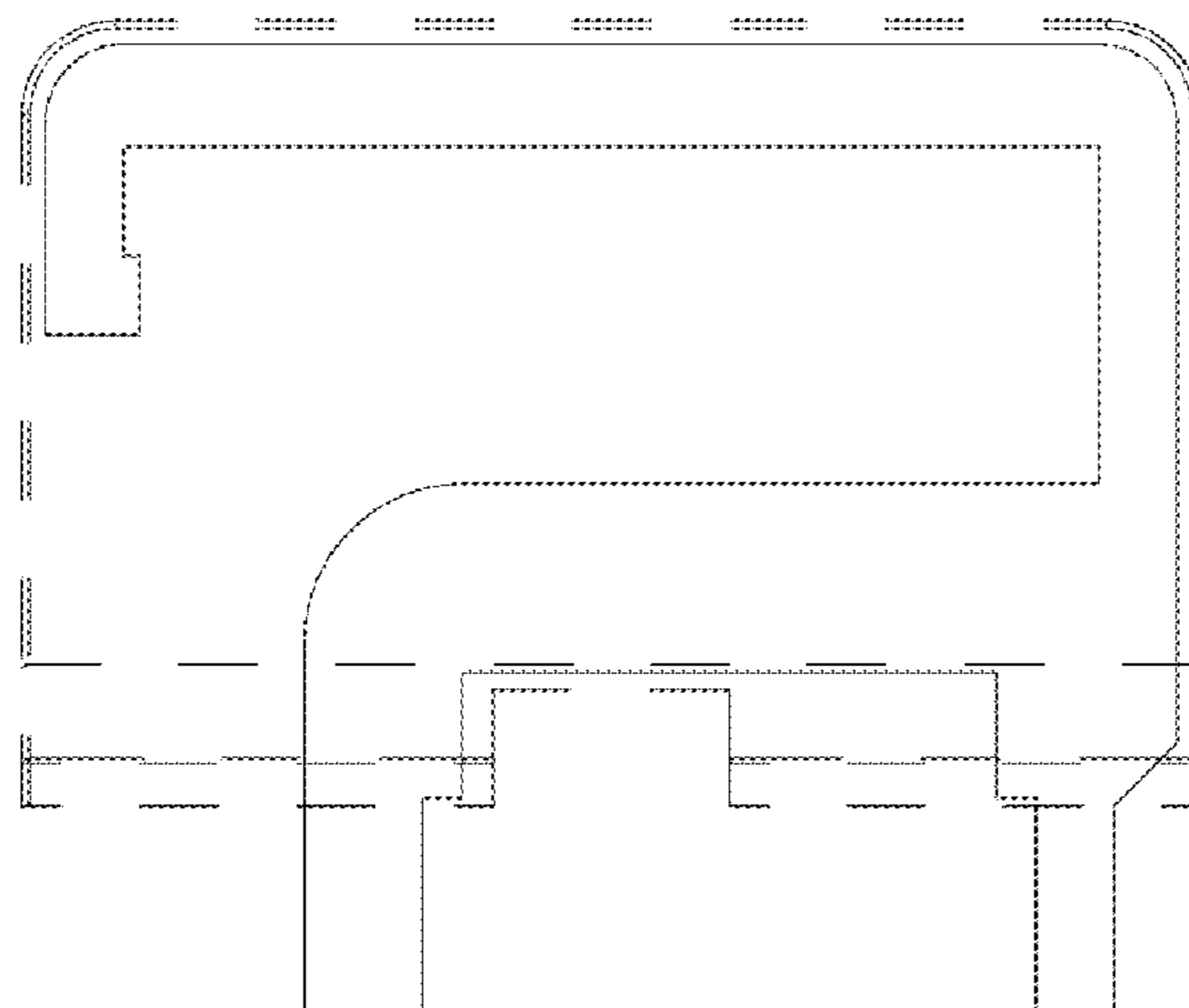
(57) **CLAIM**

The ornamental design for an antenna, as shown and described.

DESCRIPTION

FIG. 1 is an environmental front elevation view of an antenna, showing our new design;
 FIG. 2 is a side plan view thereof;
 FIG. 3 is a bottom plan view thereof;
 FIG. 4 is rear elevation view thereof;
 FIG. 5 is a top perspective view thereof;
 FIG. 6 is a front elevation view of the antenna;
 FIG. 7 is a side elevation view thereof; and,
 FIG. 8 is a top plan view thereof.
 The broken lines illustrate environment and form no part of the claimed design.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D635,965 S	4/2011	Mi et al.	D710,833 S	8/2014	Zheng et al.
D636,382 S	4/2011	Podduturi	8,854,265 B1	10/2014	Yang et al.
7,965,242 B2	6/2011	Abramov et al.	D716,775 S	11/2014	Bidermann
D649,962 S	12/2011	Tseng et al.	D741,301 S *	10/2015	He D14/230
D651,198 S	12/2011	Mi et al.	D750,051 S *	2/2016	Podduturi D14/230
D654,059 S	2/2012	Mi et al.	D763,832 S *	8/2016	Gosalia D14/230
D654,060 S	2/2012	Ko et al.	D766,220 S *	9/2016	He D14/230
D658,639 S	5/2012	Huang et al.	D766,880 S *	9/2016	He D14/230
D659,129 S	5/2012	Mi et al.	D767,542 S *	9/2016	Chang D14/230
D659,685 S	5/2012	Huang et al.	D767,543 S *	9/2016	Chang D14/230
D659,688 S	5/2012	Huang et al.	2002/0003499 A1	1/2002	Kouam et al.
8,175,036 B2	5/2012	Visuri et al.	2004/0222936 A1	11/2004	Hung et al.
8,184,601 B2	5/2012	Abramov et al.	2005/0073462 A1	4/2005	Lin et al.
D662,916 S	7/2012	Huang et al.	2005/0190108 A1	9/2005	Lin et al.
8,248,970 B2	8/2012	Abramov et al.	2006/0208900 A1	9/2006	Tavassoli Hozouri
D671,097 S	11/2012	Mi et al.	2007/0030203 A1	2/2007	Tsai et al.
8,310,402 B2	11/2012	Yang	2007/0052591 A1 *	3/2007	Chao H01Q 9/42
D676,429 S	2/2013	Gosalia et al.	2008/0150829 A1 *	6/2008	Lin G06F 1/1616
D678,255 S	3/2013	Ko et al.			343/860
8,423,084 B2	4/2013	Abramov et al.	2009/0002244 A1	1/2009	Woo
D684,565 S	6/2013	Wei	2009/0058739 A1	3/2009	Konishi
D685,352 S	7/2013	Wei	2009/0135072 A1	5/2009	Ke et al.
D685,772 S	7/2013	Zheng et al.	2009/0146906 A1 *	6/2009	Anguera Pros H01Q 5/371
D686,600 S	7/2013	Yang			343/906
D689,474 S	9/2013	Yang et al.	2009/0231199 A1 *	9/2009	Vance H01Q 1/243
D692,870 S	11/2013	He			343/700 MS
D694,738 S	12/2013	Yang	2009/0262028 A1	10/2009	Mumbru et al.
D695,279 S	12/2013	Yang et al.	2010/0188297 A1	7/2010	Chen et al.
D695,280 S	12/2013	Yang et al.	2010/0309067 A1	12/2010	Tsou et al.
D703,195 S	4/2014	Zheng	2011/0006950 A1	1/2011	Park et al.
D703,196 S	4/2014	Zheng	2011/0012789 A1 *	1/2011	Yang H01Q 1/38
D706,247 S	6/2014	Zheng et al.			343/700 MS
D706,750 S	6/2014	Bringuir	2011/0084889 A1 *	4/2011	Tsai H01Q 1/2266
D706,751 S	6/2014	Chang et al.			343/846
D708,602 S	7/2014	Gosalia et al.	2012/0038514 A1	2/2012	Bang
D709,053 S	7/2014	Chang et al.	2012/0229348 A1	9/2012	Chiang
D710,832 S	8/2014	Yang	2012/0242546 A1	9/2012	Hu et al.

* cited by examiner

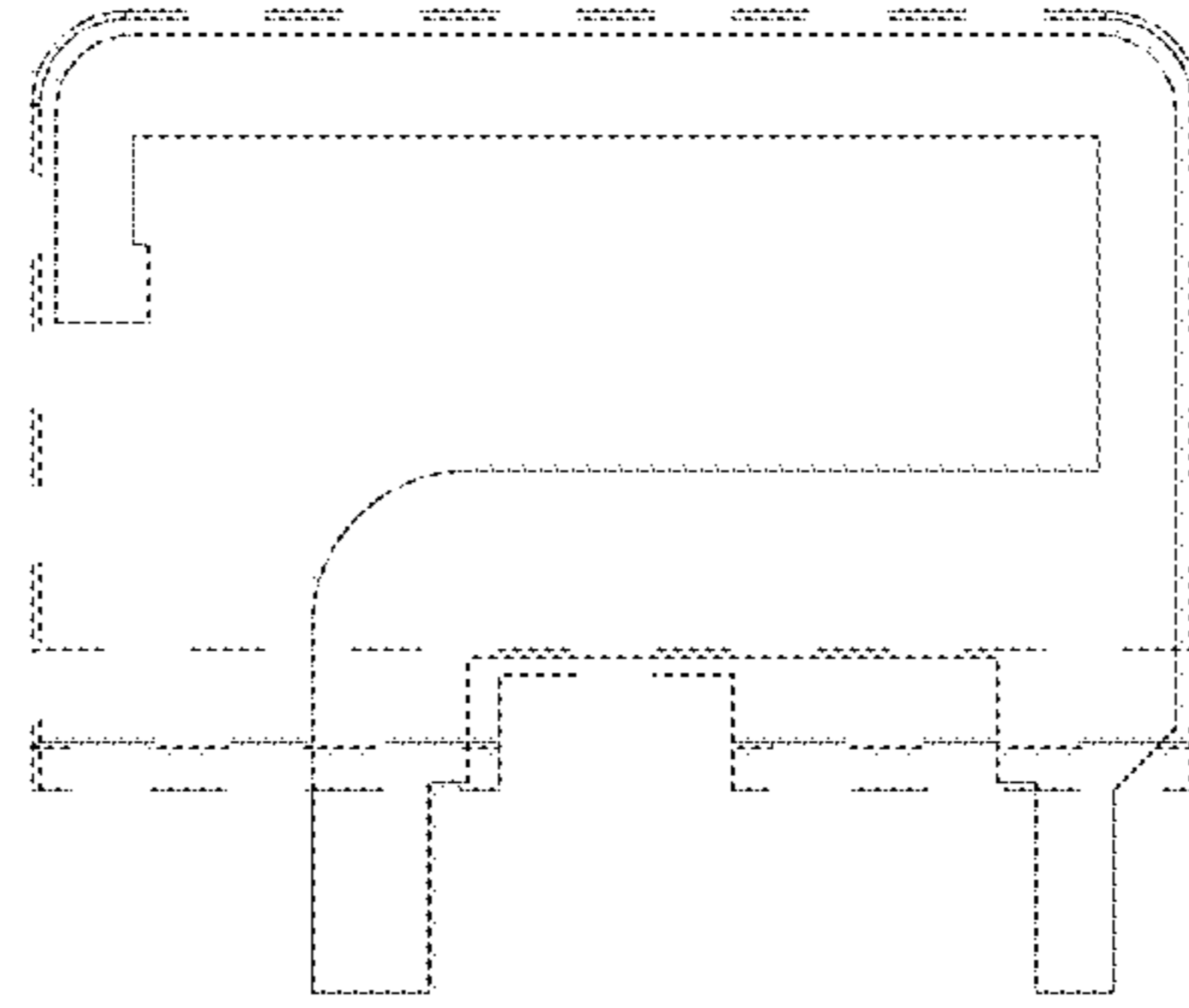


FIG. 1

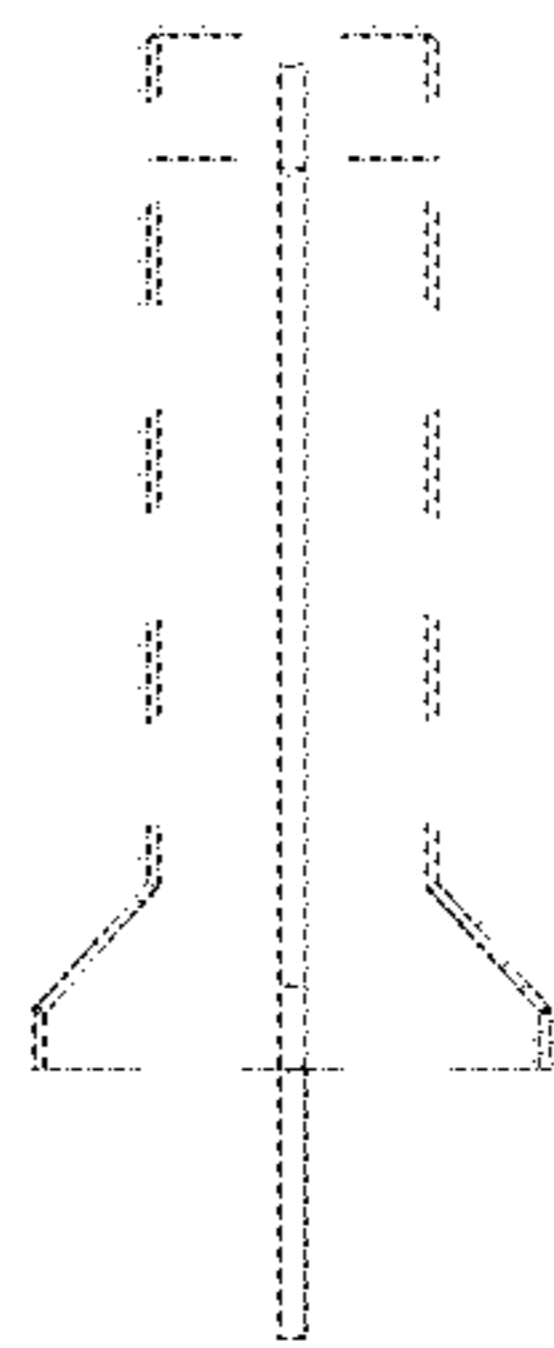


FIG. 2

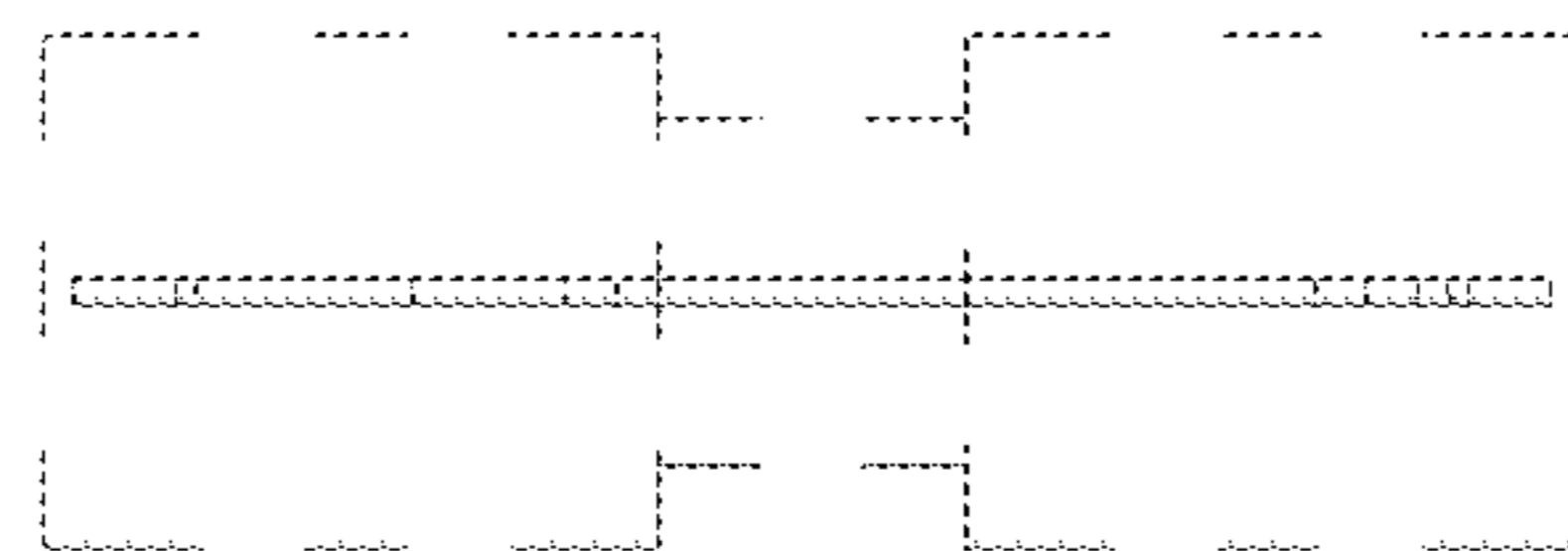


FIG. 3

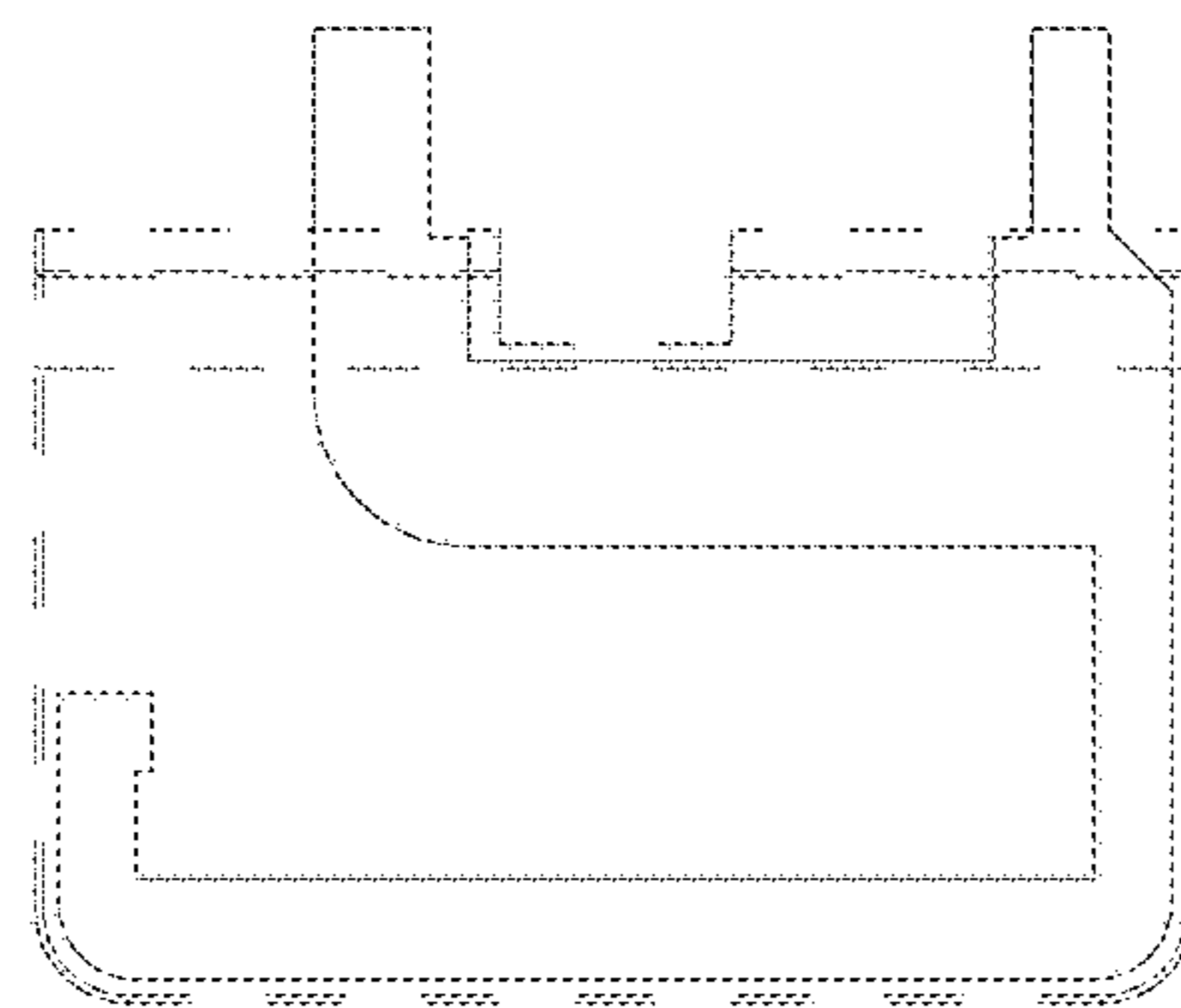


FIG. 4

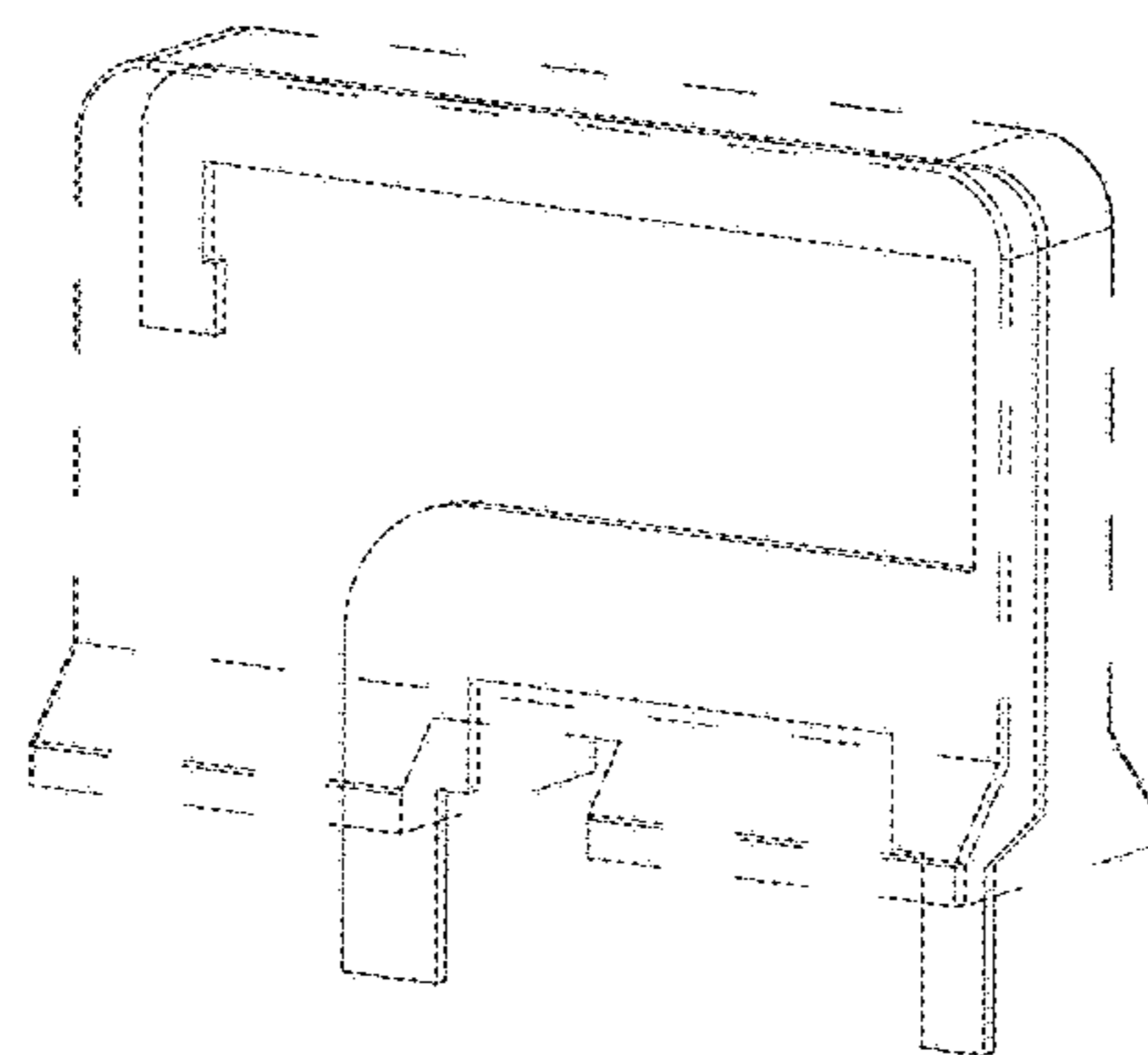


FIG. 5

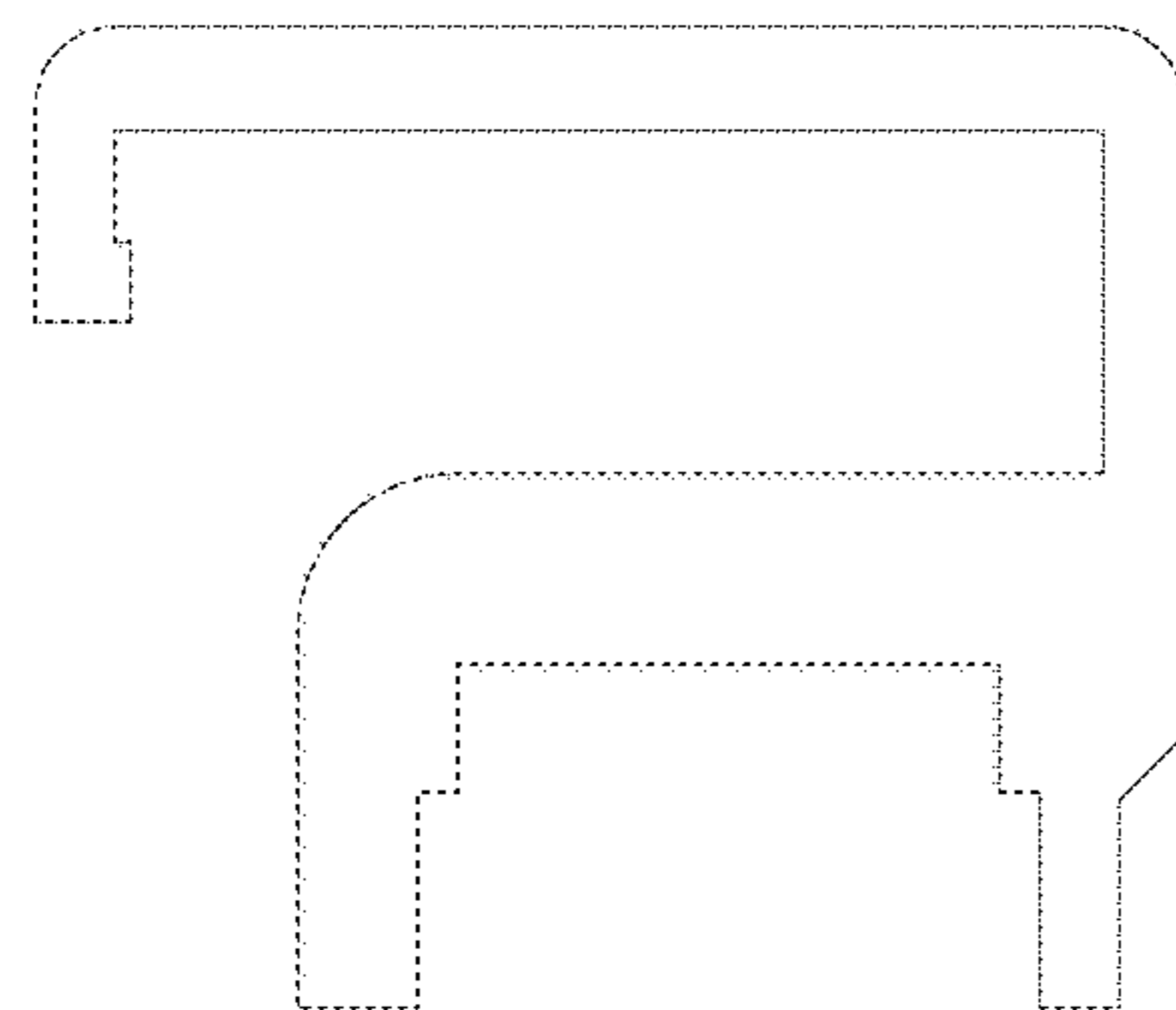


FIG. 6



FIG. 7

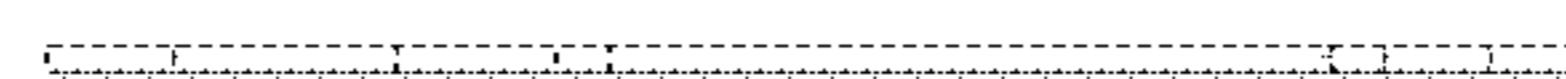


FIG. 8