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**Zheng et al.**

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- (54) **ANTENNA**
- (71) Applicant: **Airgain, Incorporated**, San Diego, CA (US)
- (72) Inventors: **Bei Zheng**, Zhang Jia Gang (CN); **Qilong Wang**, Zhang Jia Gang (CN)
- (73) Assignee: **Airgain Incorporated**, San Diego, CA (US)

(\*) Notice: This patent is subject to a terminal disclaimer.

(\*\*) Term: **14 Years**

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(51) **LOC (10) Cl.** ..... **14-03**

(52) **U.S. Cl.**  
USPC ..... **D14/230**

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USPC ..... D14/138, 230-238.1, 299, 358; D13/182  
CPC ..... H01L 33/48; H01L 33/486; H01L 23/02;  
H05K 5/00; H01Q 13/10  
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	
D534,902 S *	1/2007	Su	D14/230
D535,290 S *	1/2007	Su	D14/230
7,215,296 B2	5/2007	Abramov et al.	
D546,821 S	7/2007	Oliver	
D549,696 S	8/2007	Oshima et al.	
D555,154 S *	11/2007	Lin	D14/230
7,333,067 B2 *	2/2008	Hung	H01Q 1/36 343/700 MS
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	
7,489,278 B2 *	2/2009	Huang	H01Q 9/0421 343/700 MS
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.	

(Continued)

**OTHER PUBLICATIONS**

<http://www.airgain.com/Ultra-M2450DLC>—Retrieved Jun. 21, 2016.\*  
<http://www.airgain.com/Ultra-M2450DLCB2>—Retrieved Jun. 21, 2016.\*

*Primary Examiner* — Manpreet Matharu  
*Assistant Examiner* — Mojtaba Tehrani  
 (74) *Attorney, Agent, or Firm* — Clause Eight IPS;  
 Michael Catania

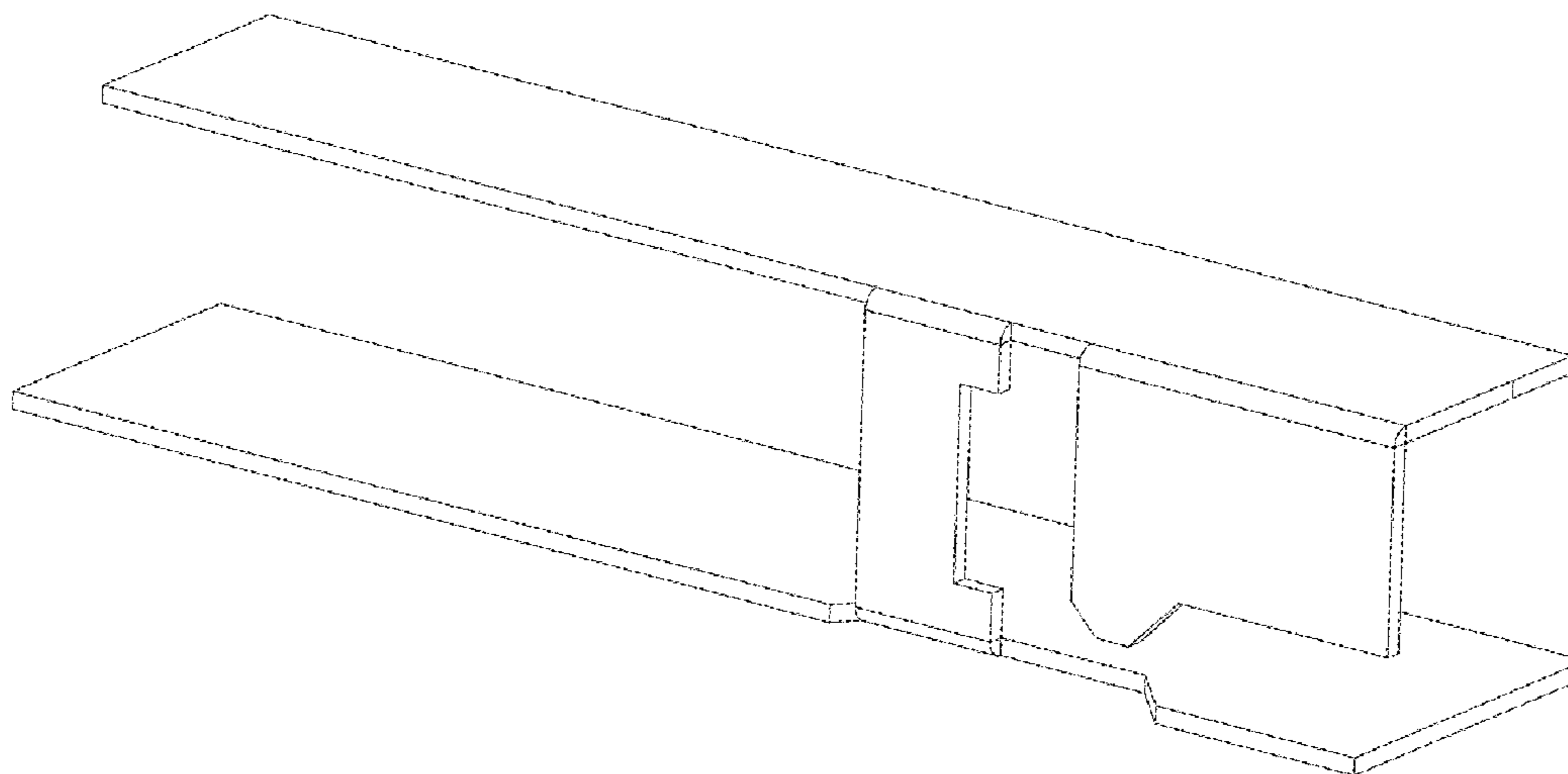
(57) **CLAIM**

The ornamental design for an antenna, as shown.

**DESCRIPTION**

FIG. 1 is a top perspective view of an antenna, showing our new design;  
 FIG. 2 is a top plan view thereof;  
 FIG. 3 is a front elevation view thereof;  
 FIG. 4 is side elevation view thereof; and,  
 FIG. 5 is a bottom plan view thereof.

**1 Claim, 1 Drawing Sheet**



(56)

References Cited

U.S. PATENT DOCUMENTS

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  
 D635,965 S 4/2011 Mi et al.  
 D636,382 S 4/2011 Podduturi  
 7,965,242 B2 6/2011 Abramov et al.  
 D649,962 S 12/2011 Tseng et al.  
 D651,198 S 12/2011 Mi et al.  
 D651,592 S \* 1/2012 Hunter ..... D14/238  
 D654,059 S 2/2012 Mi et al.  
 D654,060 S 2/2012 Ko et al.  
 D658,639 S 5/2012 Huang et al.  
 D659,129 S 5/2012 Mi et al.  
 D659,685 S 5/2012 Huang et al.  
 D659,688 S 5/2012 Huang et al.  
 8,175,036 B2 5/2012 Visuri et al.  
 8,184,601 B2 5/2012 Abramov et al.  
 D662,916 S 7/2012 Huang et al.  
 8,248,970 B2 8/2012 Abramov et al.  
 D671,097 S 11/2012 Mi et al.  
 8,310,402 B2 11/2012 Yang  
 D676,429 S 2/2013 Gosalia et al.  
 D678,255 S 3/2013 Ko et al.  
 8,423,084 B2 4/2013 Abramov et al.  
 D684,565 S 6/2013 Wei  
 D685,352 S 7/2013 Wei  
 D685,772 S 7/2013 Zheng et al.  
 D686,600 S 7/2013 Yang  
 D689,474 S 9/2013 Yang et al.  
 D692,870 S 11/2013 He

D694,738 S \* 12/2013 Yang ..... D14/230  
 D695,279 S 12/2013 Yang et al.  
 D695,280 S 12/2013 Yang et al.  
 D703,195 S \* 4/2014 Zheng ..... D14/230  
 D703,196 S \* 4/2014 Zheng ..... D14/230  
 D706,247 S 6/2014 Zheng et al.  
 D706,750 S 6/2014 Bringuir  
 D706,751 S 6/2014 Chang et al.  
 D707,665 S \* 6/2014 Chu ..... D14/230  
 D708,602 S 7/2014 Gosalia et al.  
 D709,053 S 7/2014 Chang et al.  
 D710,832 S 8/2014 Yang  
 D710,833 S 8/2014 Zheng et al.  
 8,854,265 B1 10/2014 Yang et al.  
 D716,775 S 11/2014 Bidermann  
 D754,108 S \* 4/2016 Yang ..... D14/230  
 2002/0003499 A1 1/2002 Kouam et al.  
 2004/0222936 A1 11/2004 Hung et al.  
 2005/0073462 A1 4/2005 Lin et al.  
 2005/0190108 A1 9/2005 Lin et al.  
 2006/0208900 A1 9/2006 Tavassoli Hozouri  
 2007/0030203 A1 2/2007 Tsai et al.  
 2008/0150829 A1 6/2008 Lin et al.  
 2009/0002244 A1 1/2009 Woo  
 2009/0058739 A1 3/2009 Konishi  
 2009/0135072 A1 5/2009 Ke et al.  
 2009/0262028 A1 10/2009 Mumburu et al.  
 2010/0188297 A1 7/2010 Chen et al.  
 2010/0309067 A1 12/2010 Tsou et al.  
 2011/0006950 A1 1/2011 Park et al.  
 2012/0038514 A1 2/2012 Bang  
 2012/0229348 A1 9/2012 Chiang  
 2012/0242546 A1 9/2012 Hu et al.

\* cited by examiner

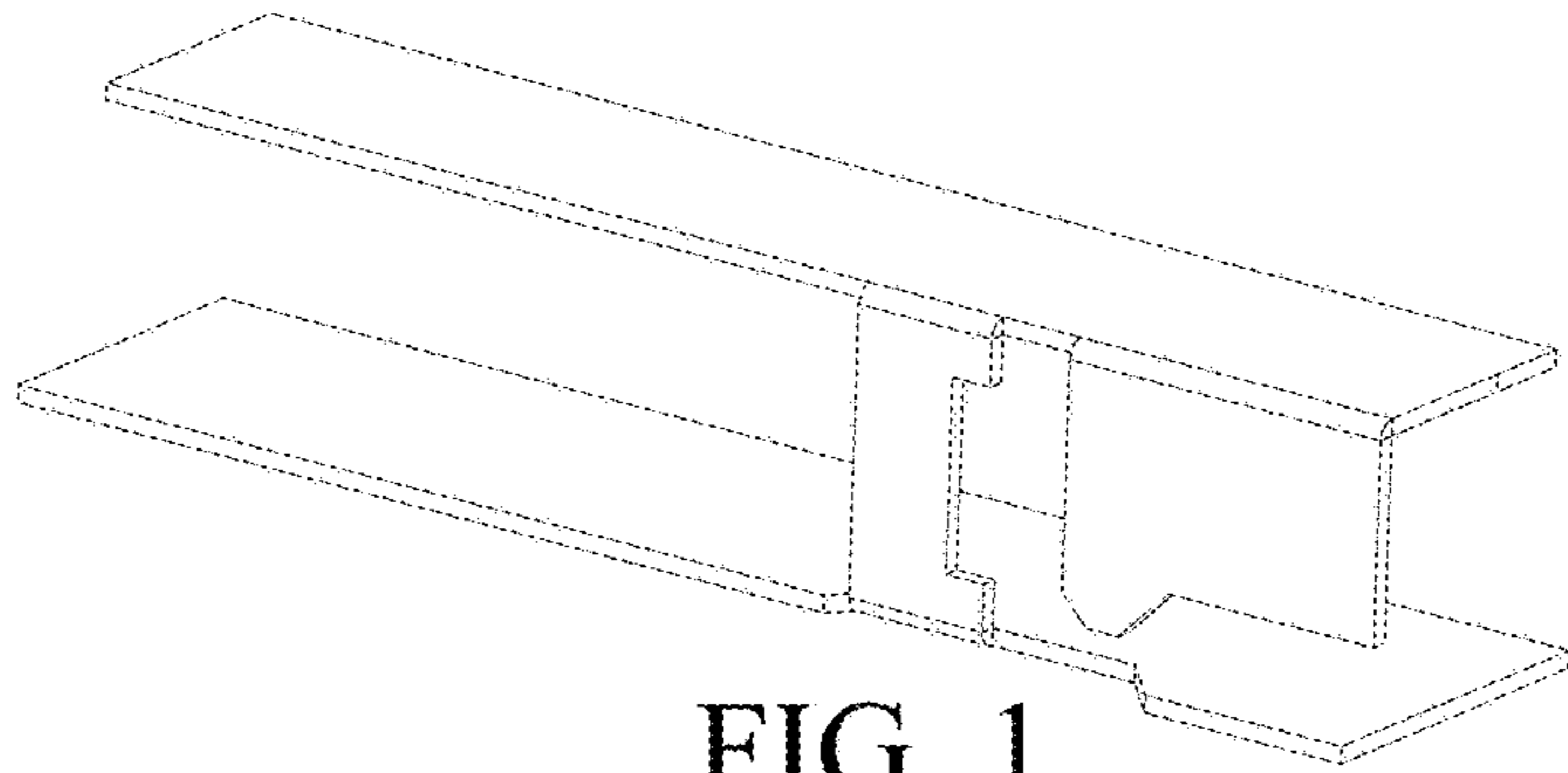


FIG. 1

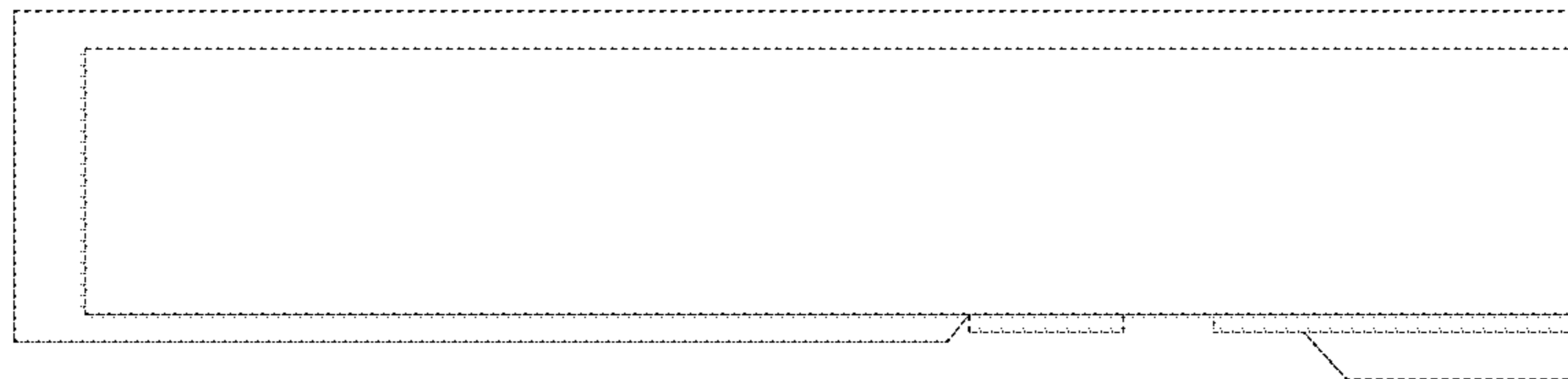


FIG. 2

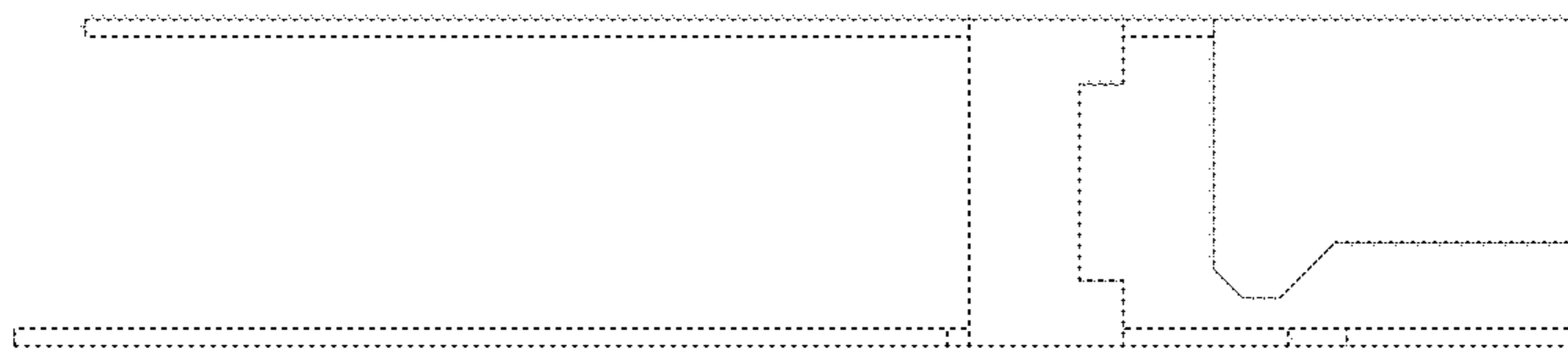


FIG. 3

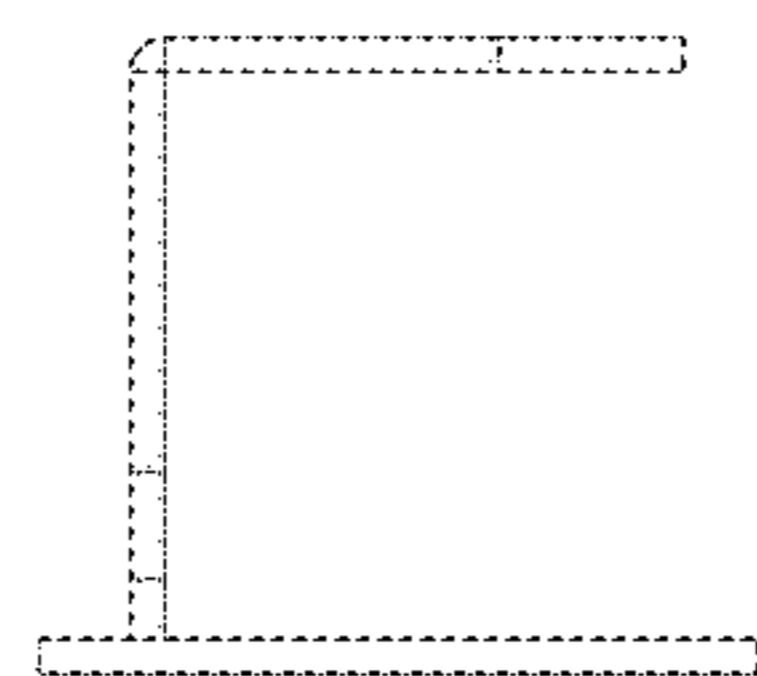


FIG. 4

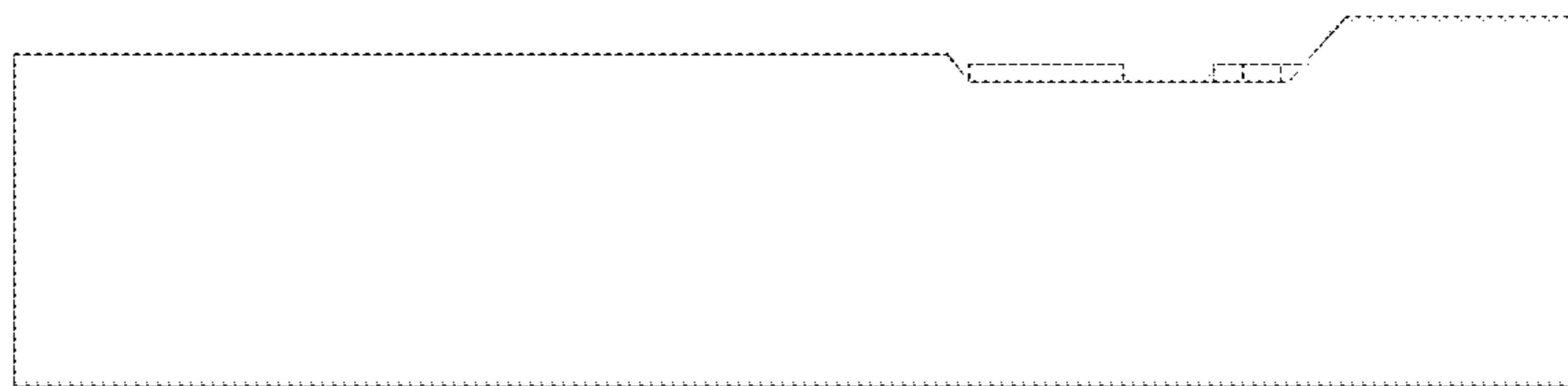


FIG. 5