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(12) United States Design Patent

Marrapode et al.

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(54) **CONNECTOR HOUSING**

(71) Applicant: **Molex, LLC**, Lisle, IL (US)

(72) Inventors: **Thomas R. Marrapode**, Naperville, IL (US); **Jesus Enrique Fung**, Westmont, IL (US); **Andrew Kolak**, Villa Park, IL (US); **Wenzong Chen**, Naperville, IL (US); **Sung-Ping Huang**, Hsinchu (TW); **Chih Chung Wu**, Hsinchu (TW); **Sheng-Pin Su**, Hsinchu County (TW); **Chien-Lang Tai**, Hsinchu (TW)

(73) Assignee: **Molex, LLC**, Lisle, IL (US)

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

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(51) **LOC (14) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/133**

(58) **Field of Classification Search**
USPC ... D13/133, 101, 123, 146, 147, 153, 137.1, D13/149; D14/433, 435.1
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,179,477 B1 1/2001 De
6,485,192 B1 11/2002 Plotts et al.
(Continued)

FOREIGN PATENT DOCUMENTS

CN 111142196 A 5/2020
CN 212485602 U 2/2021
(Continued)

OTHER PUBLICATIONS

Hybrid Optical-Electrical Interconnects for Co-Packaged Optics, Posted Date Sep. 8, 2022 [Online], [Retrieved Dec. 20, 2023]. Retrieved From Internet, https://www.hpcwire.com/off-the-wire/molex-introduces-hybrid-optical-electrical-interconnects-for-co-packaged-optics/, Year: 2022, 3 pages.
(Continued)

Primary Examiner — Rosemary K Tarcza
Assistant Examiner — Leah E Hoeferkamp

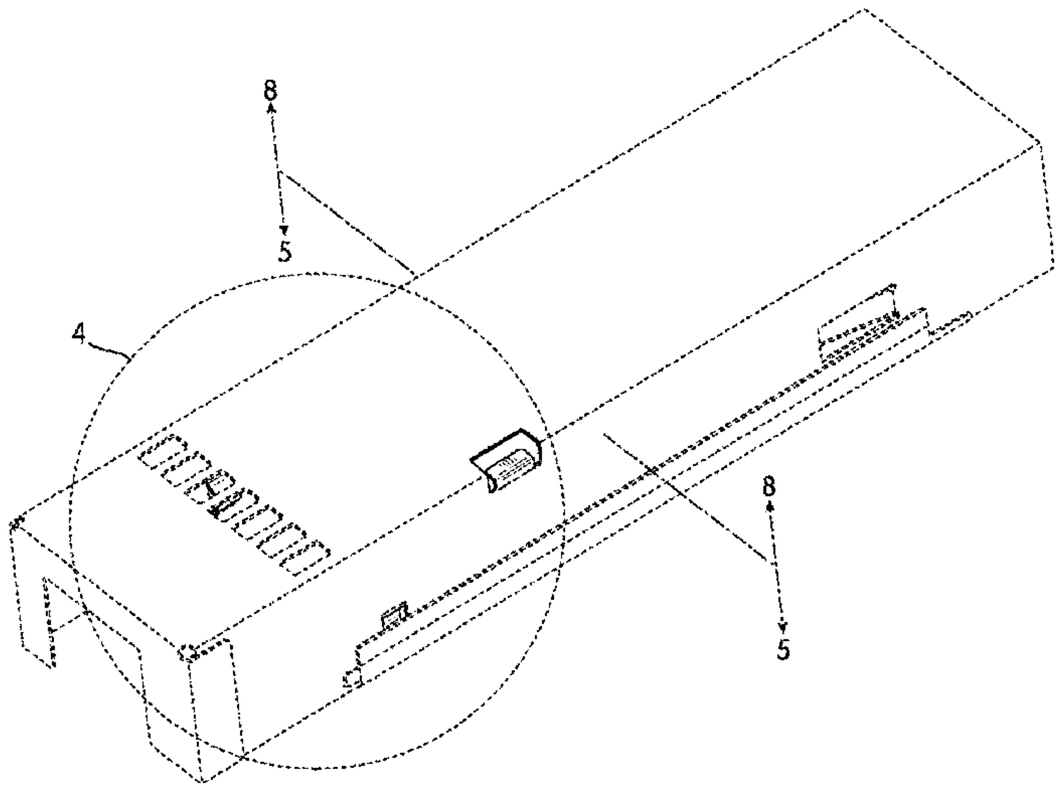
(57) **CLAIM**

The ornamental design for a connector housing as shown and described.

DESCRIPTION

FIG. **1** is a rear-top-right perspective view of a connector housing showing our new design;
FIG. **2** is a left side view thereof;
FIG. **3** is a right side view thereof;
FIG. **4** is an enlarged view of FIG. **1** as identified by region **4** of FIG. **1**;
FIG. **5** is a rear-top-left perspective cross-section view taken through line **5-5** of FIG. **1**;
FIG. **6** is a front-top-left perspective a cross-section view taken through line **5-5** of FIG. **1**;
FIG. **7** is a top cross-sectional view taken through line **5-5** of FIG. **1**;
FIG. **8** is a bottom-right perspective cross-section view taken through line **8-8** of FIG. **1**;
FIG. **9** is a second bottom-right perspective cross-section view taken through line **8-8** of FIG. **1**; and,
FIG. **10** is a bottom view taken through line **8-8** of FIG. **1**.
The uneven-length broken line immediately adjacent to the shaded area defines the bounds of the claimed design and forms no part thereof. The even-length broken lines depicting the remainder of the connector housing form no part of the claimed design. The even-length broken lines highlighting the region **4** represent the enlarged view and form no part of the claimed design. The uneven-length broken lines showing the cross-sectional lines represent the cross-sectional views and form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(58) **Field of Classification Search**
CPC G02B 6/38; G02B 6/38875; G02B 6/4284; H01R 13/40; H01R 13/58; H01R 13/627; H01R 13/66; H01R 13/6335; H01R 13/6272; H01R 13/6397; H01R 13/639; H01R 13/6275; H01R 31/06; H01R 24/00; H01R 24/46; H01R 43/26
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D468,269	S *	1/2003	Hwang	D13/154
D468,270	S *	1/2003	Hwang	D13/154
6,533,603	B1 *	3/2003	Togami	H01R 13/6275 439/372
D481,676	S *	11/2003	Huang	D13/123
D494,930	S	8/2004	Ishigami	
6,863,448	B2	3/2005	Chiu et al.	
7,077,686	B2	7/2006	Seo et al.	
7,194,183	B2	3/2007	Thornton et al.	
7,226,217	B1	6/2007	Benton et al.	
D562,327	S *	2/2008	Hsu	D13/199
7,361,053	B1	4/2008	Boone et al.	
D573,949	S	7/2008	Taira et al.	
7,416,436	B2 *	8/2008	Togami	G02B 6/428 439/484
7,559,702	B2	7/2009	Fujiwara et al.	
D610,548	S *	2/2010	Ngo	H01R 12/7088 D13/154
D623,138	S *	9/2010	Ngo	D13/154
7,963,705	B2	6/2011	Staeber et al.	
D647,058	S *	10/2011	Ngo	D13/147
D676,384	S	2/2013	Yang et al.	
D687,381	S	8/2013	Yang et al.	
9,140,862	B2	9/2015	Mccolloch	
9,176,284	B2	11/2015	Megason et al.	
9,306,306	B2	4/2016	Nishio et al.	
9,798,092	B2	10/2017	Leigh et al.	
D801,930	S	11/2017	Brandt et al.	
10,193,268	B1	1/2019	Chow et al.	
D887,991	S	6/2020	Liau	
D936,588	S	11/2021	Hsiao	
D948,456	S *	4/2022	Yu	D13/154
D950,993	S *	5/2022	Beach	D6/702
11,387,578	B2	7/2022	Karita et al.	
D960,104	S *	8/2022	Rodriguez	D13/147
D987,578	S	5/2023	Choi	
D1,000,390	S *	10/2023	Gurrapukonda	D13/133
D1,000,391	S *	10/2023	Gurrapukonda	D13/133
2014/0140666	A1 *	5/2014	Heimbuch	G02B 6/4273 385/92
2015/0277070	A1 *	10/2015	Luo	G02B 6/4246 385/88
2017/0153399	A1 *	6/2017	Rodriguez	G02B 6/4454
2019/0027882	A1	1/2019	Wang	
2020/0276948	A1	9/2020	Beska et al.	
2020/0288589	A1 *	9/2020	Lavoie	H05K 7/20163
2022/0039250	A1 *	2/2022	Amleshi	H01R 13/6594

FOREIGN PATENT DOCUMENTS

TW	201403155	A	1/2014
TW	D213693	S	9/2021
WO	2022037511	A1	2/2022

OTHER PUBLICATIONS

400G-QSFP-DD-500, Posted date Oct. 29, 2020 [Online], [Retrieved Nov. 20, 2023]. Retrieved From Internet, https://edgeoptic.com/products/400g-qsfp-dd/400g-qsfp-dd-500/ (Year: 2020), 5 pages.
Molex 1062680002, Posted Date Unknown [Online], [Retrieved Nov. 20, 2023]. Retrieved From Internet, https://www.molex.com/en-us/products/part-detail/1062680002 (Year: 2023), 2 pages.

* cited by examiner

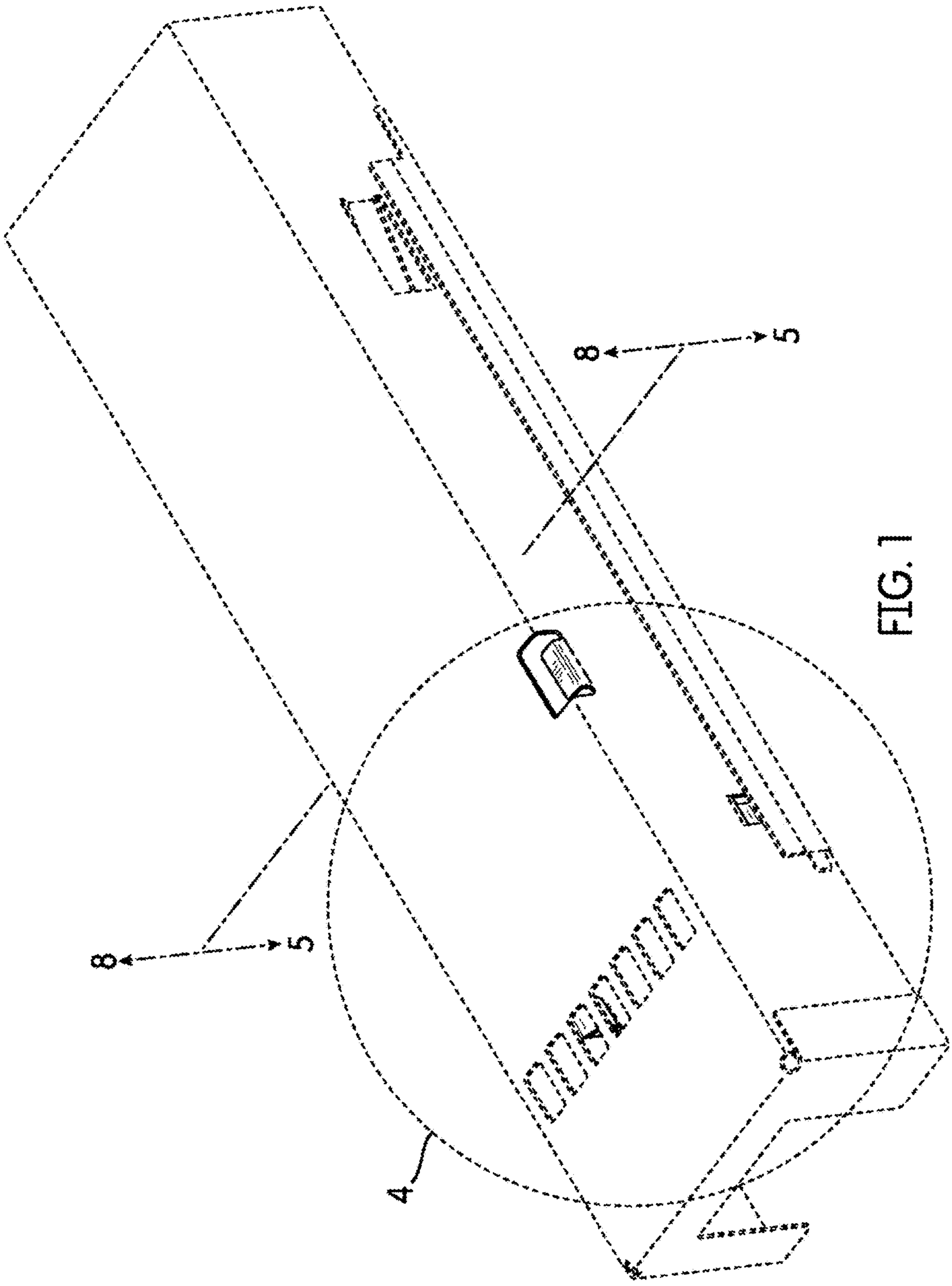


FIG. 1

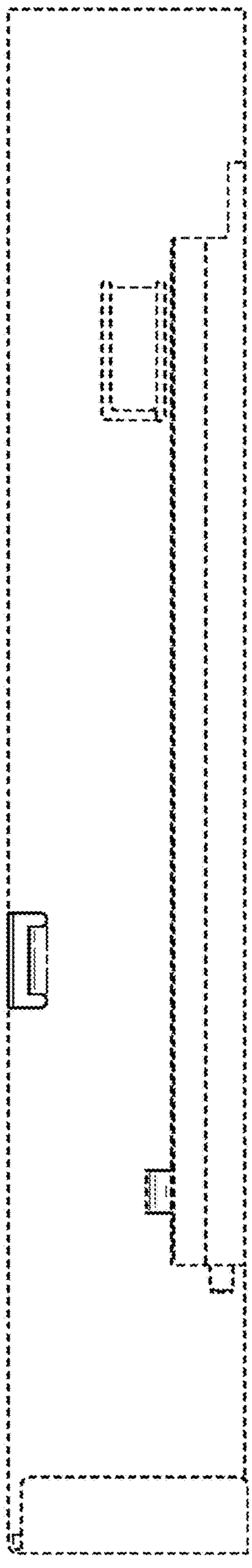


FIG. 2

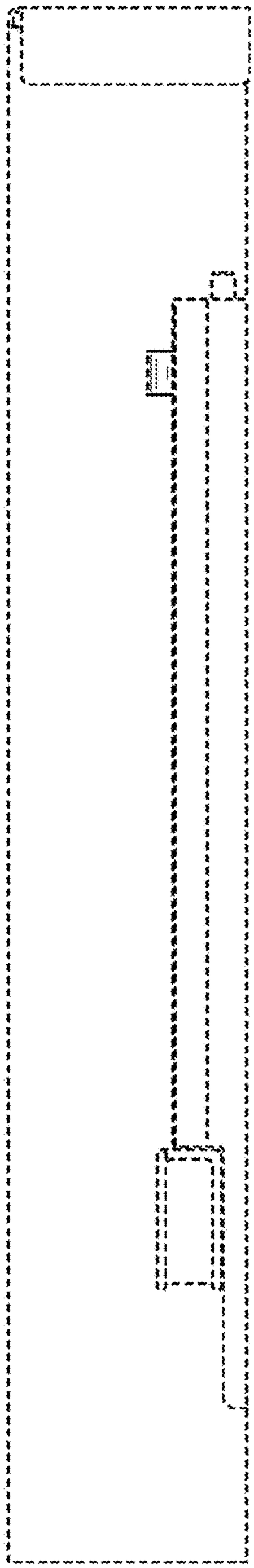


FIG. 3

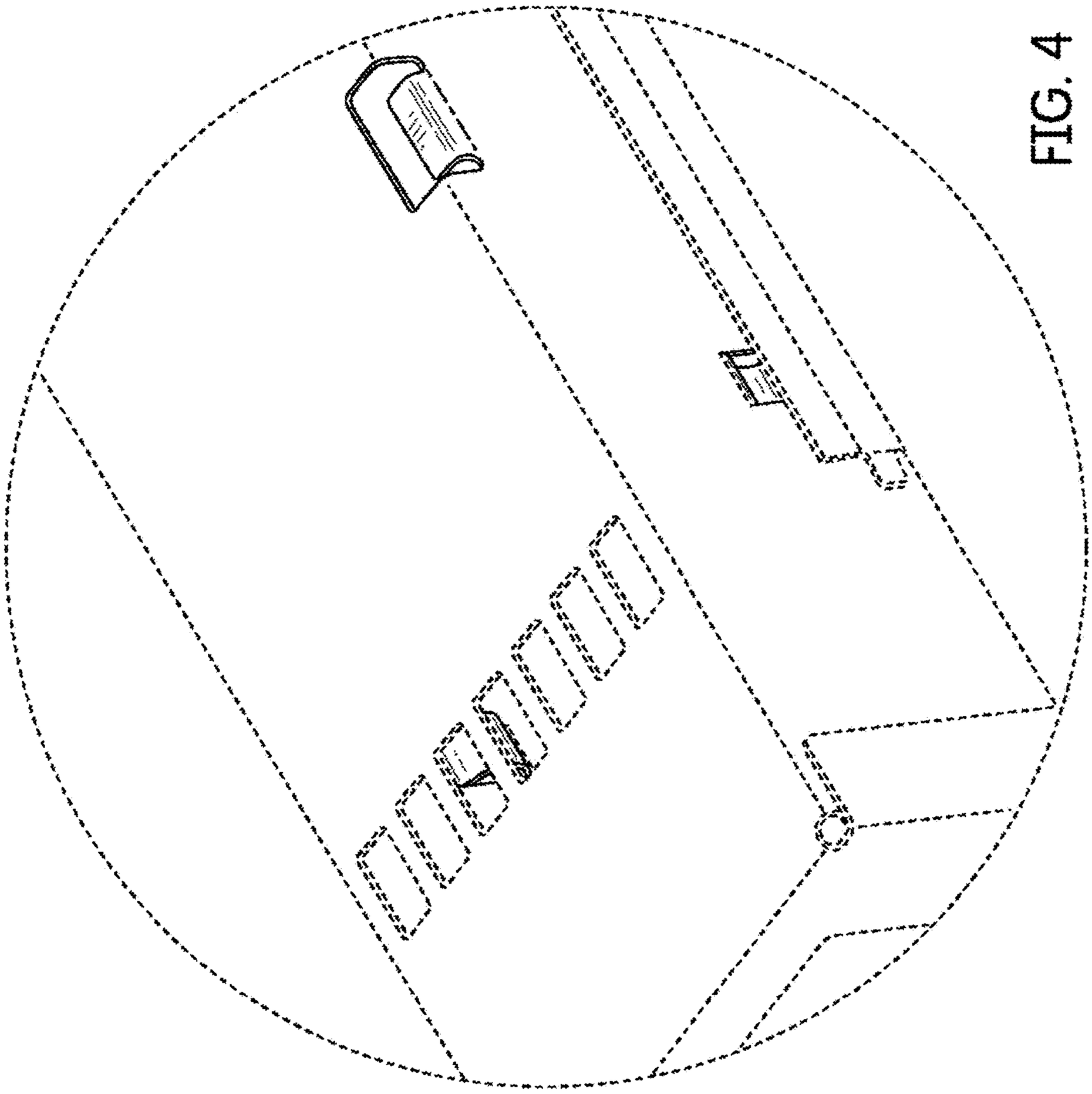


FIG. 4

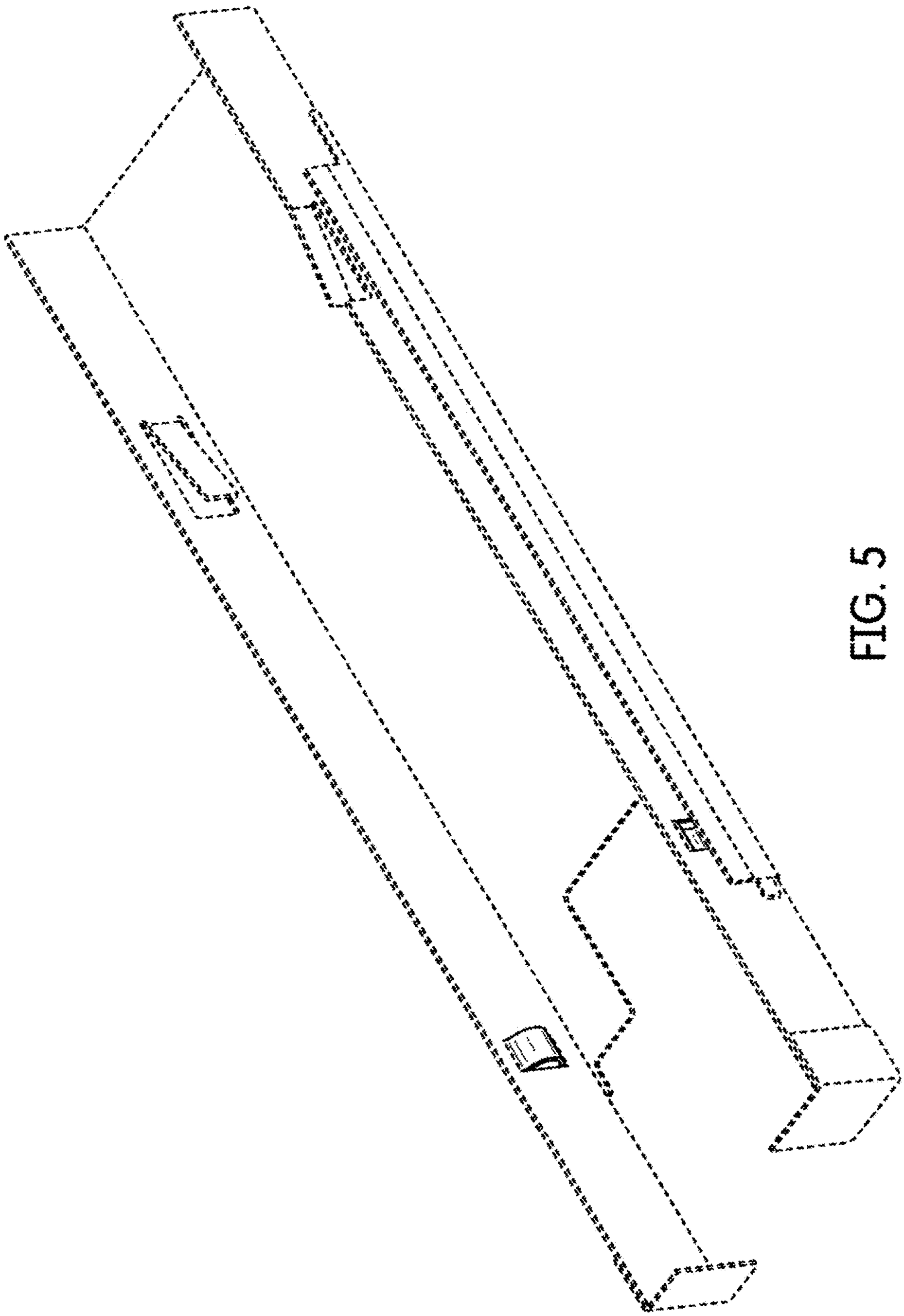


FIG. 5

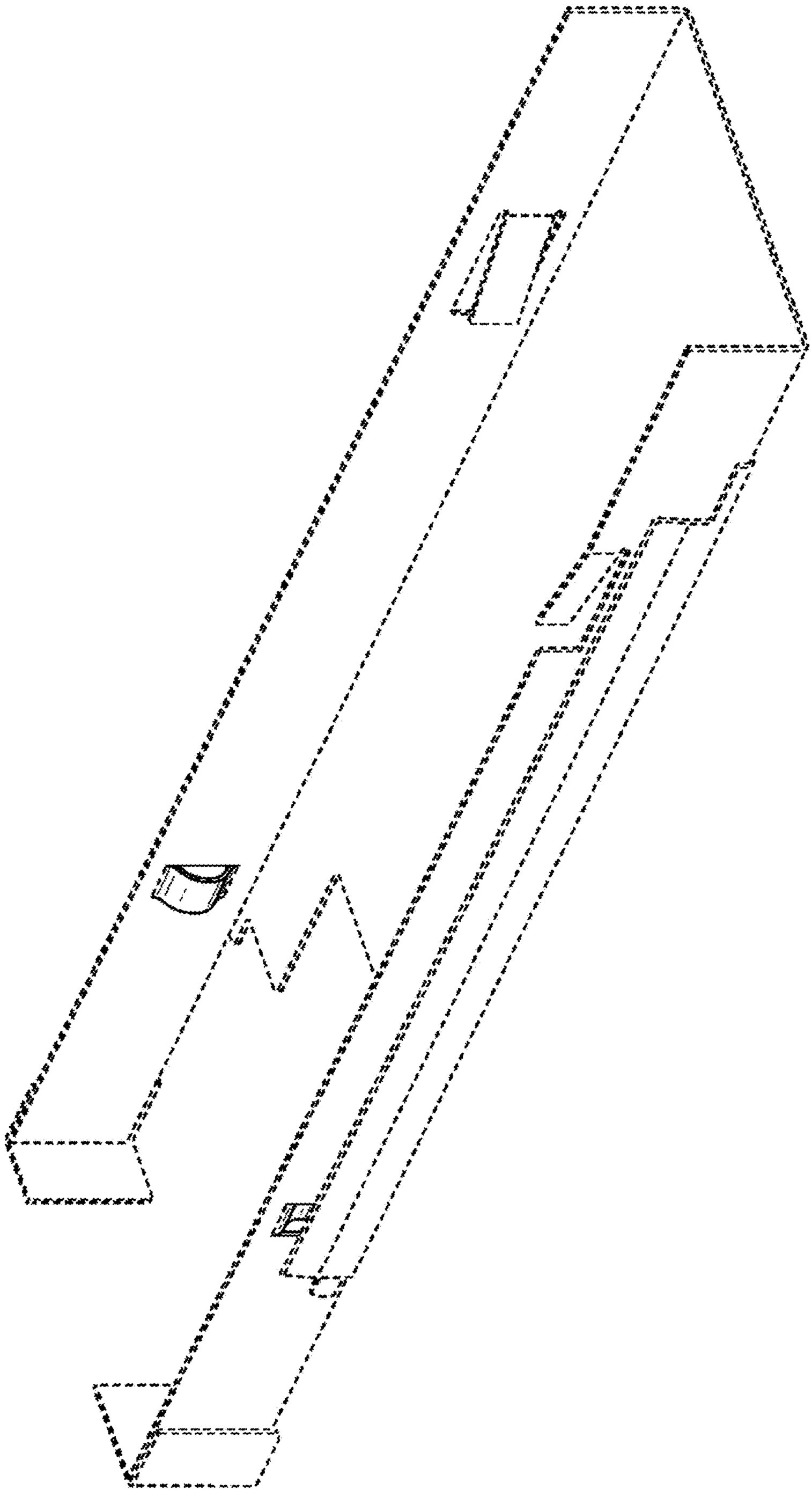


FIG. 6

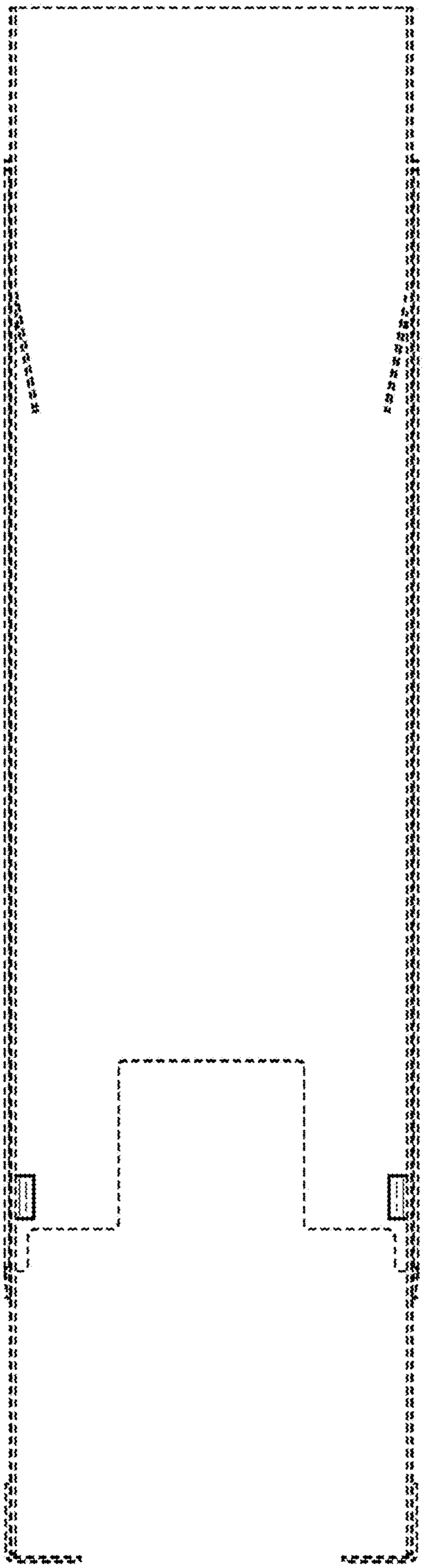


FIG. 7

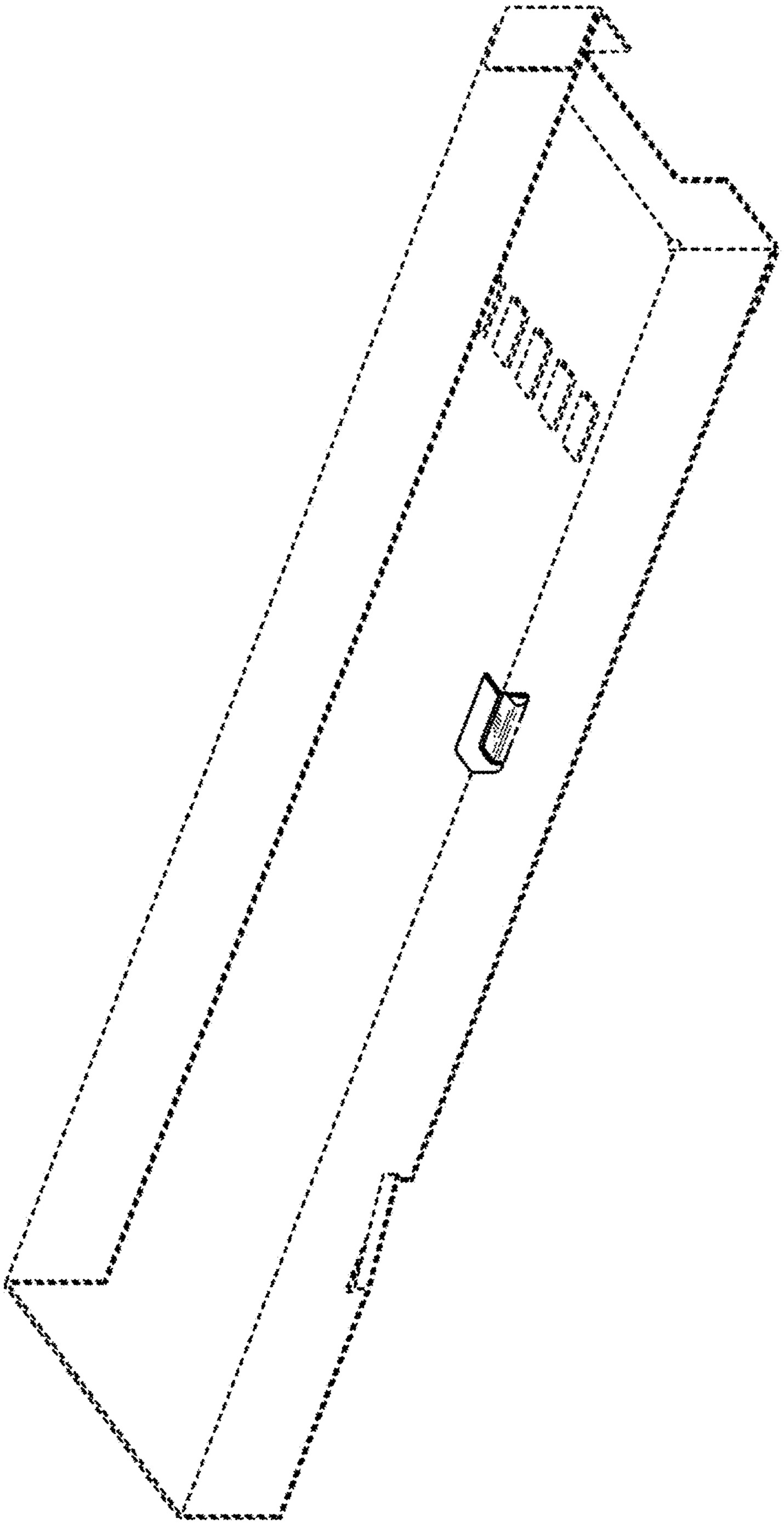


FIG. 8

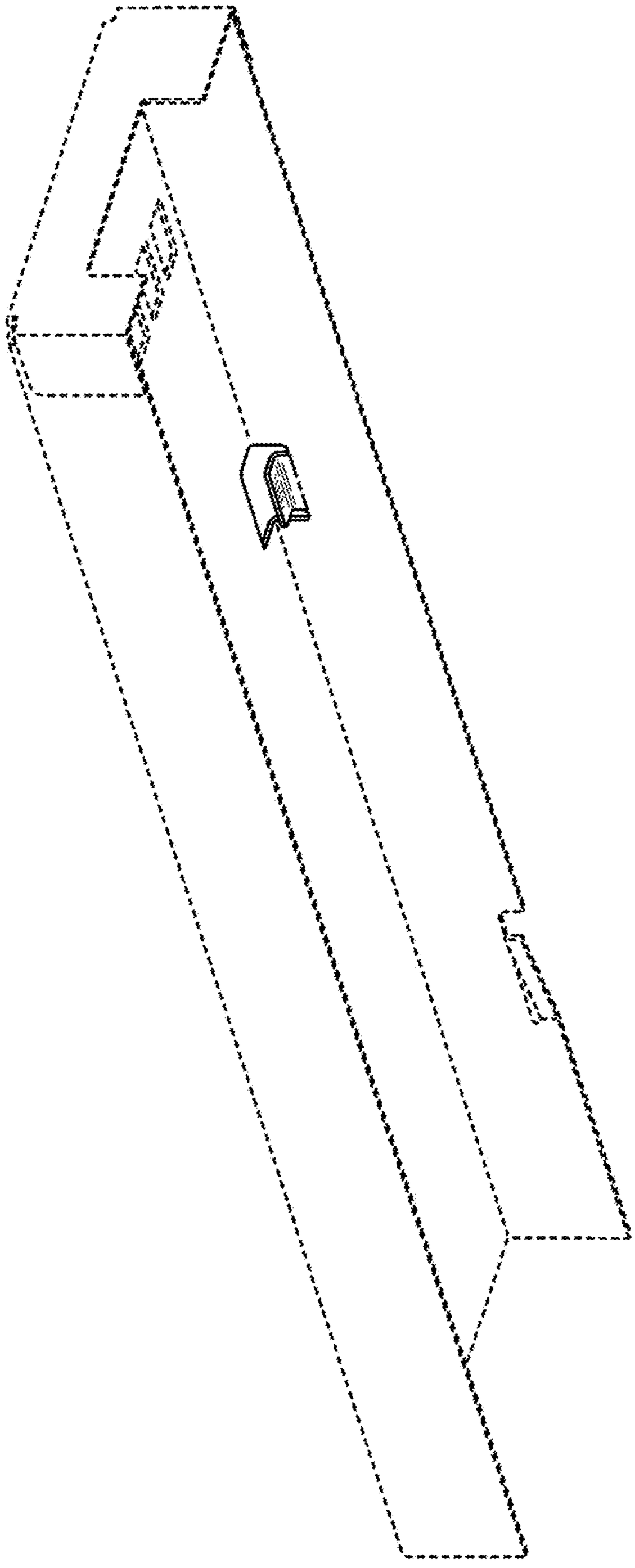


FIG. 9

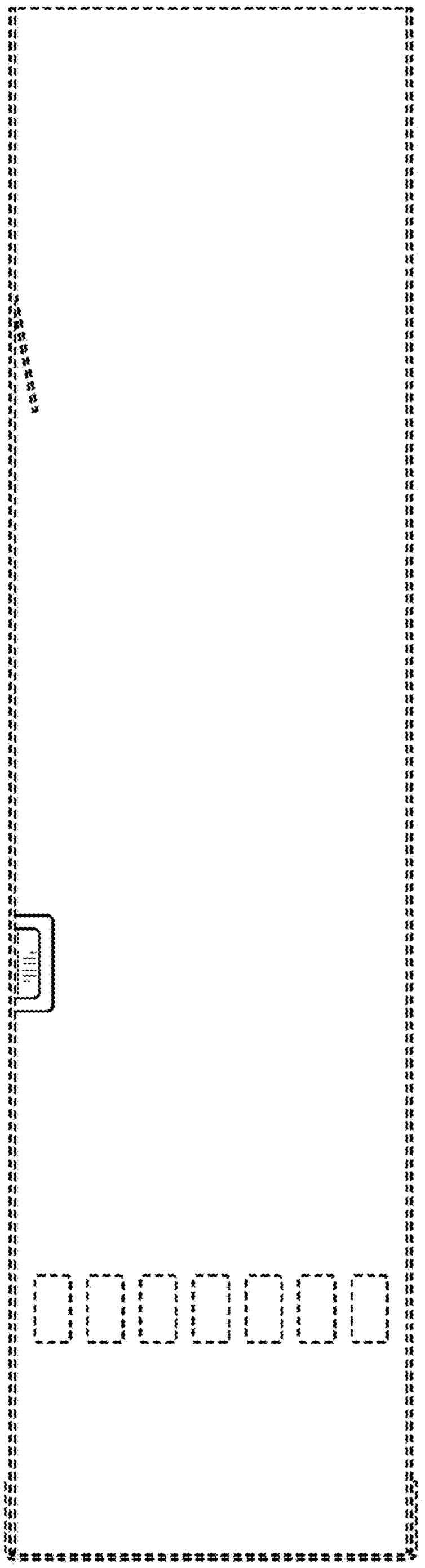


FIG. 10