



US00D883932S

(12) **United States Design Patent**
Chen

(10) **Patent No.:** **US D883,932 S**
(45) **Date of Patent:** **** May 12, 2020**

(54) **ELECTRICAL CONNECTOR PLASTIC SHELL ASSEMBLY**

DESCRIPTION

(71) Applicant: **Xiamen GHGM Industrial Trade Co., Ltd.**, Xiamen, Fujian (CN)

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

(21) Appl. No.: **29/665,413**

(22) Filed: **Oct. 3, 2018**

(51) **LOC (12) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/133; D13/146**

(58) **Field of Classification Search**
USPC D13/110, 112, 118, 123–125, 128, 129,
D13/133, 146–149, 154–156, 158, 173,
D13/184, 199

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,611,711 A * 3/1997 Okada H01R 13/6592
439/607.08
5,899,773 A * 5/1999 Cheng H01R 31/00
439/651

(Continued)

Primary Examiner — Angela J Lee

Assistant Examiner — Shawn T Gingrich

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

(57) **CLAIM**

The ornamental design for an electrical connector plastic shell assembly, as shown and described.

FIG. 1 is a front, bottom, right perspective view of a male portion of an electrical connector plastic shell assembly showing my new design;

FIG. 2 is a front, top, left perspective view thereof;

FIG. 3 is a rear, top, left perspective view thereof;

FIG. 4 is a rear, bottom, right perspective view thereof;

FIG. 5 is a front elevational view thereof;

FIG. 6 is a rear elevational view thereof;

FIG. 7 is a left side view thereof;

FIG. 8 is a right side view thereof;

FIG. 9 is top plan view thereof;

FIG. 10 is bottom plan view thereof;

FIG. 11 is a rear, top, right perspective view of a female portion of an electrical connector plastic shell assembly showing my new design;

FIG. 12 is a rear, bottom, left perspective view thereof;

FIG. 13 is a front, bottom, left perspective view thereof;

FIG. 14 is a front, top, right perspective view thereof;

FIG. 15 is a front elevational view thereof;

FIG. 16 is a rear elevational view thereof;

FIG. 17 is a left side view thereof;

FIG. 18 is a right side view thereof;

FIG. 19 is top plan view thereof;

FIG. 20 is bottom plan view thereof;

FIG. 21 is a rear, top, right perspective view of an electrical connector plastic shell assembly showing my new design;

FIG. 22 is a rear, bottom, left perspective view thereof;

FIG. 23 is a front, bottom, left perspective view thereof;

FIG. 24 is a front, top, right perspective view thereof;

FIG. 25 is a front elevational view thereof;

FIG. 26 is a rear elevational view thereof;

FIG. 27 is a left side view thereof;

FIG. 28 is a right side view thereof;

FIG. 29 is top plan view thereof;

FIG. 30 is bottom plan view thereof;

FIG. 31 is an enlarged view of the encircled portion '31' in FIG. 11;

FIG. 32 is an enlarged view of the encircled portion '32' in FIG. 14;

FIG. 33 is an enlarged view of the encircled portion '33' in FIG. 21; and,

(Continued)

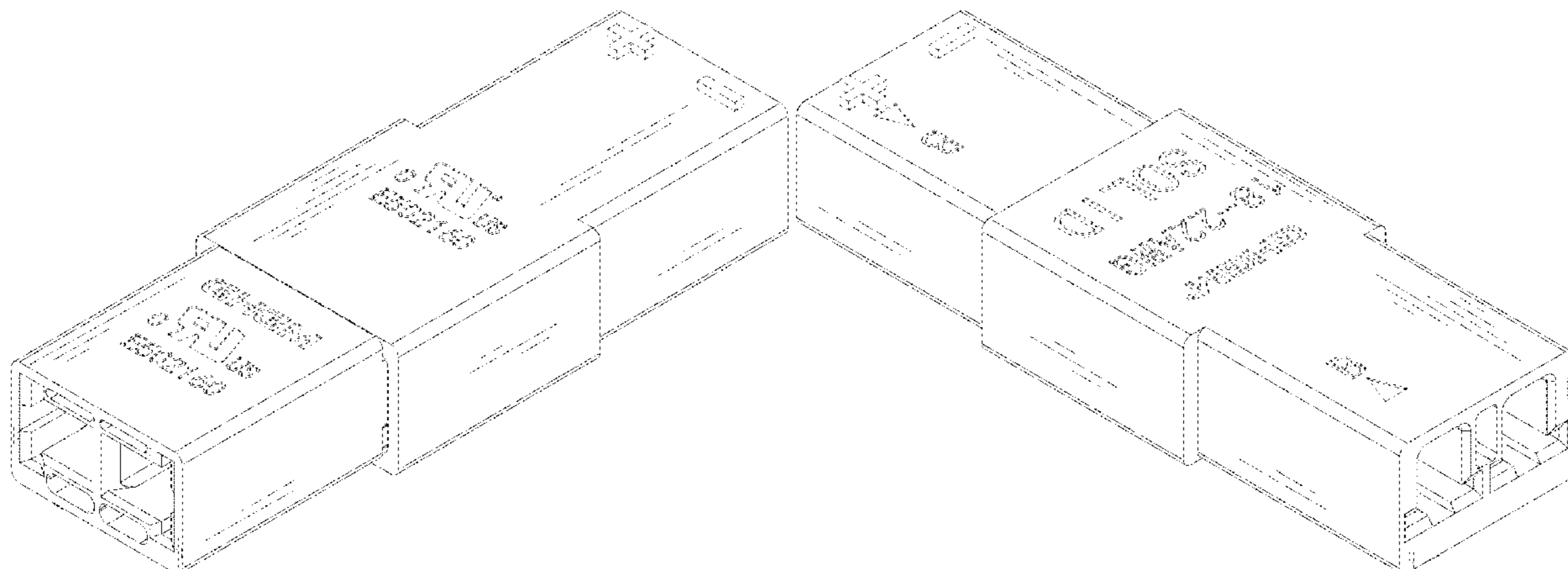


FIG. 34 is an enlarged view of the encircled portion '34' in FIG. 23.

The broken lines illustrate portions of the electrical connector plastic shell assembly which form no part of the claimed design.

1 Claim, 34 Drawing Sheets

(58) **Field of Classification Search**

CPC H01R 4/48; H01R 11/22; H01R 12/00;
H01R 12/71; H01R 12/73; H01R 13/04;
H01R 13/11; H01R 13/20; H01R 13/28;
H01R 13/514; H01R 13/62; H01R
13/627; H01R 13/639

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,296,523 B1 * 10/2001 Sasai B29C 45/26
439/607.09
D519,924 S * 5/2006 Baker D13/133

D574,772 S * 8/2008 Sutter D13/133
D574,773 S * 8/2008 Sutter D13/133
D642,528 S * 8/2011 Gravalin D13/133
9,608,353 B1 * 3/2017 Ang H01R 13/4367
9,972,931 B1 * 5/2018 Chen H01R 4/4818
9,991,620 B1 * 6/2018 Boyer H01R 13/28
10,153,573 B1 * 12/2018 Chen H01R 12/707
D873,773 S * 1/2020 Cao D13/133
D873,774 S * 1/2020 Cao D13/133
D875,047 S * 2/2020 Hu D13/133
D876,361 S * 2/2020 Hu D13/133
2003/0162425 A1 * 8/2003 Hall H01R 13/639
439/144
2007/0212952 A1 * 9/2007 Ragnarsson H01R 13/26
439/790
2012/0329304 A1 * 12/2012 Lopes H01R 31/06
439/345
2015/0255923 A1 * 9/2015 Xu H01R 4/4836
439/345
2016/0072214 A1 * 3/2016 Shi H01R 13/50
439/660
2018/0316128 A1 * 11/2018 Gunreben H01R 13/627
2019/0386437 A1 * 12/2019 Matsunaga H01R 4/185
2020/0064578 A1 * 2/2020 Kohn G02B 6/3897

* cited by examiner

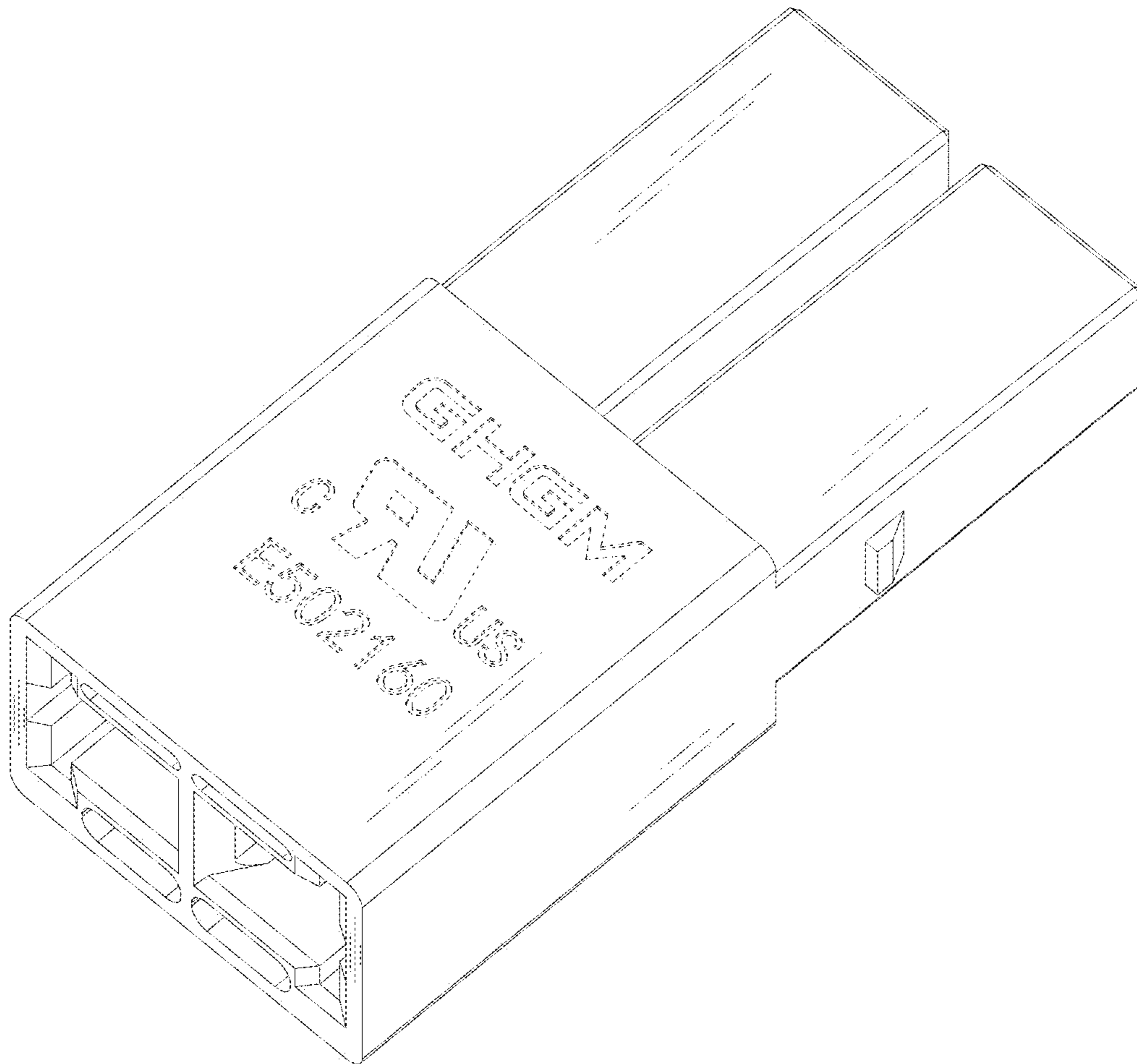


FIG. 1

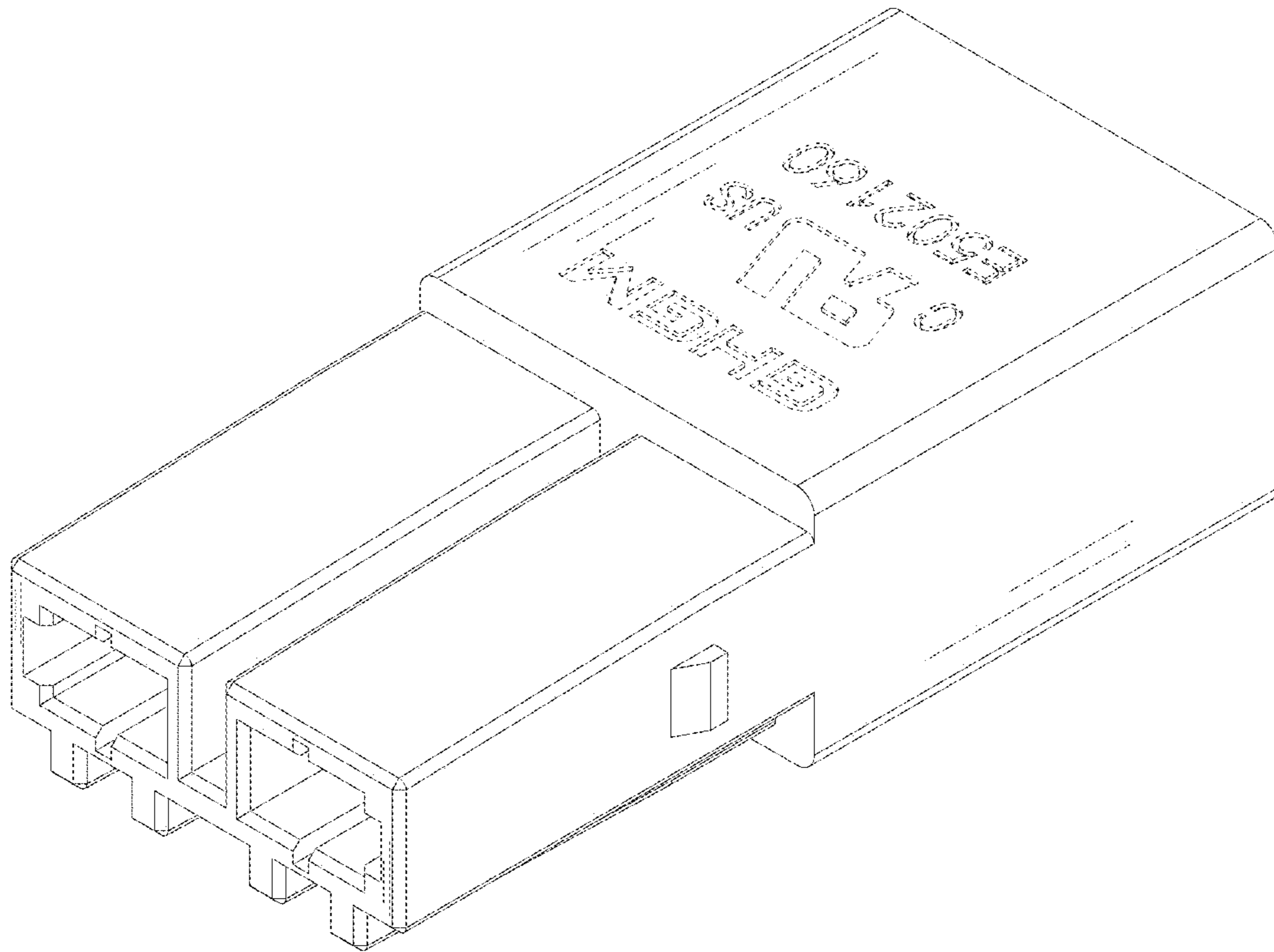


FIG. 2

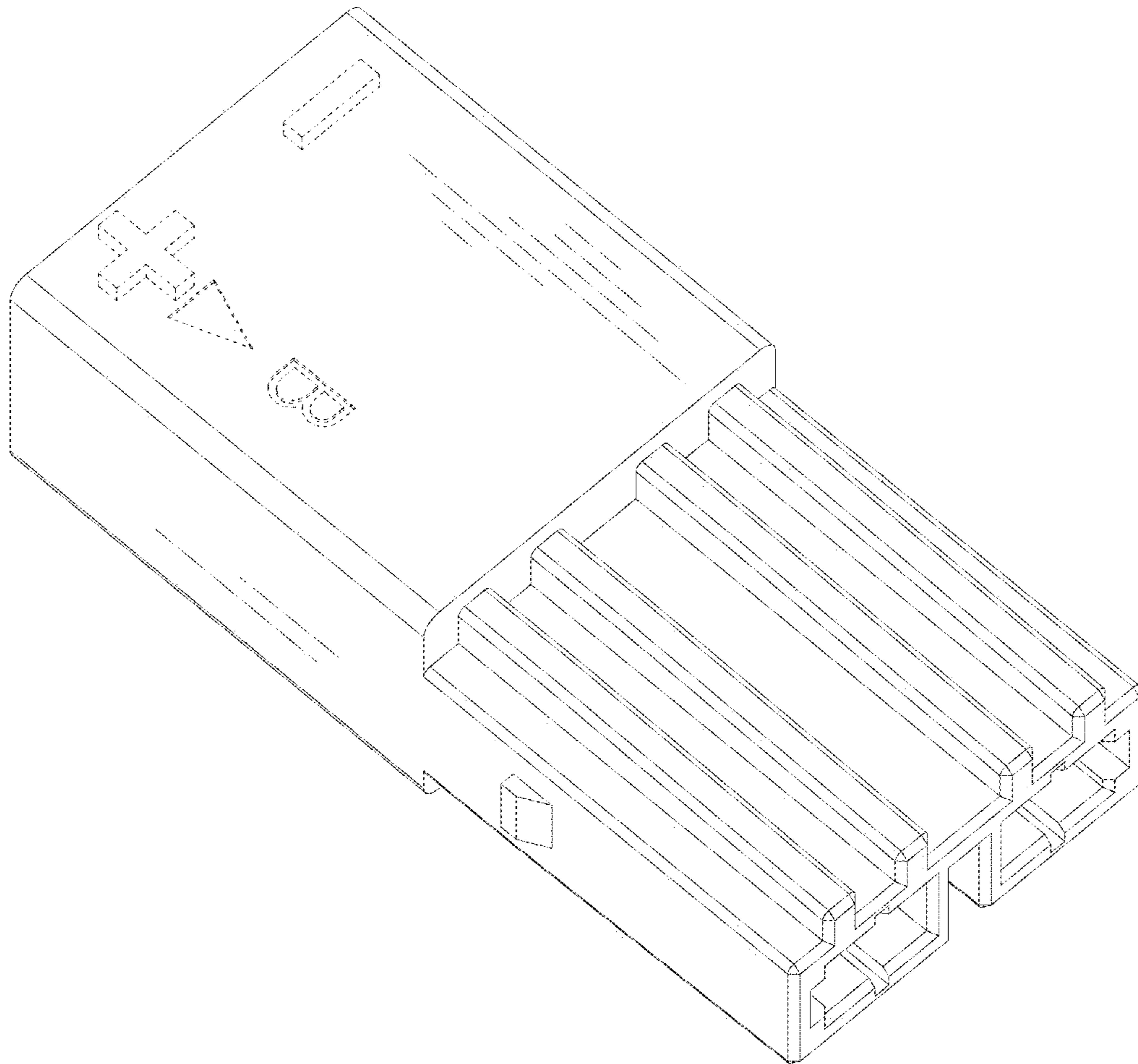


FIG. 3

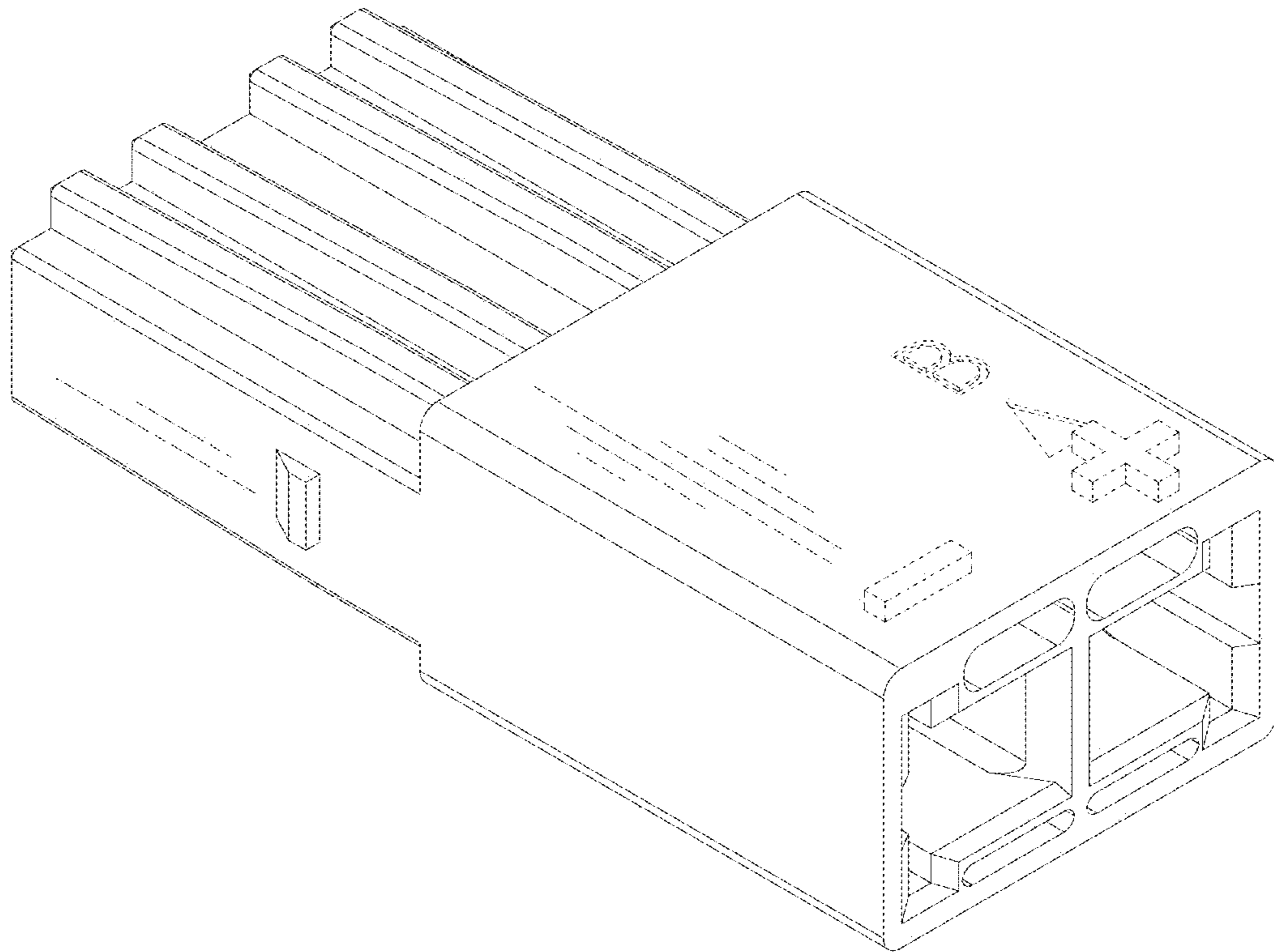


FIG. 4

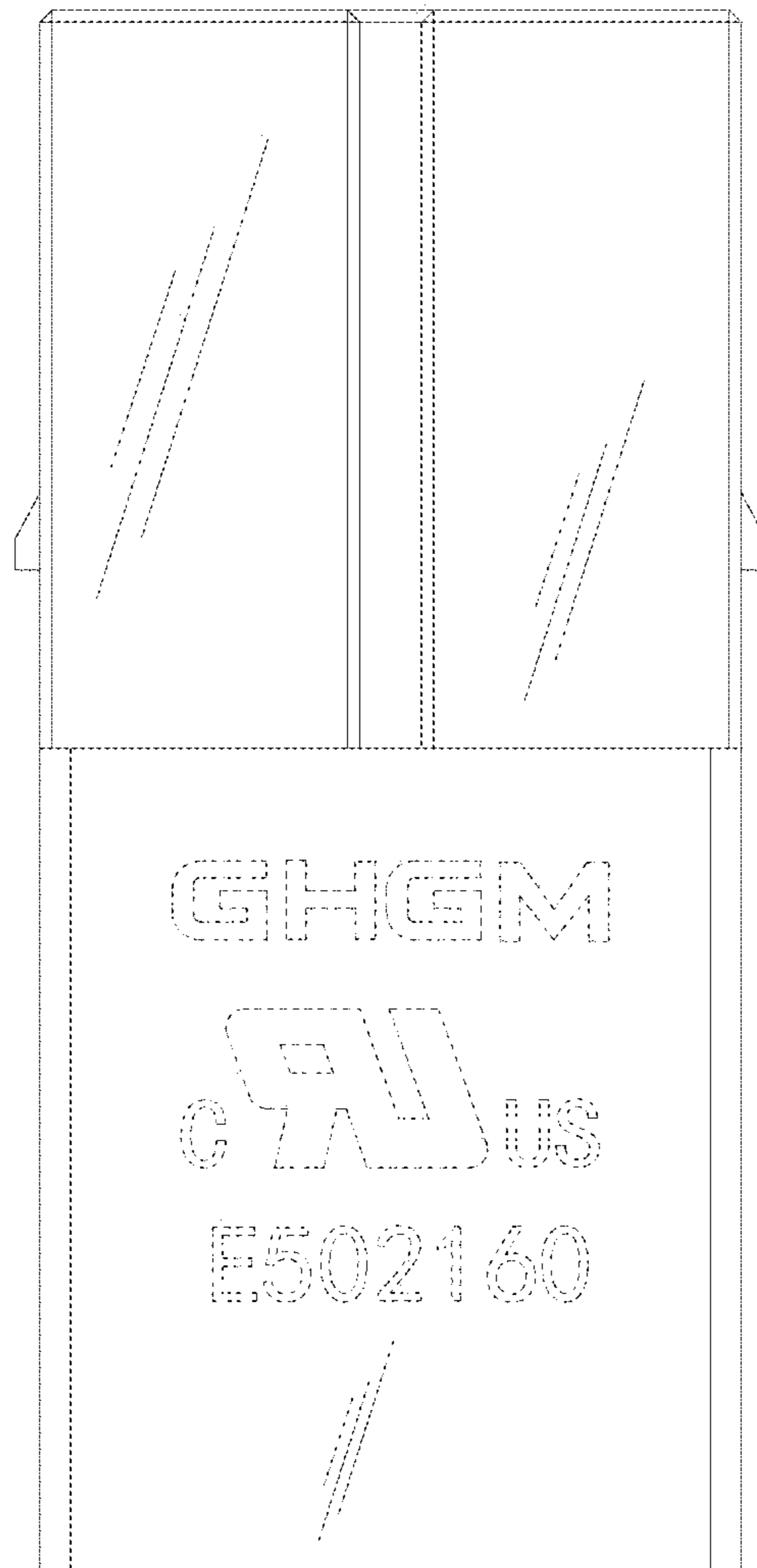


FIG. 5

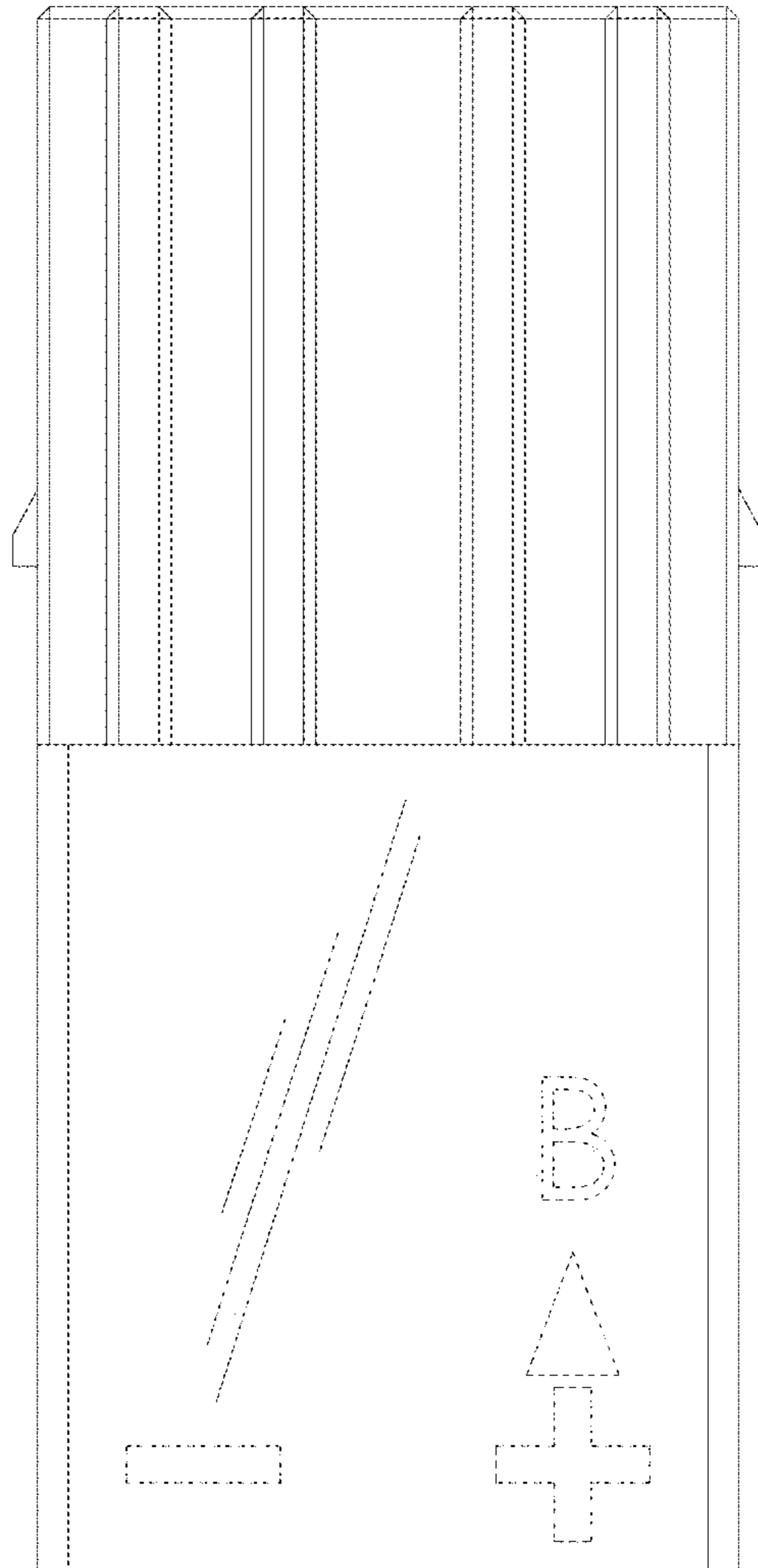


FIG. 6

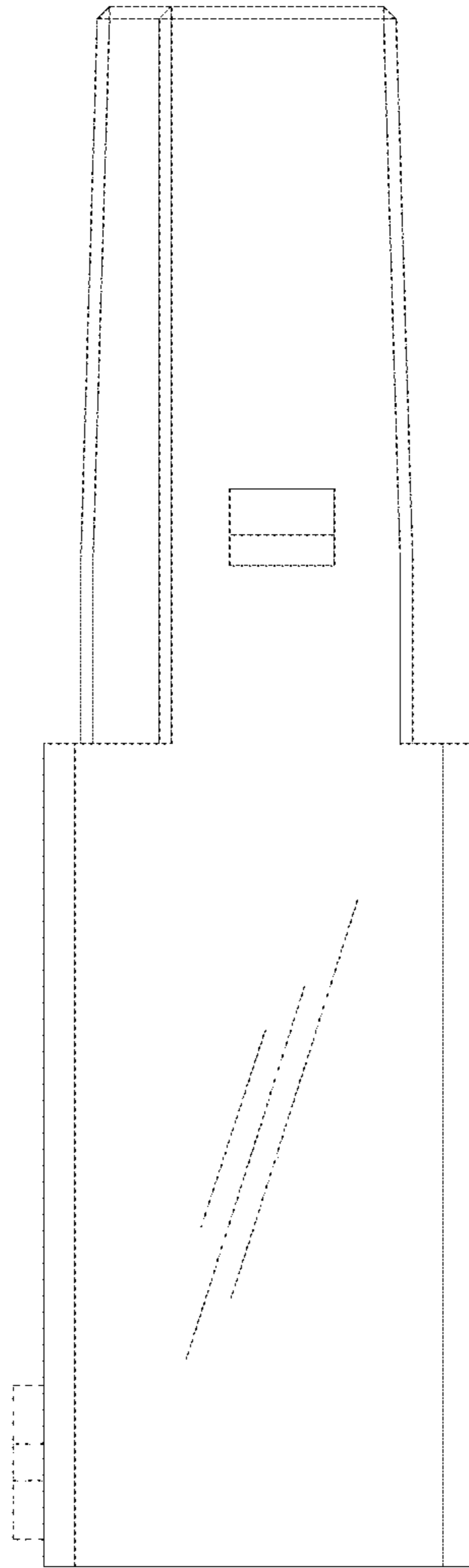


FIG. 7

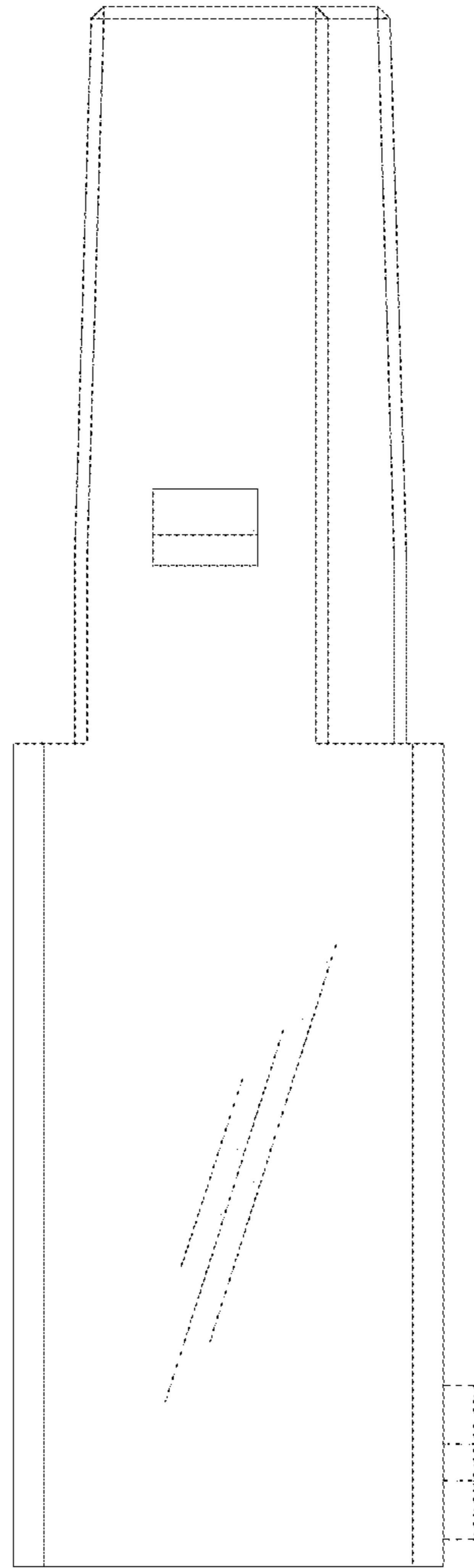


FIG. 8

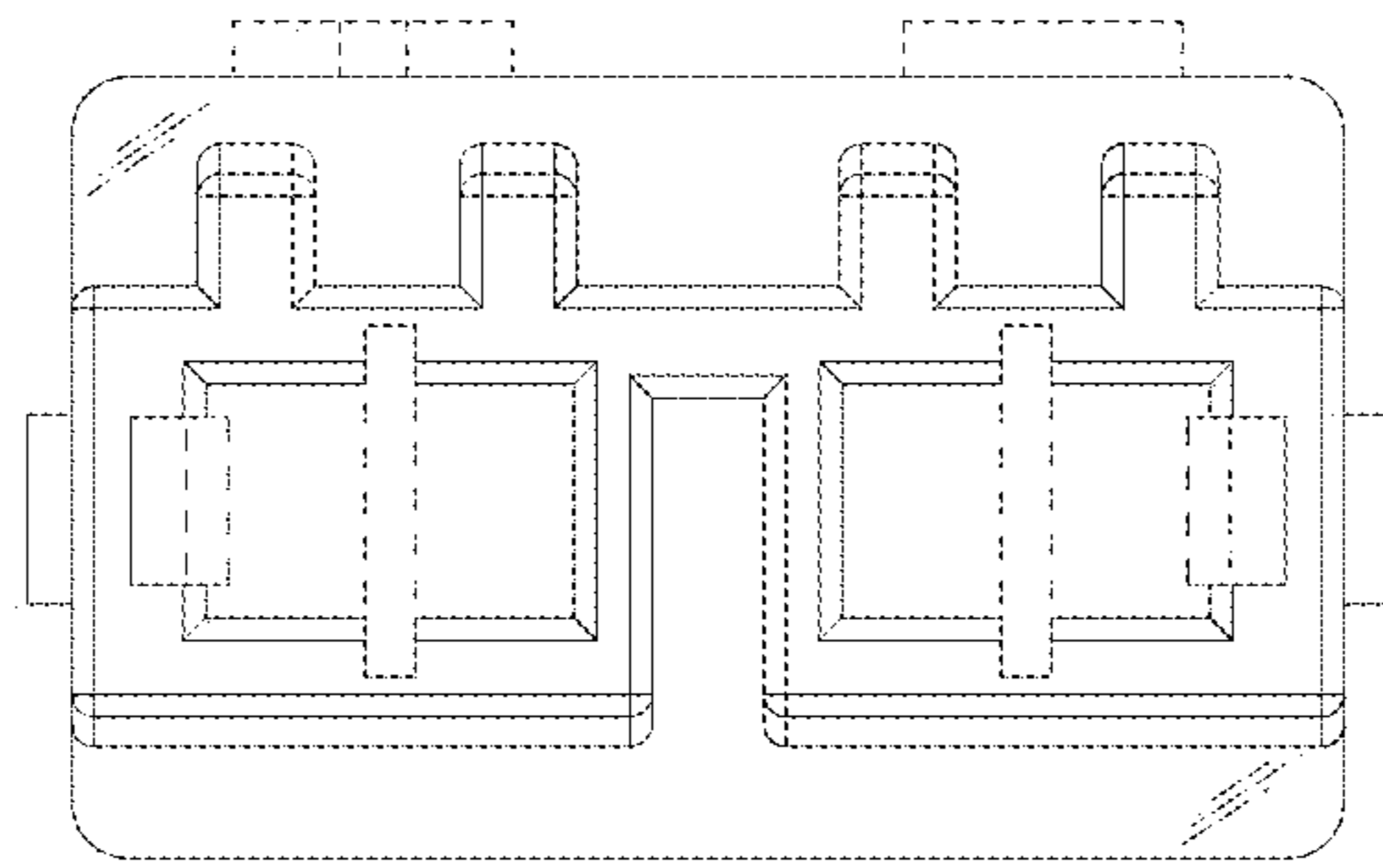


FIG. 9

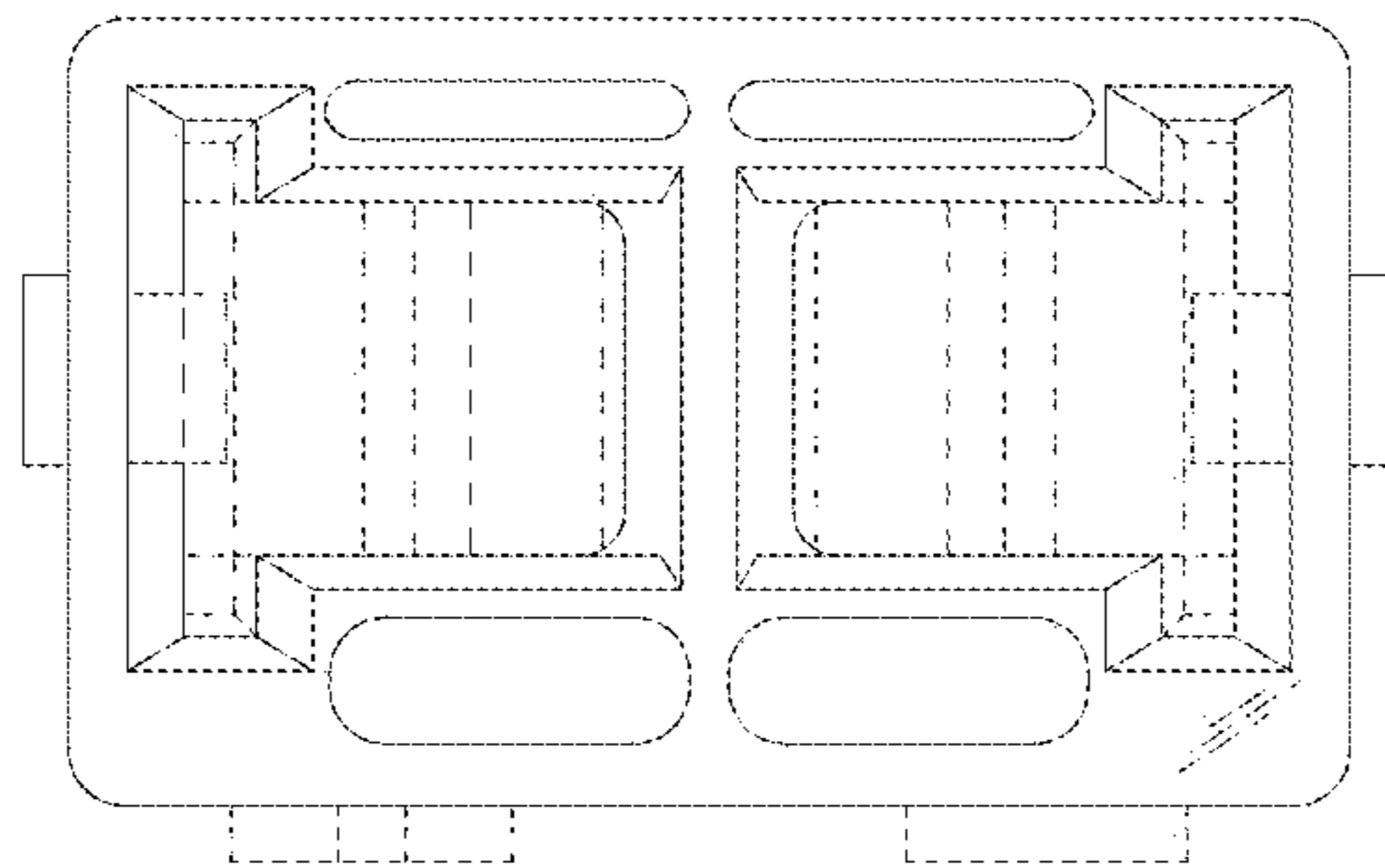


FIG. 10

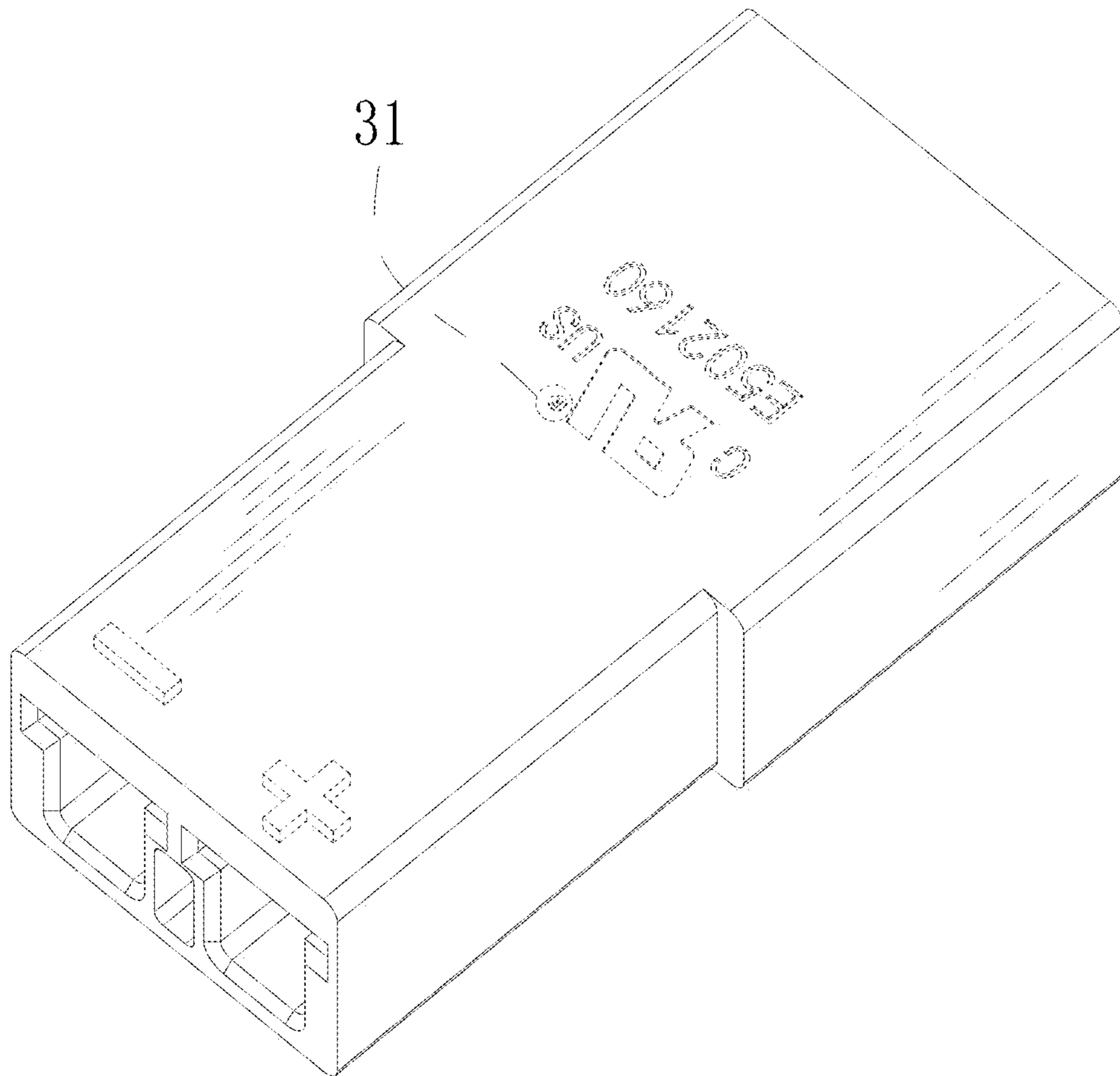


FIG. 11

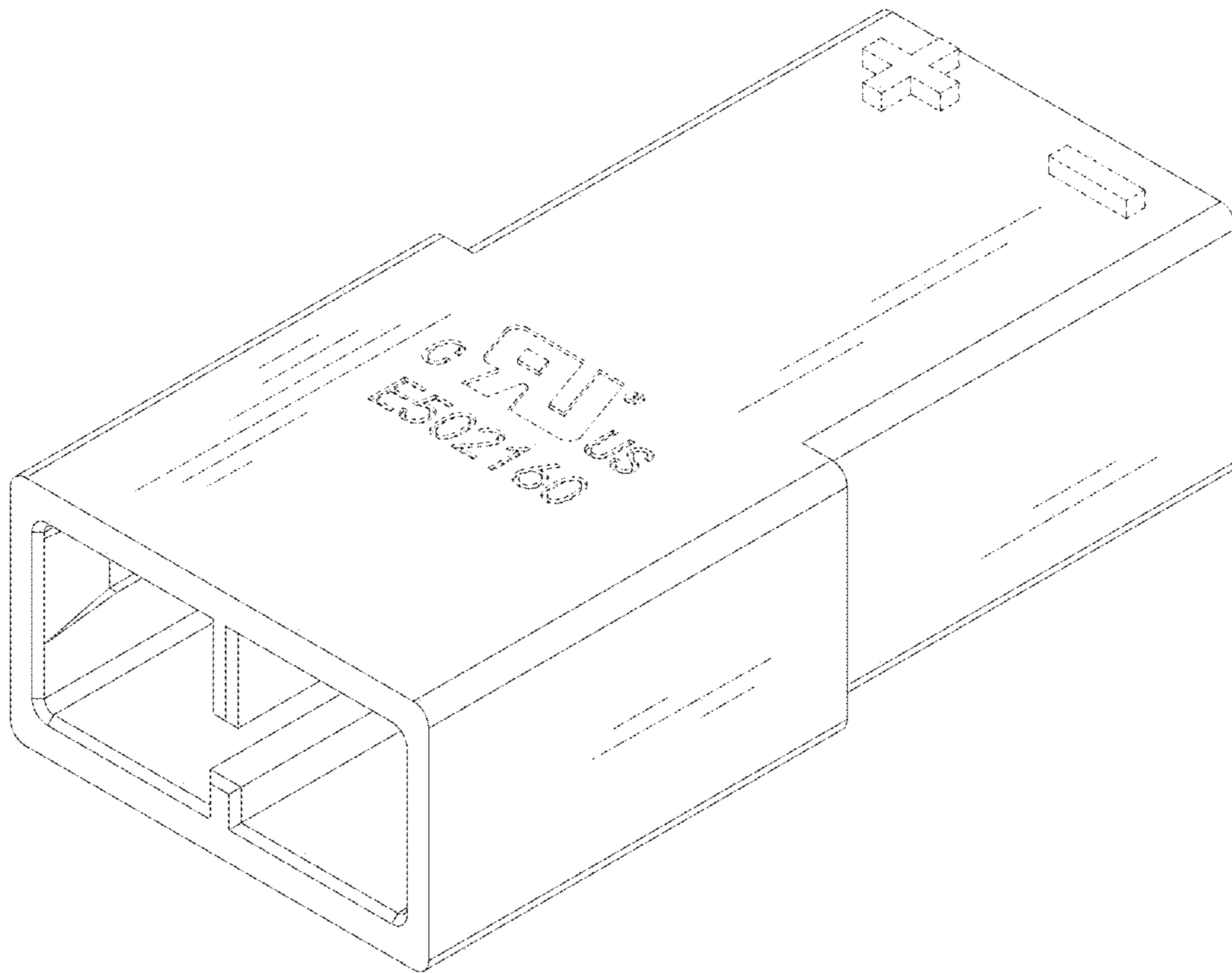


FIG. 12

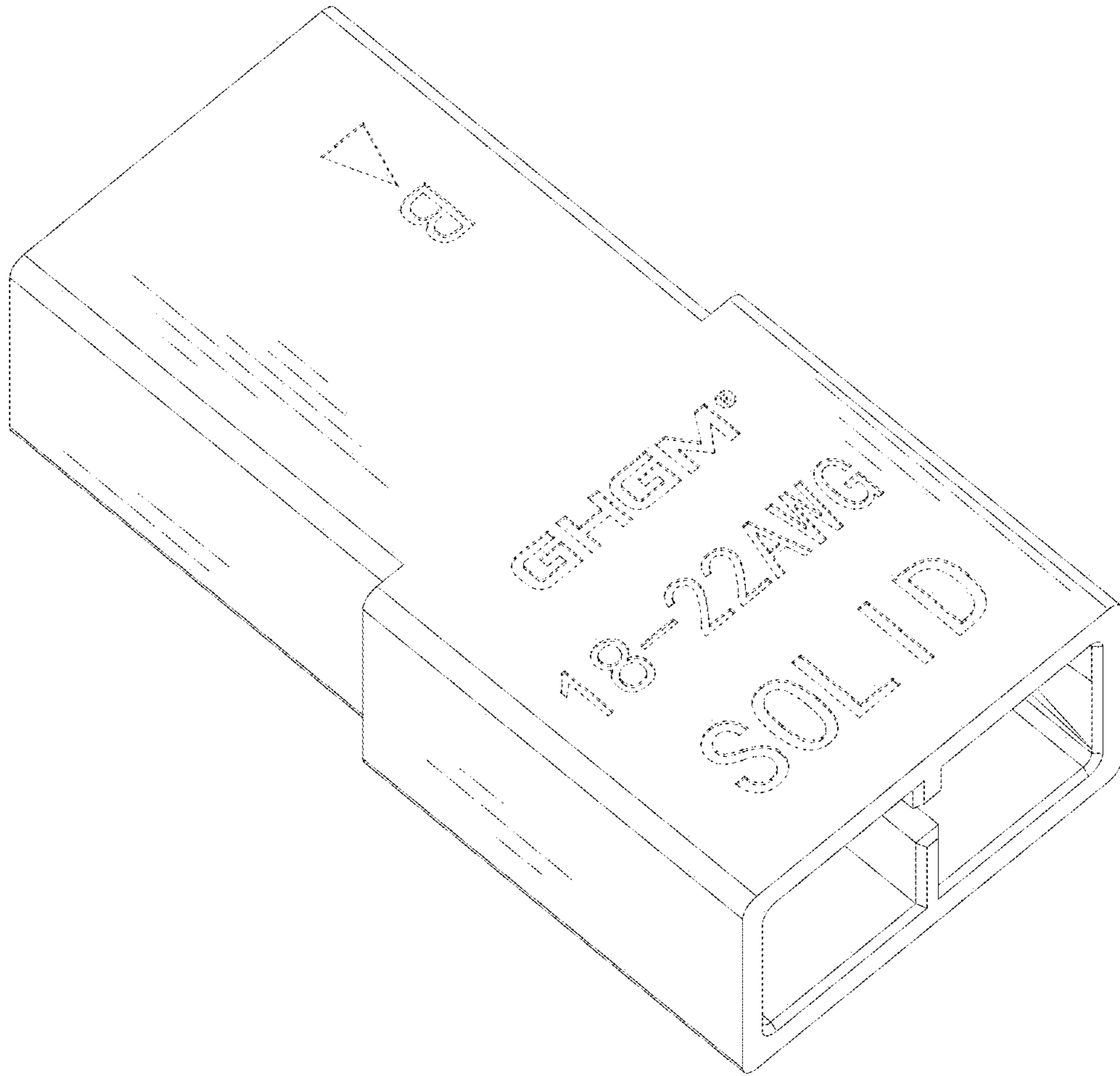


FIG. 13

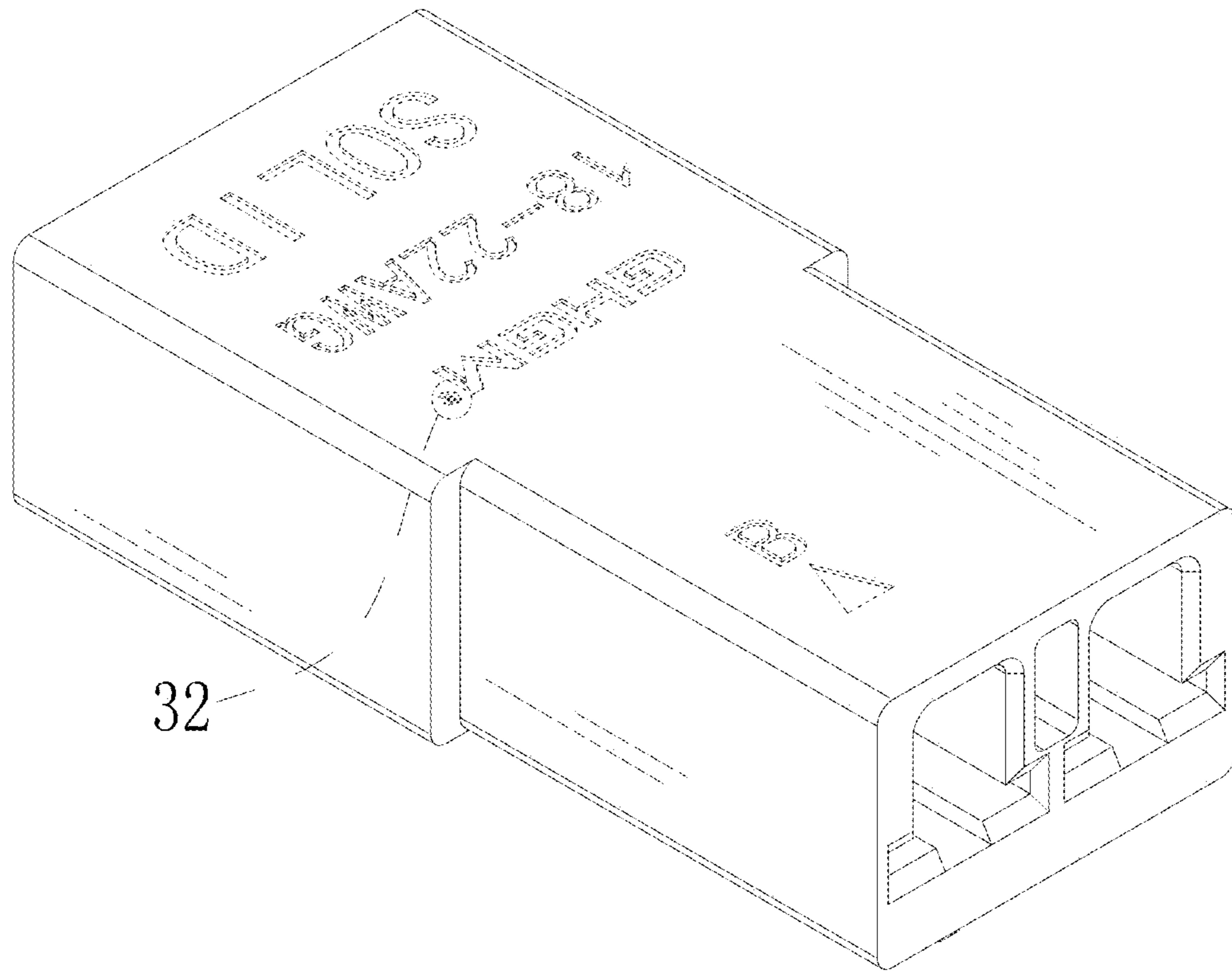


FIG. 14

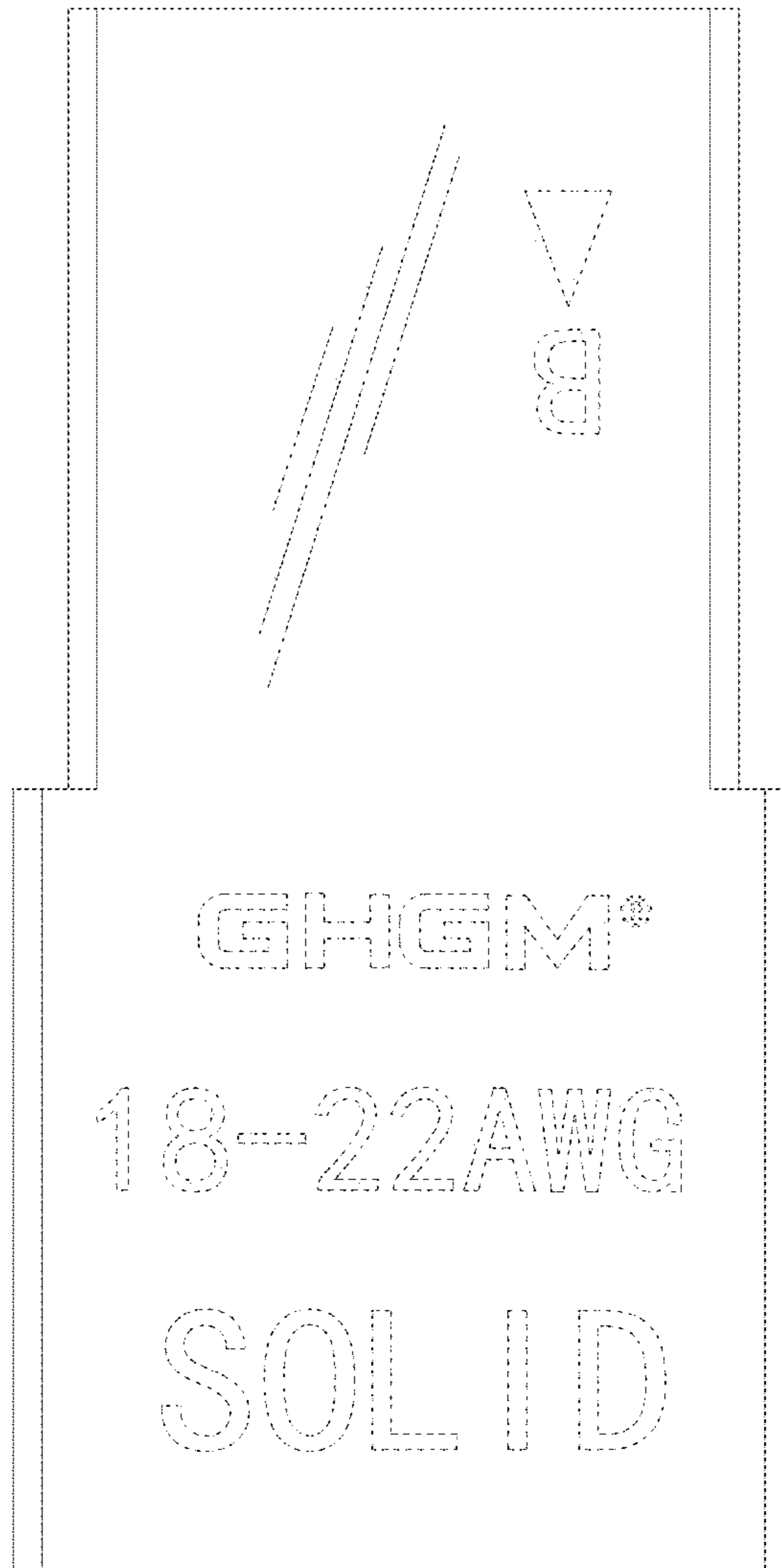


FIG. 15

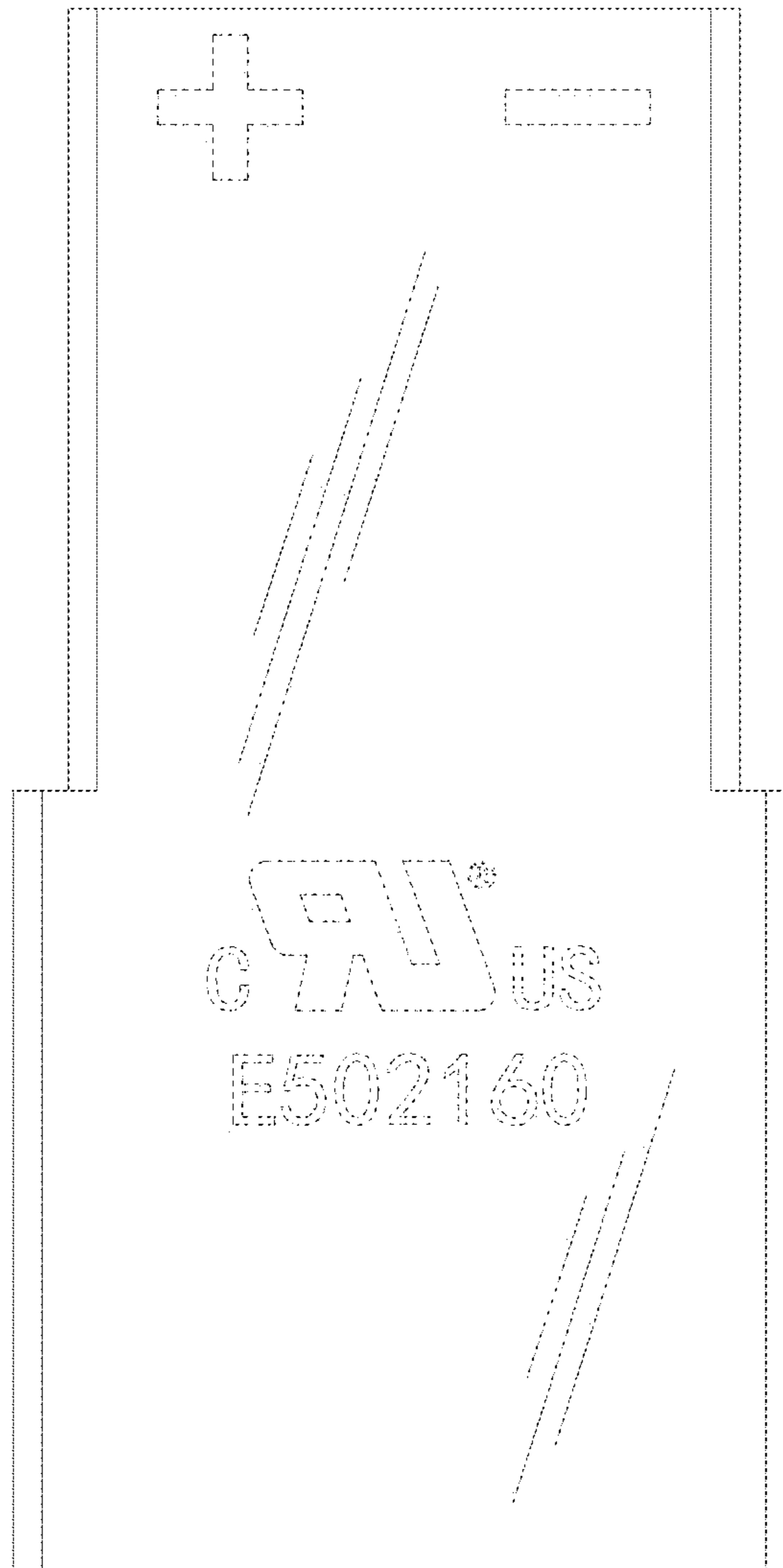


FIG. 16

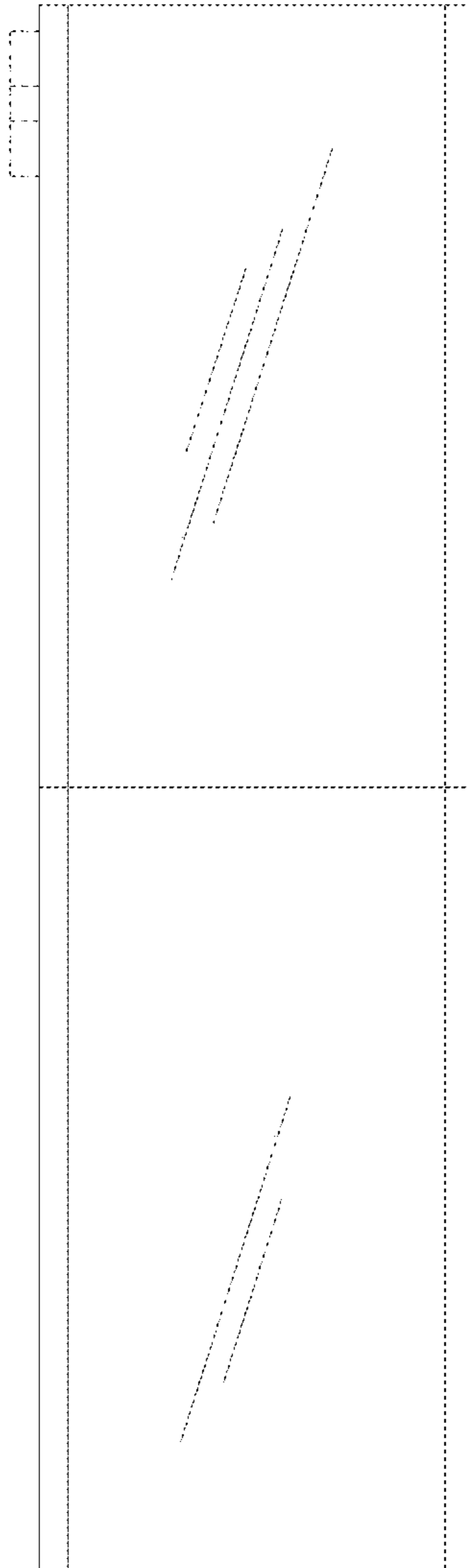


FIG. 17

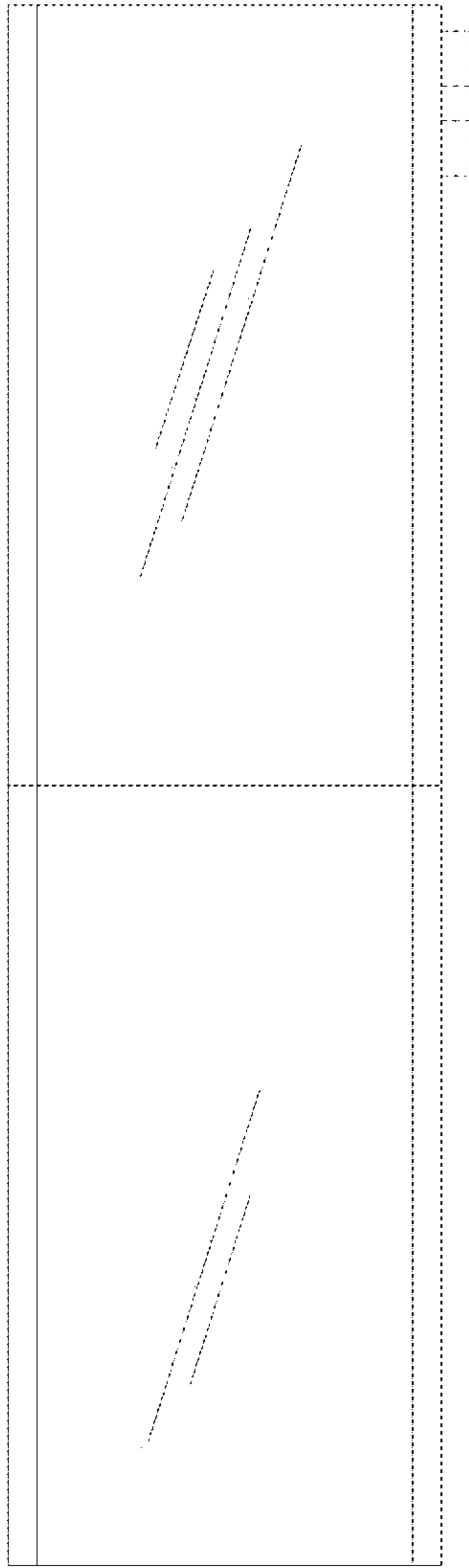


FIG. 18

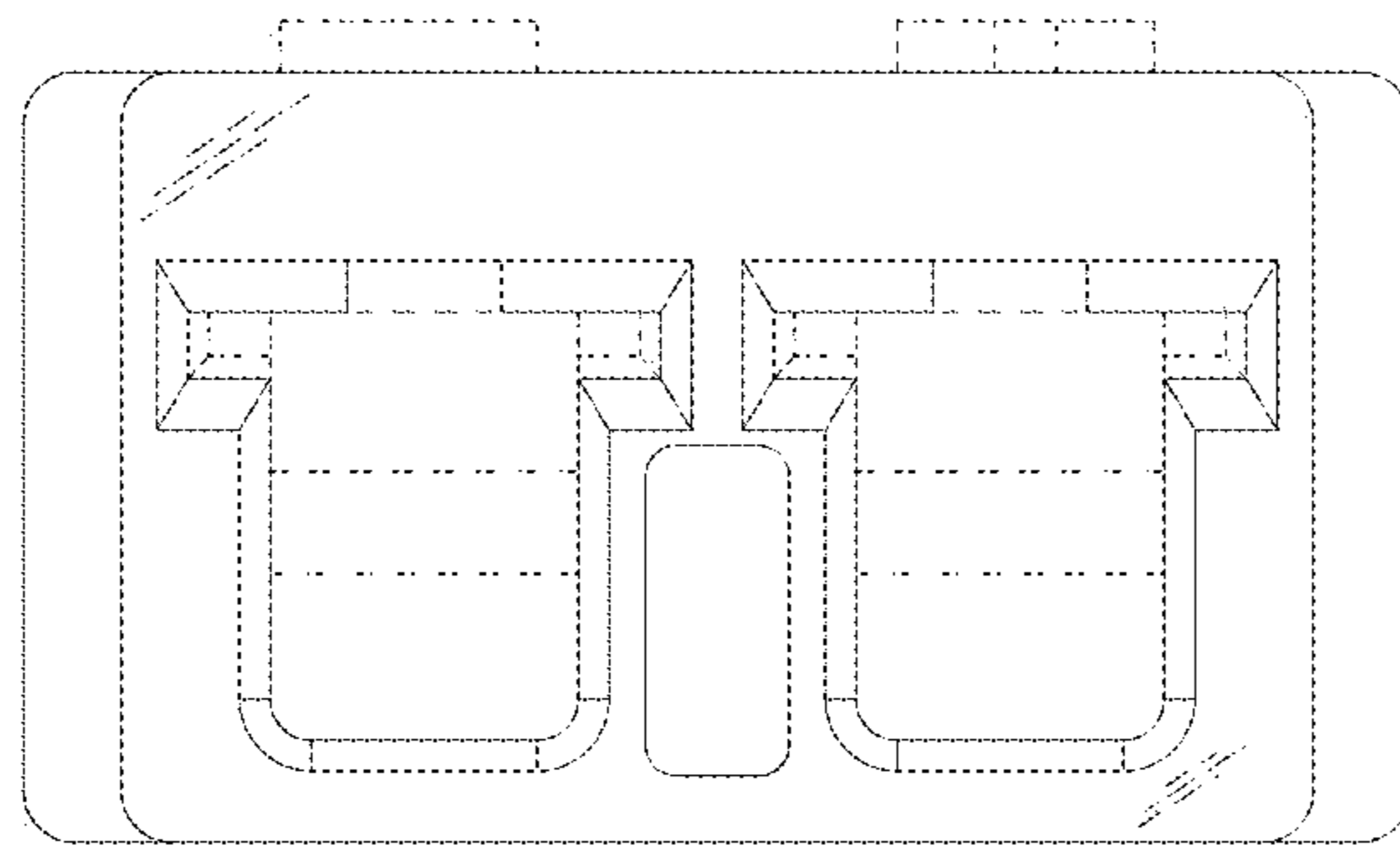


FIG. 19

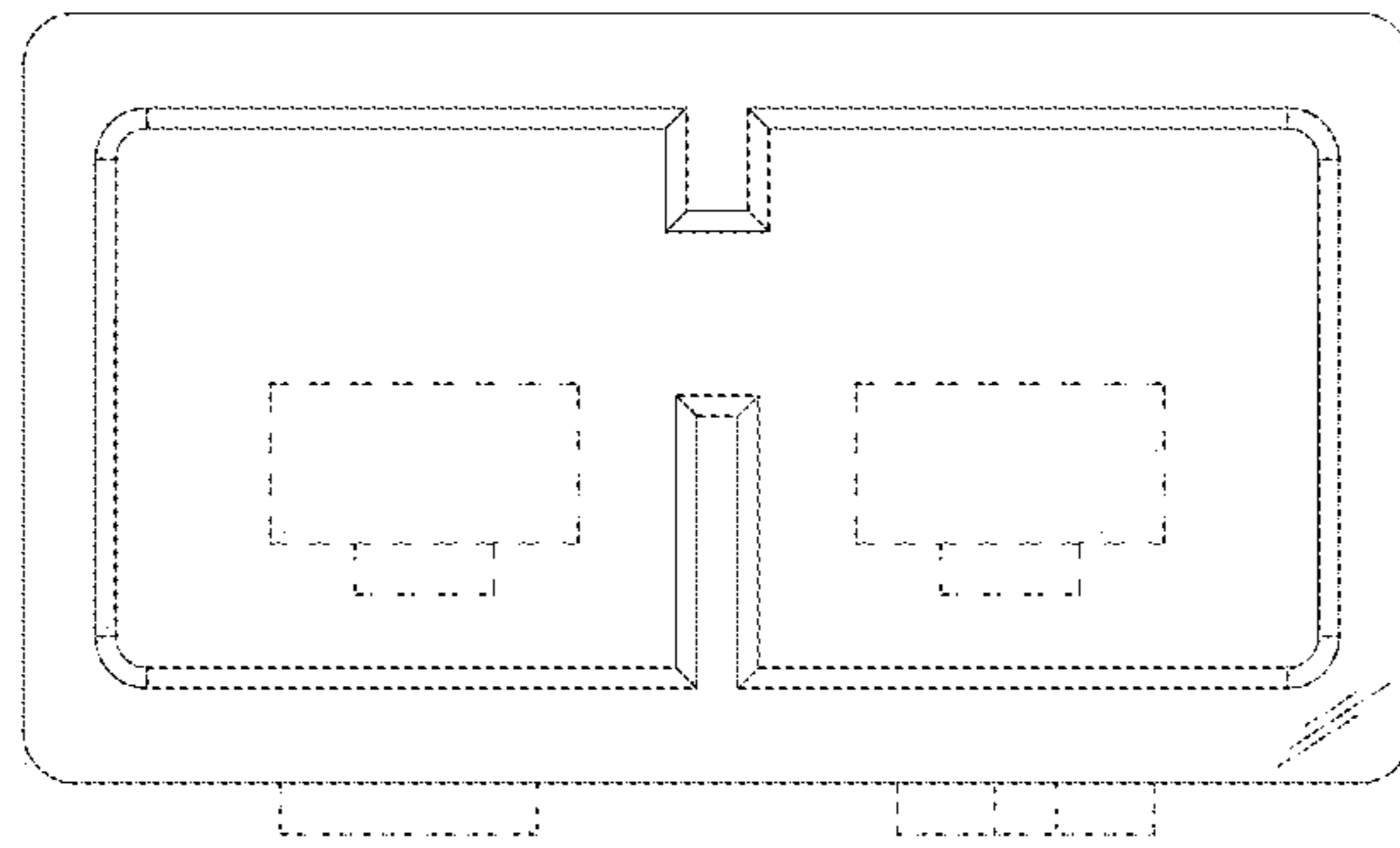


FIG. 20

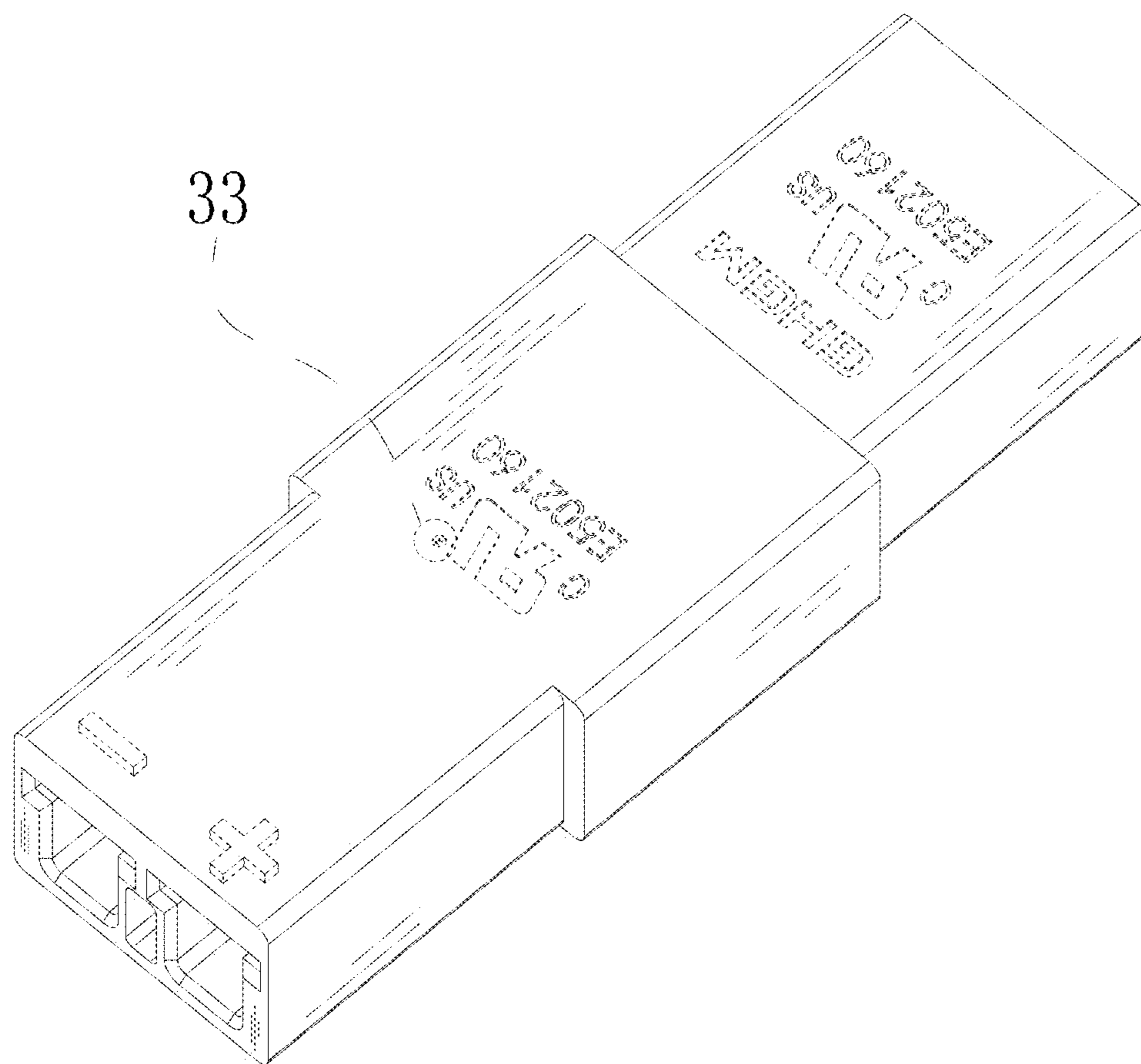


FIG. 21

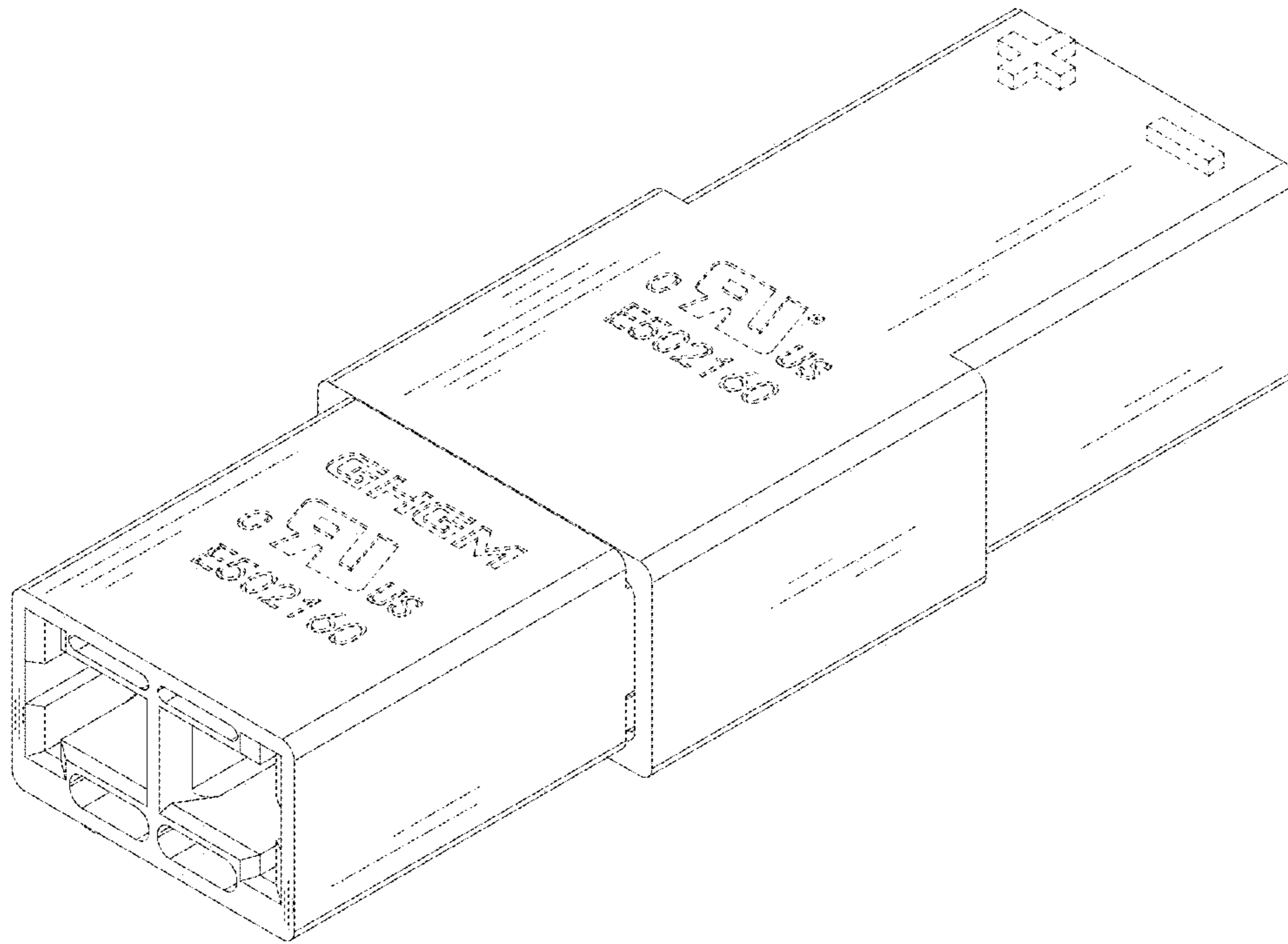


FIG. 22

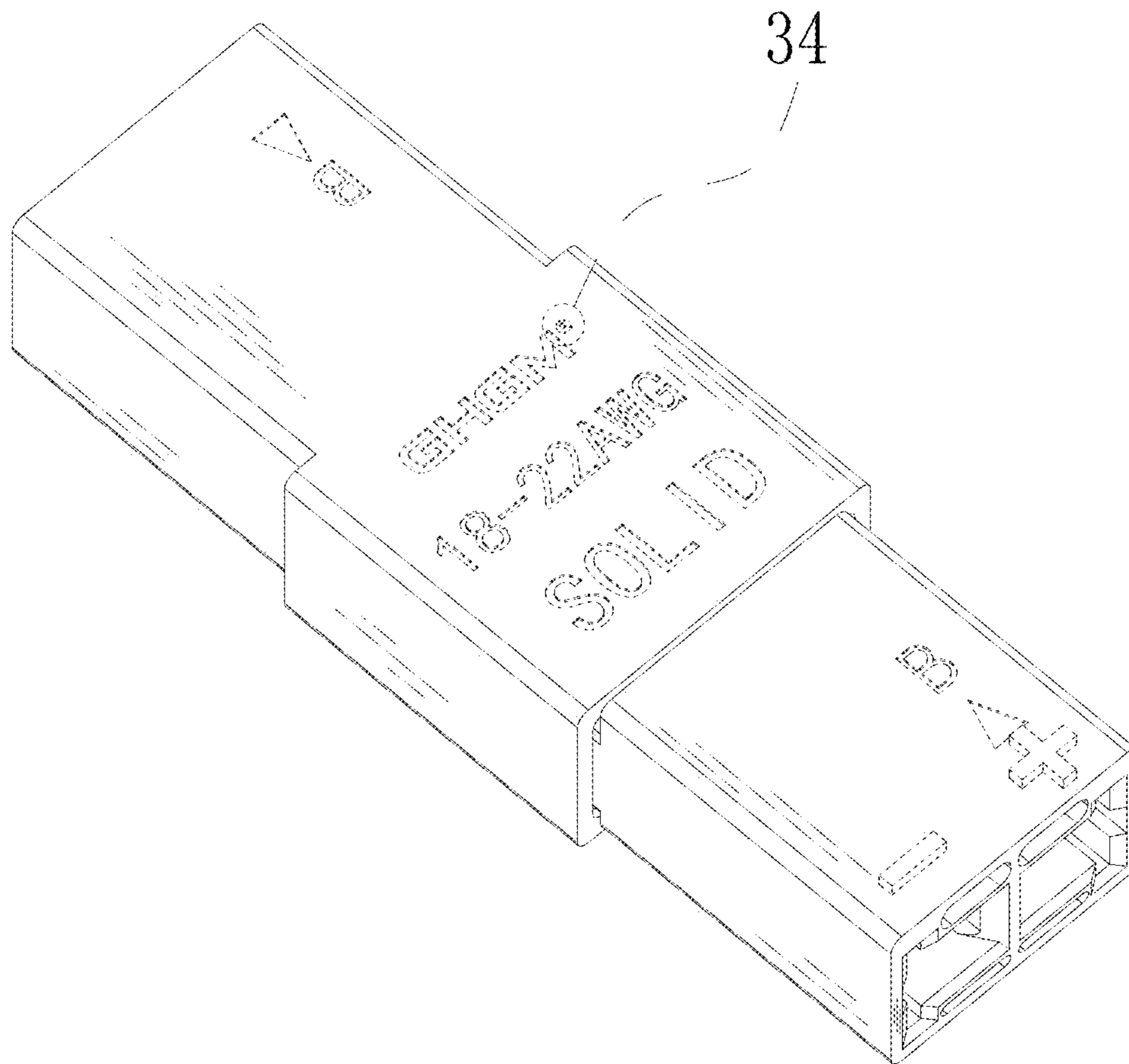


FIG. 23

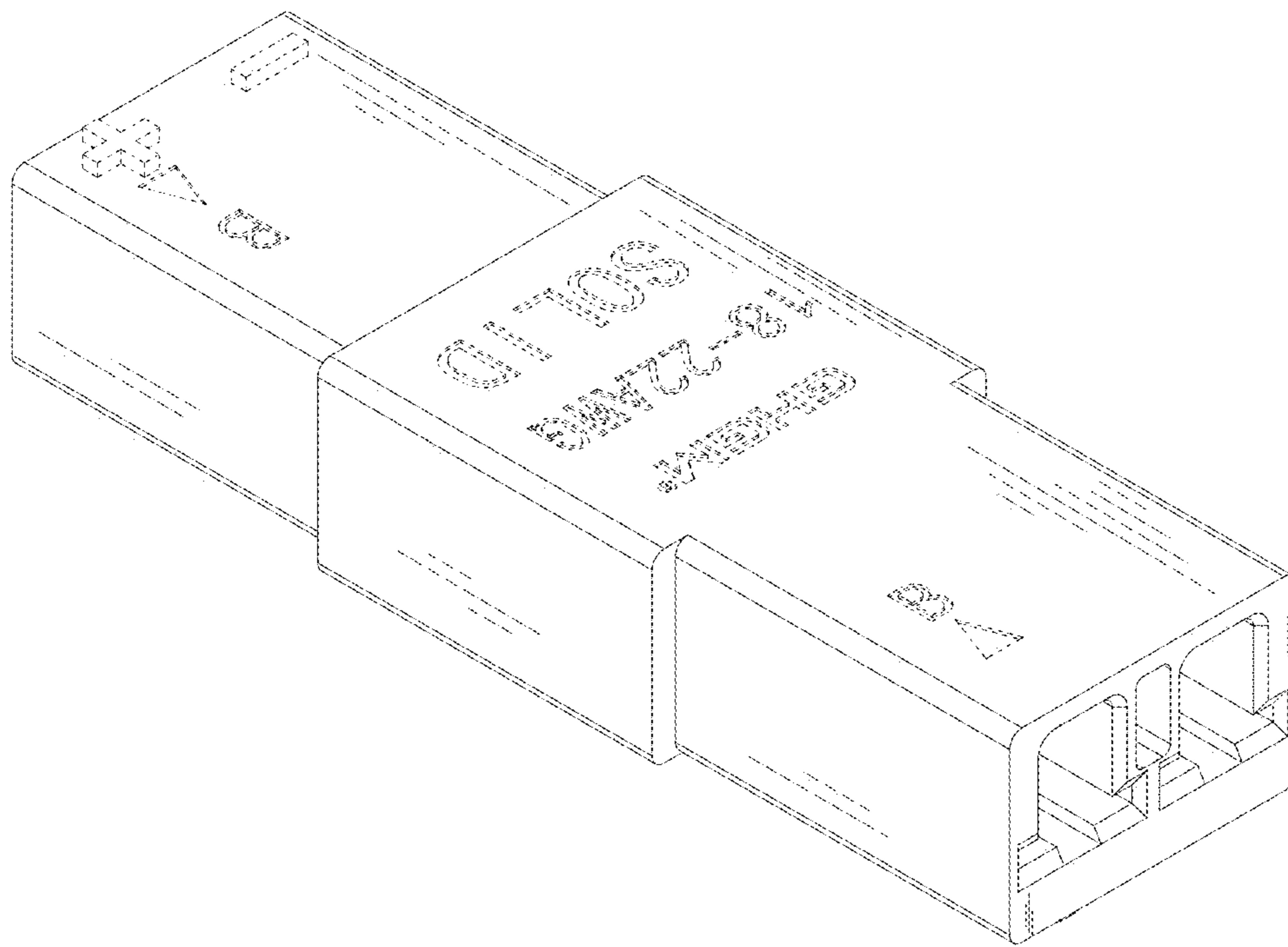


FIG. 24

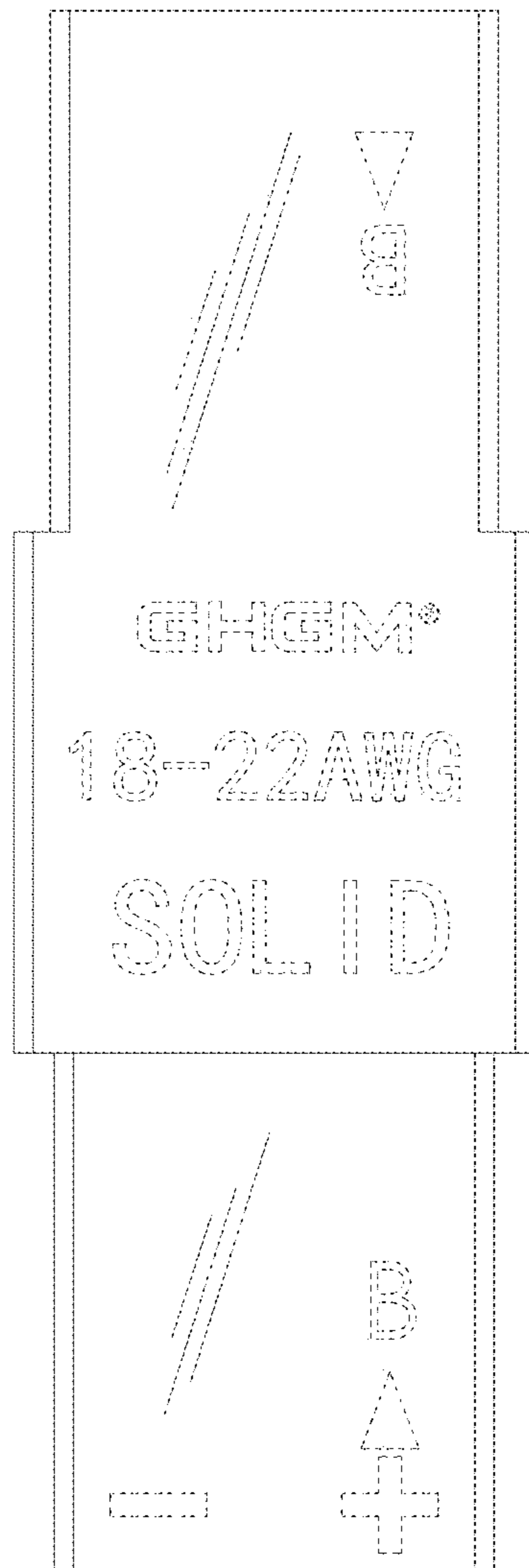


FIG. 25

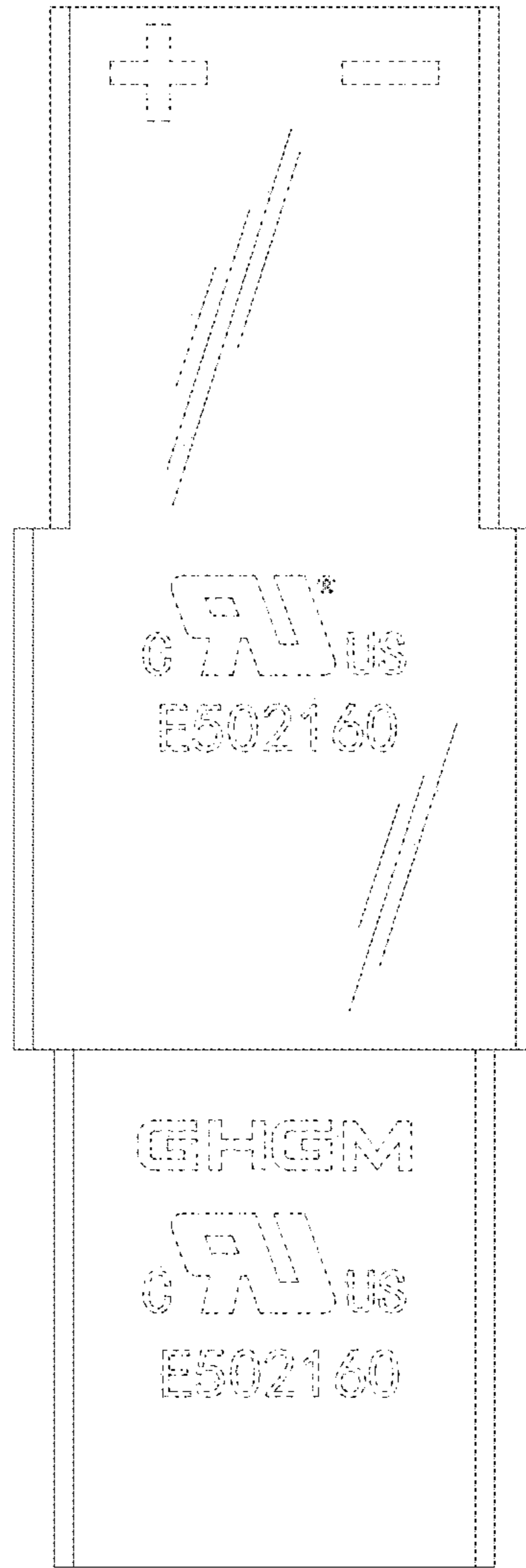


FIG. 26

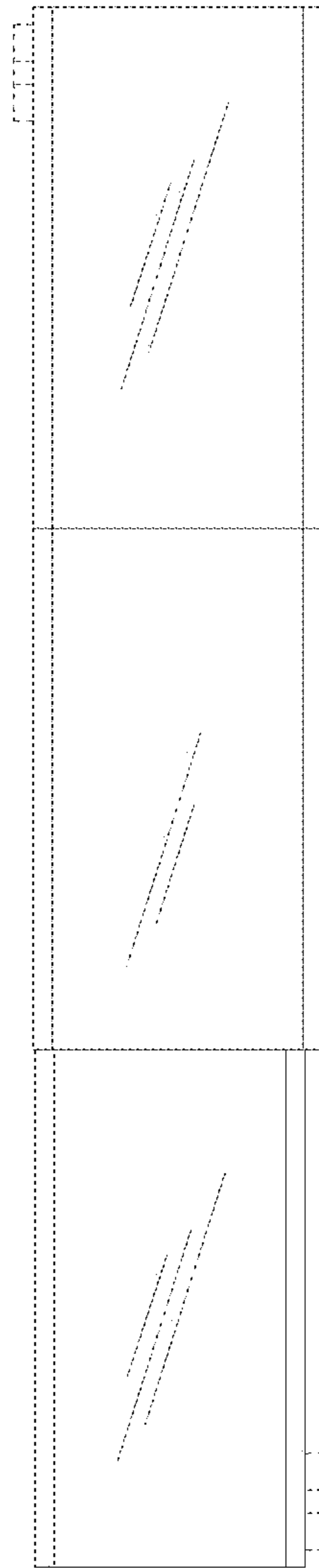


FIG. 27

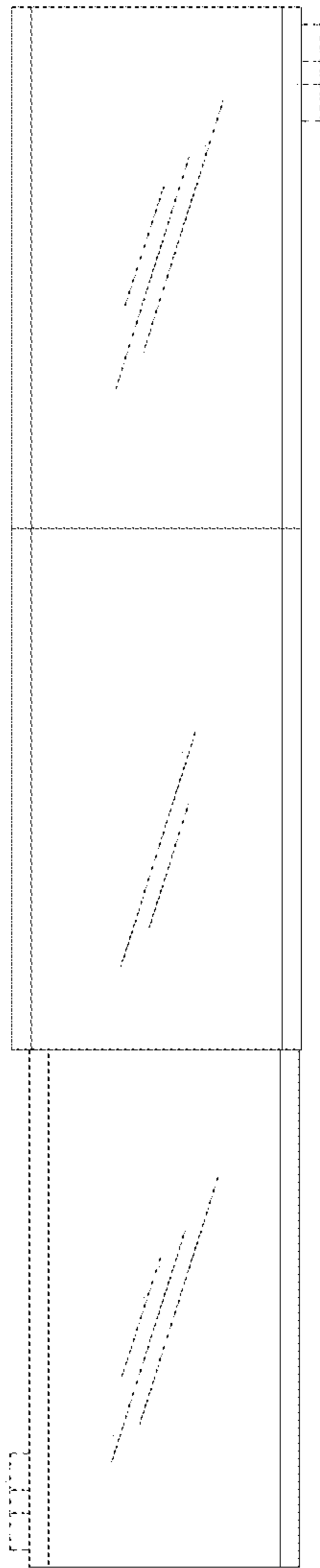


FIG. 28

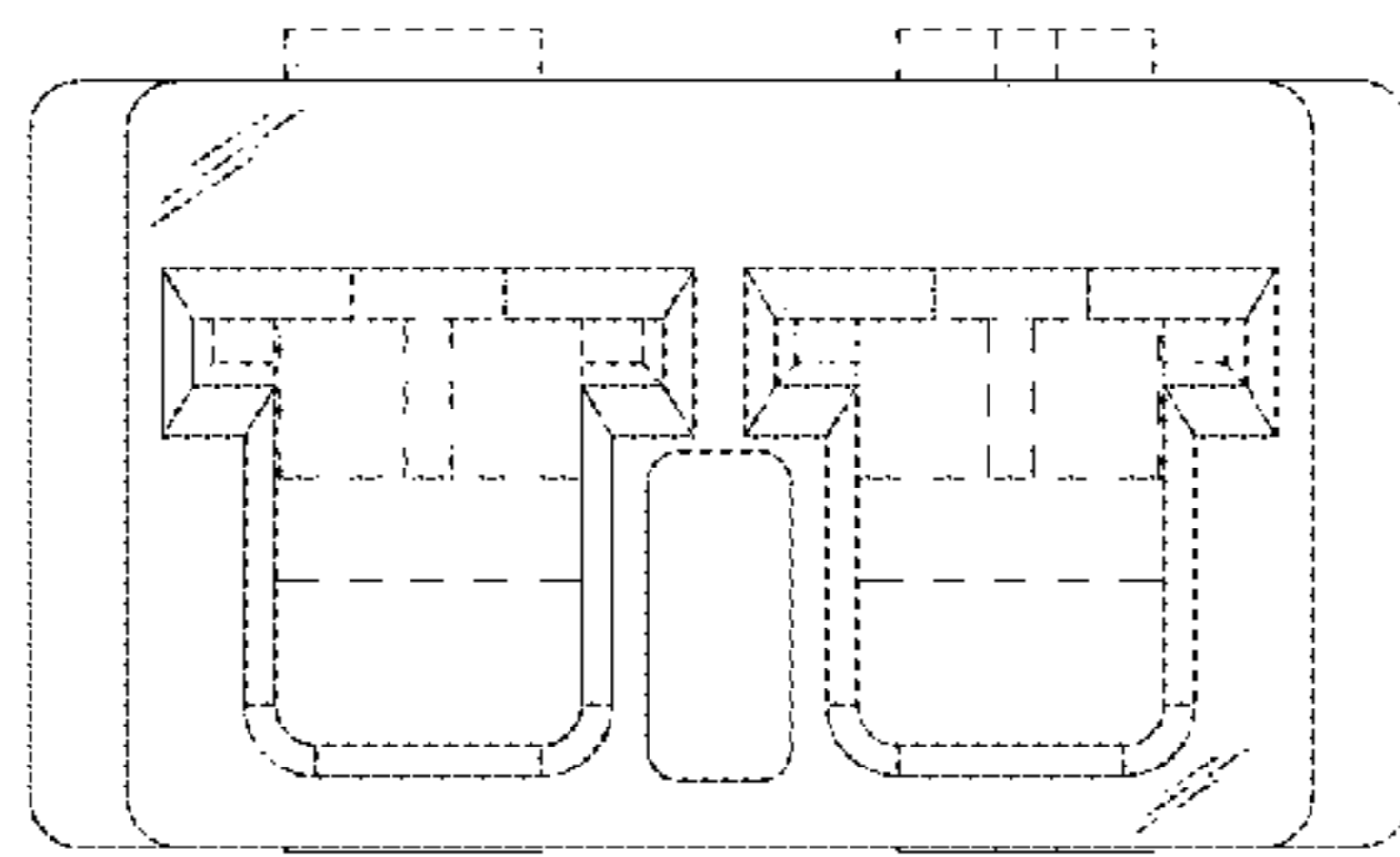


FIG. 29

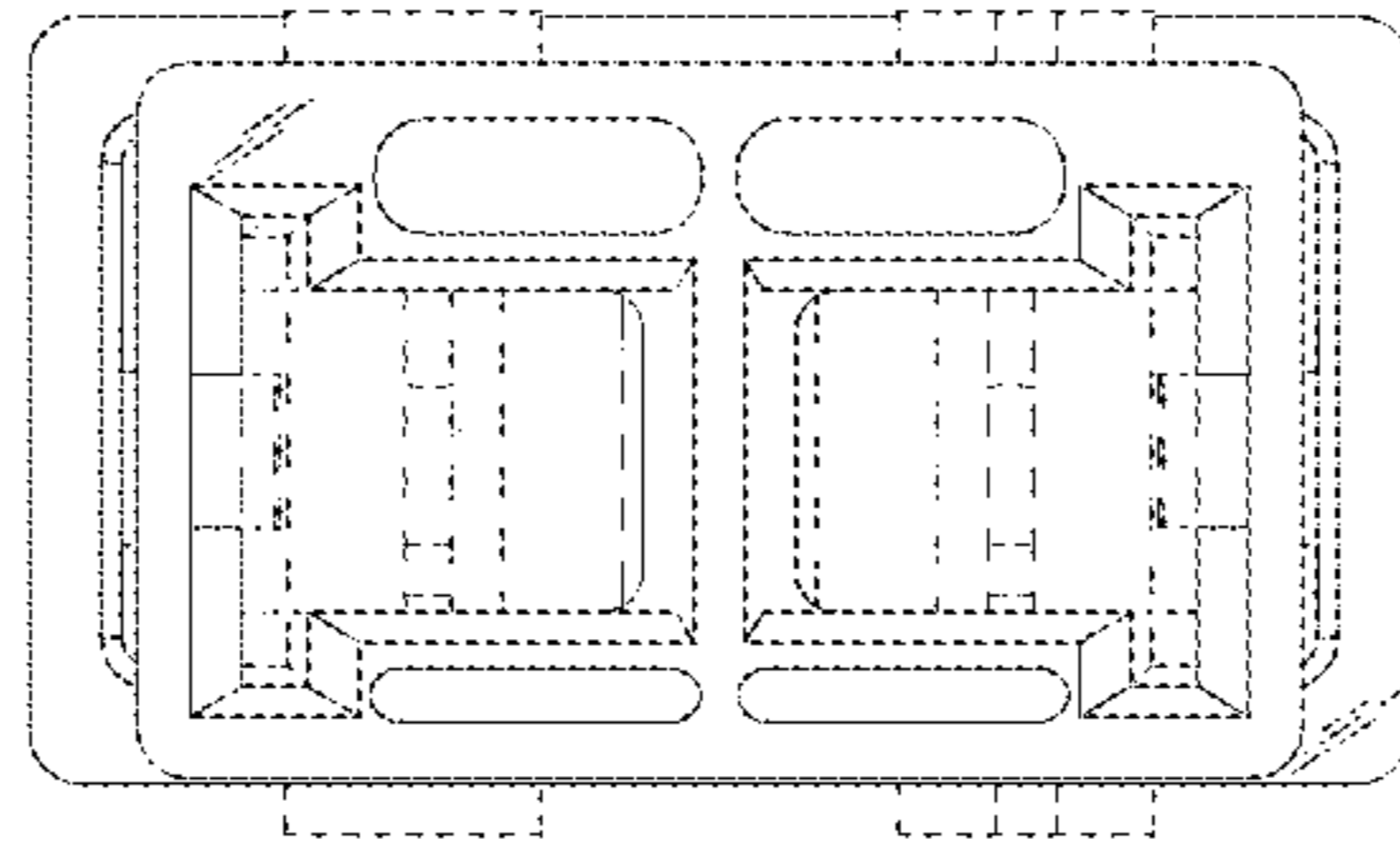


FIG. 30

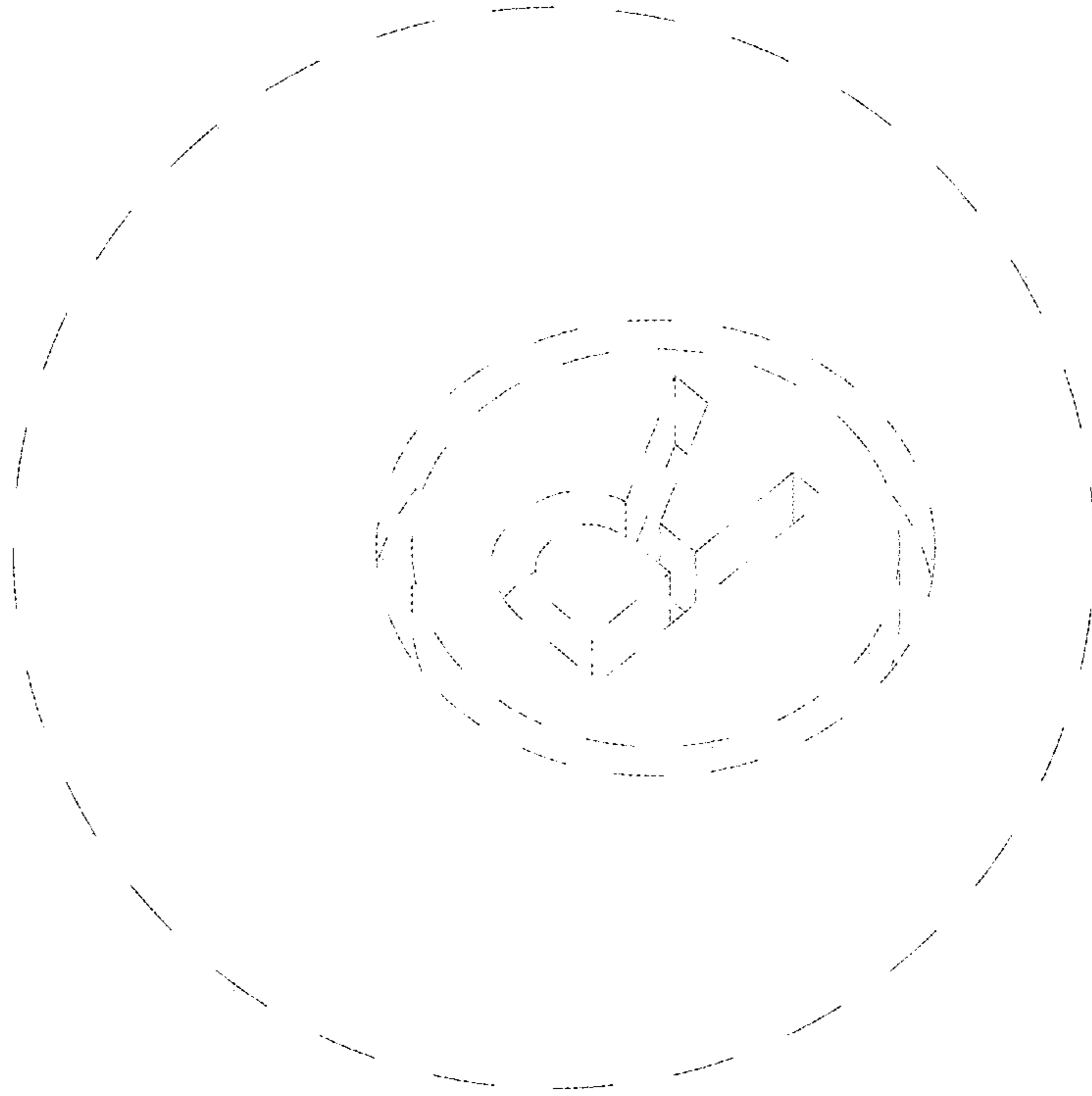


FIG. 31

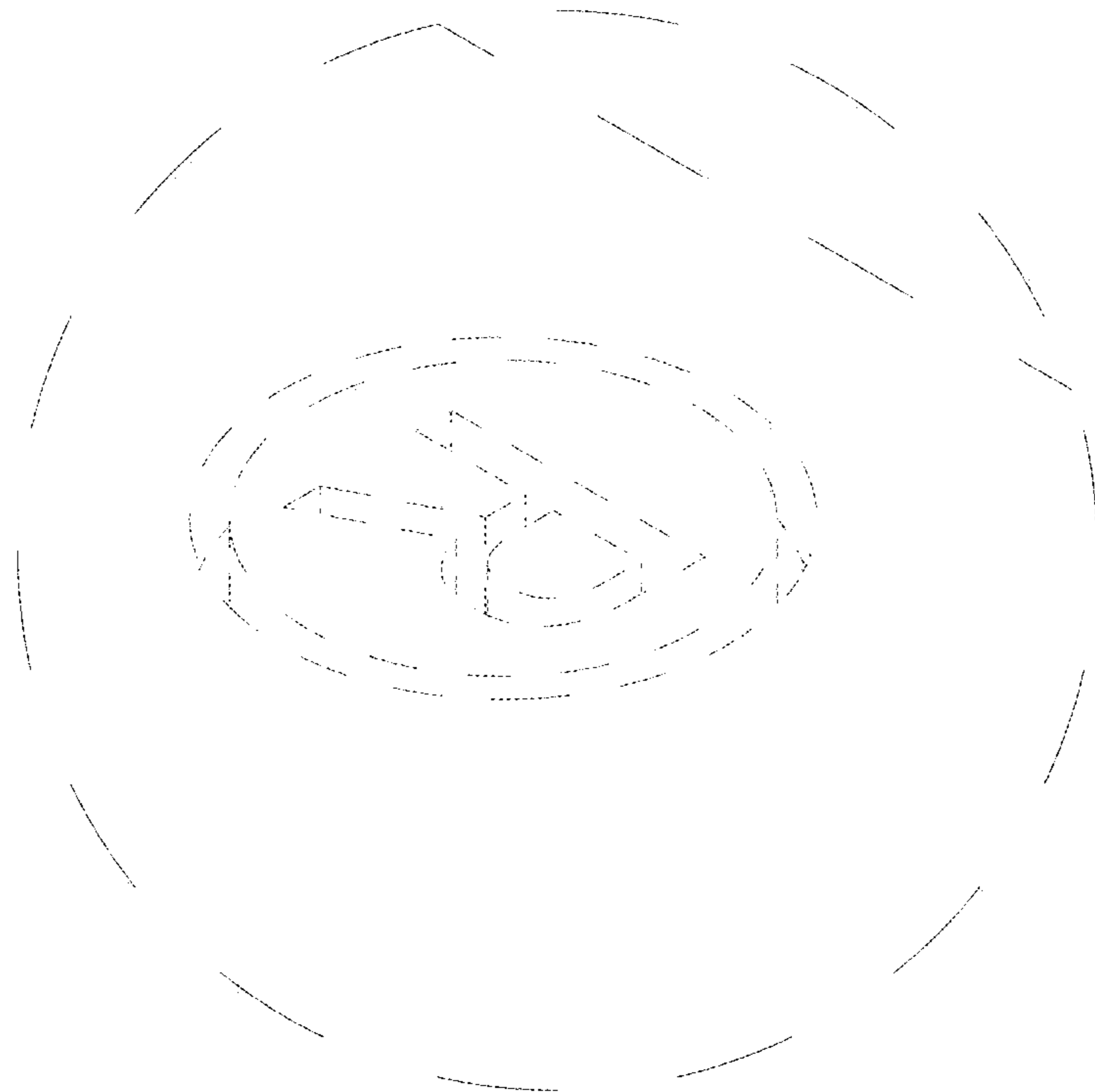


FIG. 32

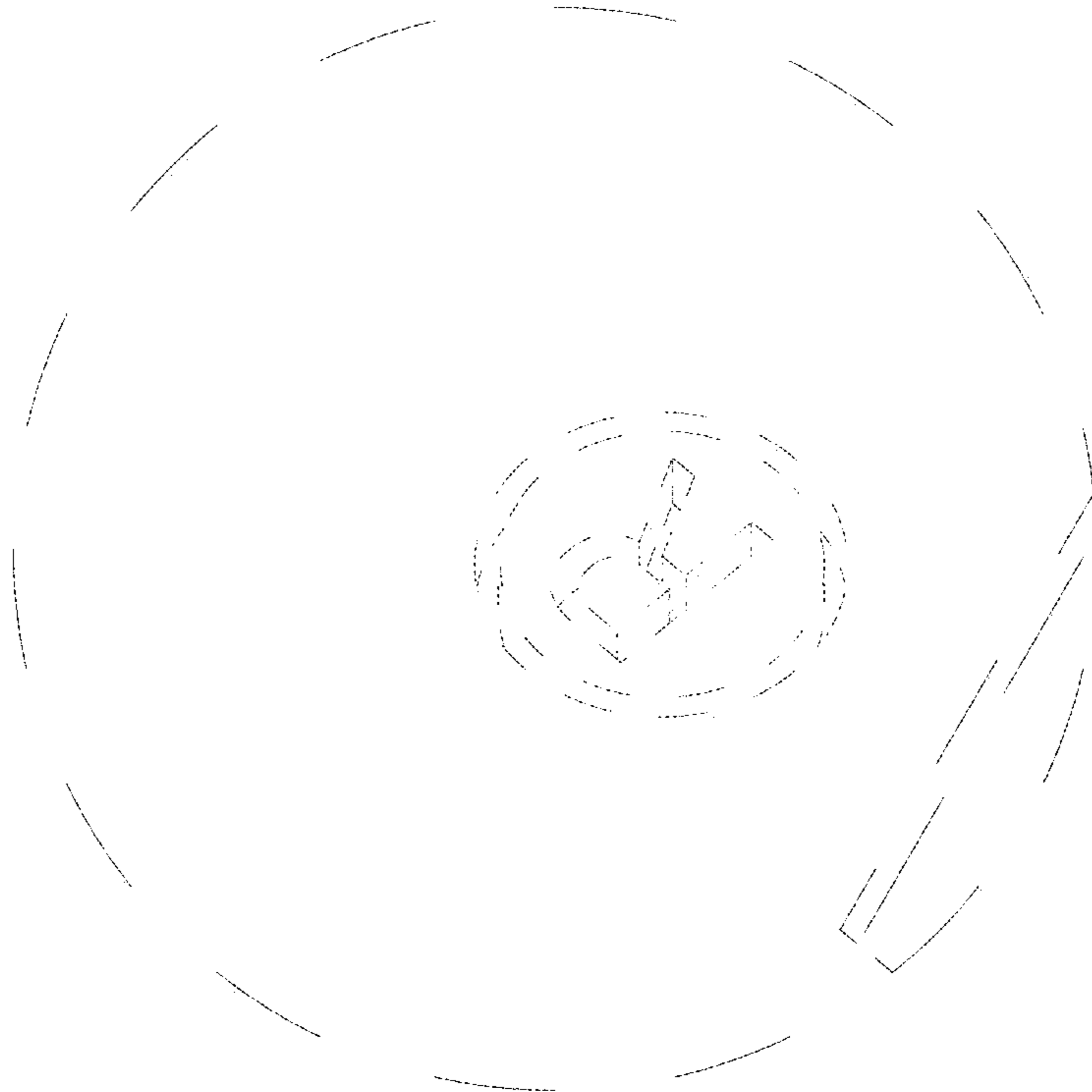


FIG. 33

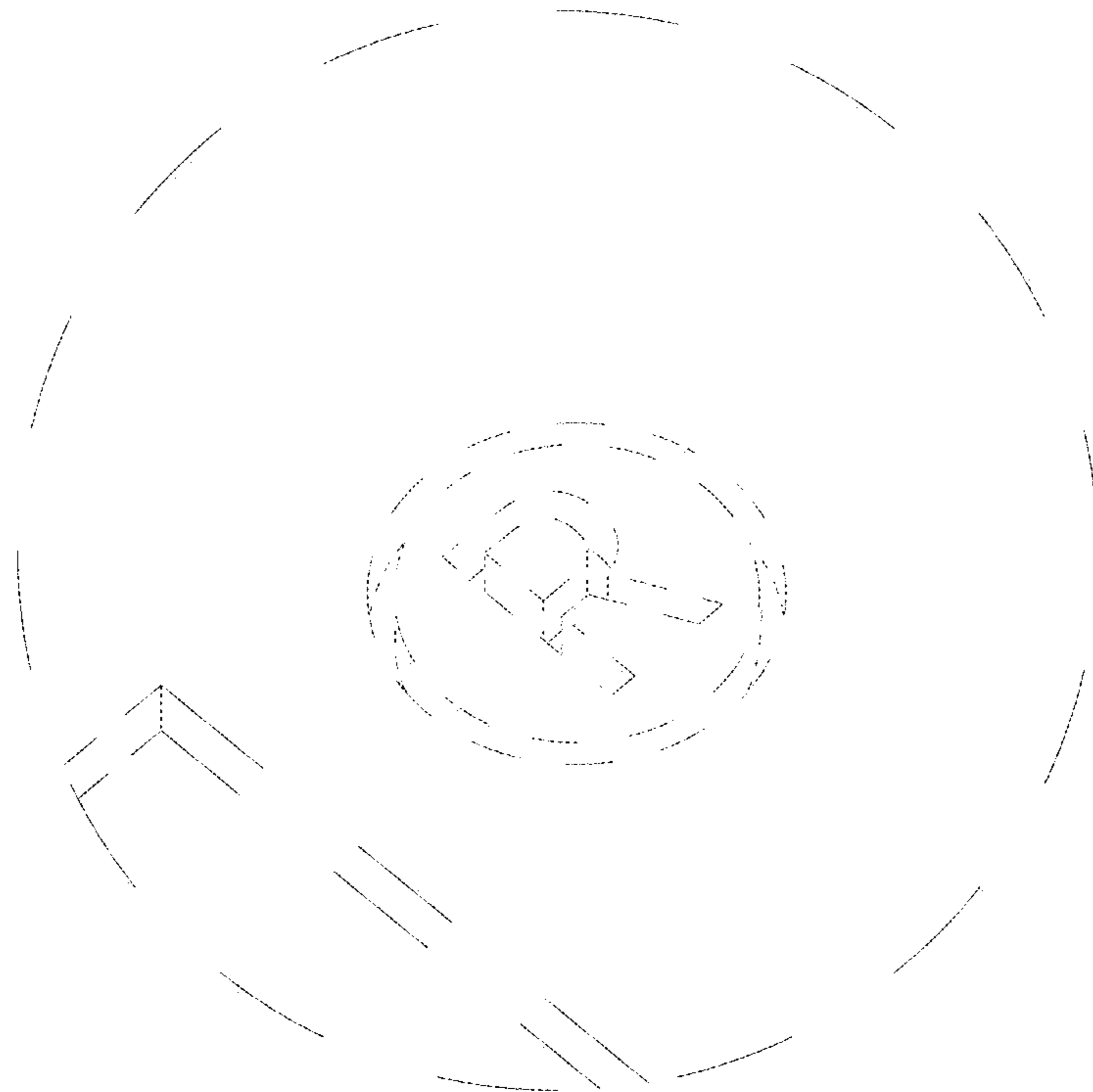


FIG. 34