



US00D986173S

(12) **United States Design Patent** (10) **Patent No.:** **US D986,173 S**  
**Lu et al.** (45) **Date of Patent:** **\*\* May 16, 2023**

(54) **BATTERY PROTECTIVE CASE**  
(71) Applicant: **Shenzhen Ampere Time Digital Energy Technology Co., Ltd.,**  
Shenzhen (CN)  
(72) Inventors: **Haijun Lu, Shenzhen (CN); Lixin He,**  
Shenzhen (CN); **Zhiyong Hu, Shenzhen**  
(CN)

(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/858,810**  
(22) Filed: **Nov. 4, 2022**

(30) **Foreign Application Priority Data**  
Oct. 21, 2022 (CN) ..... 202230697636.1  
(51) **LOC (14) Cl.** ..... **13-02**  
(52) **U.S. Cl.**  
USPC ..... **D13/103; D13/106; D13/119**  
(58) **Field of Classification Search**  
USPC ..... **D3/294, 302; D13/102, 103, 104, 106,**  
**D13/107, 108, 110, 116, 118, 119, 184**  
CPC .... **H01M 10/06; H01M 50/30; H01M 50/147;**  
**H01M 50/256; H01M 50/358**  
See application file for complete search history.

(56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
947,575 A \* 1/1910 Haschke ..... H01M 50/30  
16/DIG. 15  
3,956,022 A \* 5/1976 Fox ..... H01M 50/256  
429/187  
D292,696 S \* 11/1987 Sahli ..... D13/106  
D294,484 S \* 3/1988 Kellett ..... D13/106  
4,752,543 A \* 6/1988 Anderson ..... H01M 50/147  
429/89  
5,440,785 A \* 8/1995 McDonald ..... H01M 50/256  
16/DIG. 15  
D400,849 S \* 11/1998 Ikeda ..... D13/106

D401,551 S \* 11/1998 Kim ..... D13/106  
D660,790 S \* 5/2012 Elison ..... D13/106  
D753,586 S \* 4/2016 Fujimoto ..... D13/103  
D758,303 S \* 6/2016 Walker ..... D13/103  
D766,819 S 9/2016 Gjøvik et al.  
10,446,808 B2 \* 10/2019 Elison ..... H01M 10/06  
D872,022 S 1/2020 Yang  
D875,668 S 2/2020 Jiao  
2017/0229687 A1 \* 8/2017 Elison ..... H01M 50/358

**OTHER PUBLICATIONS**

Youtube, Date: May 19, 2022, [online], [site visited Dec. 28, 2022].  
Available from internet, URL: [https://www.youtube.com/watch?v=F9QB9mN\\_58s](https://www.youtube.com/watch?v=F9QB9mN_58s) (Year: 2022).\*

(Continued)

*Primary Examiner* — Shawn T Gingrich  
*Assistant Examiner* — Bryan N. Melvin  
(74) *Attorney, Agent, or Firm* — Rumit Ranjit Kanakia

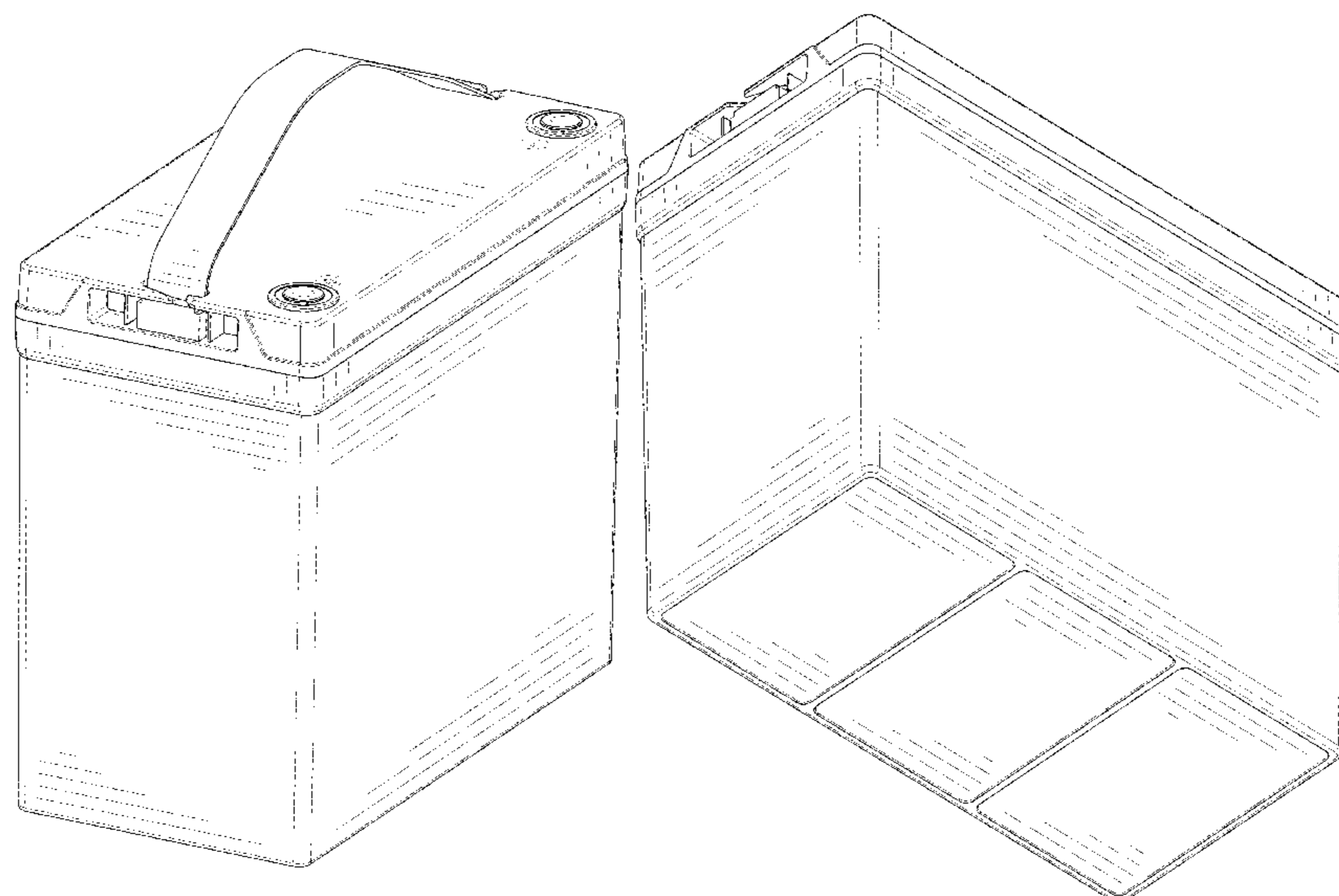
(57) **CLAIM**

The ornamental design for a battery protective case, as shown and described.

**DESCRIPTION**

FIG. 1 is a first perspective view of a battery protective case showing our new design;  
FIG. 2 is a second perspective view thereof;  
FIG. 3 is a front view thereof;  
FIG. 4 is a back view thereof;  
FIG. 5 is a left side view thereof;  
FIG. 6 is a right side view thereof;  
FIG. 7 is a top view thereof; and,  
FIG. 8 is a bottom view thereof.  
The broken lines shown in the drawings depict portions of the battery protective ease that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



(56)

**References Cited**

OTHER PUBLICATIONS

AmpereTime, Date: May 22, 2022, [online], [site visited Dec. 28, 2022]. Available from internet, URL: <https://www.amperetime.com/products/ampere-time-12v-100ah-lithium-lifepo4-battery> (Year: 2022).\*

\* cited by examiner

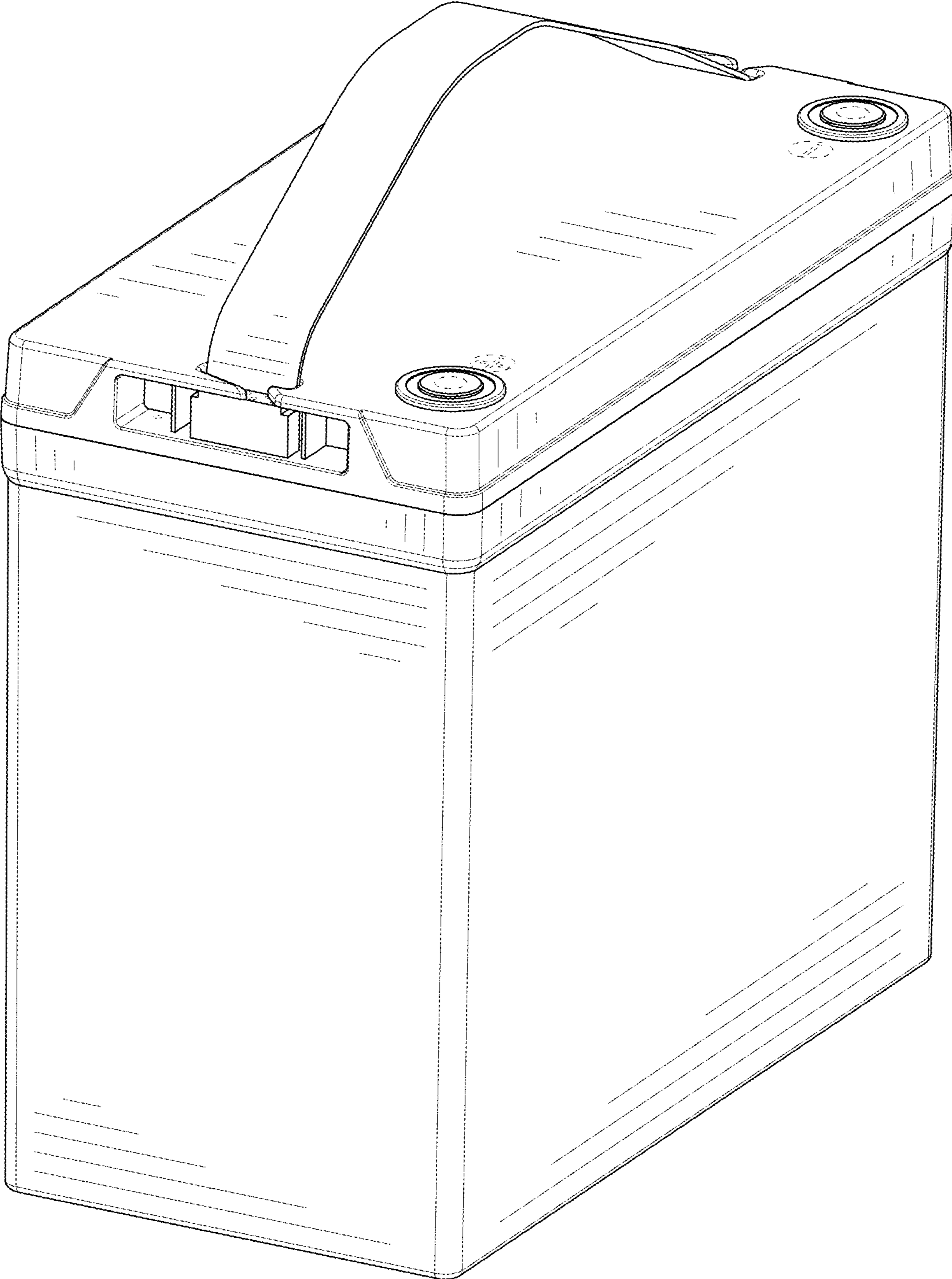


FIG. 1

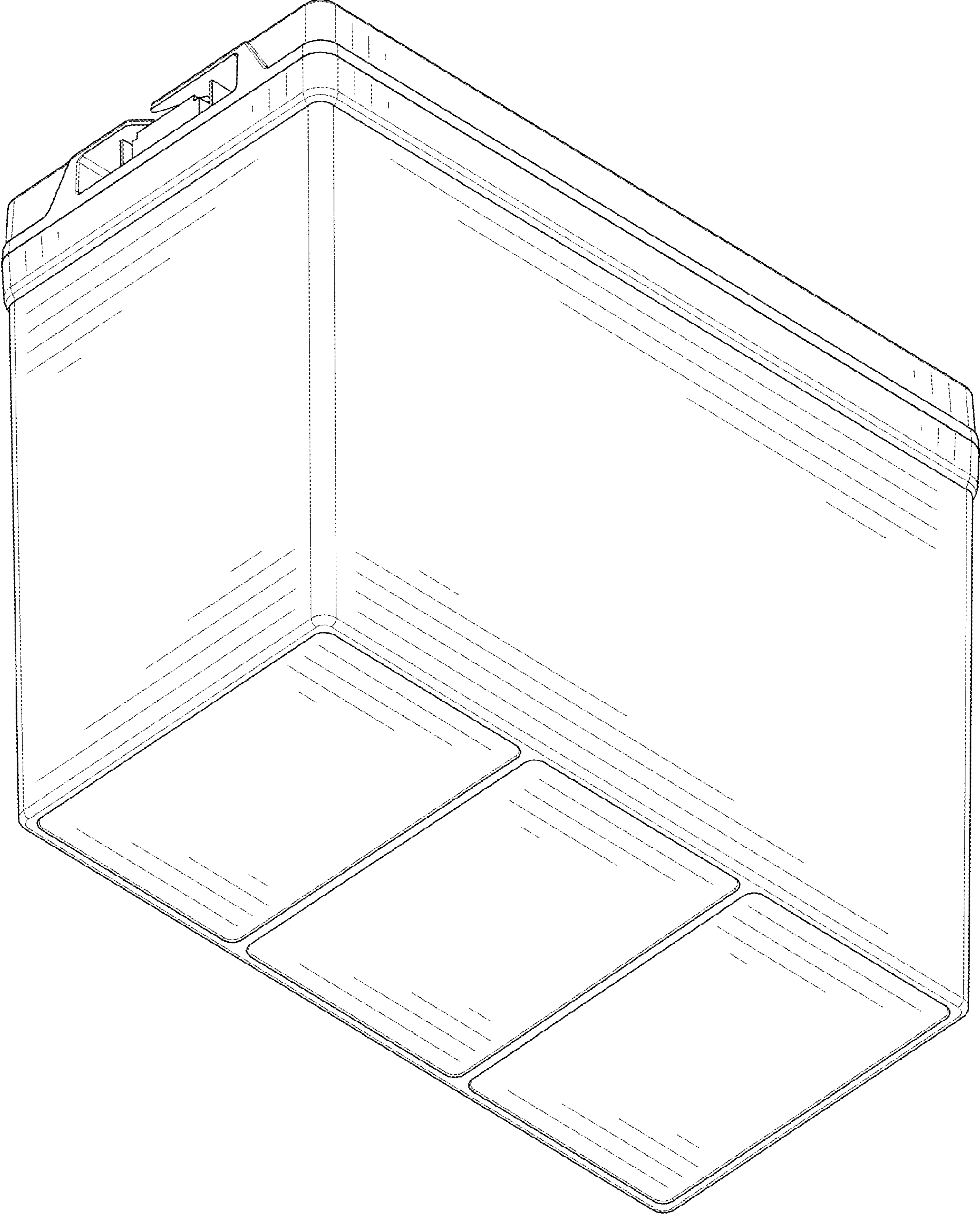


FIG. 2

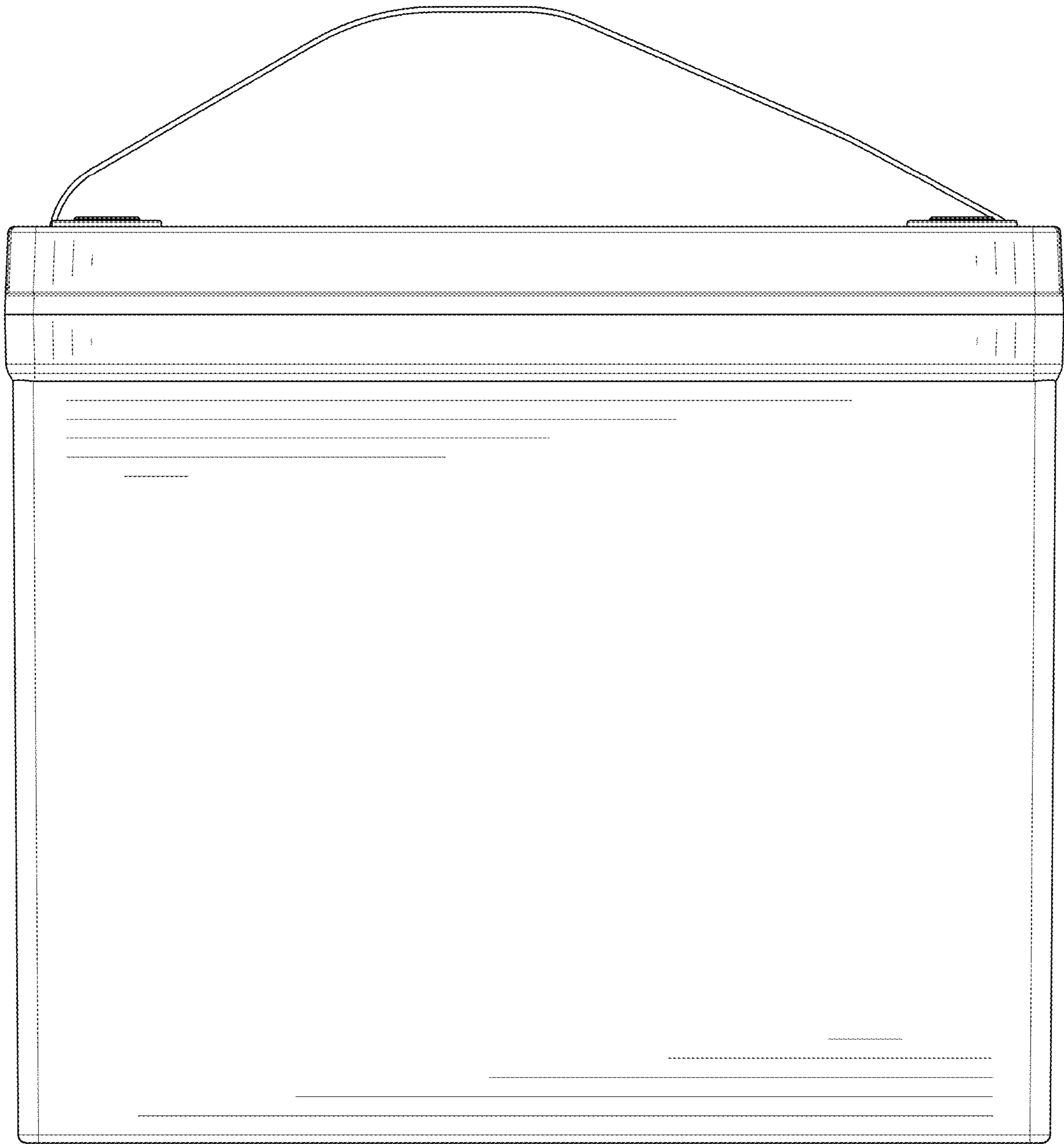


FIG. 3

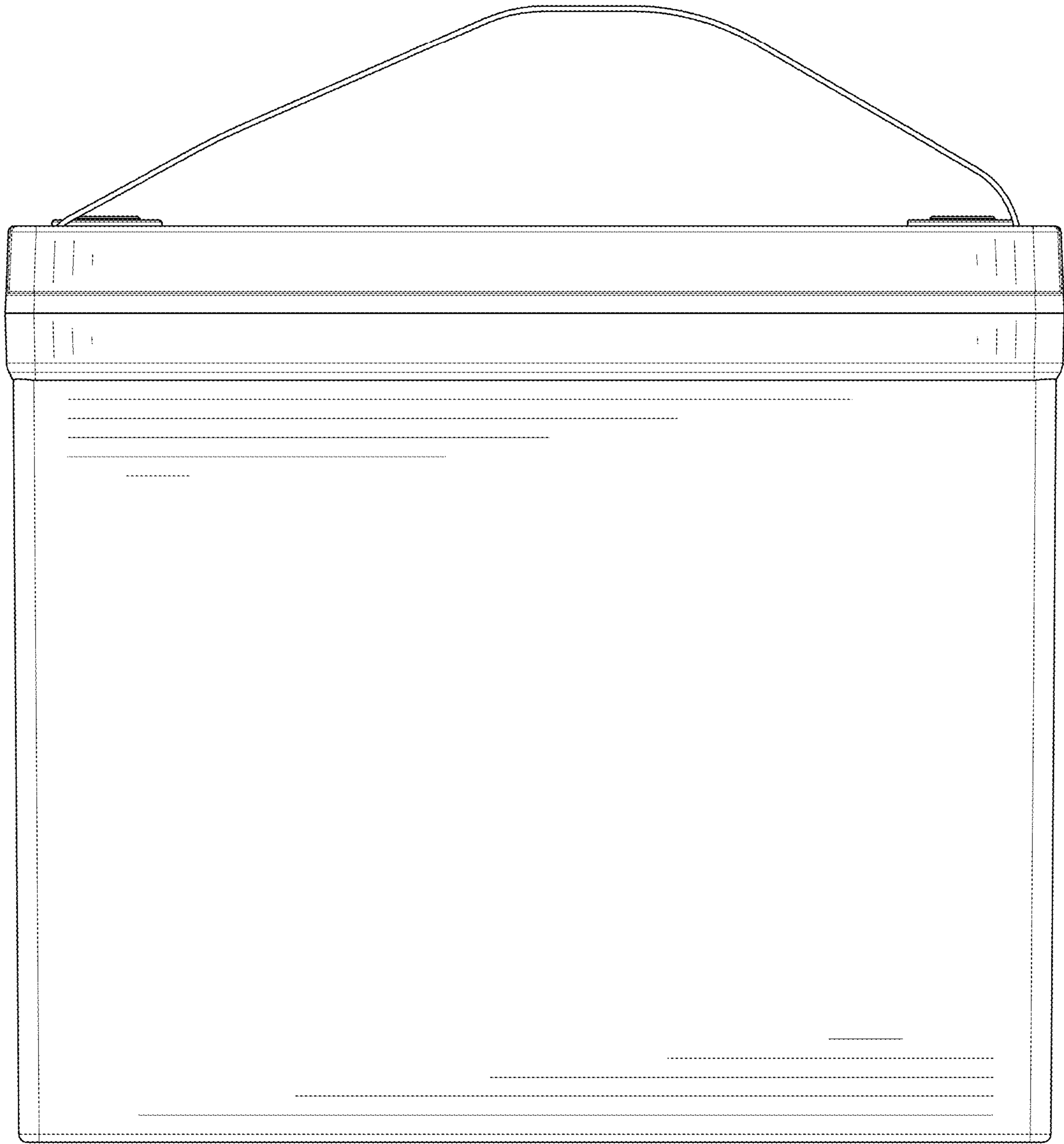


FIG. 4

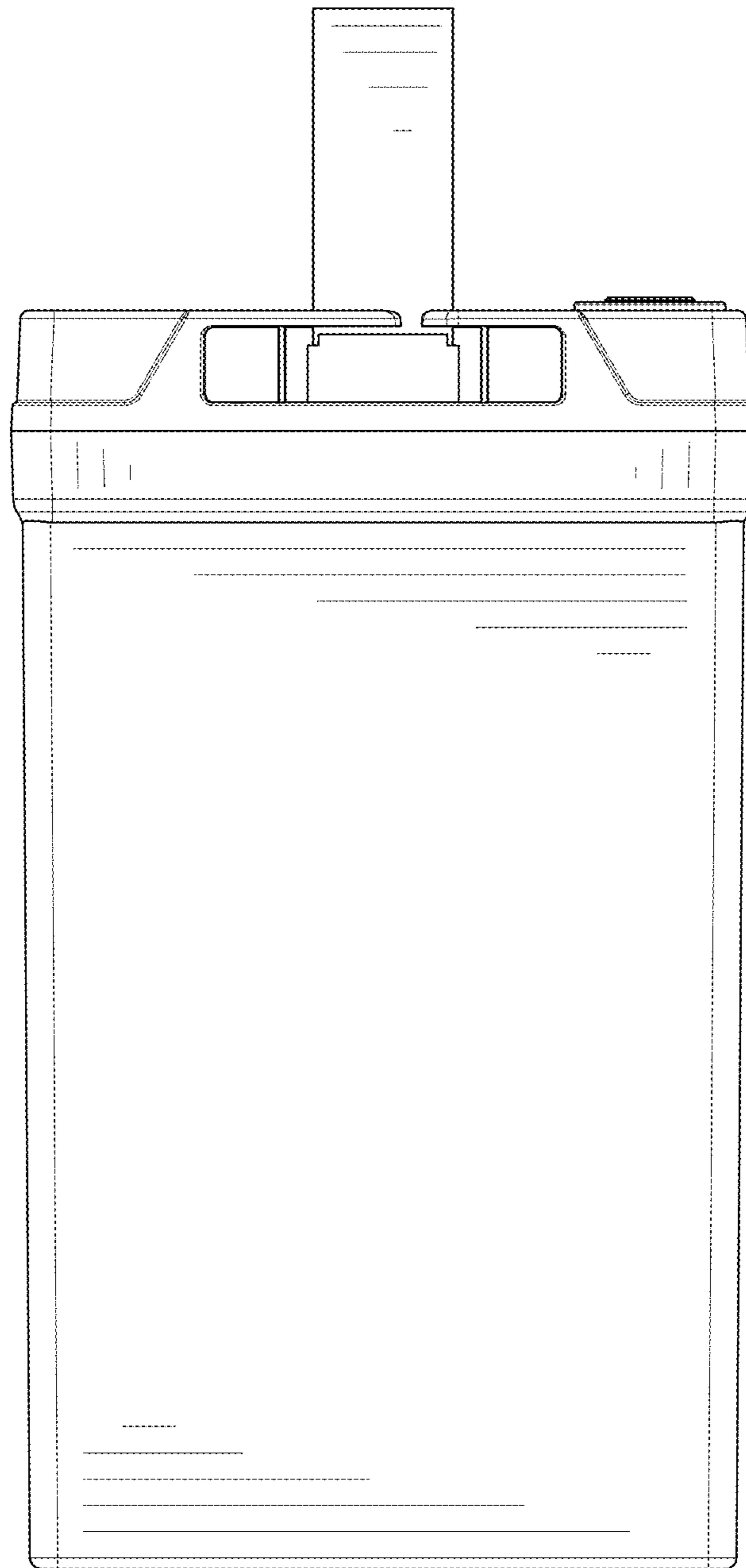


FIG. 5

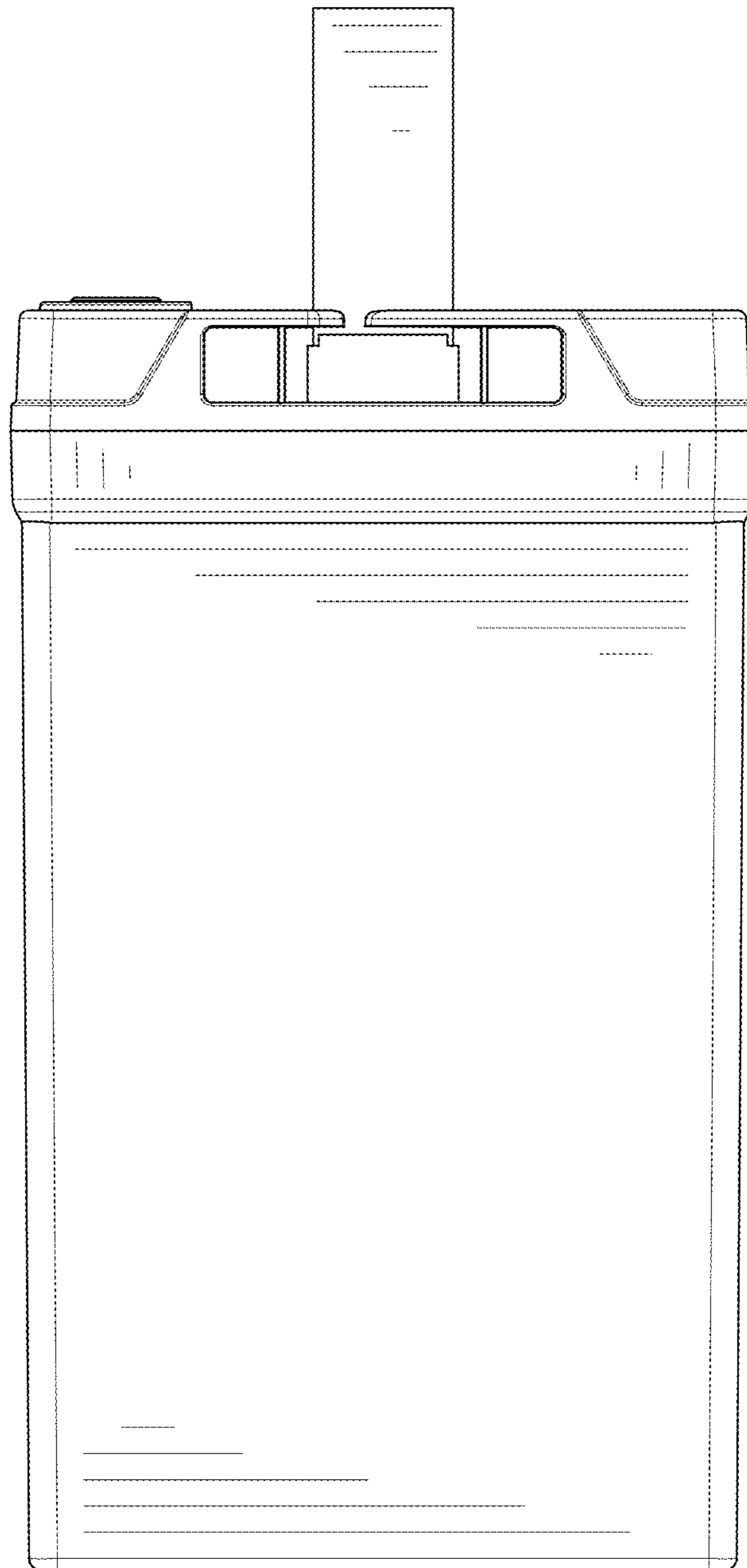


FIG. 6



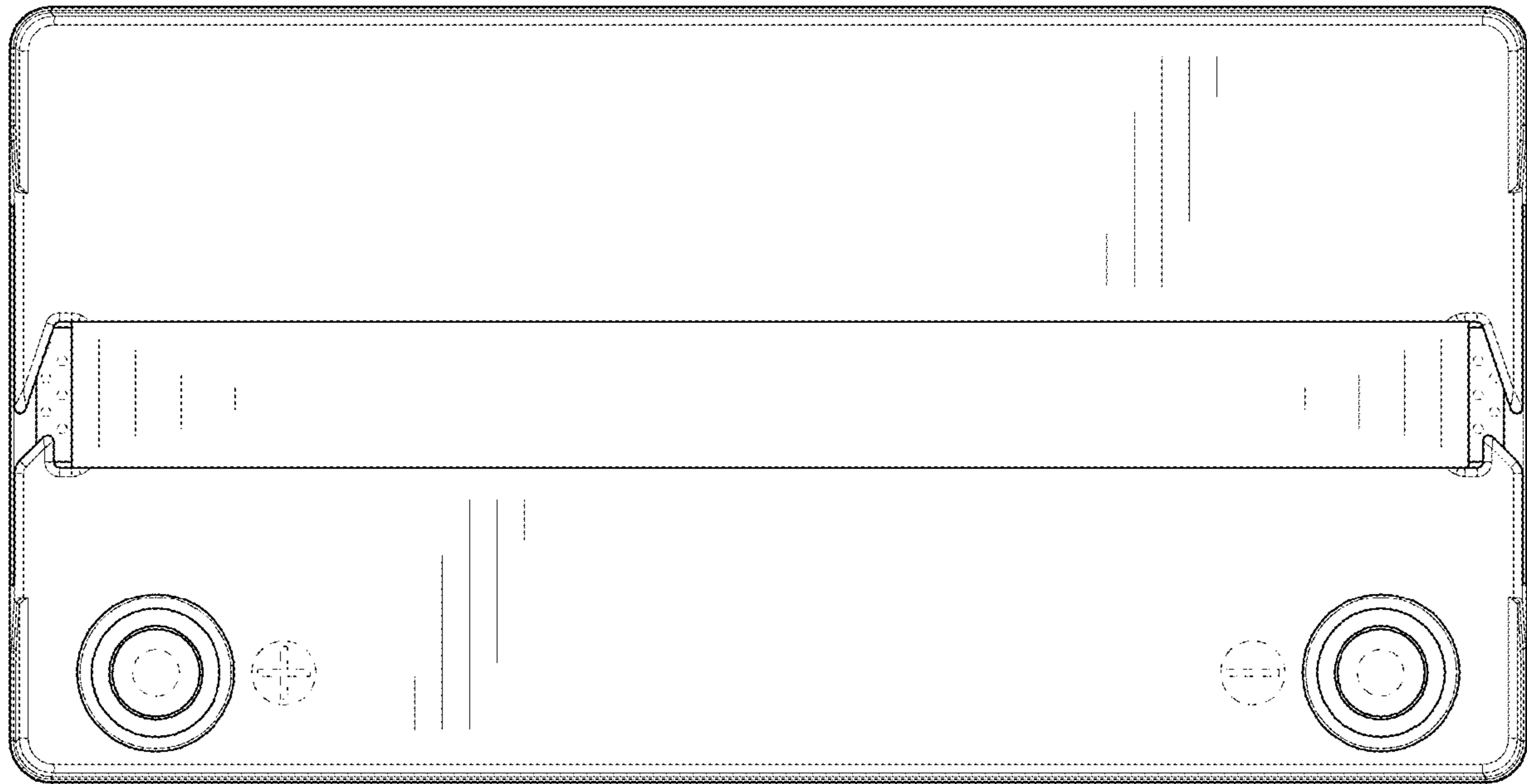


FIG. 7

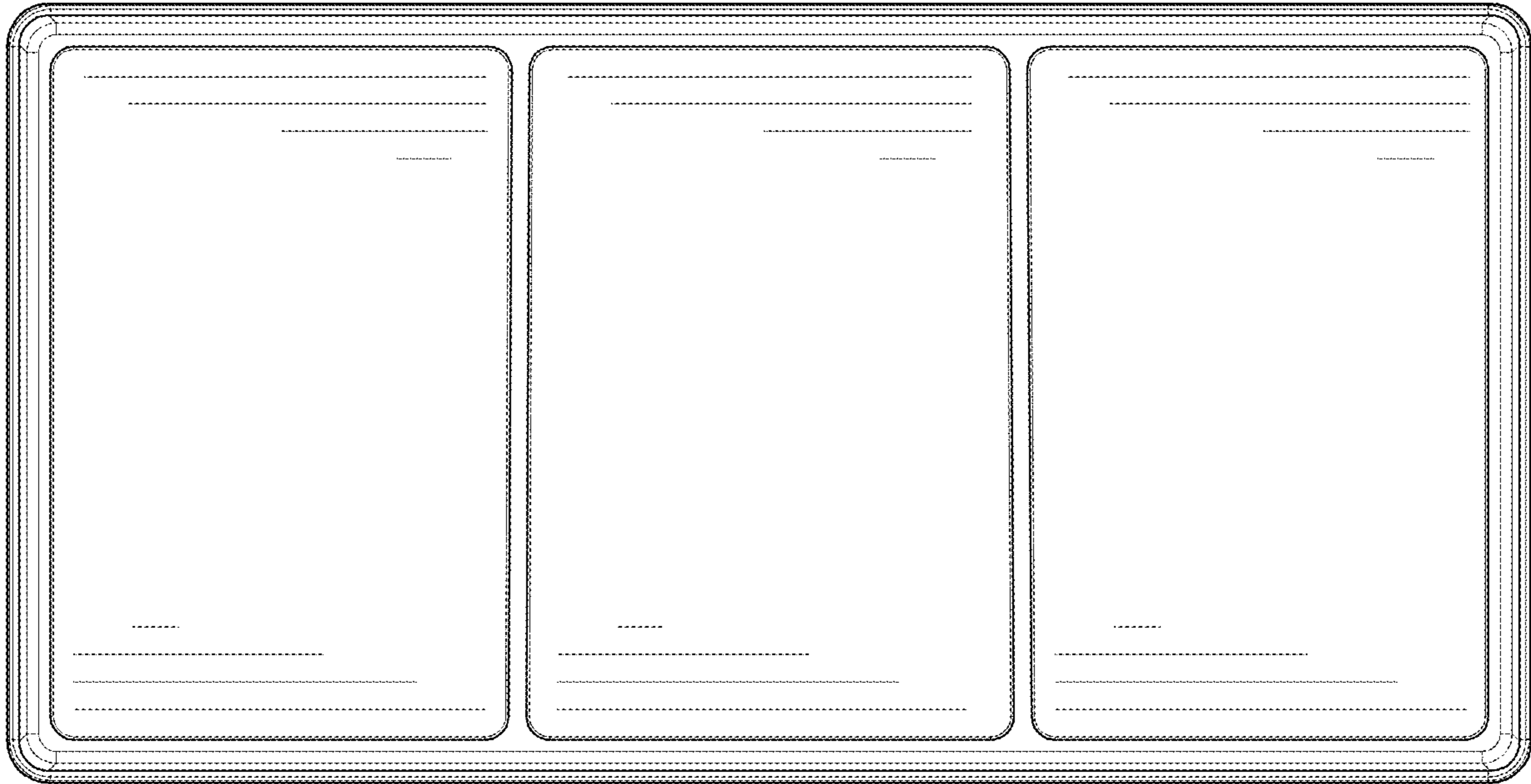


FIG. 8