



US00D643810S

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

(10) **Patent No.:** **US D643,810 S**

(45) **Date of Patent:** **\*\* Aug. 23, 2011**

(54) **FLAT PLATE BATTERY**

(75) Inventors: **Lee Qualls**, Milton, GA (US); **Layna Mendlinger**, Milton, GA (US); **John Bear**, Milton, GA (US); **Chris Morin**, Milton, GA (US); **Rex Holliday**, Milton, GA (US); **Nick Kovalkevich**, Milton, GA (US); **T. Bruce Montgomery**, Milton, GA (US); **David Thimm**, Walled Lake, MI (US)

(73) Assignee: **Exide Technologies**, Milton, GA (US)

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

(21) Appl. No.: **29/366,671**

(22) Filed: **Jul. 28, 2010**  
(Under 37 CFR 1.47)

(51) **LOC (9) Cl.** ..... **13-02**

(52) **U.S. Cl.** ..... **D13/106**

(58) **Field of Classification Search** ..... D13/102–106,  
D13/110, 118–119, 184, 199; 429/96–100,  
429/163, 176

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,634,642	A *	1/1987	Lopez-Doriga	
			Lopez-Doriga	429/121
4,693,949	A *	9/1987	Kellett et al.	429/128
D292,576	S *	11/1987	Kump et al.	D13/106
D294,484	S *	3/1988	Kellett et al.	D13/106
D303,519	S *	9/1989	Lopez-Doriga	
			Lopez-Doriga	D13/106
5,187,031	A *	2/1993	Heiman et al.	429/129
5,484,667	A *	1/1996	Sahli et al.	429/100
5,512,065	A *	4/1996	Kump et al.	29/623.1
D400,849	S *	11/1998	Ikeda et al.	D13/106
D401,551	S *	11/1998	Kim	D13/106
6,300,005	B1 *	10/2001	Kump	429/175
D458,900	S *	6/2002	Carter et al.	D13/106
D462,656	S *	9/2002	Degen et al.	D13/104

D491,138	S *	6/2004	Minato	D13/104
D543,938	S *	6/2007	Kawakita et al.	D13/119
D584,684	S *	1/2009	Aglassinger	D13/110
D609,178	S *	2/2010	Mack	D13/104
D633,863	S *	3/2011	Qualls et al.	D13/106
D633,864	S *	3/2011	Qualls et al.	D13/106
D633,865	S *	3/2011	Qualls et al.	D13/106
D633,866	S *	3/2011	Qualls et al.	D13/106
2009/0130549	A1 *	5/2009	Kelley et al.	429/163

\* cited by examiner

*Primary Examiner* — Rosemary K Tarcza

(74) *Attorney, Agent, or Firm* — Joel T. Charlton

(57) **CLAIM**

The ornamental design for a flat plate battery, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of an embodiment of a battery in accordance with the present invention. In this embodiment, the battery includes terminals on the top, vertically ribbed portions on the end panels, and protruding shoulder portions at each of the eight corners of the battery. In addition, the battery includes a series of small notches in a horizontal arrangement along a bottom portion of the front and back sides of the battery. The front and back sides of the battery are recessed inwardly.

FIG. 2 is a front side view of a battery in accordance with the FIG. 1 embodiment.

FIG. 3 is a back side view of a battery in accordance with the FIG. 1 embodiment.

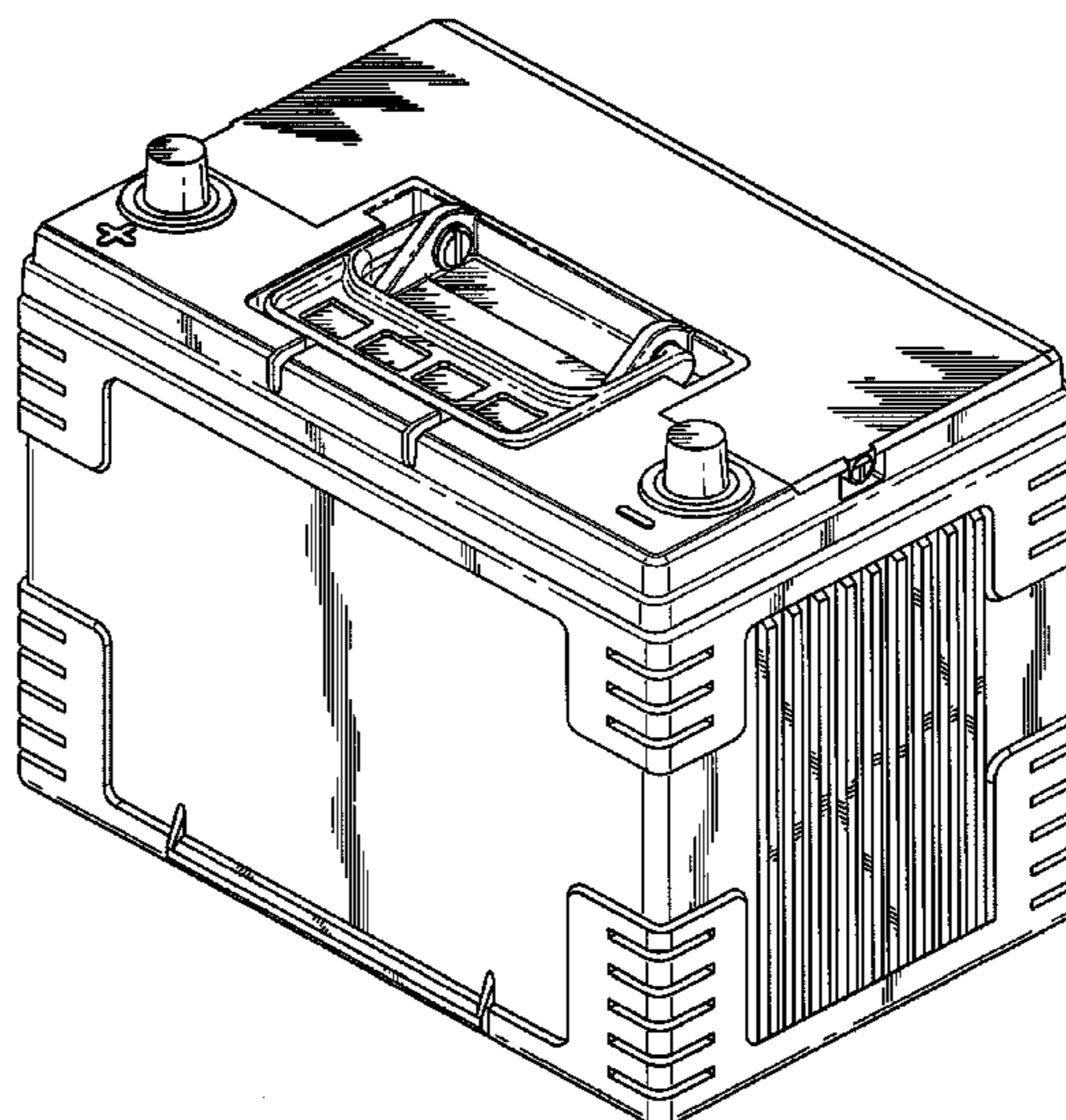
FIG. 4 is a top view of a battery in accordance with the FIG. 1 embodiment.

FIG. 5 is a bottom view of a battery in accordance with the FIG. 1 embodiment.

FIG. 6 is an end panel view of a battery in accordance with the FIG. 1 embodiment; and,

FIG. 7 is an end panel view of a battery in accordance with the FIG. 1 embodiment.

**1 Claim, 4 Drawing Sheets**



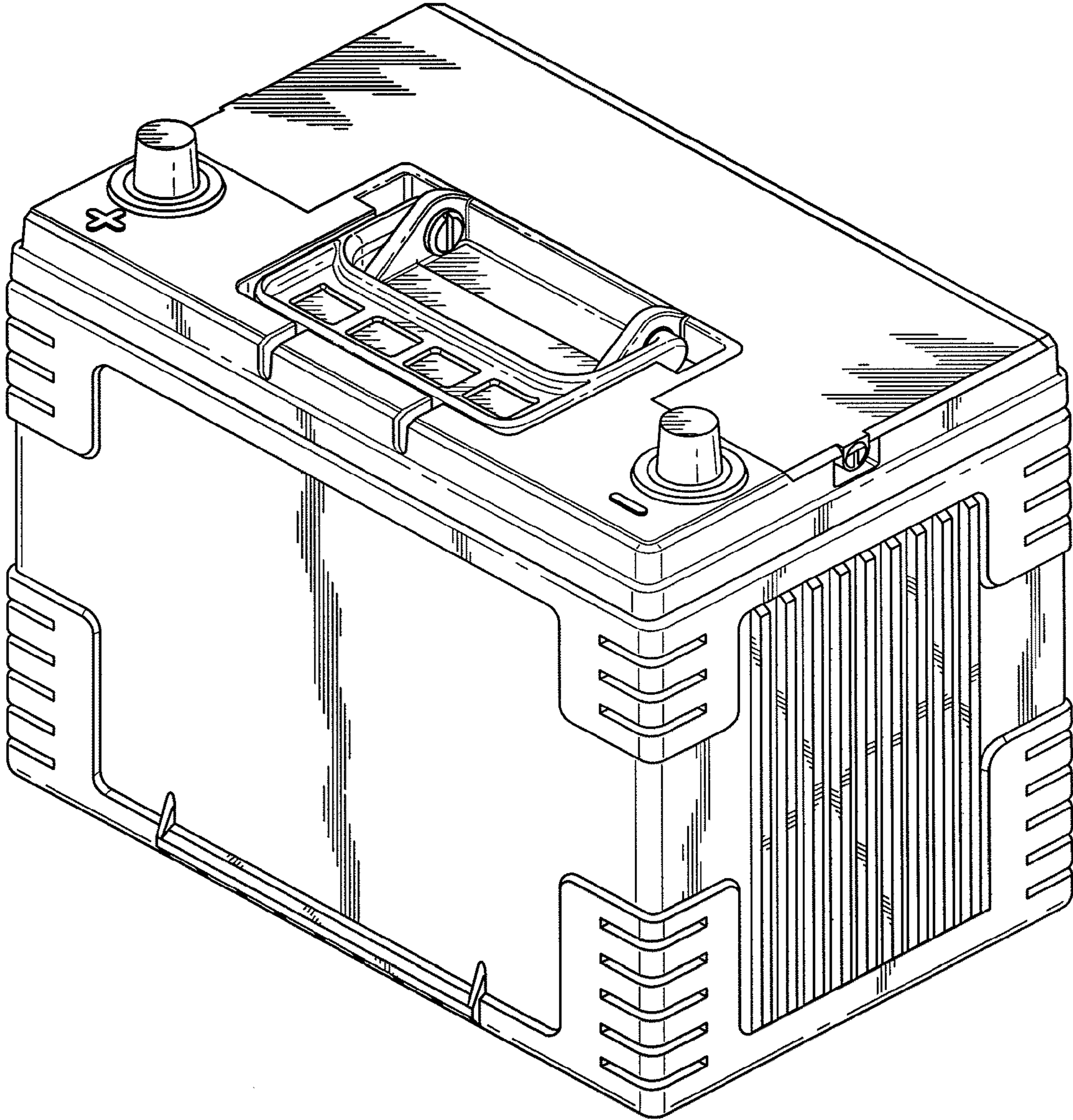


FIG. 1



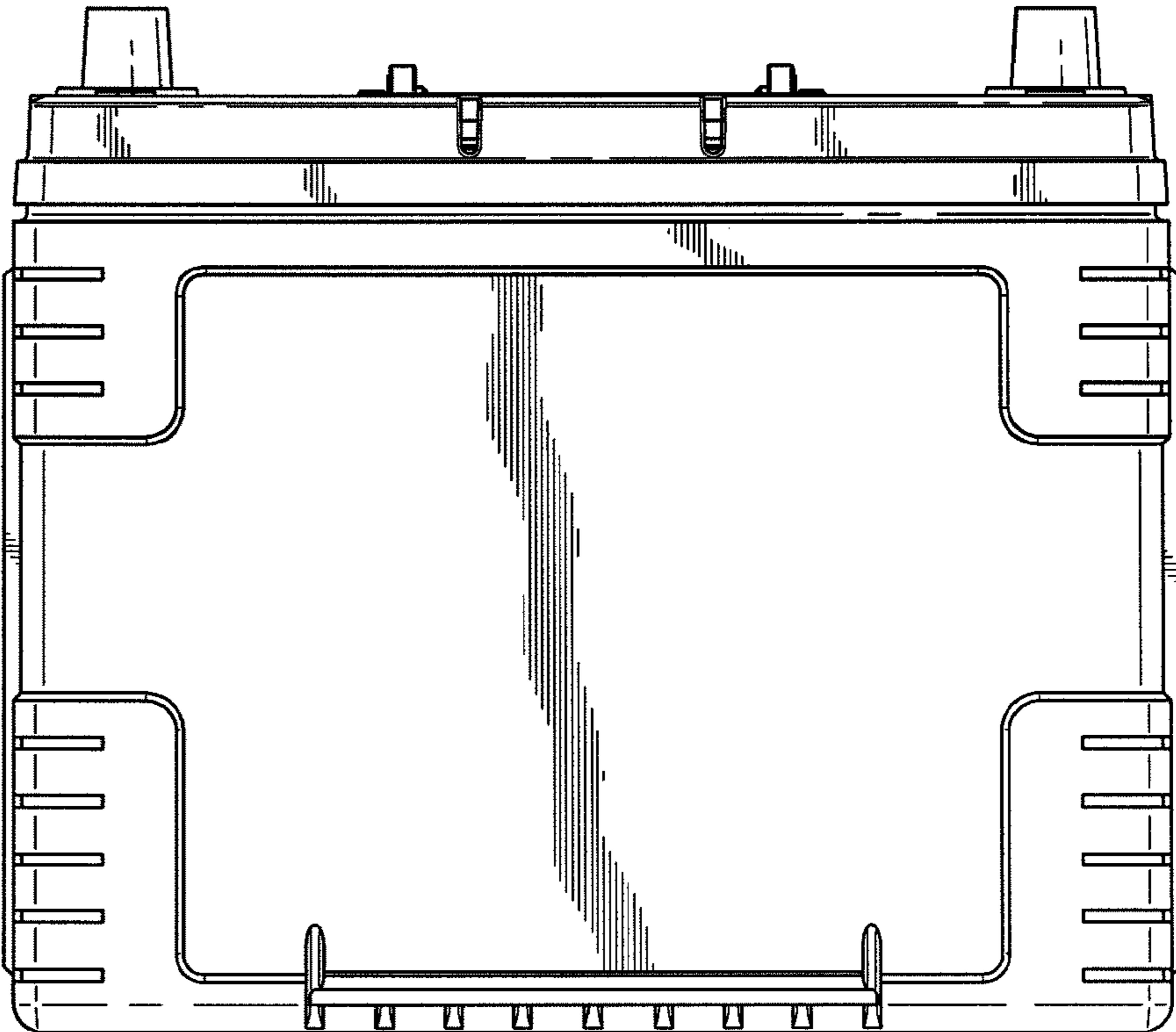


FIG. 2

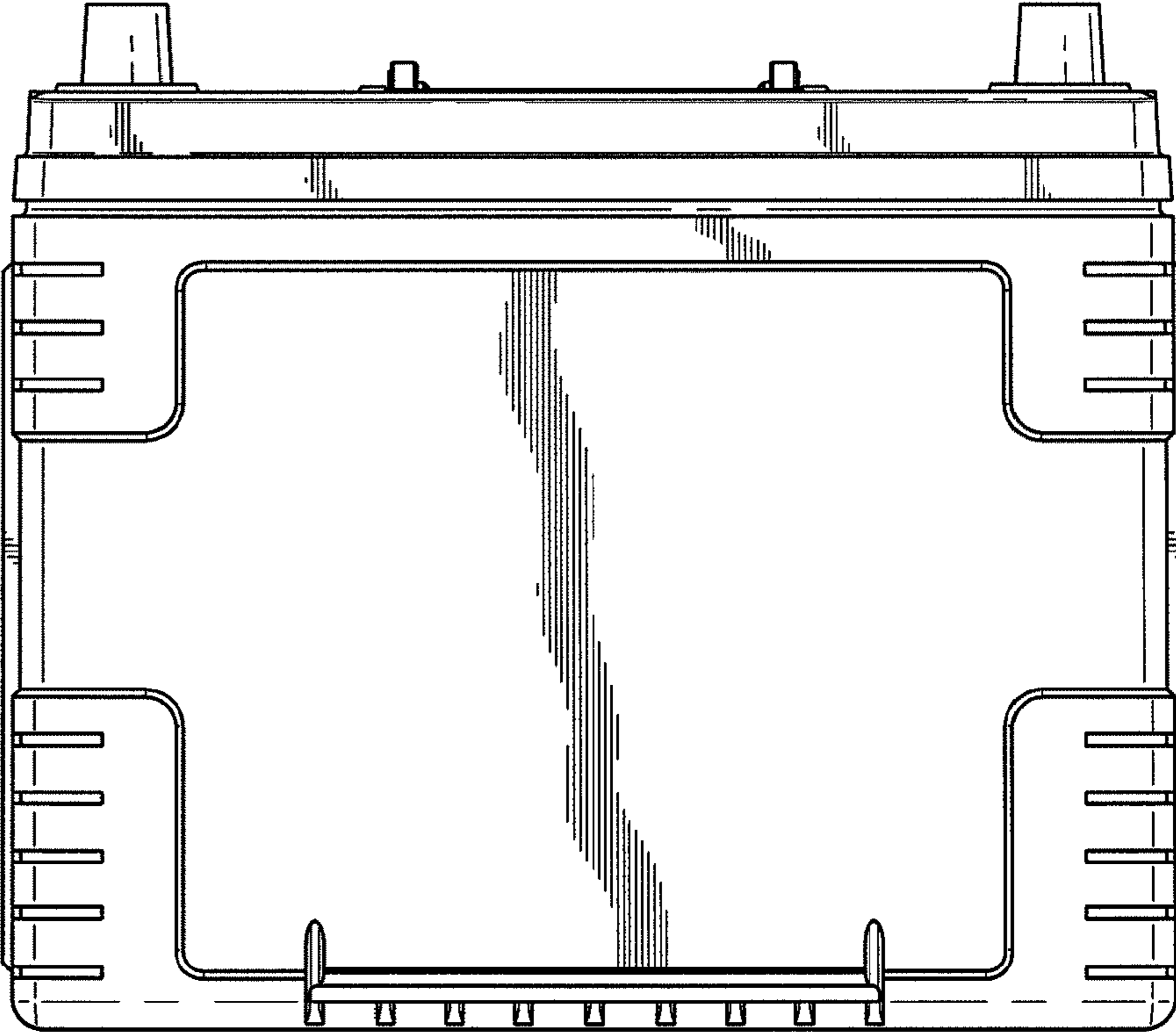


FIG. 3

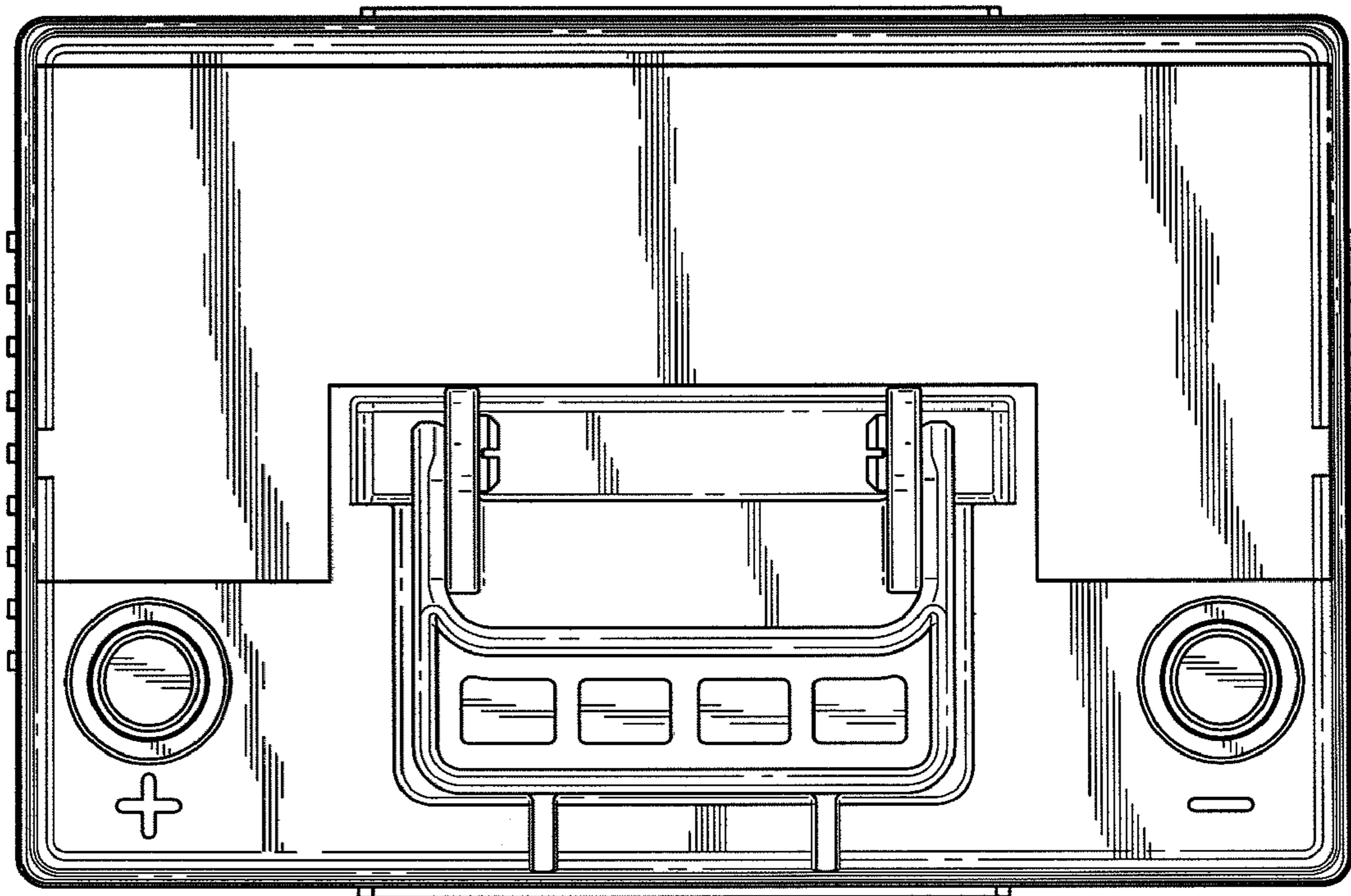


FIG. 4

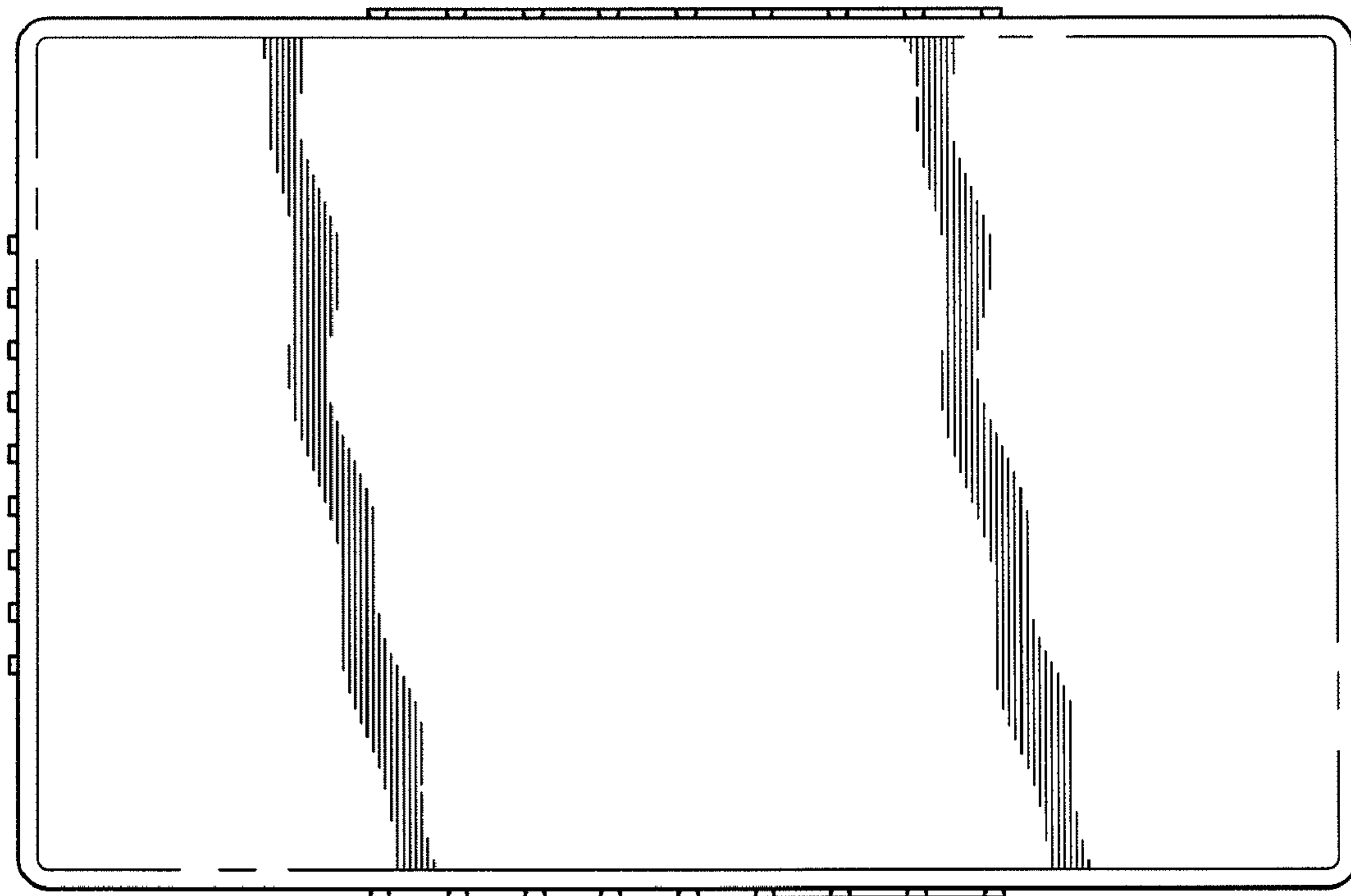


FIG. 5

FIG. 6

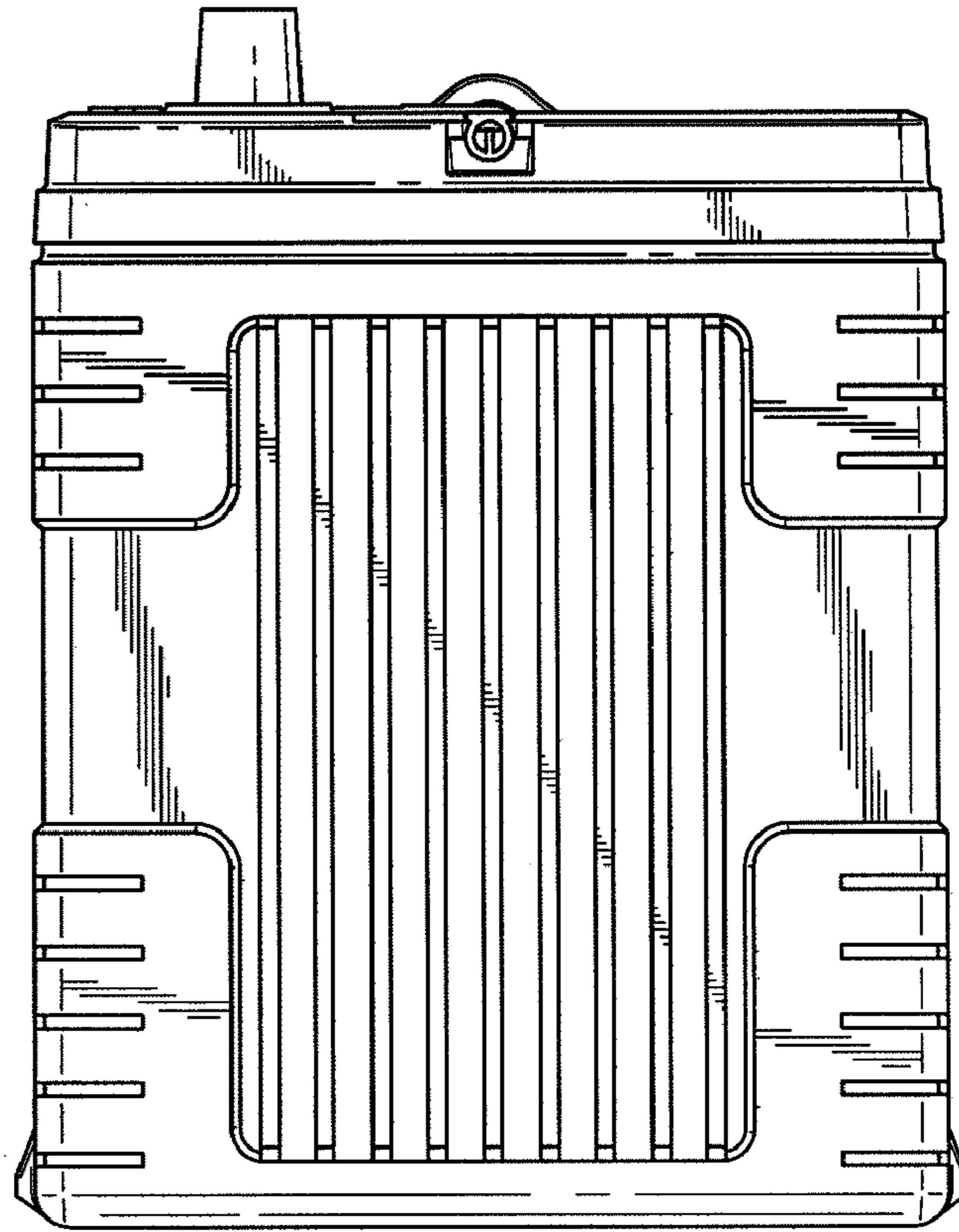


FIG. 7

