



US00D899355S

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

(10) **Patent No.:** **US D899,355 S**

(45) **Date of Patent:** **\*\* Oct. 20, 2020**

(54) **BATTERY**

2/0207; H01M 2/0212; H01M 2/1061;  
H01M 2/1022; H01M

(71) Applicant: **MILWAUKEE ELECTRIC TOOL CORPORATION**, Brookfield, WI (US)

(Continued)

(72) Inventors: **Steven Sommerfeld**, Mukwonago, WI (US); **Benjamin Gall**, Wauwatosa, WI (US); **Hui Shu Beldon Liu**, Dongguan (CN)

(56)

**References Cited**

U.S. PATENT DOCUMENTS

5,065,082 A 11/1991 Fushiya  
D335,277 S 5/1993 Hattori

(Continued)

(73) Assignee: **Milwaukee Electric Tool Corporation**, Brookfield, WI (US)

FOREIGN PATENT DOCUMENTS

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

DE 19617805 11/1996  
EP 1061593 A2 12/2000

(Continued)

(21) Appl. No.: **29/594,066**

(22) Filed: **Feb. 15, 2017**

OTHER PUBLICATIONS

**Related U.S. Application Data**

(63) Continuation of application No. PCT/CN2016/102208, filed on Oct. 14, 2016.

International Search Report and Written Opinion for Application No. PCT/CN2016/102208 dated Jul. 24, 2017, 12 pages.

(Continued)

(30) **Foreign Application Priority Data**

Aug. 15, 2016 (CN) ..... 2016 3 0390112

(51) **LOC (12) Cl.** ..... **13-02**

(52) **U.S. Cl.**

USPC ..... **D13/103**

(58) **Field of Classification Search**

USPC ..... D13/103, 107, 108, 110, 133,

D13/137.1-137.4, 138.1-138.2,

D13/139.1-139.8, 146, 147, 151-156,

D13/173, 177, 199; D14/432, 433, 435.1,

D14/250; D23/231, 232; D15/7-9;

D8/350, 353-356

CPC ..... H01R 11/00; H01R 9/00; H01R 13/00;

H01R 13/04; H01R 13/10; H01R

13/6666; H01R 13/6675; H01R 25/00;

H01R 25/006; H01H 2207/00; H01H

2207/022; Y02E 60/12; Y02E 60/122;

Y02E 60/124; Y02E 60/50; H01M 2/02;

H01M 2/022; H01M 2/0202; H01M

(57)

**CLAIM**

We claim the ornamental design for a battery, as shown and described.

**DESCRIPTION**

FIG. 1 is a first perspective view of a battery.

FIG. 2 is a top view of the battery of FIG. 1.

FIG. 3 is a bottom view of the battery of FIG. 1.

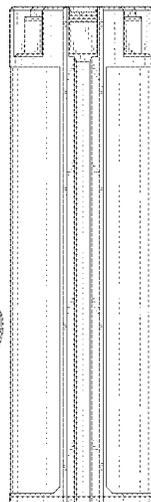
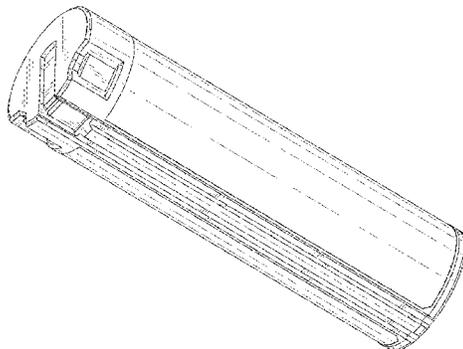
FIG. 4 is a first side view of the battery of FIG. 1.

FIG. 5 is a second side view of the battery of FIG. 1.

FIG. 6 is a third side view of the battery of FIG. 1; and,

FIG. 7 is a fourth side view of the battery of FIG. 1.

**1 Claim, 7 Drawing Sheets**



(58) **Field of Classification Search**

CPC .. 2/1055; H01M 2/1066; H01M 2/105; H01M 2/204; H02J 7/00; H02J 7/0003; H02J 7/0011; H02J 7/0013; H02J 7/0054; H02J 7/0055; H02J 7/0057; Y02T 10/7005; Y02T 10/705; Y02T 10/7088; B60L 11/1809; B60L 11/1861

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D352,698 S 11/1994 Okumura  
 5,626,979 A 5/1997 Mitsui et al.  
 5,874,181 A 2/1999 Tam  
 D413,565 S \* 9/1999 Nakayama ..... D13/103  
 D427,142 S \* 6/2000 Luh ..... D13/103  
 D428,385 S \* 7/2000 Luh ..... D13/103  
 D459,297 S \* 6/2002 Searle ..... D13/103  
 6,955,446 B2 10/2005 Uke  
 D530,277 S \* 10/2006 Lin ..... D13/110  
 D532,372 S \* 11/2006 Keating ..... D13/108  
 D539,216 S \* 3/2007 Hamaguchi ..... D13/103  
 D539,217 S \* 3/2007 Hamaguchi ..... D13/103  
 D543,143 S \* 5/2007 Hamaguchi ..... D13/103  
 7,278,753 B2 10/2007 Uke  
 D557,658 S \* 12/2007 Ledbetter ..... D13/108  
 7,491,466 B2 2/2009 Feddrix et al.  
 D593,488 S \* 6/2009 Harrison ..... D13/103  
 D598,374 S \* 8/2009 Sasada ..... D13/108  
 D598,844 S \* 8/2009 Harrison ..... D13/103  
 D645,816 S \* 9/2011 Sasada ..... D13/108  
 D664,498 S \* 7/2012 Liu ..... D13/103  
 D664,920 S \* 8/2012 Huang ..... D13/107  
 D670,244 S \* 11/2012 Workman ..... D13/110  
 D686,155 S \* 7/2013 Nguyen ..... D13/103  
 D709,891 S \* 7/2014 Alesi ..... D14/433  
 D717,305 S \* 11/2014 Alesi ..... D14/433  
 D749,044 S \* 2/2016 Huang ..... D13/108  
 D756,908 S \* 5/2016 Chung ..... D13/103  
 D762,564 S \* 8/2016 Patton ..... D13/103  
 D780,115 S \* 2/2017 Huang ..... D13/107

D815,037 S \* 4/2018 Chen ..... D13/108  
 D822,591 S \* 7/2018 Wu ..... D13/103  
 D826,846 S \* 8/2018 Greiner ..... D13/103  
 D844,557 S \* 4/2019 Wang ..... D13/103  
 D846,492 S \* 4/2019 Verleur ..... D13/103  
 D860,951 S \* 9/2019 Hu ..... D13/144  
 D866,461 S \* 11/2019 Arimoto ..... D13/108  
 D870,659 S \* 12/2019 Liao ..... D13/108  
 2003/0203669 A1 10/2003 Glauning  
 2008/0225519 A1 9/2008 Uke  
 2008/0305387 A1 12/2008 Murray et al.  
 2009/0148756 A1 \* 6/2009 Specht ..... H01M 6/16  
 429/94  
 2010/0190052 A1 \* 7/2010 Rajani ..... H01M 2/1055  
 429/178  
 2011/0076523 A1 3/2011 Iwamoto et al.  
 2012/0048587 A1 3/2012 Umemura et al.  
 2013/0022847 A1 \* 1/2013 Janousek ..... H01M 2/022  
 429/90  
 2013/0344361 A1 12/2013 Imre  
 2014/0106195 A1 4/2014 Milbourne et al.  
 2014/0242449 A1 8/2014 Lee et al.  
 2016/0260955 A1 \* 9/2016 Jo ..... H01M 2/30  
 2018/0309096 A1 \* 10/2018 Kim ..... H01M 2/08  
 2018/0315968 A1 \* 11/2018 Koyama ..... H01M 10/48  
 2018/0347061 A1 \* 12/2018 Sadaki ..... C25D 5/50  
 2019/0207273 A1 \* 7/2019 Chen ..... H02J 7/0042  
 2019/0252732 A1 \* 8/2019 Park ..... H01M 10/0431  
 2019/0348703 A1 \* 11/2019 Lim ..... H01M 10/0431

FOREIGN PATENT DOCUMENTS

EP 3059781 A1 8/2016  
 JP 3083442 B2 9/2000  
 JP 1442636 6/2012  
 TW D147001 5/2012

OTHER PUBLICATIONS

European Patent Office Extended Search Report for Application No. 16918594.9 dated May 4, 2020 (7 pages).

\* cited by examiner

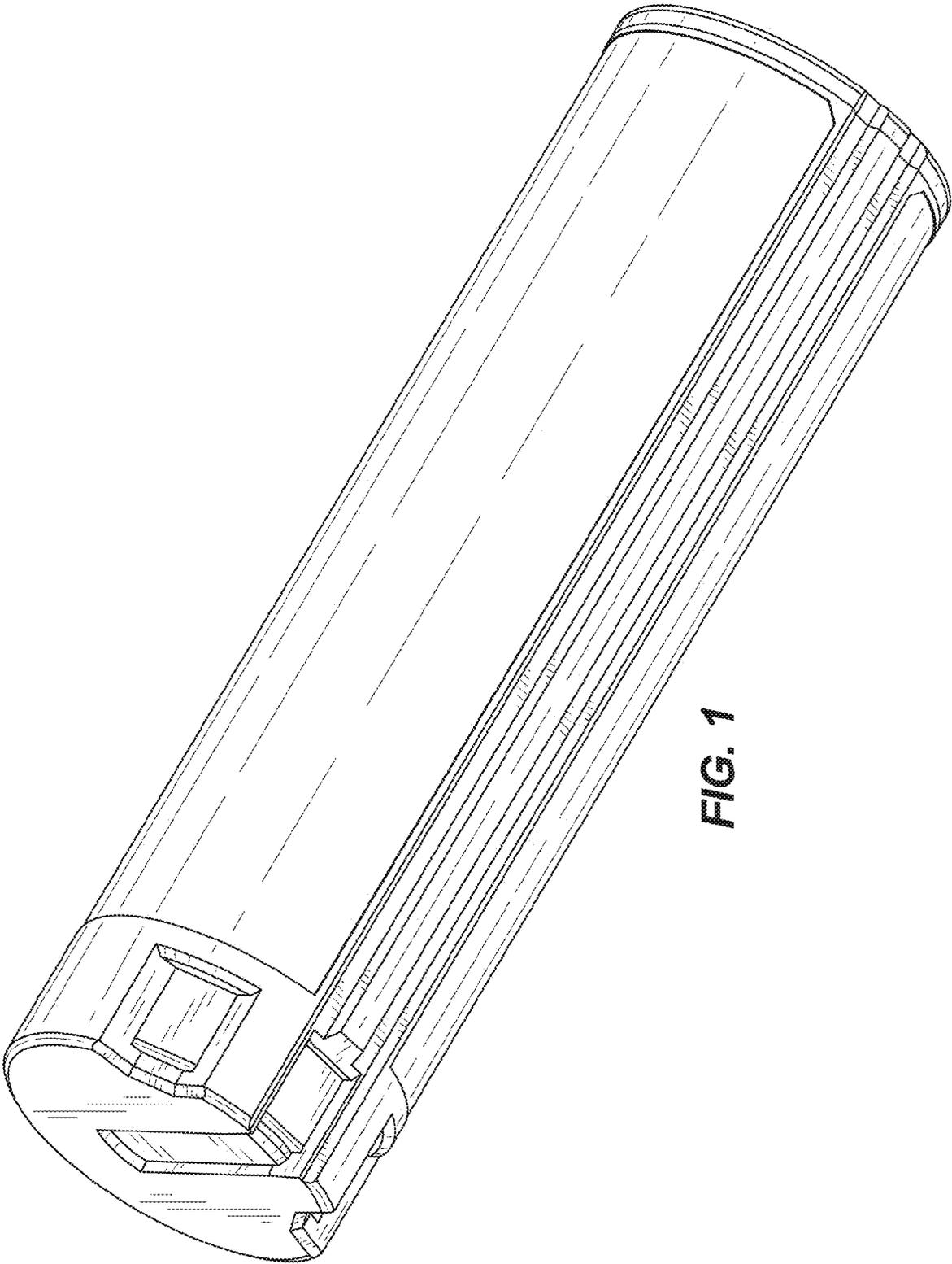
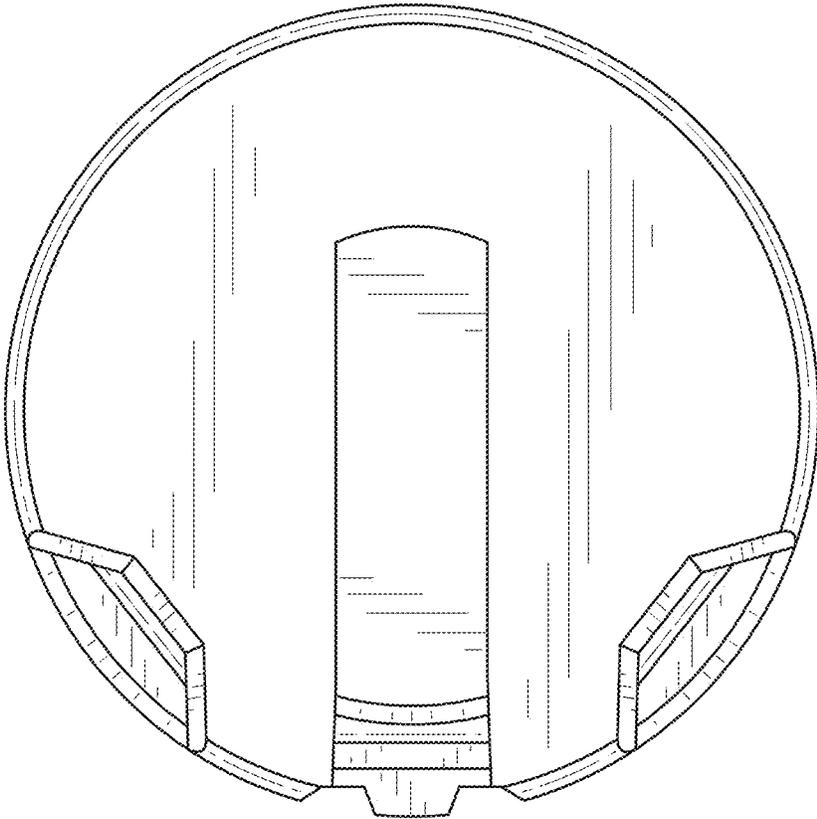
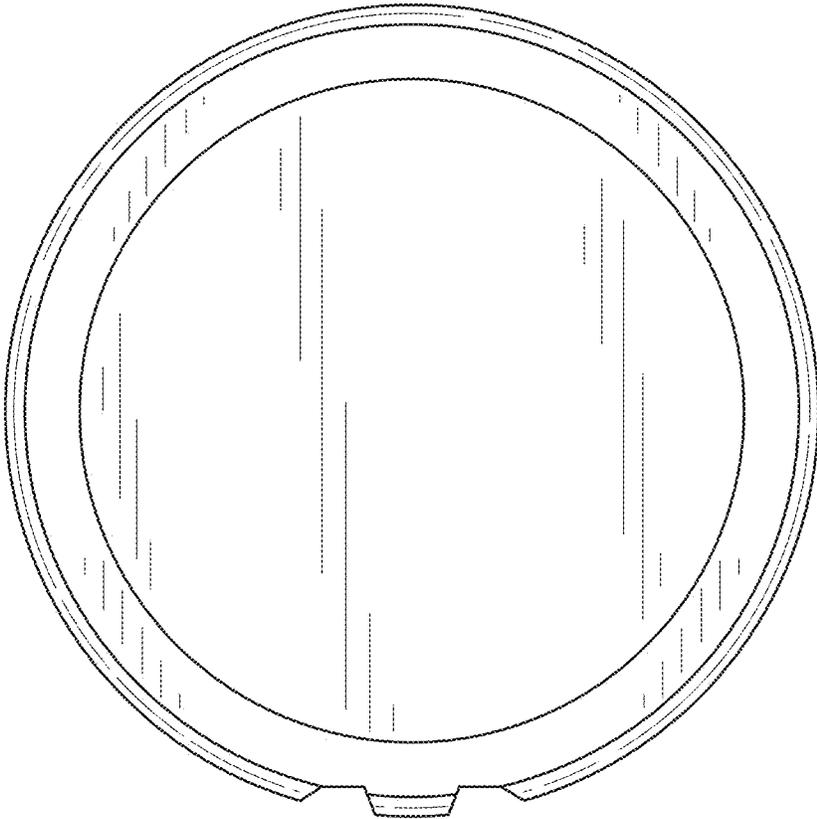


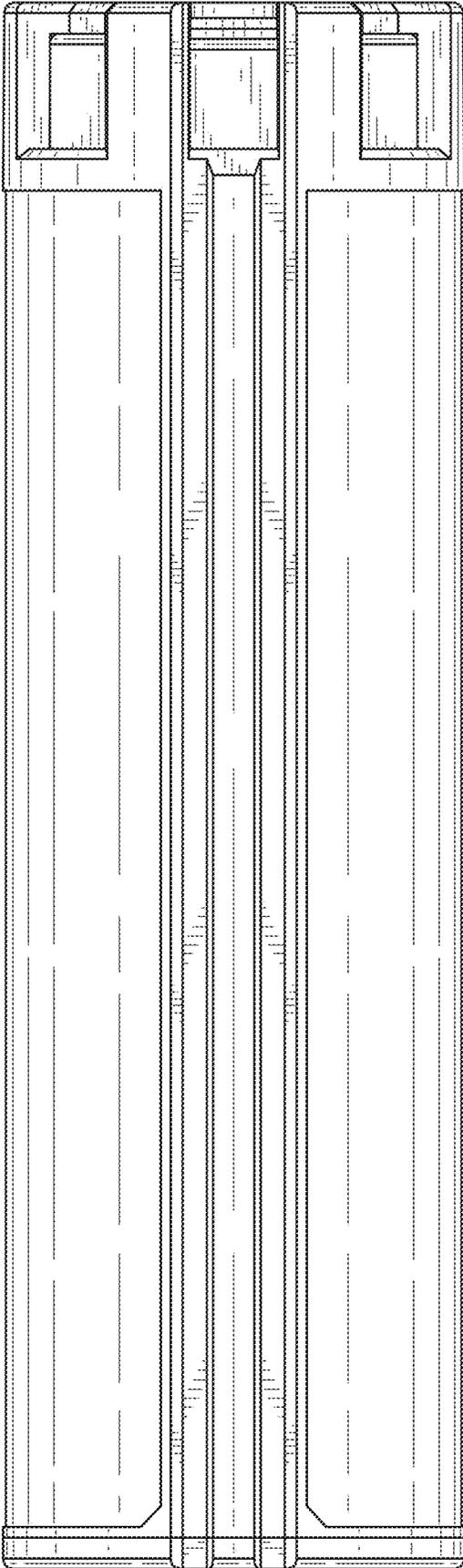
FIG. 1



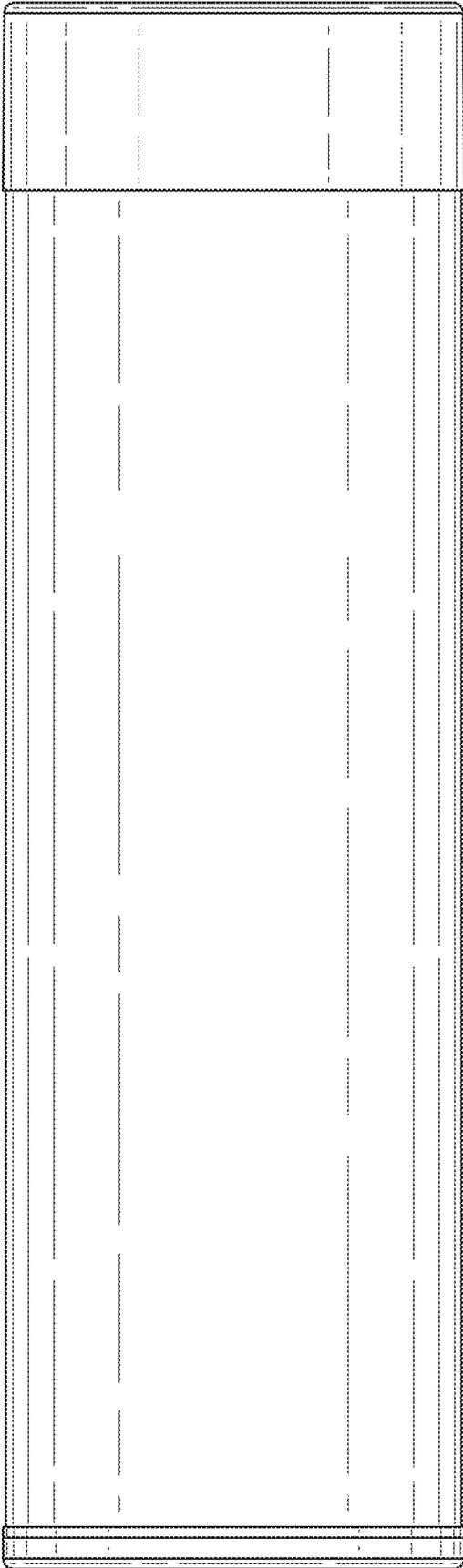
**FIG. 2**



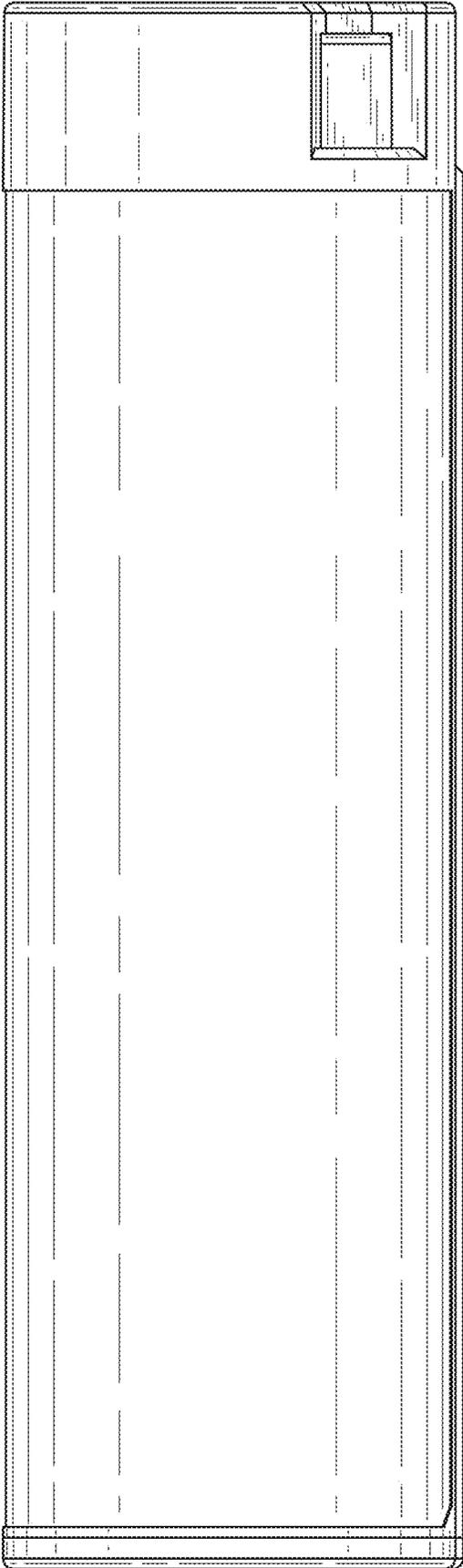
**FIG. 3**



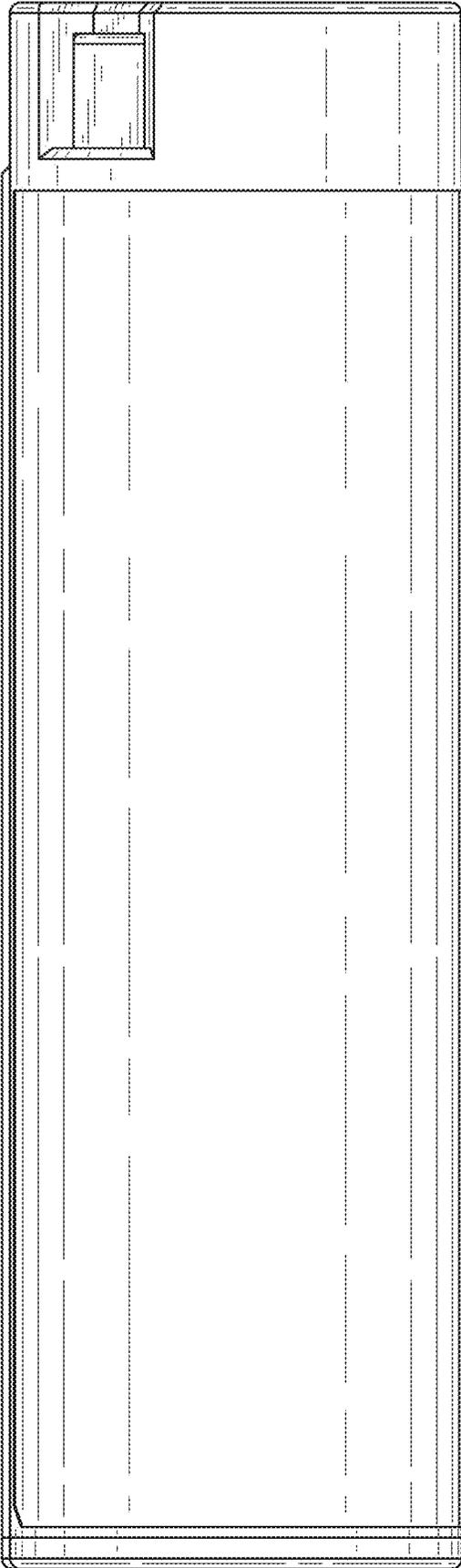
**FIG. 4**



**FIG. 5**



**FIG. 6**



**FIG. 7**