



US00D822210S

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

(10) **Patent No.:** **US D822,210 S**
(45) **Date of Patent:** **** Jul. 3, 2018**

(54) **EXTENDED BATTERY OF A POWERED AIR PURIFYING RESPIRATOR**

(71) Applicant: **LINCOLN GLOBAL, INC.**, City of Industry, CA (US)

(72) Inventors: **Jack Lee Milligan**, Mentor, OH (US);
Jamy Edward Bulan, Lakewood, OH (US)

(73) Assignee: **LINCOLN GLOBAL, INC.**, City of Industry, CA (US)

(*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/529,657**

(22) Filed: **Jun. 9, 2015**

(51) **LOC (11) Cl.** **24-00**

(52) **U.S. Cl.**
USPC **D24/164**

(58) **Field of Classification Search**
USPC D24/164, 110.1, 110, 186, 172, 162;
D13/108, 119, 103; 128/205.12, 200.13,
128/200.17, 200.11, 205.23
CPC A62B 7/00; A61M 16/16; A61M 11/00;
A61M 16/167; B01D 53/04
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 3,806,102 A * 4/1974 Valenta A61M 16/16
128/200.13
- 3,812,853 A * 5/1974 Crain A61M 11/00
128/200.17
- 3,982,095 A * 9/1976 Robinson A61M 16/167
128/200.11
- D255,029 S * 5/1980 Brownlie D13/108
- D259,954 S * 7/1981 Reichl D13/108

- 4,502,873 A * 3/1985 Mottram B01D 53/04
417/269
- 5,091,997 A 3/1992 Foehl
- 5,103,815 A * 4/1992 Siegel A62B 7/00
128/205.23
- D332,442 S * 1/1993 Simpson, Sr. D13/119
(Continued)

OTHER PUBLICATIONS

3M TM Versaflo TM Powered Air Purifying Respirator TR-600; Heavy Industry Evolve to TR-600; 3M Personal Safety Division; pp. 1-3; estimated Jan. 2014.

(Continued)

Primary Examiner — Rhea Shields

(74) *Attorney, Agent, or Firm* — Perkins Coie LLP

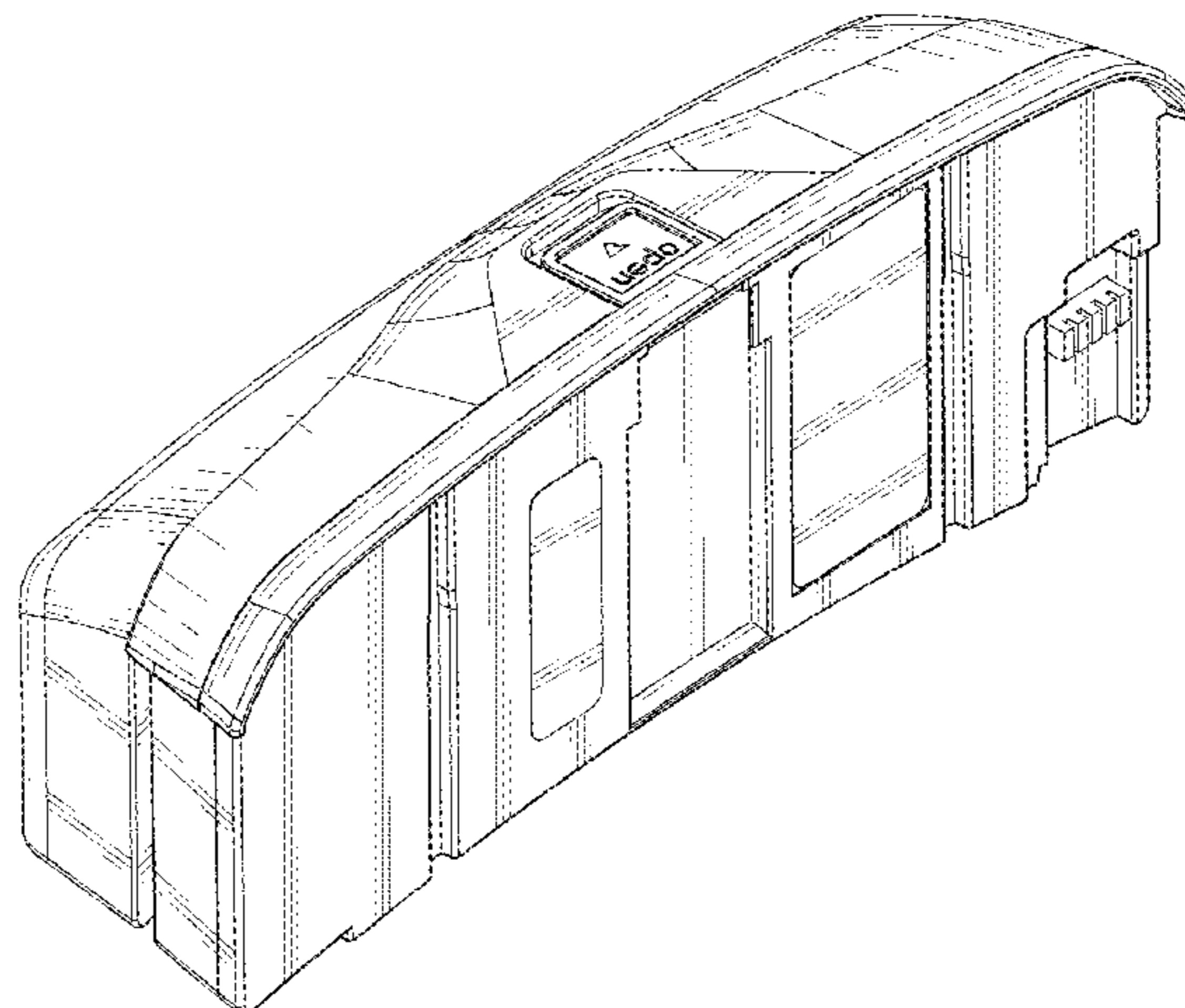
(57) **CLAIM**

The ornamental design for an extended battery of a powered air purifying respirator, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the design for the extended battery of a powered air purifying respirator;
FIG. 2 is a front view of a design for the extended battery of a powered air purifying respirator;
FIG. 3 is a bottom view of a design for the extended battery of a powered air purifying respirator;
FIG. 4 is a back view of a design for the extended battery of a powered air purifying respirator;
FIG. 5 is a top view of a design for the extended battery of a powered air purifying respirator;
FIG. 6 is a right hand view of a design for the extended battery of a powered air purifying respirator; and,
FIG. 7 is a left hand view of a design for the extended battery of a powered air purifying respirator.
In the drawings, the broken lines are for the purpose of illustrating environment only and form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

OTHER PUBLICATIONS

U.S. PATENT DOCUMENTS

5,230,101 A 7/1993 Hedges
 5,461,731 A 10/1995 Shida
 5,924,420 A 7/1999 Reischel
 D416,649 S 11/1999 Burns
 3,016,805 A 1/2000 Burns
 6,014,971 A 1/2000 Danish
 3,035,451 A 3/2000 Burns
 3,062,221 A 5/2000 Brostrom
 6,081,931 A 7/2000 Burns
 6,102,033 A 8/2000 Baribeau
 6,123,077 A 9/2000 Bostock
 6,186,140 B1 2/2001 Hoague
 D439,878 S * 4/2001 Ark D13/103
 6,250,299 B1 6/2001 Danisch
 6,279,572 B1 8/2001 Danisch
 6,298,498 B1 10/2001 Burns
 6,367,085 B1 4/2002 Berg
 6,438,763 B2 8/2002 Guay
 6,575,165 B1 6/2003 Cook
 6,666,209 B2 12/2003 Bennett
 D486,916 S * 2/2004 Cheung D24/186
 6,895,960 B2 5/2005 Fabin
 7,093,302 B1 8/2006 Burns
 7,197,774 B2 4/2007 Curran
 7,594,278 B2 9/2009 Huh
 7,748,381 B2 7/2010 Croll
 7,841,026 B2 11/2010 Makris
 7,865,968 B2 1/2011 Lilenthal
 D632,375 S 2/2011 Curran
 3,056,152 A1 11/2011 Brace
 8,082,600 B2 12/2011 Morin
 D662,672 S 6/2012 Carlburg
 D666,288 S 8/2012 Bainton
 D668,326 S 10/2012 Bainton
 D675,789 S 2/2013 Wanhainen
 8,387,162 B2 3/2013 Huh
 8,505,121 B2 8/2013 Ahlgren
 8,584,265 B2 11/2013 Lilenthal
 8,627,517 B2 1/2014 Ahlgren
 8,745,770 B2 6/2014 Ahlgren
 8,806,662 B2 8/2014 Huh
 8,821,621 B2 9/2014 Dwyer
 8,839,788 B2 9/2014 Betz
 8,875,318 B2 11/2014 Huh
 8,955,162 B2 2/2015 Huh
 D728,777 S 5/2015 Spear
 D731,123 S 6/2015 Spear
 3,066,552 A1 6/2015 Ahlgren
 D745,137 S * 12/2015 Pipe D24/108
 D756,519 S * 5/2016 Adams D24/164
 D790,685 S * 6/2017 Silkaitis D24/110.5
 D791,329 S * 7/2017 Verma D24/164

3M TM Versaflo TM Powered Air Purifying Respirator TR-600; Pharmaceutical to TR-600; 3M Personal Safety Division; pp. 1-3; estimated Jan. 2014.
 3M TM Versaflo TM Powered Air Purifying Respirator TR-600; Evolve to TR-600; 3M Personal Safety Division; pp. 1-2; estimated Jan. 2014.
 Powered Air-Purifying Respirator (PAPR); OM-234 936 Rev. K; Owners Manual; www.MillerWelds.com; pp. 1-44; estimated Jan. 2014.
 PAPR Powered Air Purifying Respirator, "The Power of the Blue", Welding Protection; Miller Electric Mfg. Co.; www.MillerWelds.com; pp. 1-2; Apr. 2009.
 3M TM Personal Safety Division; 3M TM Versaflo TM Powered Air Purifying Respirator TR-600 brochure, Evolve to TR-600, pp. 1-6, estimated Jan. 2014.
 3M TM Personal Safety Division; The New 3M TM Versaflo TM Powered Air Purifying Respirator TR-600 brochure, Evolve to TR-600-Heavy Industry, pp. 1-4, estimated Jan. 2014.
 3M TM Personal Safety Division; The New 3M TM Versaflo TM Powered Air Purifying Respirator TR-600 brochure, Evolve to TR-600-Pharmaceutical, pp. 1-4, estimated Jan. 2014.
 3M TM Versaflo TM Respirator Systems for Healthcare Professionals; Comfort and Simplicity Versatility; 3M.com/Versaflo; pp. 1-4; estimated Jan. 2014.
 3M TM Versaflo TM Respirator Systems for Pharmaceutical Applications; Comfort Simplicity Versatility; pp. 1-2; estimated Jan. 2014.
 3M TM Versaflo TM Respirator Systems; Comfort Simplicity Versatility; pp. 1-8; estimated Jan. 2014.
 3M TM Versaflo TM S-Series Hoods and Headcovers for powered and Supplied Air Respirators; Comfort Simplicity Versatility; pp. 1-12; estimated Jan. 2014.
 3M TM Versaflo TM TR-300 Powered Air Purifying Respirators; Protection from Particles; Comfort Simplicity Versatility; pp. 1-4; estimated Jan. 2014.
 3M TM Versaflo TM TR-300 Series Parts and Accessories; pp. 1-2; estimated Jan. 2014.
 3M TM Versaflo TM Powered Air Purifying Respirator TR-600 Assemblies; TR-600 Series Quick Start Guide; pp. 1-2; estimated Jan. 2014.
 3M TM Versaflo TM TR-300 Series Parts and Accessories; 3M.com/PPESafety; pp. 1; estimated Jan. 2014.
 PAPR Powered Air Purifying Respirator, Welding Protection; Miller Electric Mfg. Co.; pp. 1-2; estimated Jan. 2014.

* cited by examiner

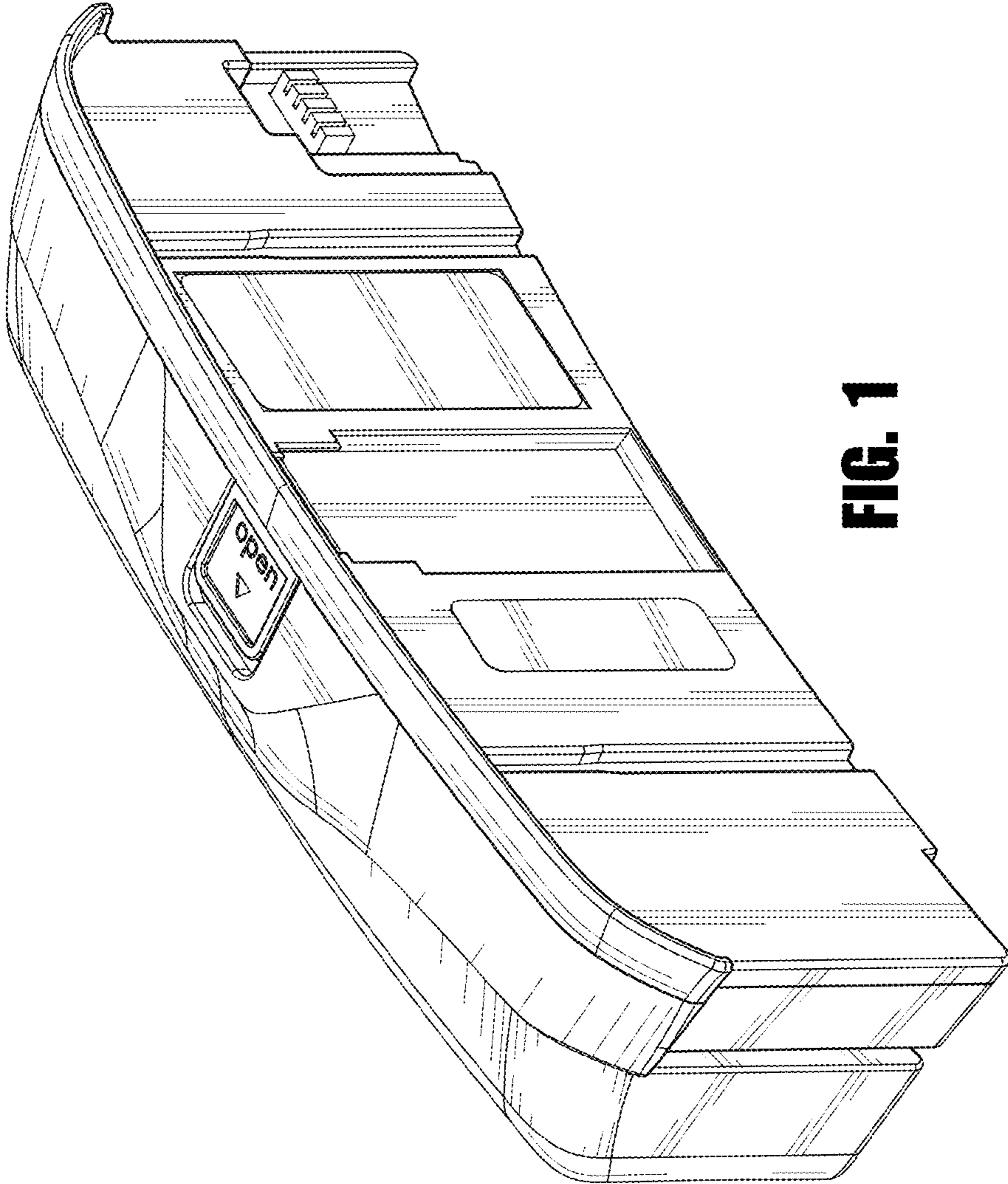


FIG. 1

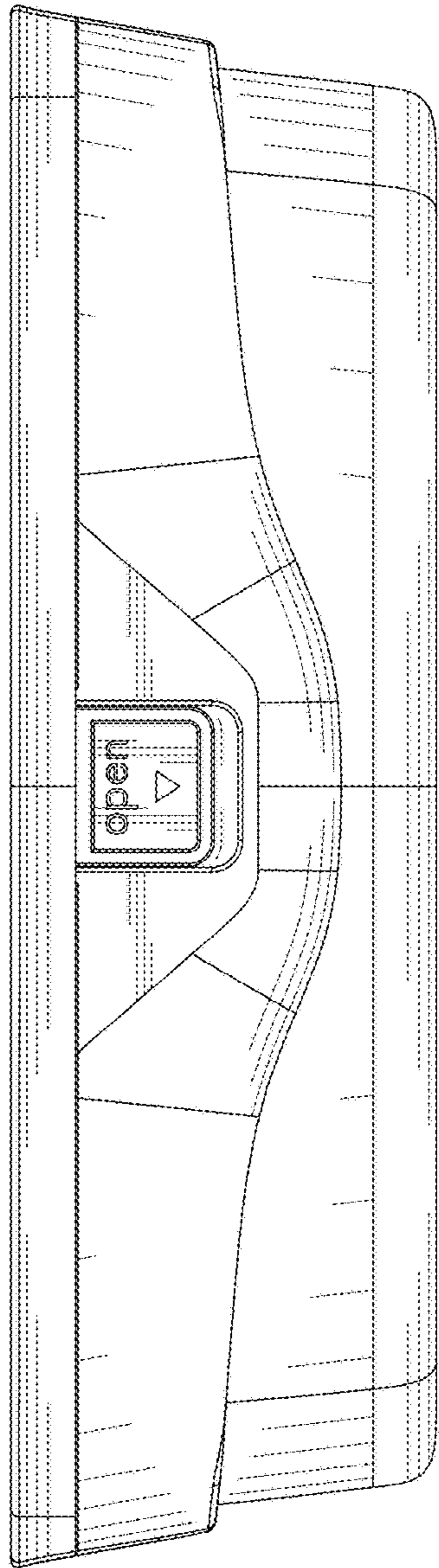


FIG. 2

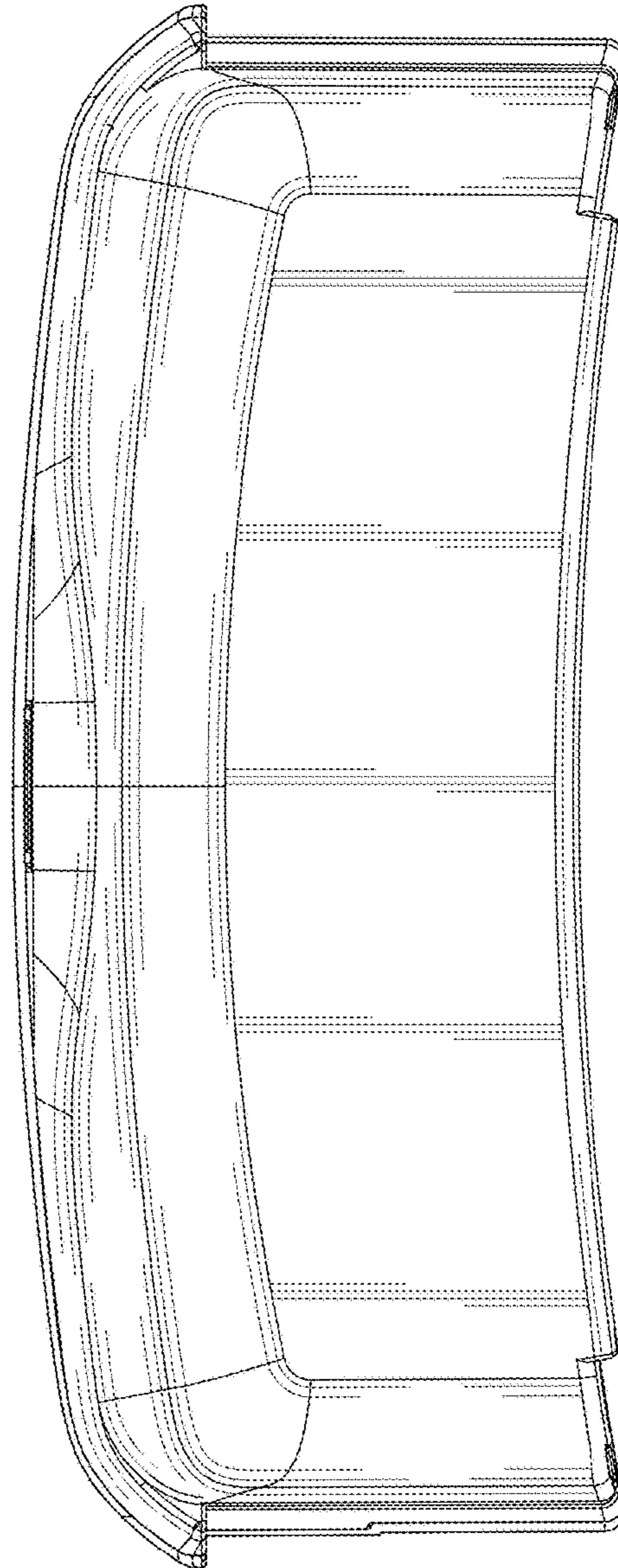


FIG. 3

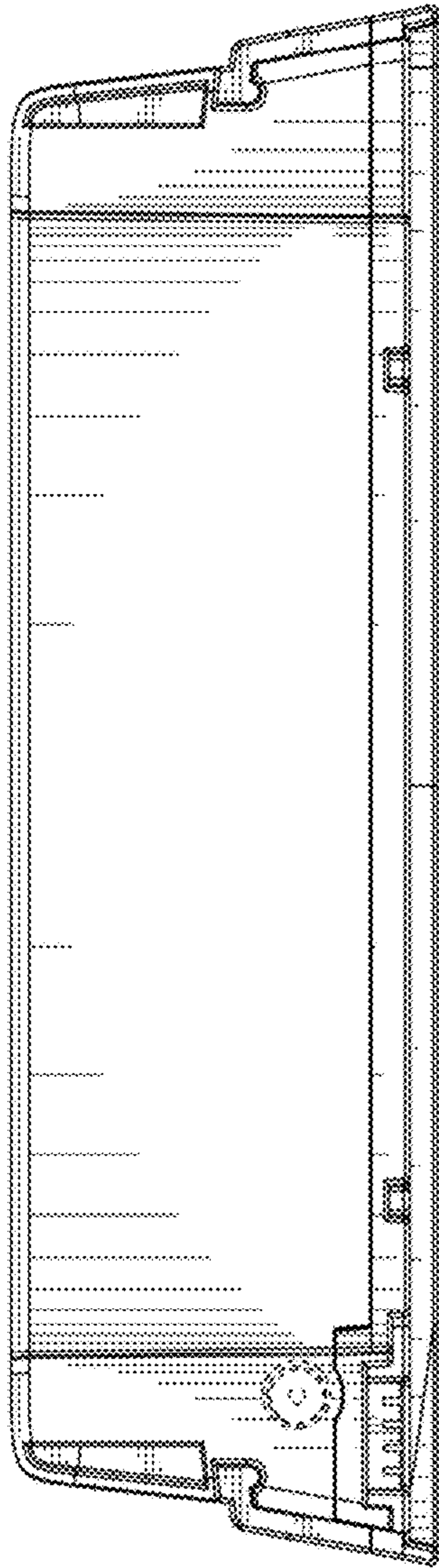


FIG. 4

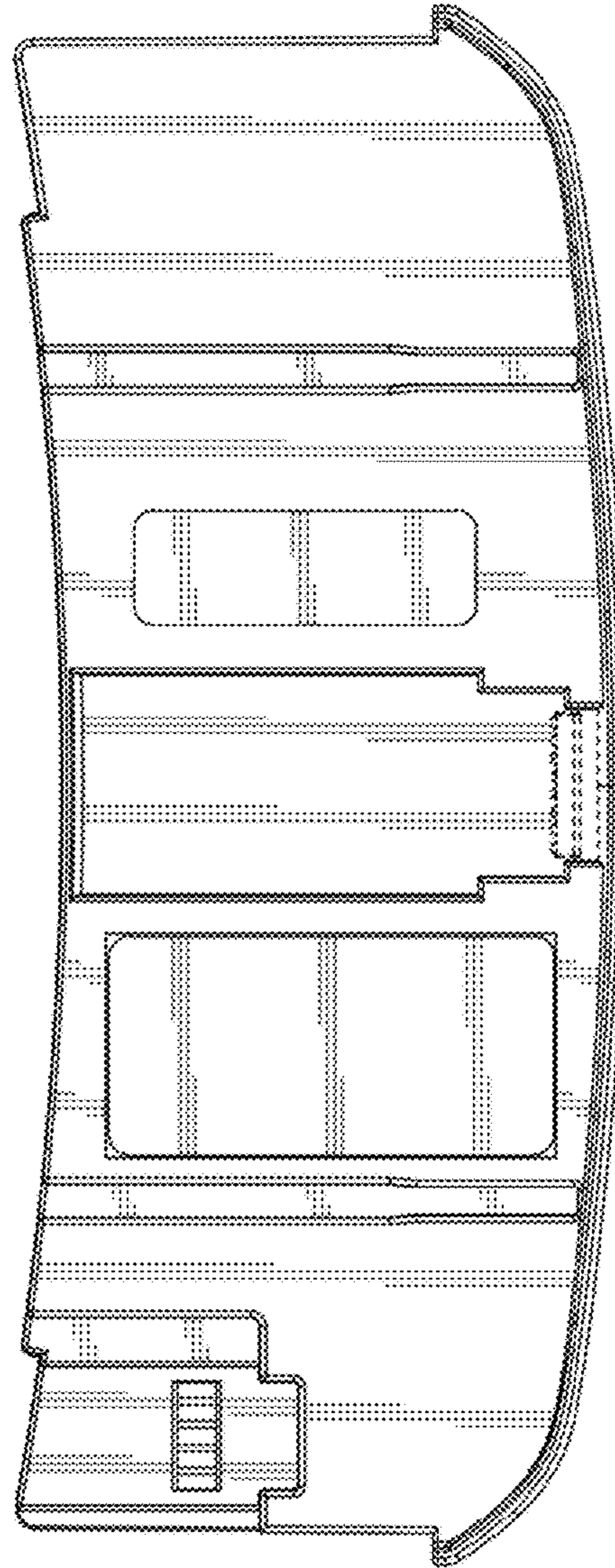


FIG. 5

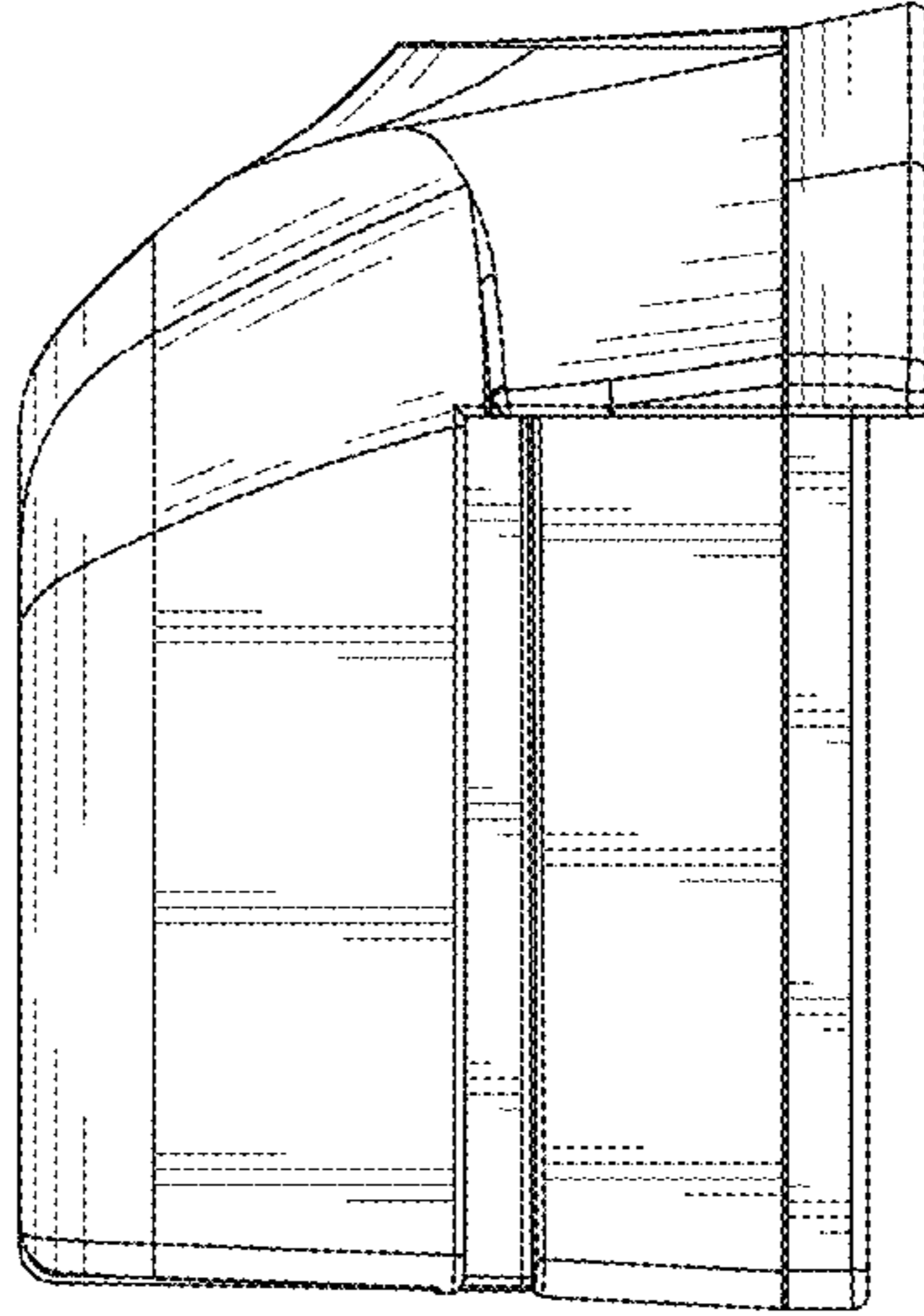


FIG. 6

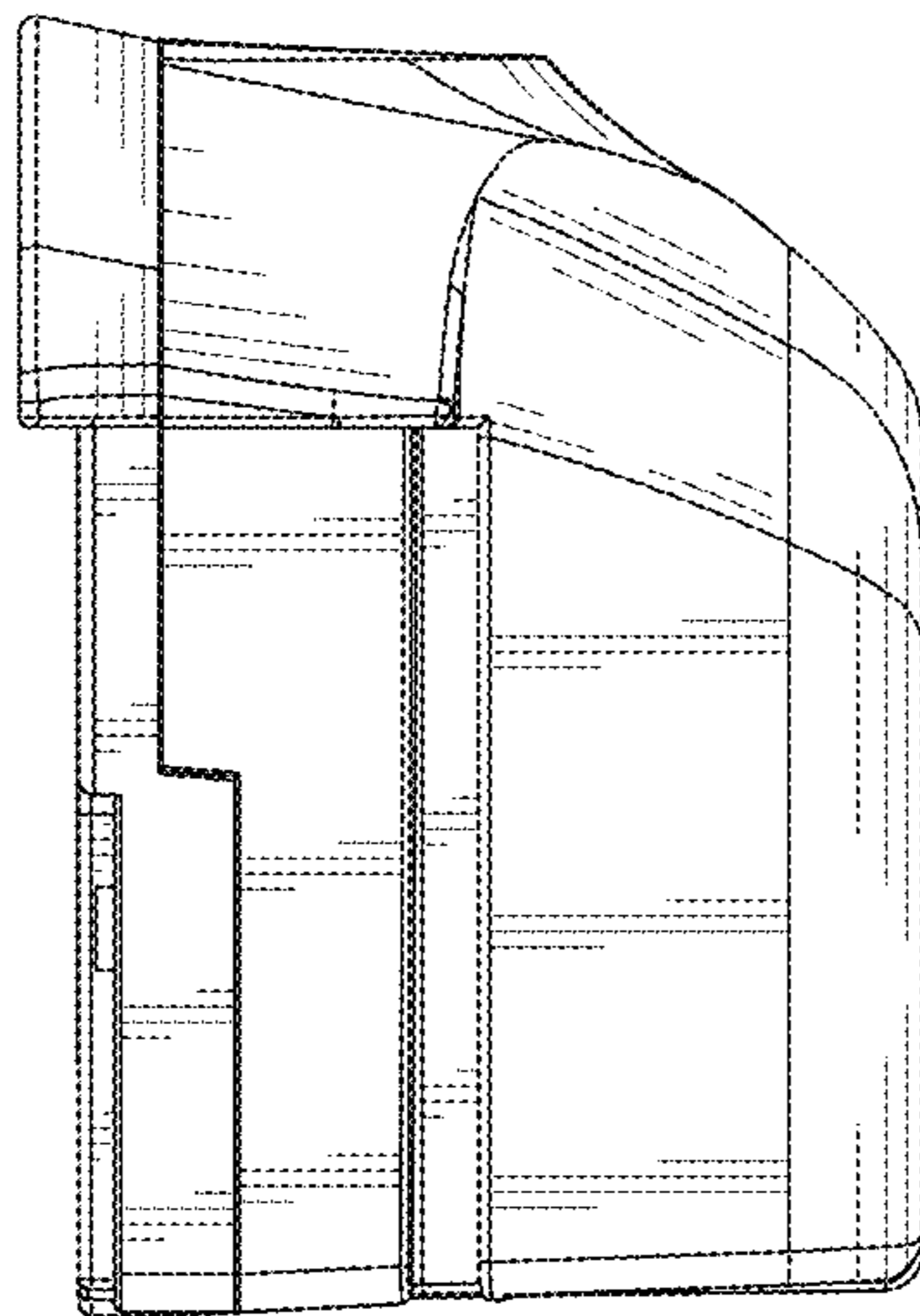


FIG. 7