

US00D867697S

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

(10) **Patent No.:** **US D867,697 S**

(45) **Date of Patent:** **** Nov. 19, 2019**

- (54) **VACUUM CLEANER**
- (71) Applicant: **Sharp Kabushiki Kaisha**, Sakai, Osaka (JP)
- (72) Inventors: **Sayami Nakamura**, Sakai (JP);
Tomoki Taira, Sakai (JP)
- (73) Assignee: **Sharp Kabushiki Kaisha**, Sakai, Osaka (JP)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/621,311**
- (22) Filed: **Oct. 6, 2017**
- (30) **Foreign Application Priority Data**

Apr. 11, 2017 (JP) 2017-007676

- (51) **LOC (12) Cl.** **15-05**
- (52) **U.S. Cl.**
USPC **D32/21**

- (58) **Field of Classification Search**
USPC D32/21-23, 31, 34
CPC . A47L 5/362; A47L 5/365; A47L 5/28; A47L 5/32; A47L 5/36; A47L 7/0004; A47L 7/0038; A47L 11/29; A47L 11/30
See application file for complete search history.

- (56) **References Cited**
U.S. PATENT DOCUMENTS

| | | |
|-------------|---------|----------------|
| 4,426,211 A | 1/1984 | Ataka et al. |
| 4,592,764 A | 6/1986 | Ikezaki et al. |
| 4,704,765 A | 11/1987 | Ataka |
| 4,905,342 A | 3/1990 | Ataka |
| 4,939,810 A | 7/1990 | Ataka |
| D325,274 S | 4/1992 | Ikeda |
| D327,145 S | 6/1992 | Kuriya |
| D335,556 S | 5/1993 | Kuriya |
| D344,164 S | 2/1994 | Kuriya |

| | | | |
|--------------|---------|------------------|--------|
| D344,165 S | 2/1994 | Kuriya | |
| D354,593 S | 1/1995 | Koike | |
| D358,913 S | 5/1995 | Sugiyama et al. | |
| D373,665 S | 9/1996 | Nakamura et al. | |
| 5,557,822 A | 9/1996 | Yagi et al. | |
| 5,659,919 A | 8/1997 | Kajihara | |
| D383,574 S | 9/1997 | Saimen et al. | |
| 5,699,585 A | 12/1997 | Tomooka et al. | |
| D398,093 S | 9/1998 | Fujima | |
| D403,477 S | 12/1998 | Tsujimoto et al. | |
| D403,478 S | 12/1998 | Tsujimoto et al. | |
| 5,901,411 A | 5/1999 | Hato et al. | |
| D417,323 S * | 11/1999 | Fujita | D32/21 |
| 6,018,845 A | 2/2000 | Sueki et al. | |
| 6,032,327 A | 3/2000 | Oka et al. | |
| 6,079,077 A | 6/2000 | Kajihara et al. | |
| 6,079,079 A | 6/2000 | Oka | |
| D436,699 S | 1/2001 | Makihara et al. | |
| 6,189,180 B1 | 2/2001 | Hato et al. | |
| D443,738 S | 6/2001 | Makihara et al. | |
| 6,345,408 B1 | 2/2002 | Nagai et al. | |
| D455,530 S | 4/2002 | Fujii | |

(Continued)

Primary Examiner — Ruth McInroy
(74) *Attorney, Agent, or Firm* — Nixon & Vanderhye P.C.

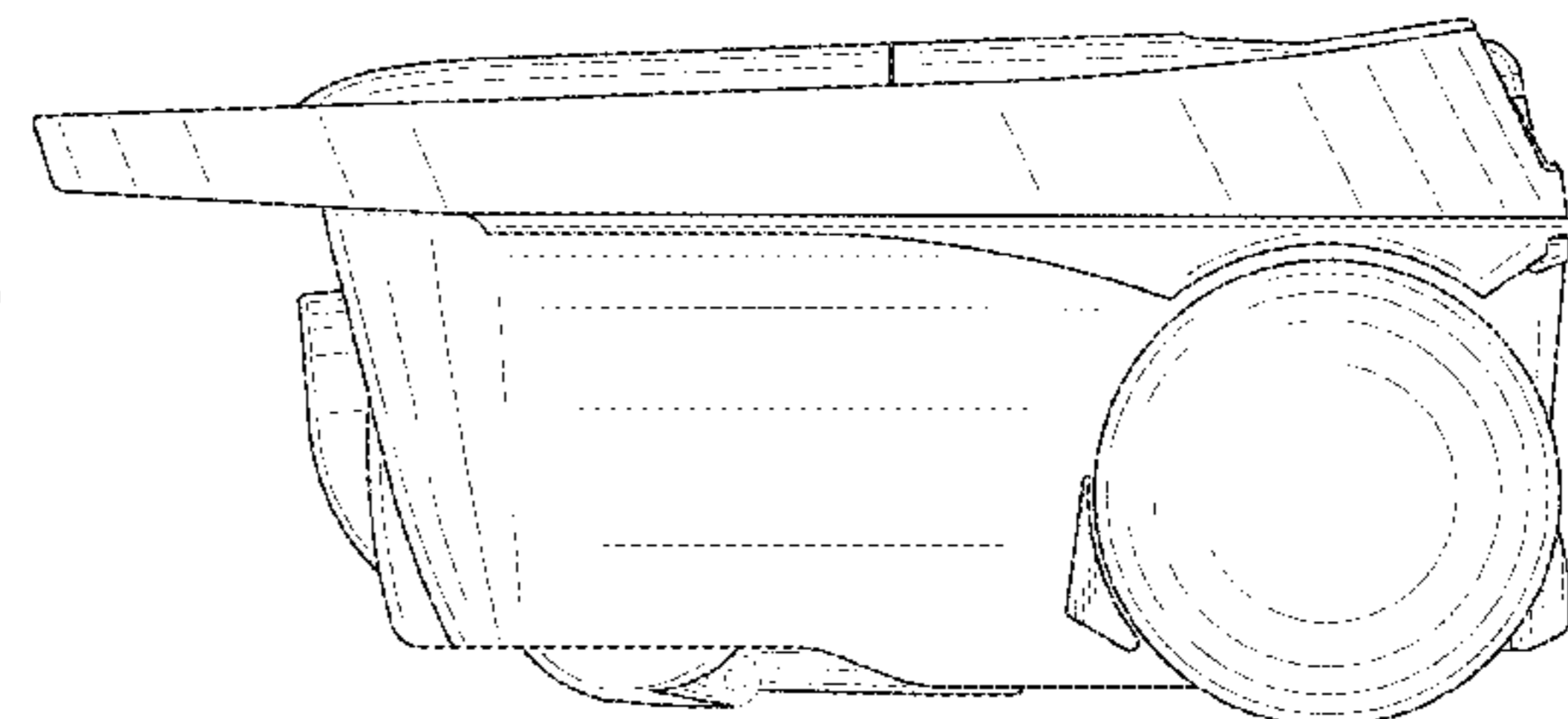
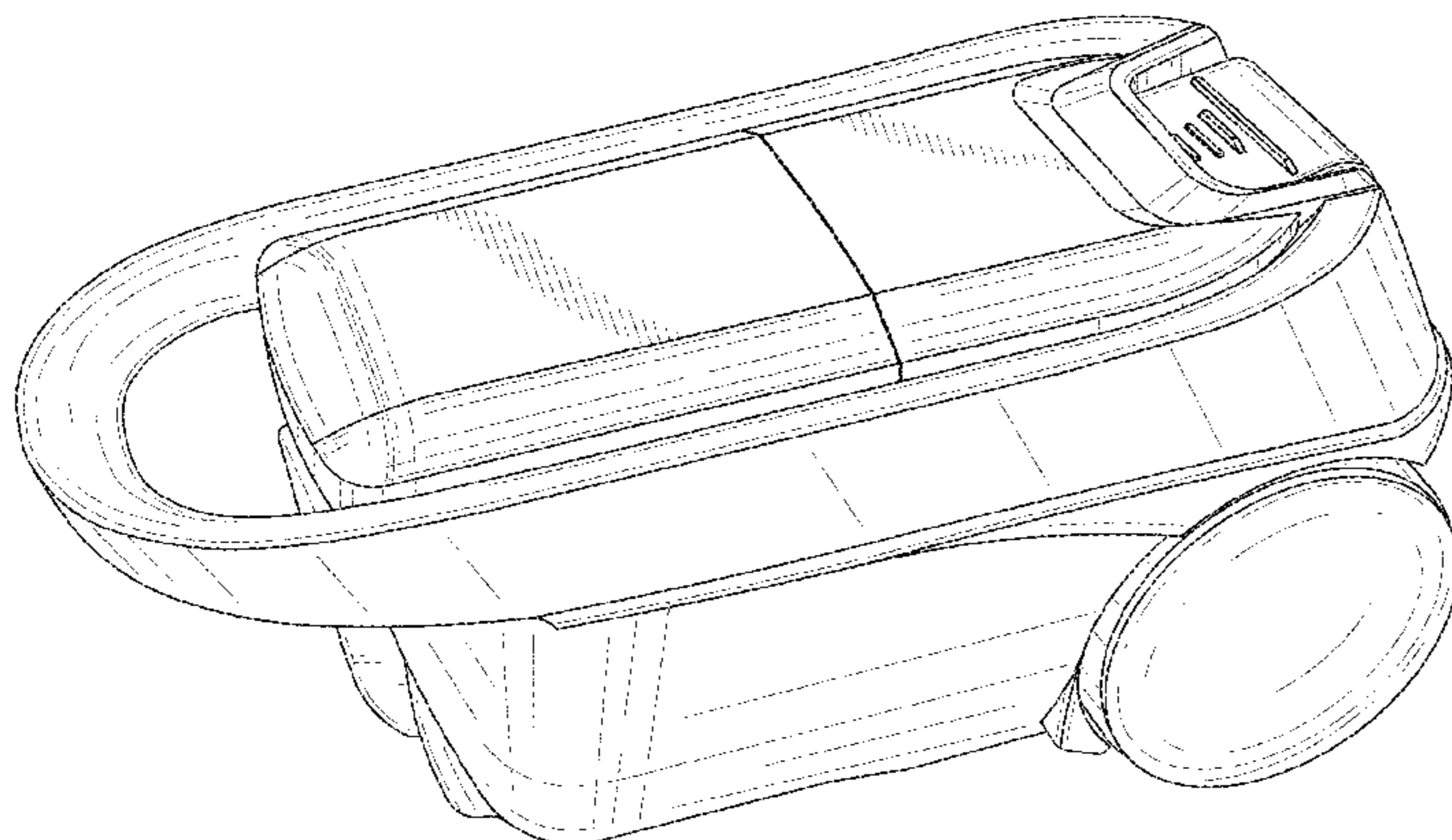
(57) **CLAIM**

The ornamental design for a vacuum cleaner, as shown and described.

DESCRIPTION

FIG. 1 is a front, right perspective view of a vacuum cleaner in accordance with our new design;
FIG. 2 is a rear, left perspective view thereof;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a back elevation view thereof;
FIG. 5 is a top plan view thereof;
FIG. 6 is a bottom plan view thereof;
FIG. 7 is a right side elevation view thereof; and,
FIG. 8 is a left side elevation view thereof.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | |
|-----------|-----|---------|------------------|--------|
| D460,843 | S | 7/2002 | Saimen et al. | |
| 6,553,613 | B2 | 4/2003 | Onishi et al. | |
| 6,625,845 | B2 | 9/2003 | Matsumoto et al. | |
| D480,847 | S | 10/2003 | Fujii | |
| D481,180 | S | 10/2003 | Fujii | |
| D488,598 | S * | 4/2004 | Wakasa | D32/21 |
| 6,742,220 | B2 | 6/2004 | Nagai et al. | |
| 6,766,558 | B1 | 7/2004 | Matsumoto et al. | |
| D498,886 | S | 11/2004 | Fujii | |
| 6,859,975 | B2 | 3/2005 | Ohta et al. | |
| D530,467 | S | 10/2006 | Tokunaga | |
| D530,469 | S * | 10/2006 | Ikeno | D32/21 |
| D532,943 | S | 11/2006 | Haranaka | |
| 7,320,151 | B2 | 1/2008 | Oka | |
| D597,713 | S * | 8/2009 | Brown | D32/21 |
| D600,415 | S * | 9/2009 | Svantesson | D32/21 |
| 7,591,043 | B2 | 9/2009 | Ninomiya et al. | |
| 7,611,553 | B2 | 11/2009 | Hato | |
| D617,964 | S * | 6/2010 | Ayers | D32/21 |
| D682,494 | S * | 5/2013 | Kim | D32/21 |
| 8,627,531 | B2 | 1/2014 | Ninomiya et al. | |
| 9,044,127 | B2 | 6/2015 | Yato | |
| 9,687,127 | B2 | 6/2017 | Oka | |
| D842,561 | S * | 3/2019 | Tokoi | D32/21 |

* cited by examiner

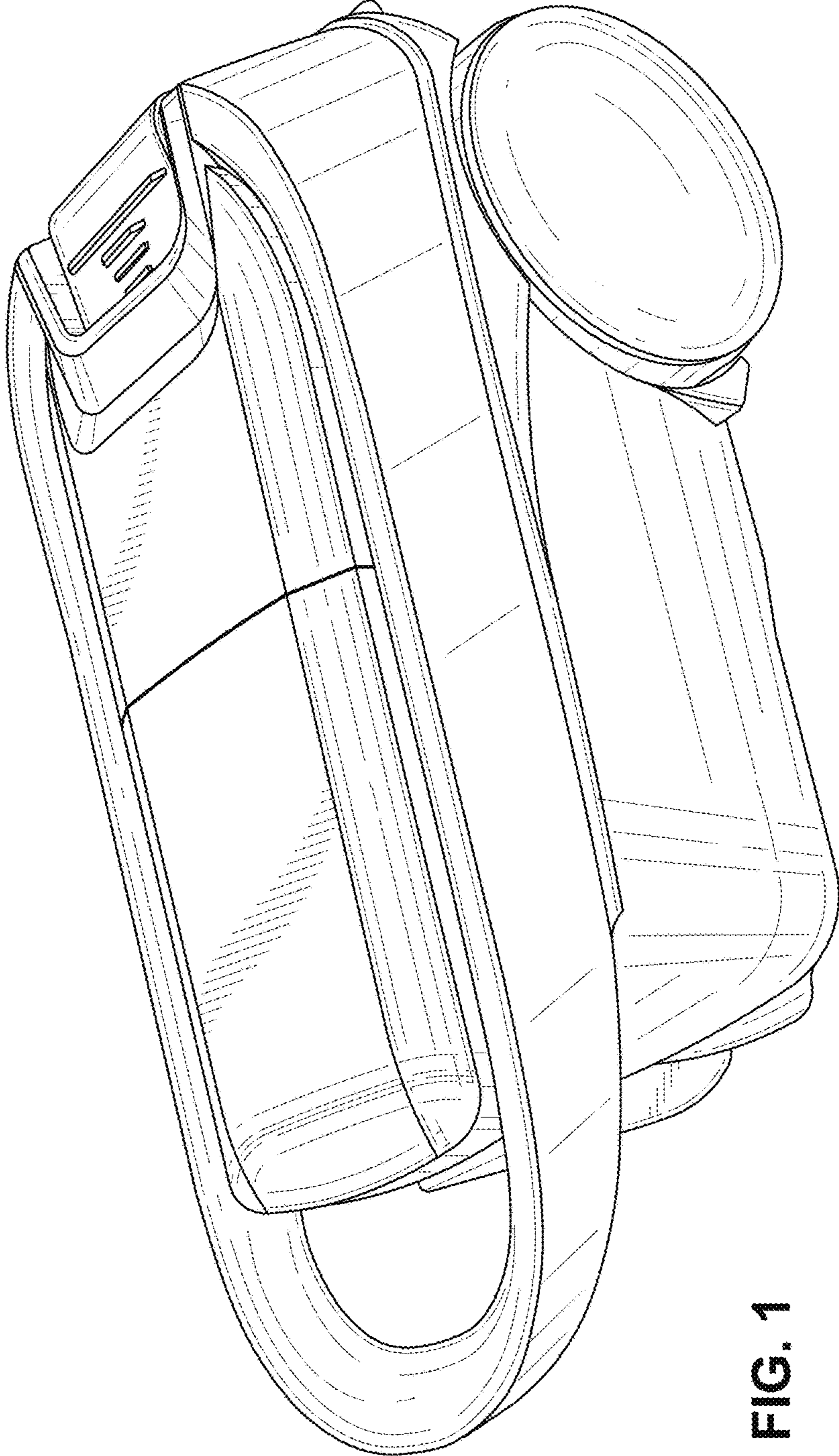


FIG. 1

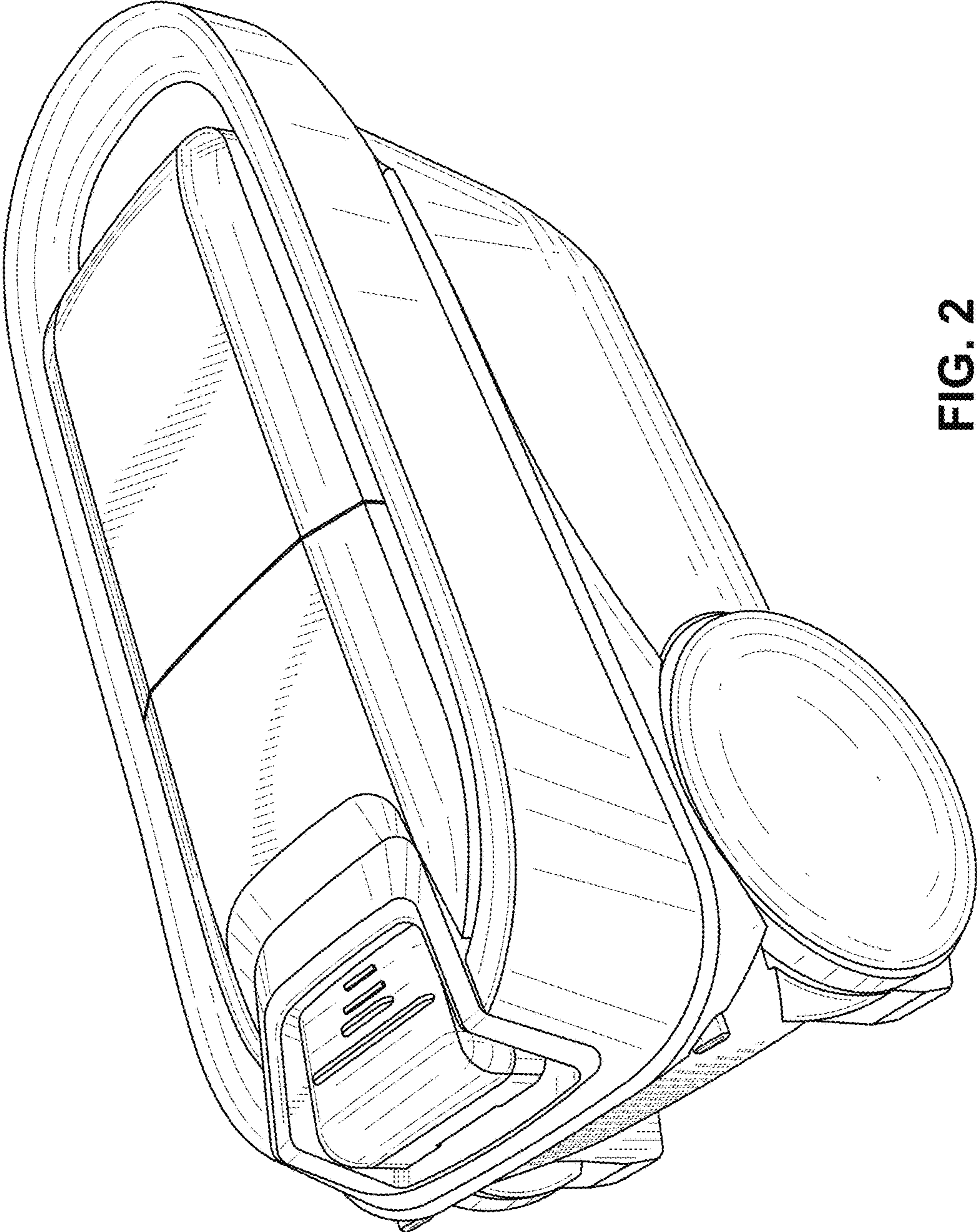


FIG. 2

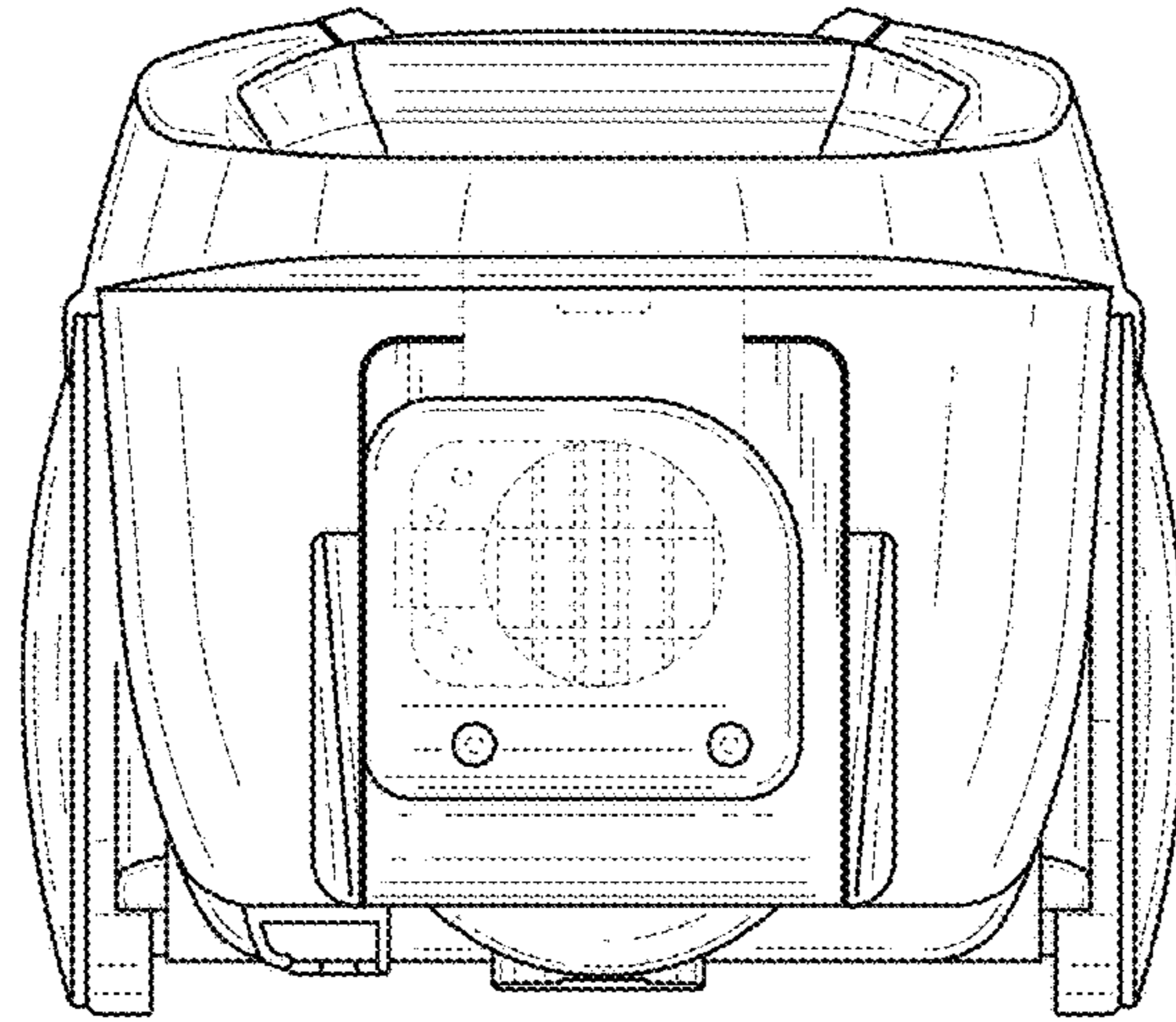


FIG. 3

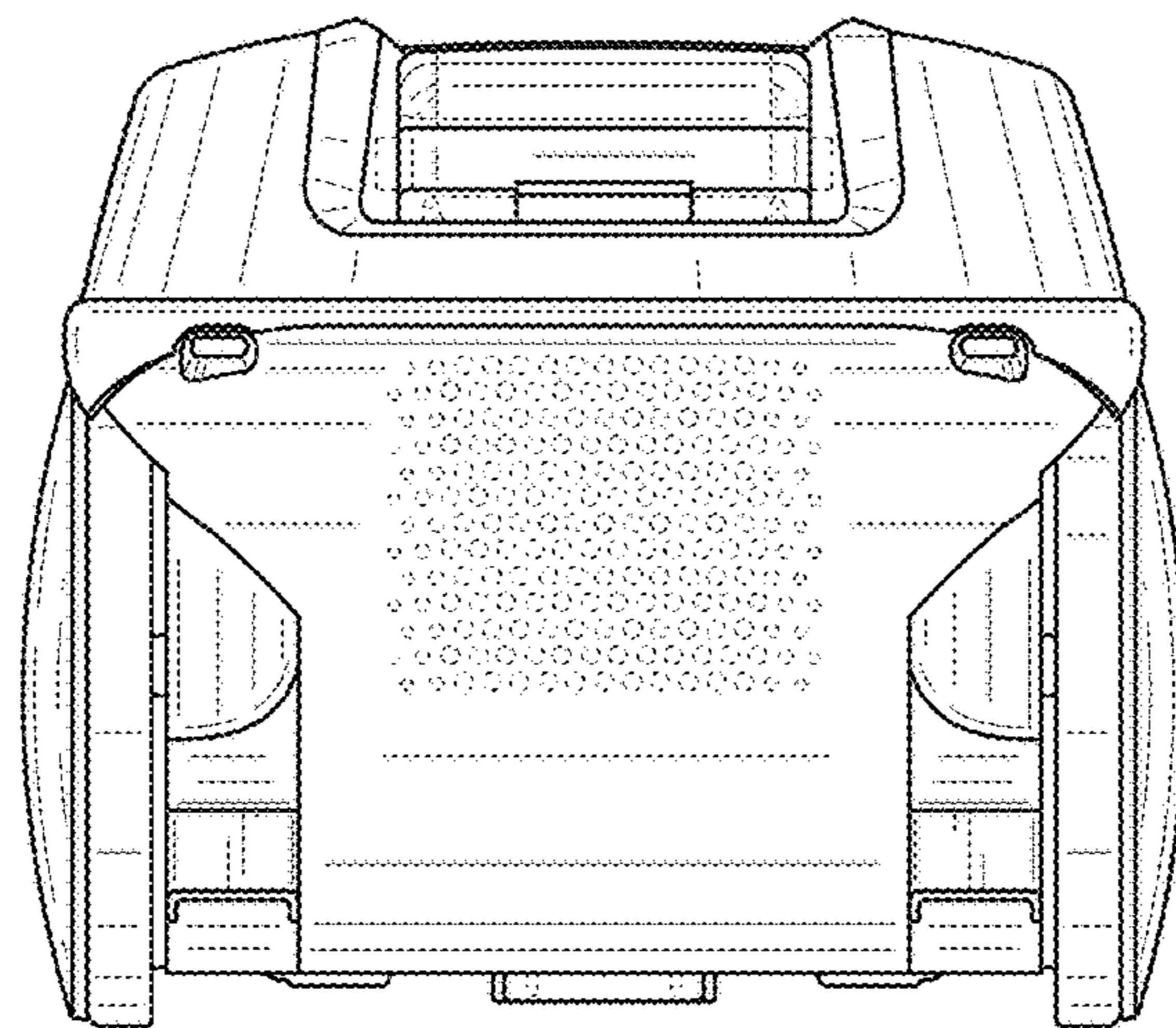


FIG. 4

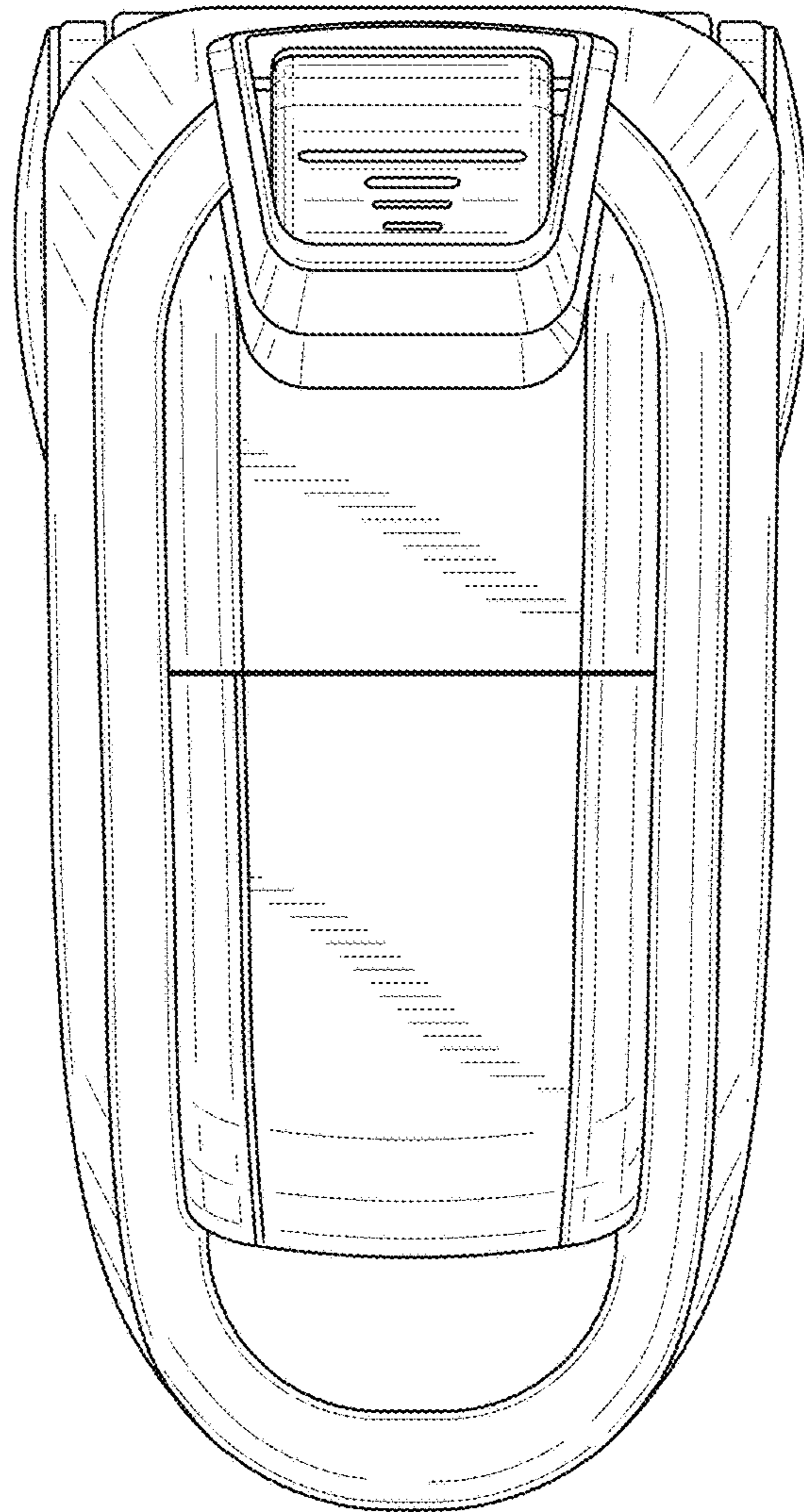


FIG. 5

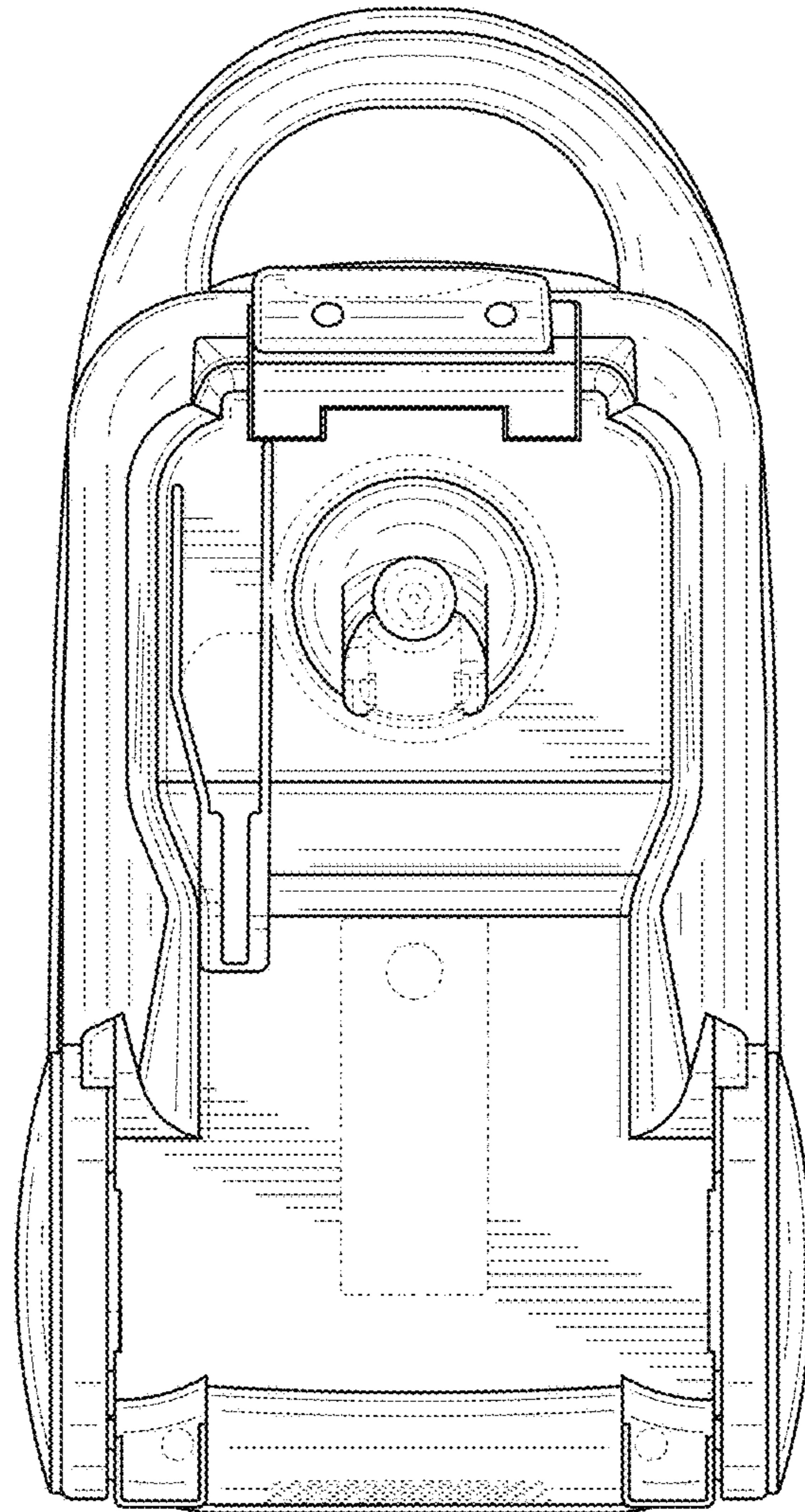


FIG. 6

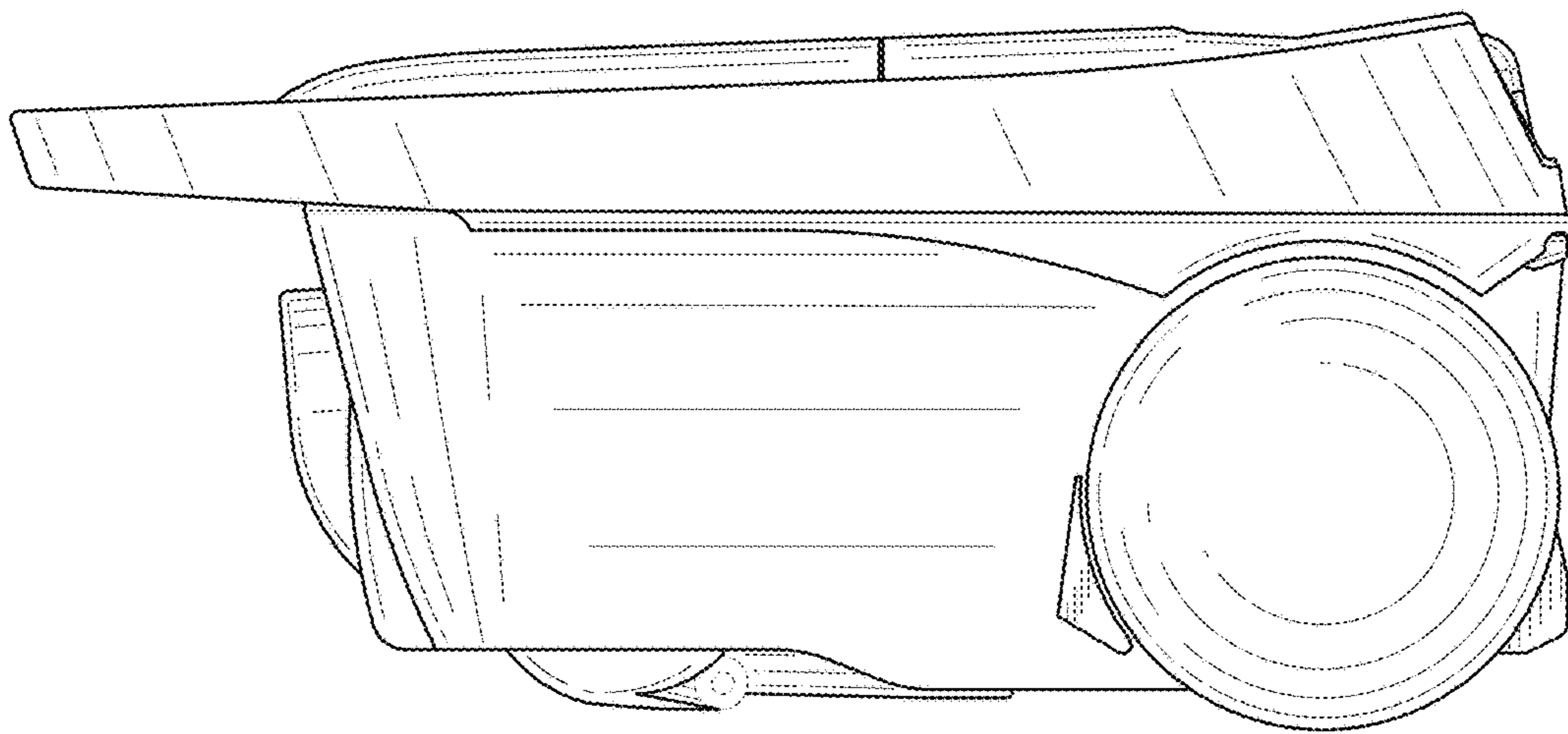


FIG. 7

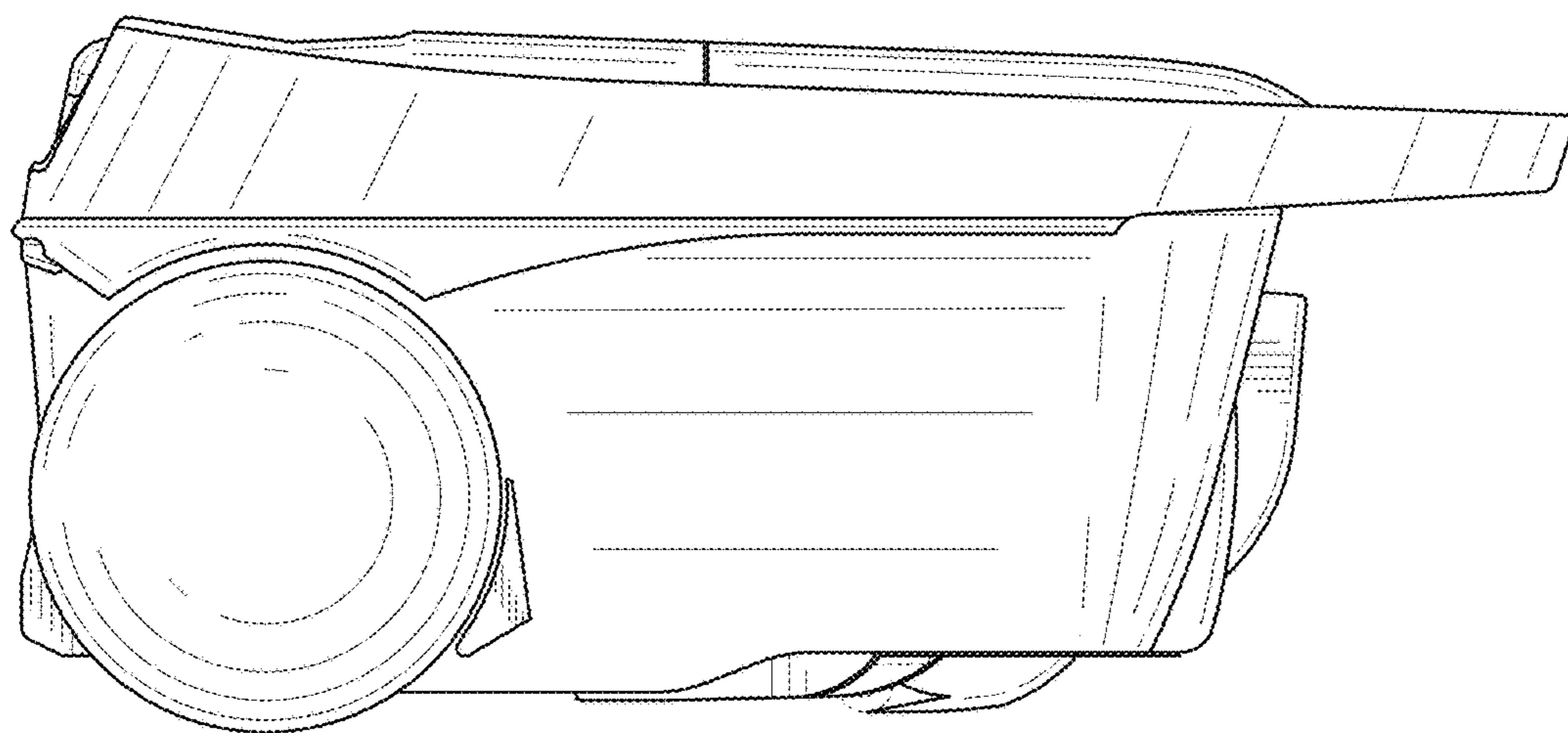


FIG. 8