



US00D891014S

(12) **United States Design Patent**
Chu

(10) **Patent No.:** **US D891,014 S**

(45) **Date of Patent:** **** Jul. 21, 2020**

(54) **VACUUM CLEANER**

(71) Applicant: **Suzhou Sheng Jiajie Intelligent Technology Co., Ltd.**, Suzhou, Jiangsu (CN)

(72) Inventor: **Haisheng Chu**, Jiangsu (CN)

(73) Assignee: **Suzhou Sheng Jiajie Intelligent Technology Co., Ltd.**, Suzhou (CN)

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

(21) Appl. No.: **29/701,367**

(22) Filed: **Aug. 12, 2019**

(30) **Foreign Application Priority Data**

Jul. 25, 2019 (CN) 2019 3 0399187

(51) **LOC (12) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/18**

(58) **Field of Classification Search**
USPC D32/31-33, 25, 17-18, 21; D6/553, 569, D6/570; 15/323
CPC . A47L 9/00; A47L 9/02; A47L 9/0018; A47L 9/0027; A47L 9/0036; A47L 9/0045; A47L 9/0009; A47L 9/0054; A47L 7/0057
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D272,572 S * 2/1984 Parise D32/31
D294,755 S * 3/1988 Lackner D32/31
D295,334 S * 4/1988 Fonville D32/31
D295,910 S * 5/1988 Hill D32/31
D308,267 S * 5/1990 Bradd D13/108
5,029,359 A * 7/1991 Ortega A47L 7/04
15/246.3

D334,260 S * 3/1993 Kieft D32/31
D354,380 S * 1/1995 Stephens D32/31
5,528,794 A * 6/1996 Tomasiak A47L 9/0009
15/323
D391,703 S * 3/1998 Miller D32/22
5,943,731 A * 8/1999 Wood A47L 9/0018
15/323
D422,764 S * 4/2000 Wood D32/31
6,058,558 A * 5/2000 Kim A47L 9/0045
15/323
6,070,288 A * 6/2000 Luyckx A47L 9/0009
15/323
D434,886 S * 12/2000 Wareham D32/31
D435,152 S * 12/2000 Stephens D32/31
(Continued)

FOREIGN PATENT DOCUMENTS

CN 302612544 S 10/2012

Primary Examiner — Michael A. Pratt

(74) *Attorney, Agent, or Firm* — Wayne & Ken, LLC; Tony Hom

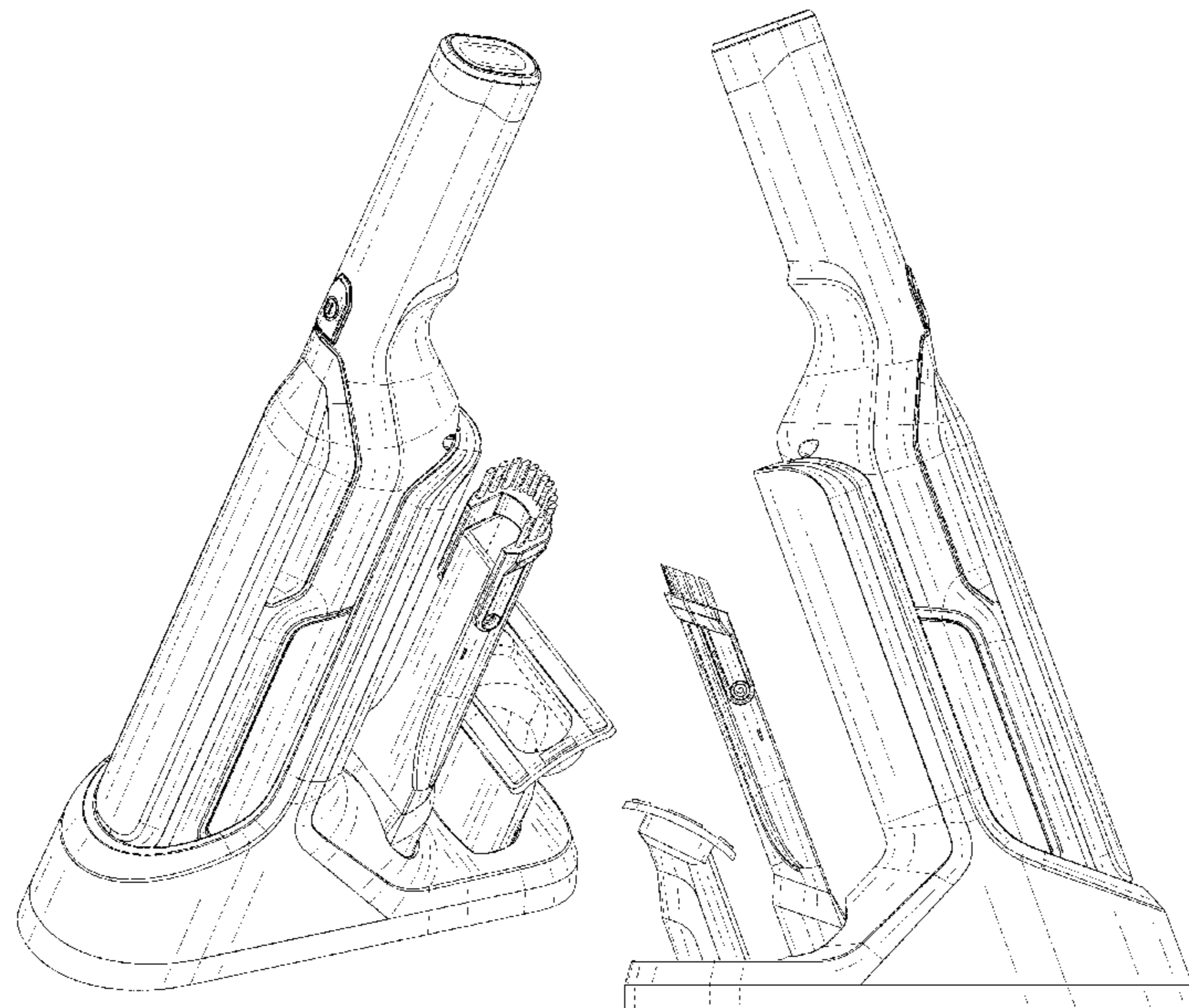
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a perspective view of a vacuum cleaner showing my new design;
FIG. 2 is another perspective view thereof;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a back elevation view thereof;
FIG. 5 is a left side view thereof;
FIG. 6 is a right side view thereof;
FIG. 7 is a top plan view thereof; and,
FIG. 8 is a bottom plan view thereof.
The broken lines in the drawing depict environmental subject matter only and form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

6,345,407 B1 * 2/2002 Jupp A47L 9/0009
15/323
D463,079 S * 9/2002 Leyden D32/31
D469,226 S * 1/2003 Stephens
D469,228 S * 1/2003 Wareham D32/31
D481,180 S 10/2003 Fujii
D537,585 S 2/2007 Kim
7,284,297 B2 * 10/2007 Shanor A47L 9/0018
15/246.2
D568,009 S * 4/2008 Lam D32/21
D623,367 S * 9/2010 Gottschall D32/31
D629,577 S 12/2010 Bassett et al.
D647,261 S * 10/2011 Schultz D32/18
D651,373 S * 12/2011 Fan D32/18
D655,872 S * 3/2012 Jin D32/21
D672,102 S * 12/2012 Schouten D32/18
D713,109 S * 9/2014 Seasholtz D32/31
D762,335 S * 7/2016 Fry D32/31

* cited by examiner

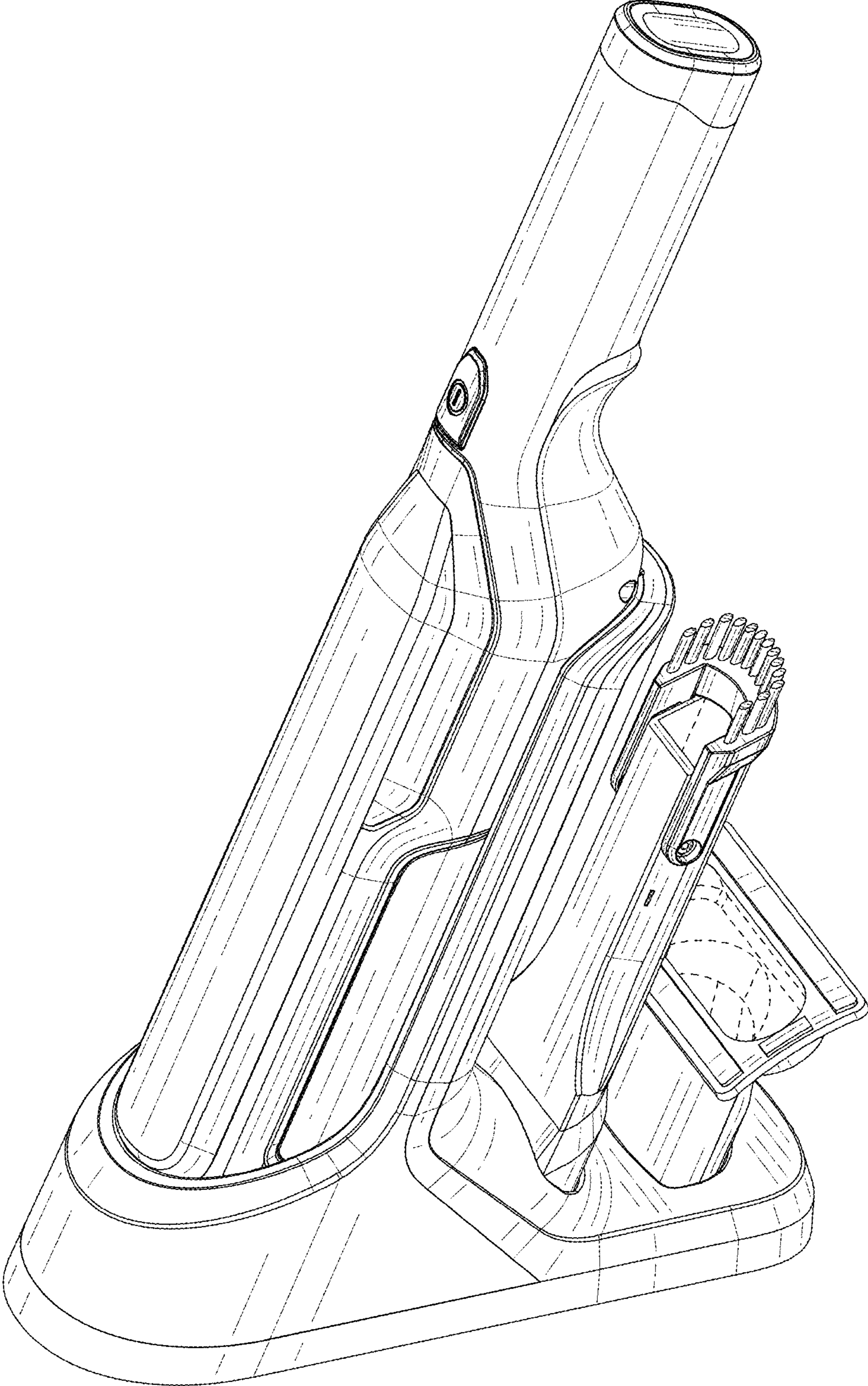


FIG. 1

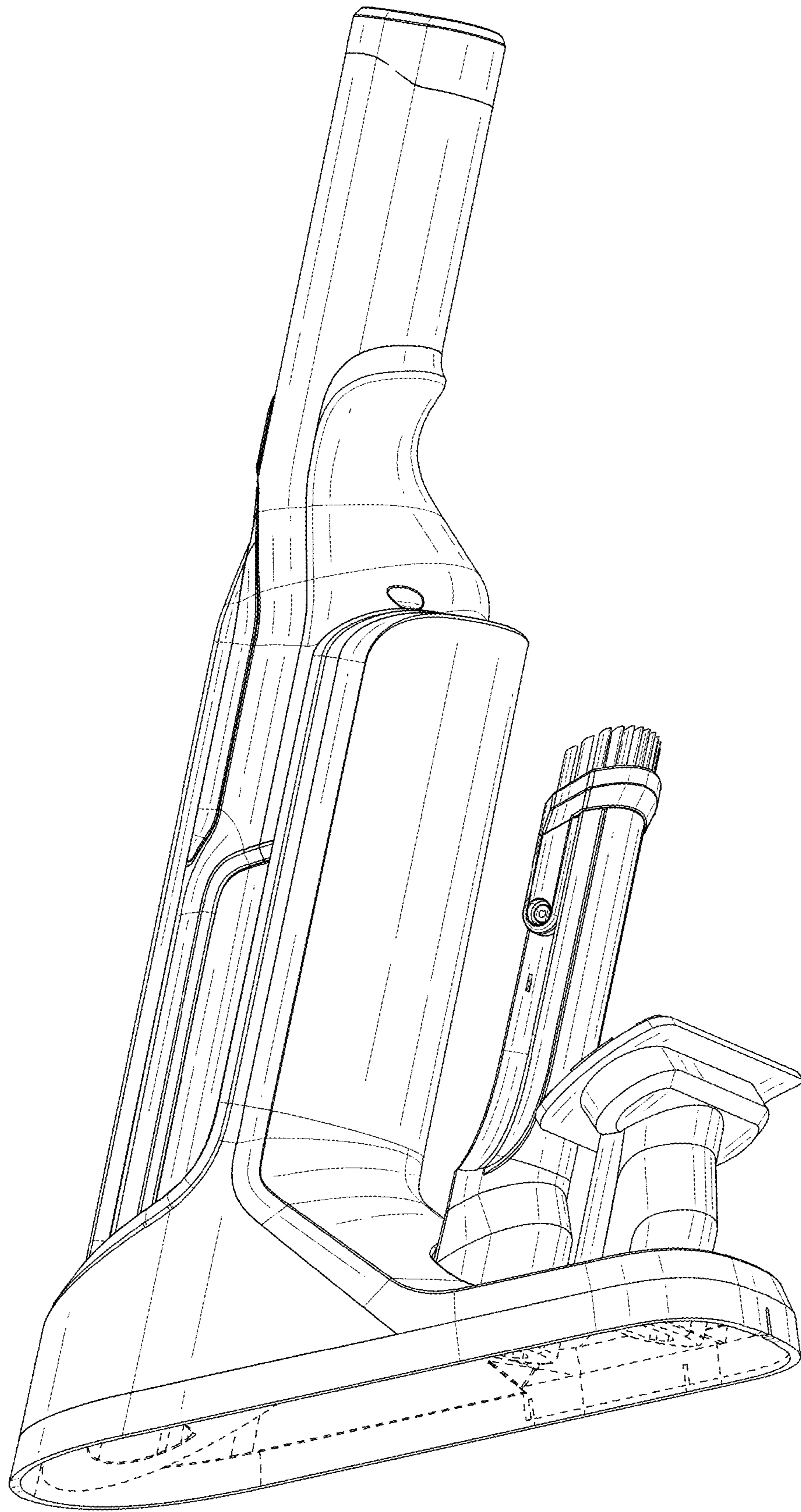


FIG. 2

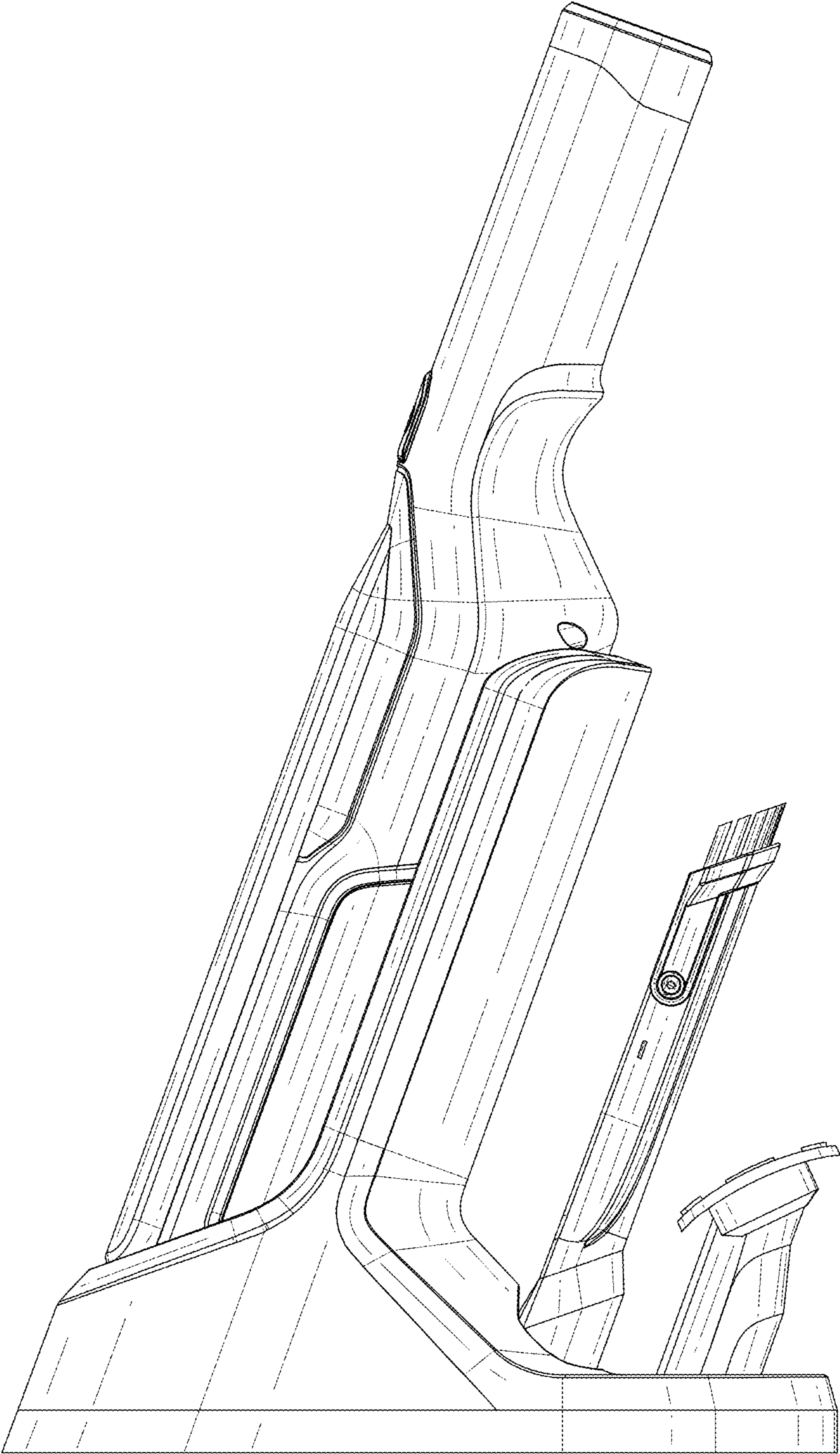


FIG. 3

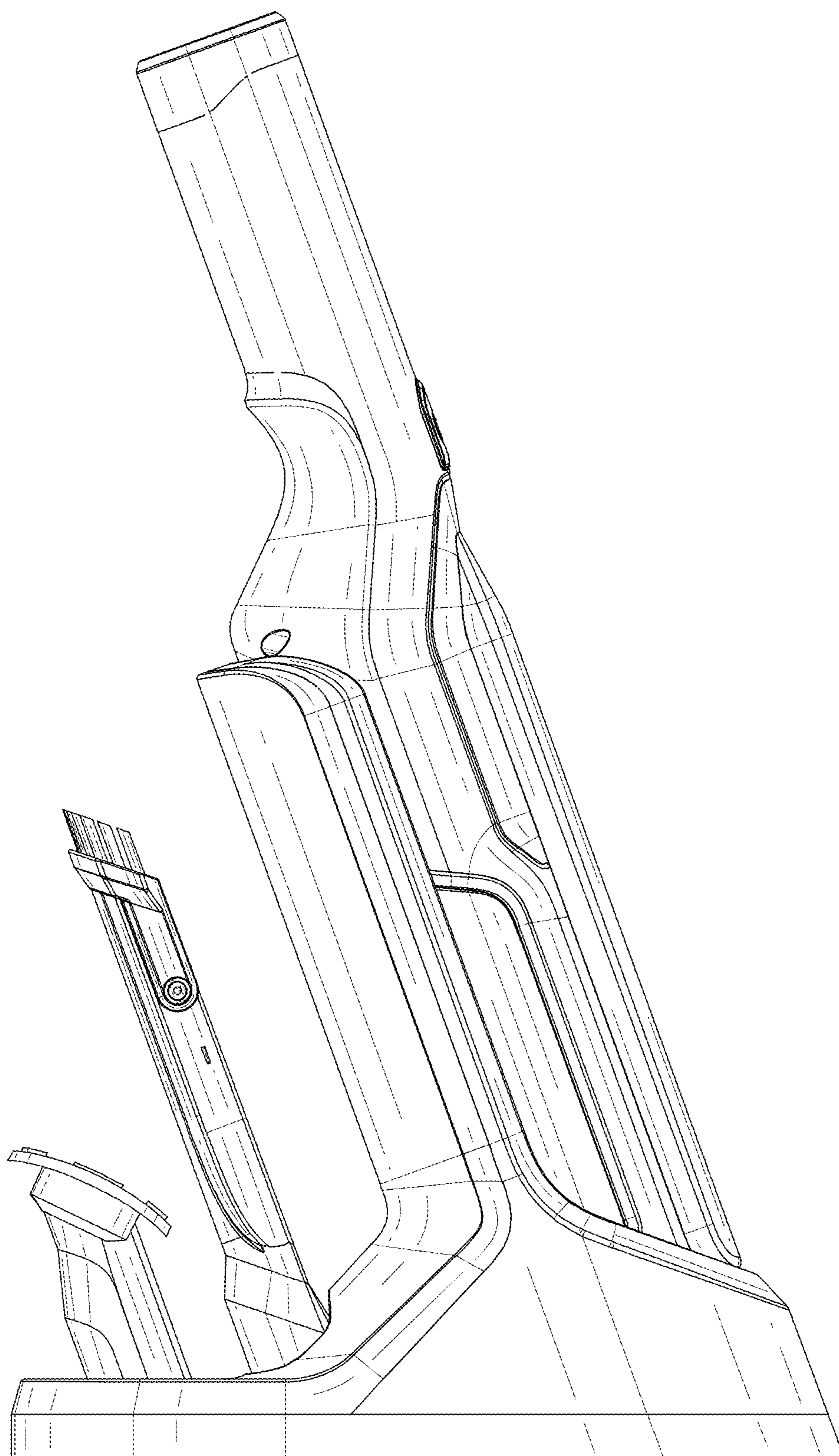


FIG. 4

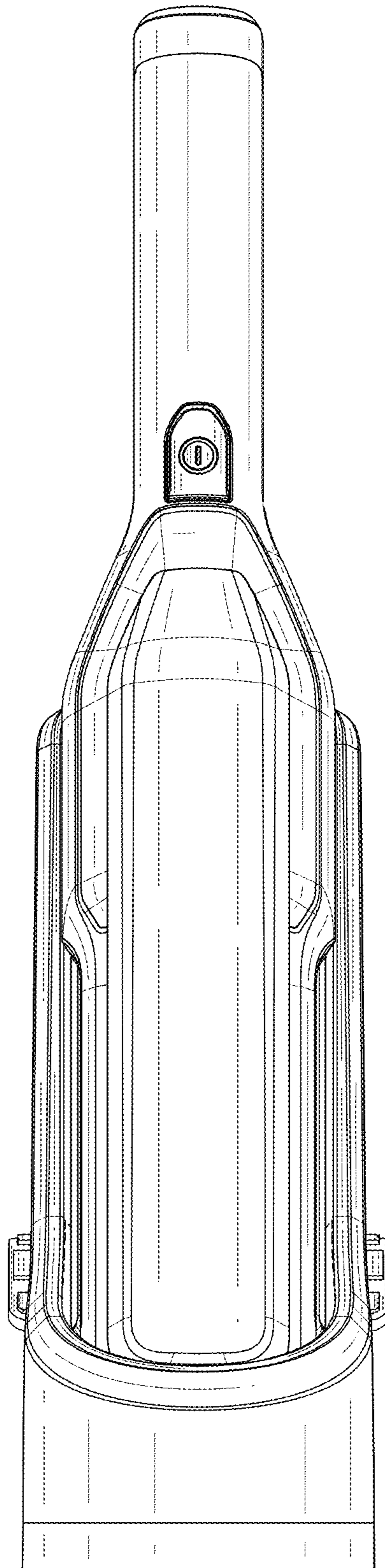


FIG. 5

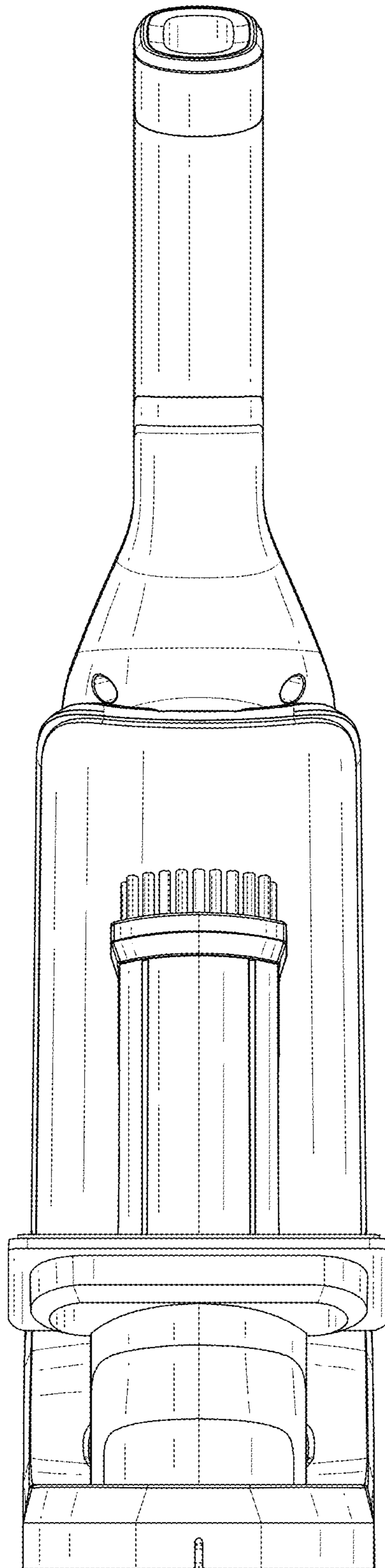


FIG. 6

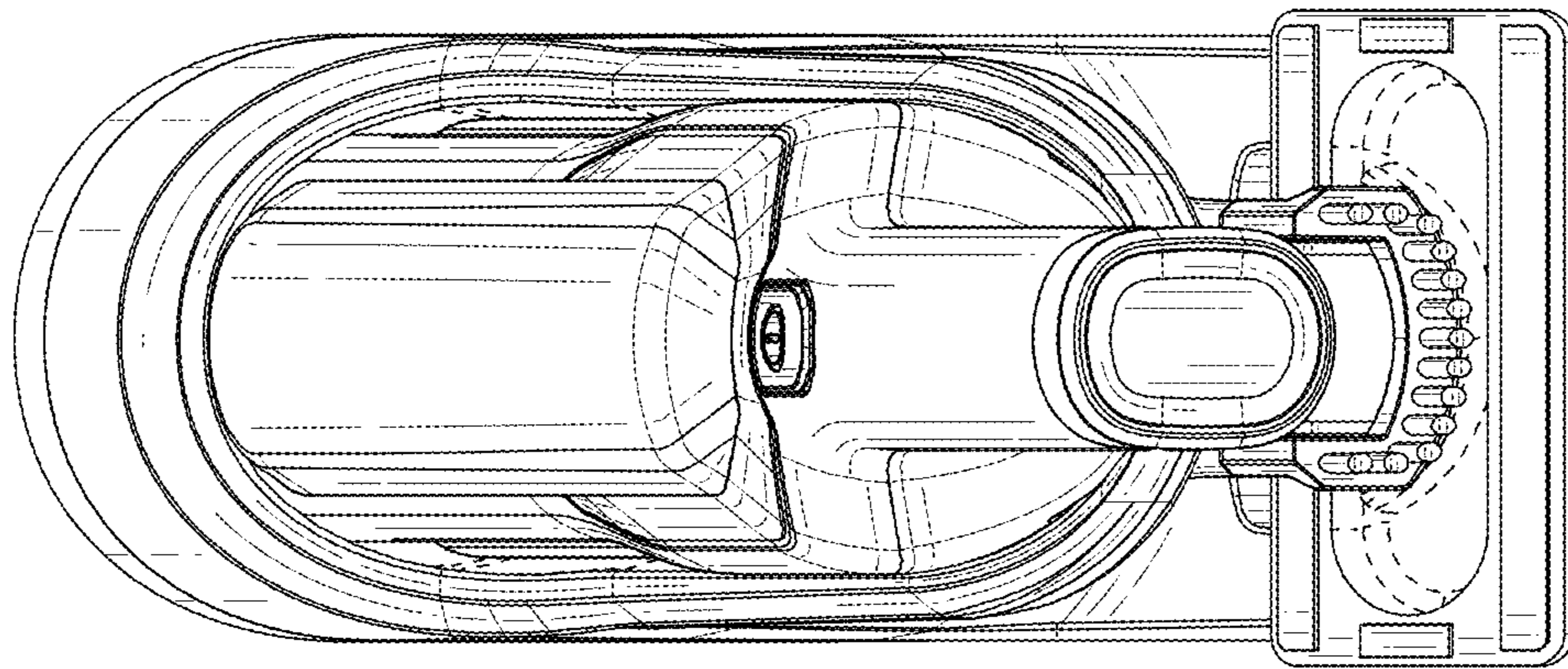


FIG. 7

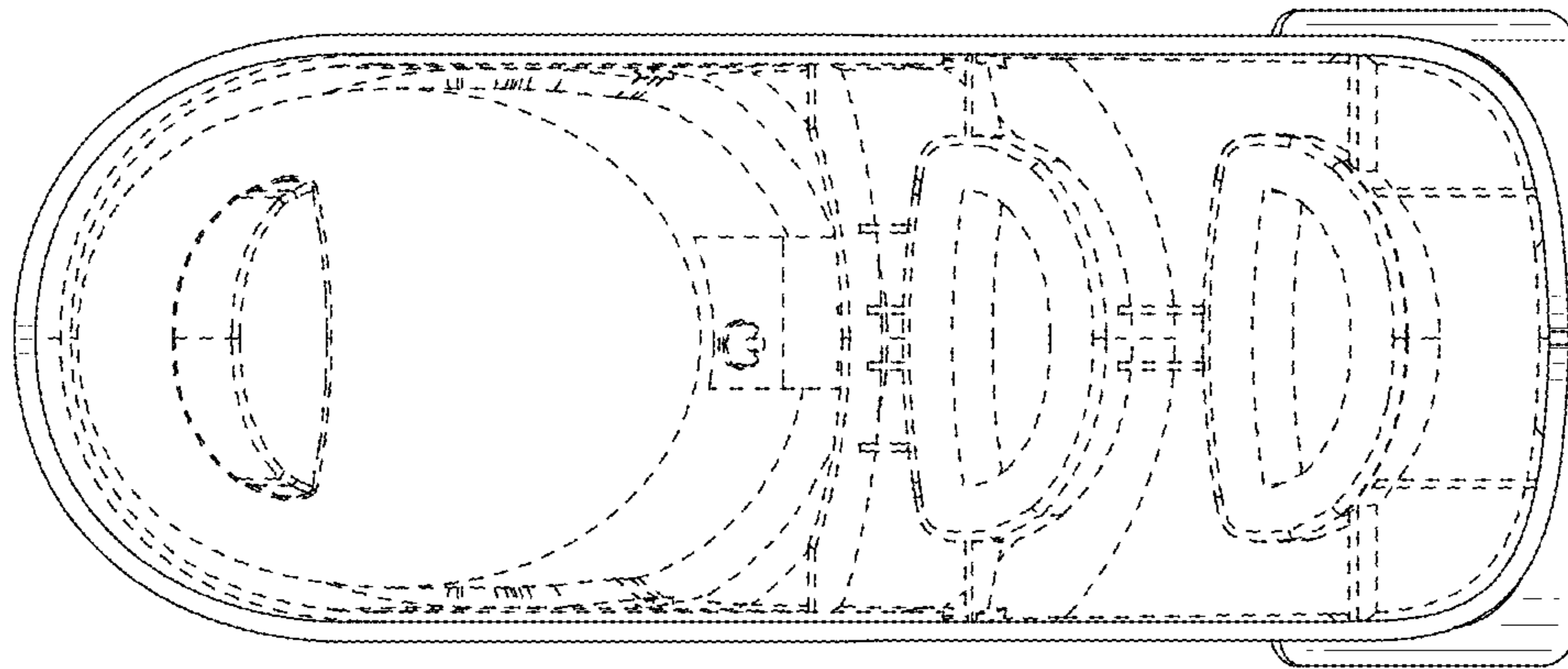


FIG. 8