



US00D924708S

(12) **United States Design Patent** (10) **Patent No.:** **US D924,708 S**  
**Sherman et al.** (45) **Date of Patent:** **\*\* Jul. 13, 2021**

(54) **AIR CONDITIONING REFRIGERANT CHARGING DEVICE WITH DIGITAL GAUGE**

D511,307 S \* 11/2005 Cowan ..... D10/85  
8,181,665 B2 \* 5/2012 Pearl, II ..... F25B 45/00  
137/240  
8,301,403 B2 \* 10/2012 Weick ..... F25B 45/00  
702/50

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D747,988 S 1/2016 Matsumiya et al.  
D790,379 S 6/2017 Matsumiya et al.  
D813,698 S 3/2018 Zhu  
D817,794 S 5/2018 Manning et al.  
D843,330 S 3/2019 Oe  
D845,799 S 4/2019 Wurts et al.

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**OTHER PUBLICATIONS**

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

\* cited by examiner

(21) Appl. No.: **29/690,674**

*Primary Examiner* — Antoine Duval Davis

(22) Filed: **May 9, 2019**

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(51) **LOC (13) Cl.** ..... **10-04**

(52) **U.S. Cl.**  
USPC ..... **D10/84**

(57) **CLAIM**

The ornamental design for an air conditioning refrigerant charging device with digital gauge, as shown and described.

(58) **Field of Classification Search**  
USPC ..... D10/83, 84, 85  
CPC ..... F25B 45/00; F25B 2345/001; F25B 2345/002; F25B 2345/006; F25B 2700/04; F25B 2700/19; Y10S 62/22  
See application file for complete search history.

**DESCRIPTION**

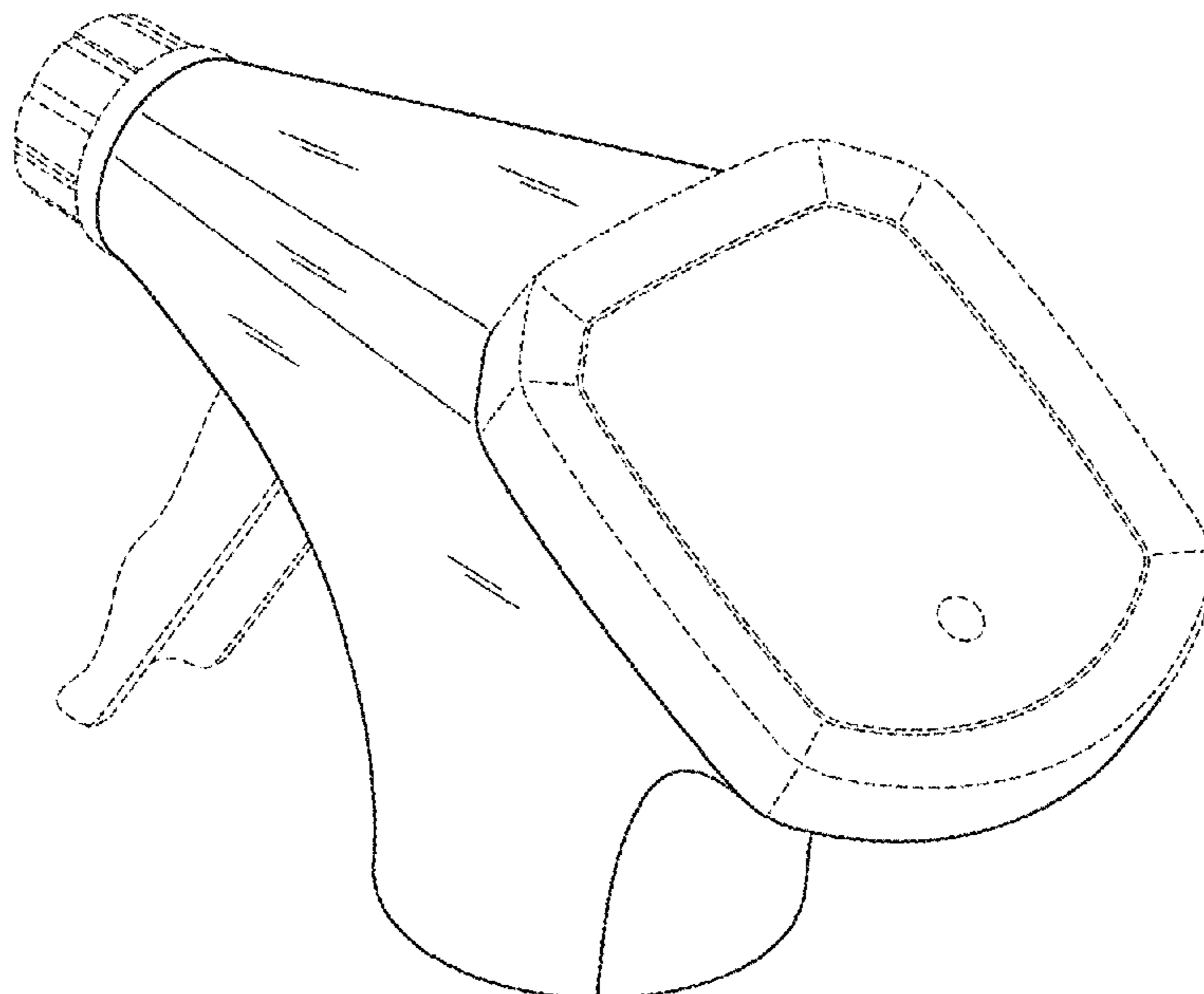
FIG. 1 is a front perspective view of an air conditioning refrigerant charging device with digital gauge in accordance with the claimed design;  
FIG. 2 is a left side elevation view thereof;  
FIG. 3 is a right side elevation view thereof;  
FIG. 4 is a top view thereof;  
FIG. 5 is a bottom view thereof;  
FIG. 6 is a rear elevation view thereof; and,  
FIG. 7 is a front elevation view thereof.  
The broken lines in the FIGURES represent unclaimed subject matter and form no part of the claimed design.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D263,125 S \* 2/1982 Taylor ..... D10/85  
D467,941 S 12/2002 Duncan  
D467,942 S 12/2002 Duncan  
6,539,988 B1 \* 4/2003 Cowan ..... B60H 1/00585  
137/614.04  
D506,154 S 6/2005 Cowan et al.

**1 Claim, 7 Drawing Sheets**



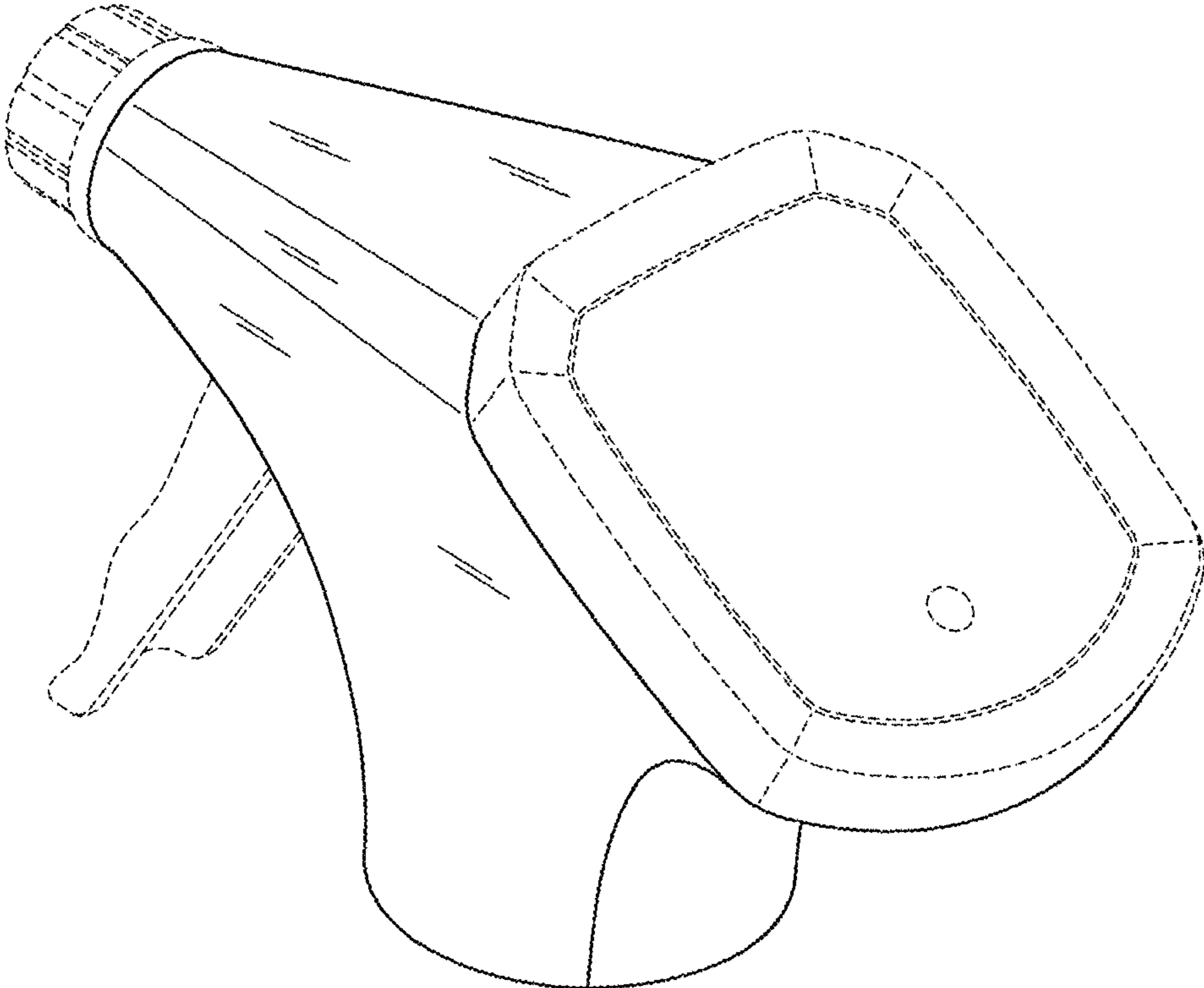


FIG. 1

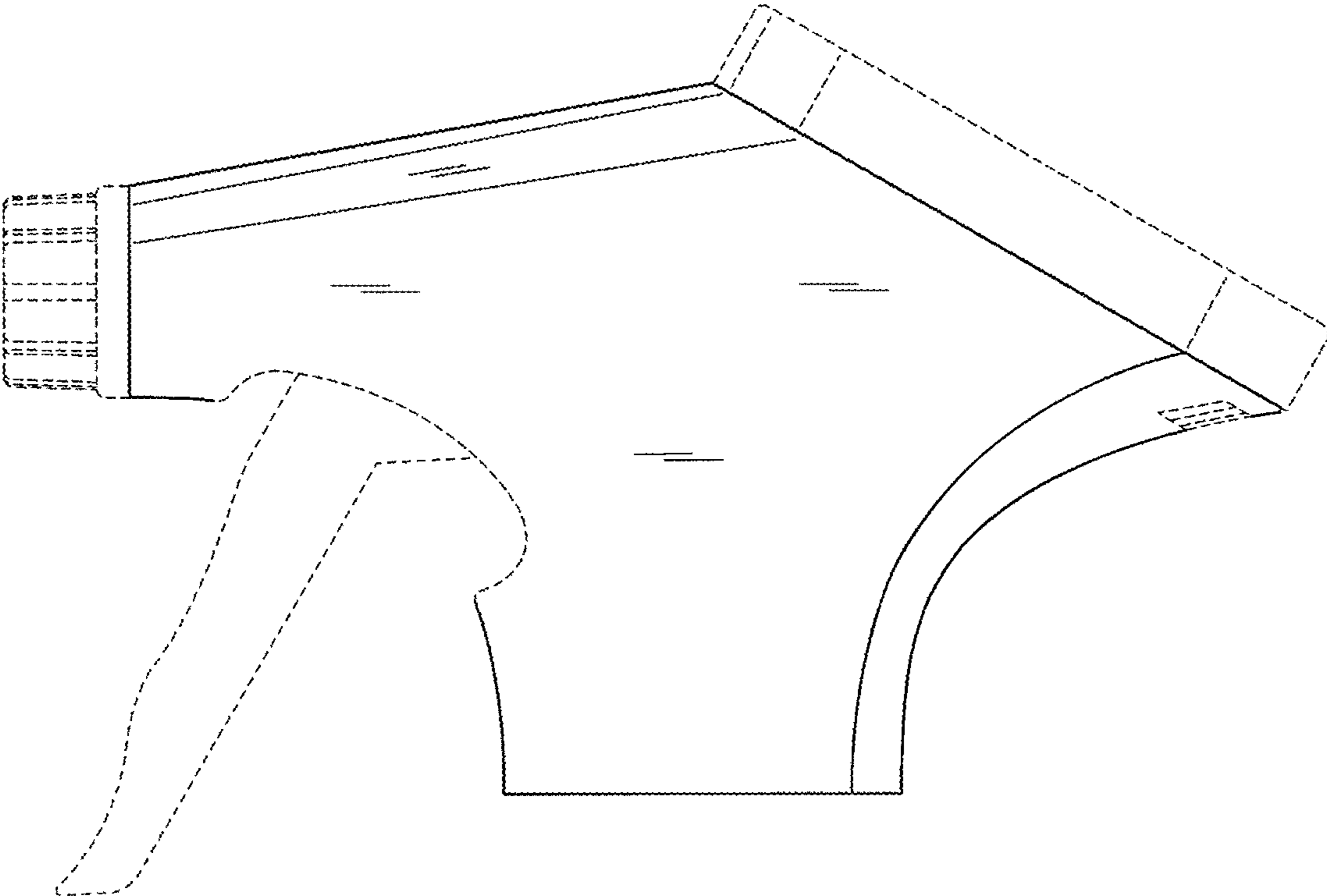


FIG. 2

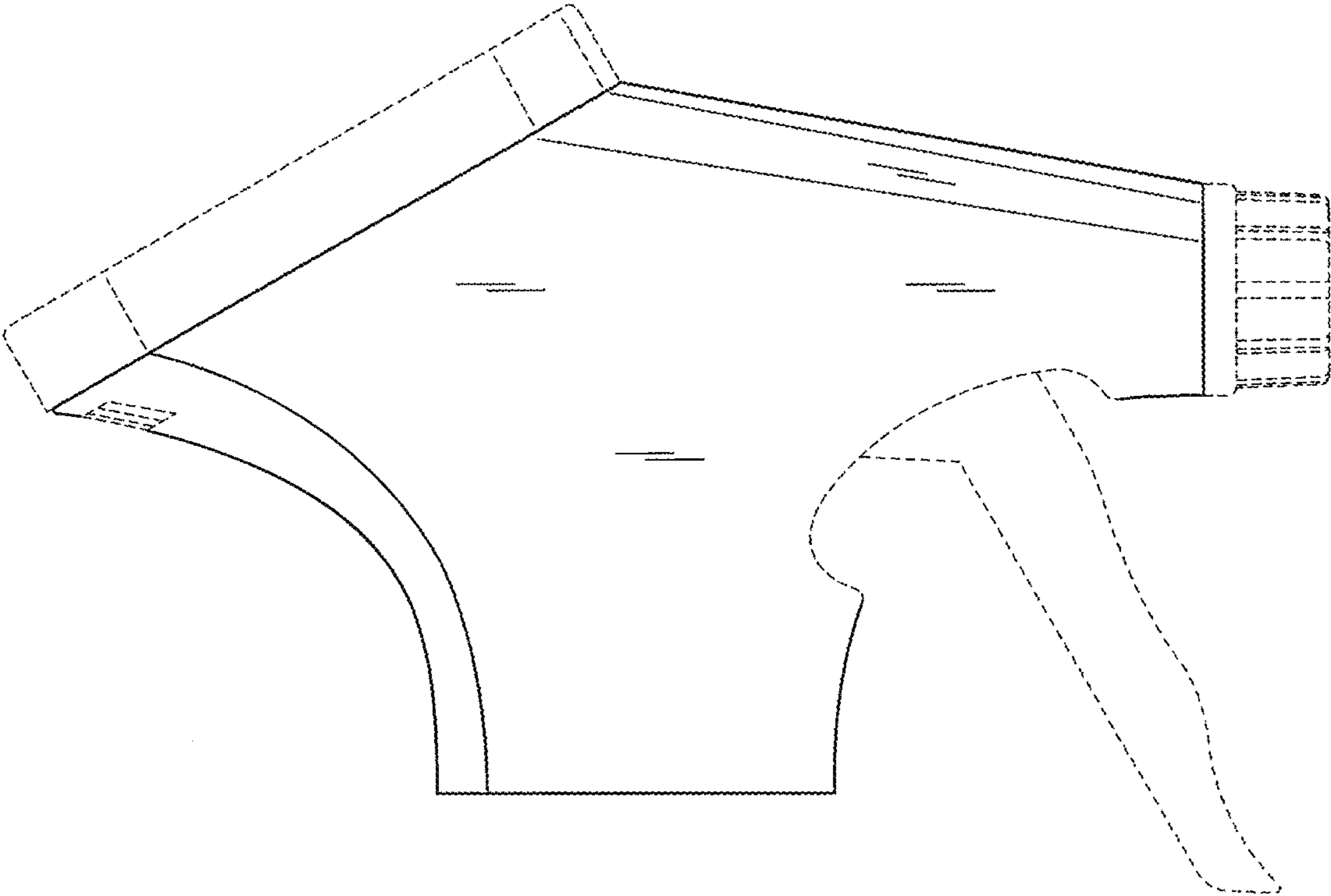


FIG. 3

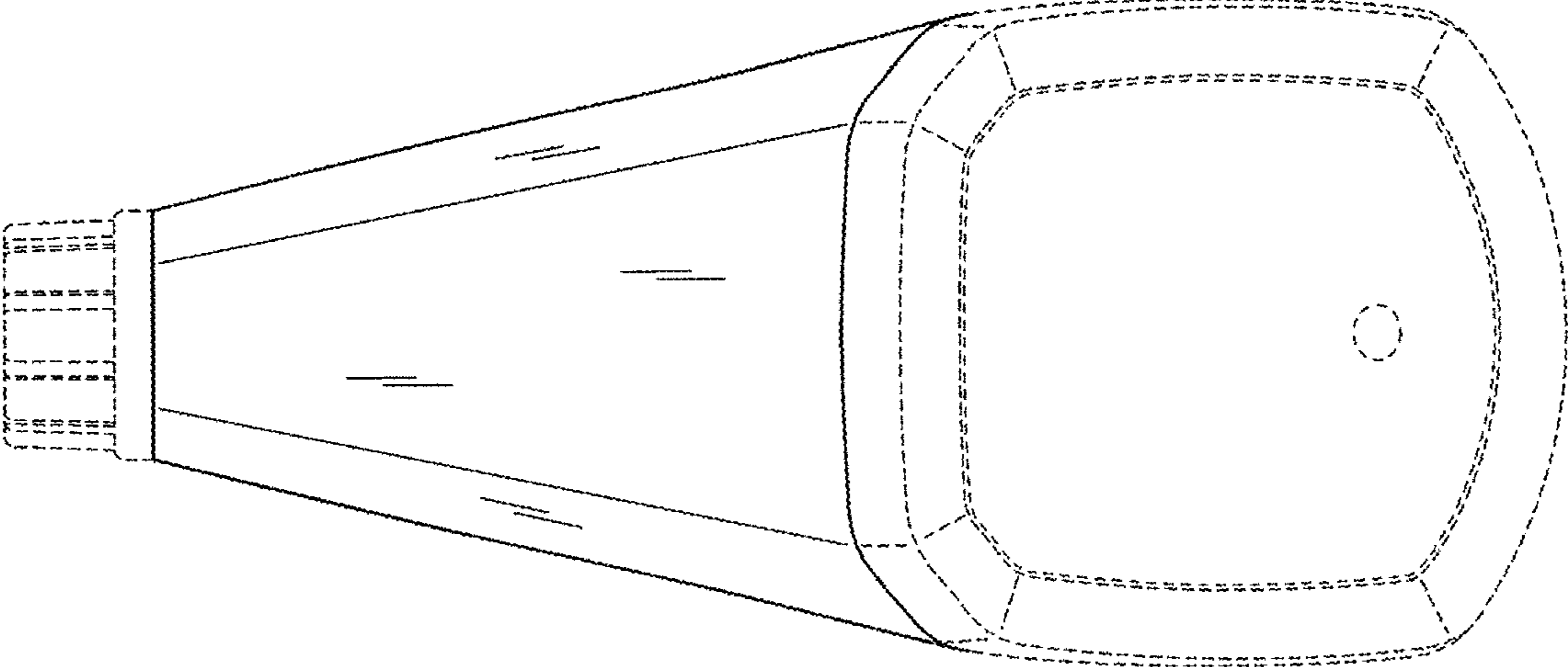


FIG. 4

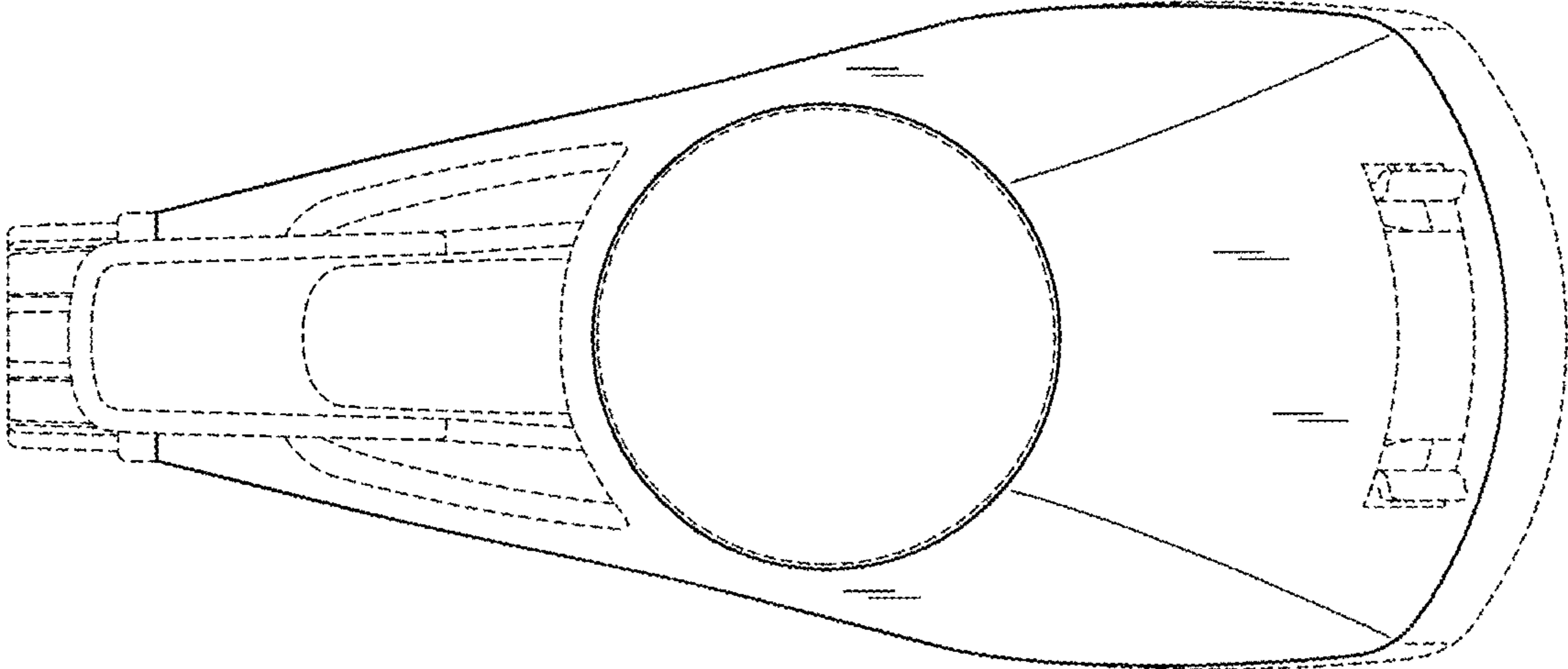


FIG. 5

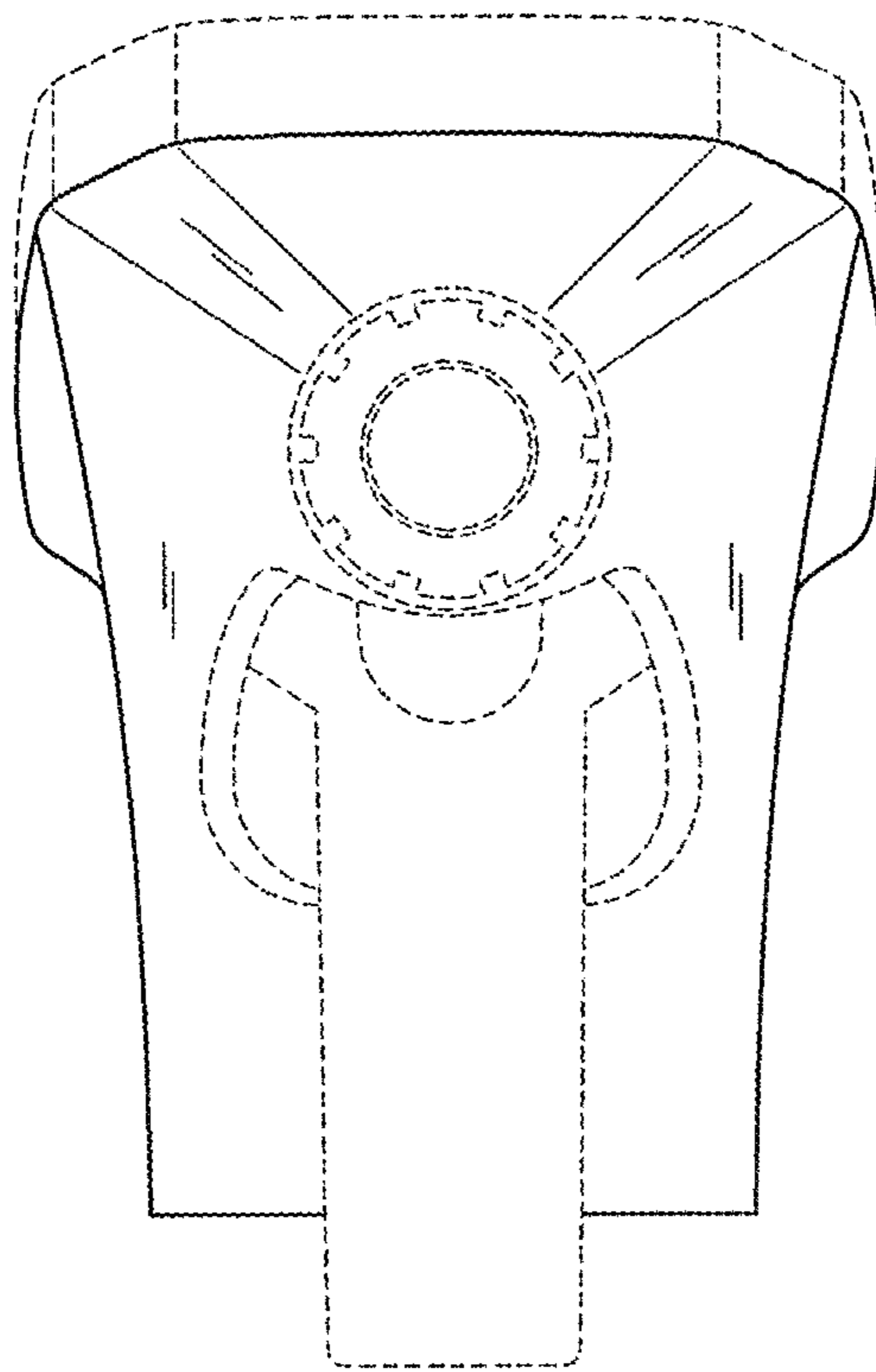


FIG. 6

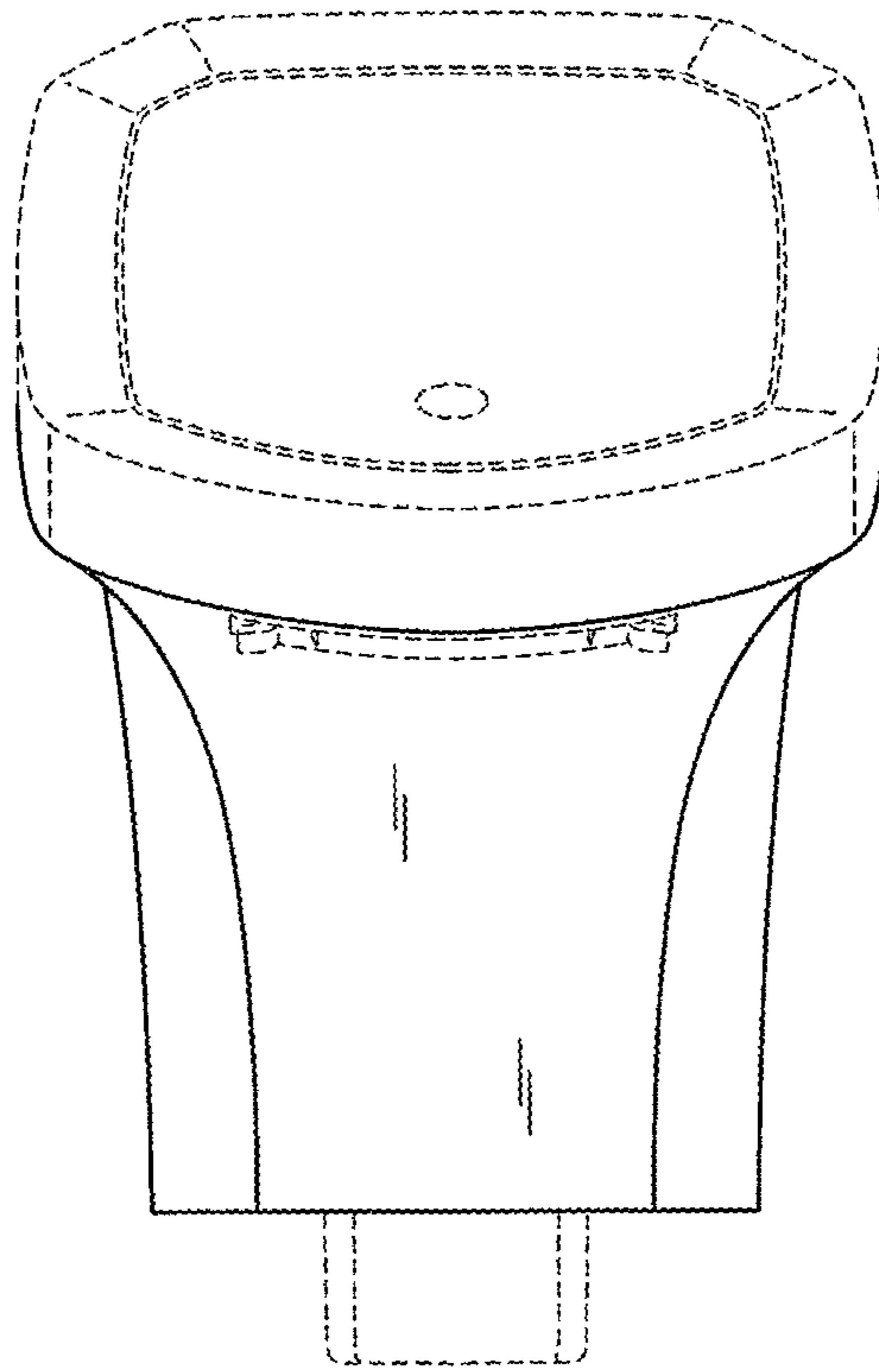


FIG. 7