



US00D688781S

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

(10) **Patent No.:** **US D688,781 S**

(45) **Date of Patent:** **\*\* Aug. 27, 2013**

(54) **IONIZER**

(75) Inventors: **John Zenon Galasgas Vallinan**,  
Singapore (SG); **Siarhei V. Savich**,  
Singapore (SG); **Qin Fei Chen**,  
Singapore (SG); **Chee Ming Ng**,  
Singapore (SG); **Kam Poi Chia**,  
Singapore (SG); **Francisco J.**  
**Rodriguez**, Austin, TX (US); **Lee A.**  
**Fain**, St. Paul, MN (US); **Matthew J.**  
**Storey**, Trophy Club, TX (US); **Yoshiaki**  
**Sato**, Kanagawa (JP)

(73) Assignee: **3M Innovative Properties Company**,  
St. Paul, MN (US)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/417,051**

(22) Filed: **Mar. 29, 2012**

(51) **LOC (9) Cl.** ..... **23-04**

(52) **U.S. Cl.**  
USPC ..... **D23/355**

(58) **Field of Classification Search**  
USPC ..... D23/355, 381–383, 364, 370, 371,  
D23/385–387, 393, 399, 411, 328;  
454/237–253, 186, 228–236; 52/302.1;  
417/423.1, 423.14, 370; 415/182.1, 200,  
415/206; 34/114; D28/54.1

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,295,811 A \* 3/1994 Chiu ..... 417/423.15  
D353,660 S \* 12/1994 Cunning ..... D23/328

D374,071 S \* 9/1996 Wang et al. .... D23/382  
D387,151 S \* 12/1997 Fok ..... D23/381  
D387,152 S \* 12/1997 Jane et al. .... D23/382  
D387,153 S \* 12/1997 Fok ..... D23/382  
D397,192 S \* 8/1998 Chiu et al. .... D23/328  
D421,114 S \* 2/2000 Lozzio et al. .... D23/382  
D456,067 S \* 4/2002 Kalina et al. .... D23/382  
7,025,798 B2 \* 4/2006 Endo ..... 55/385.1  
D539,402 S \* 3/2007 Blateri ..... D23/336  
D540,455 S \* 4/2007 Ferraro, Sr. .... D23/383  
D577,799 S \* 9/2008 Blateri ..... D23/335

**OTHER PUBLICATIONS**

Product Literature: minION™ Compact Ioniser data sheet, 1 pp.,  
date unknown but believed to be prior to filing of present application.

\* cited by examiner

*Primary Examiner* — David Muller

(74) *Attorney, Agent, or Firm* — Johannes P. M. Kusters

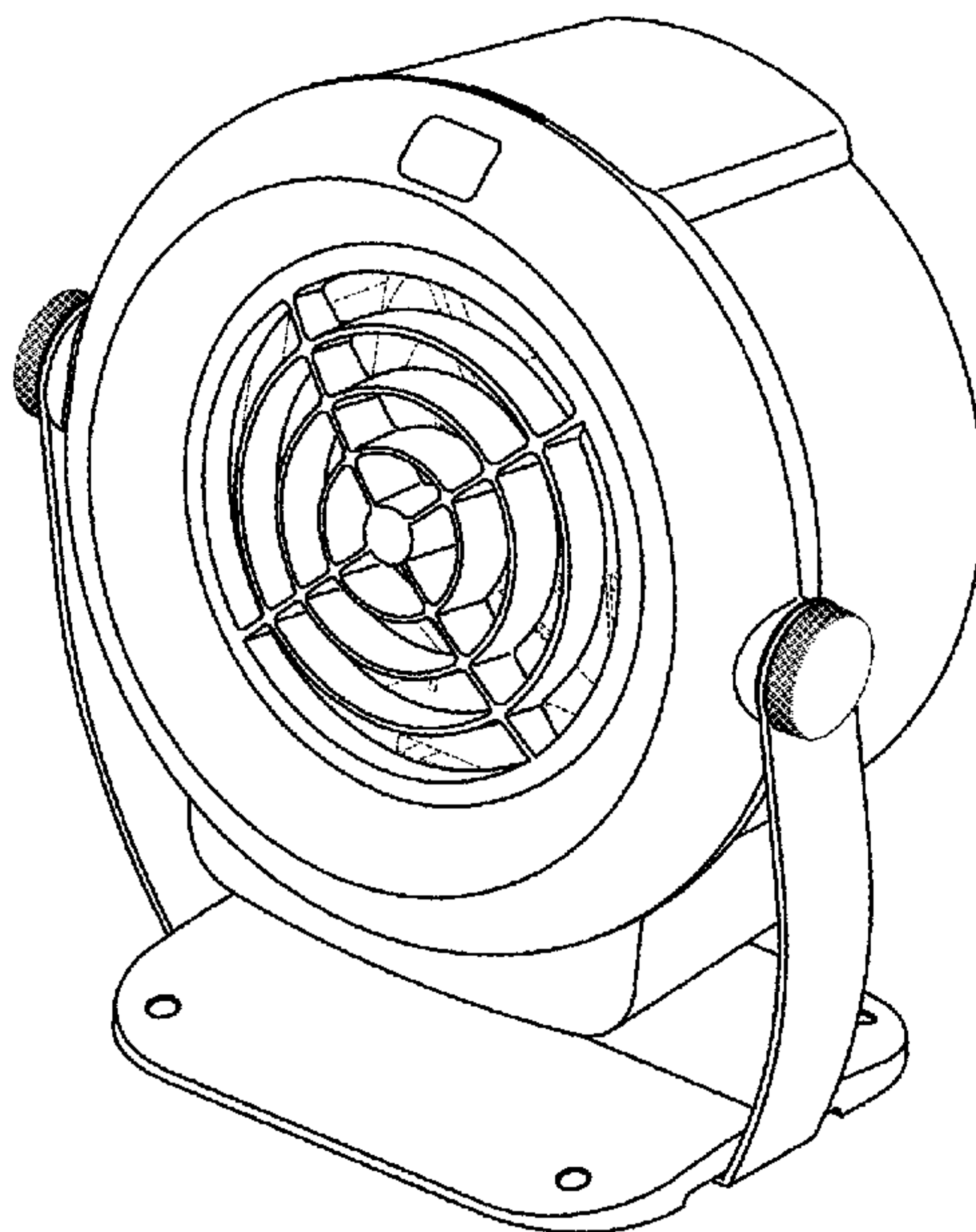
(57) **CLAIM**

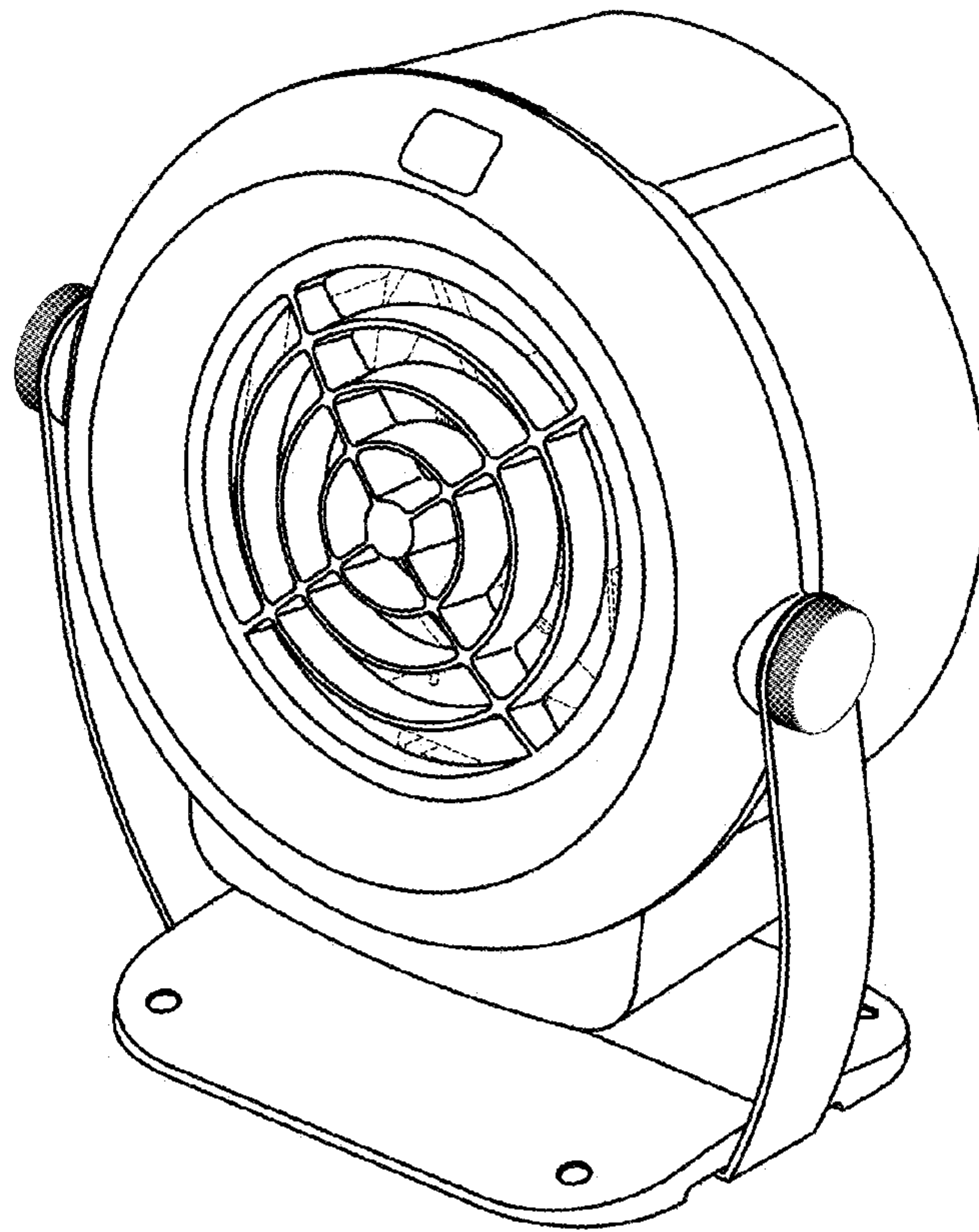
The ornamental design for an ionizer, as shown and  
described.

**DESCRIPTION**

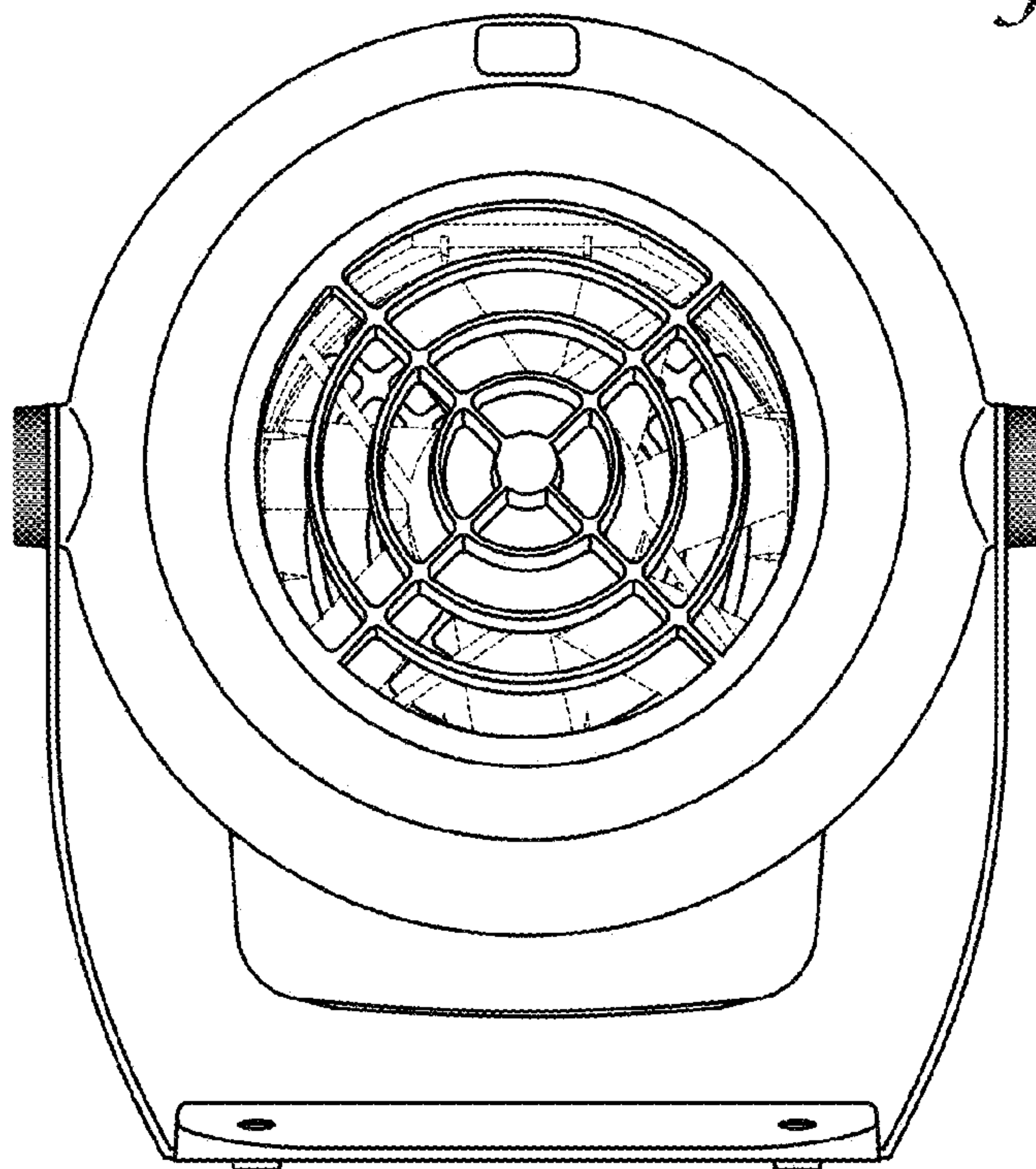
FIG. 1 is a front perspective view of an embodiment of an  
ionizer showing an aspect of the new design;  
FIG. 2 is a front view of the ionizer of FIG. 1;  
FIG. 3 is a back view of the ionizer of FIG. 1;  
FIG. 4 is a side view of the ionizer of FIG. 1;  
FIG. 5 is a top view of the ionizer of FIG. 1; and,  
FIG. 6 is a bottom view of the ionizer of FIG. 1.  
The broken lines showing unclaimed portions of the ionizer  
form no part of the claimed design.

**1 Claim, 3 Drawing Sheets**

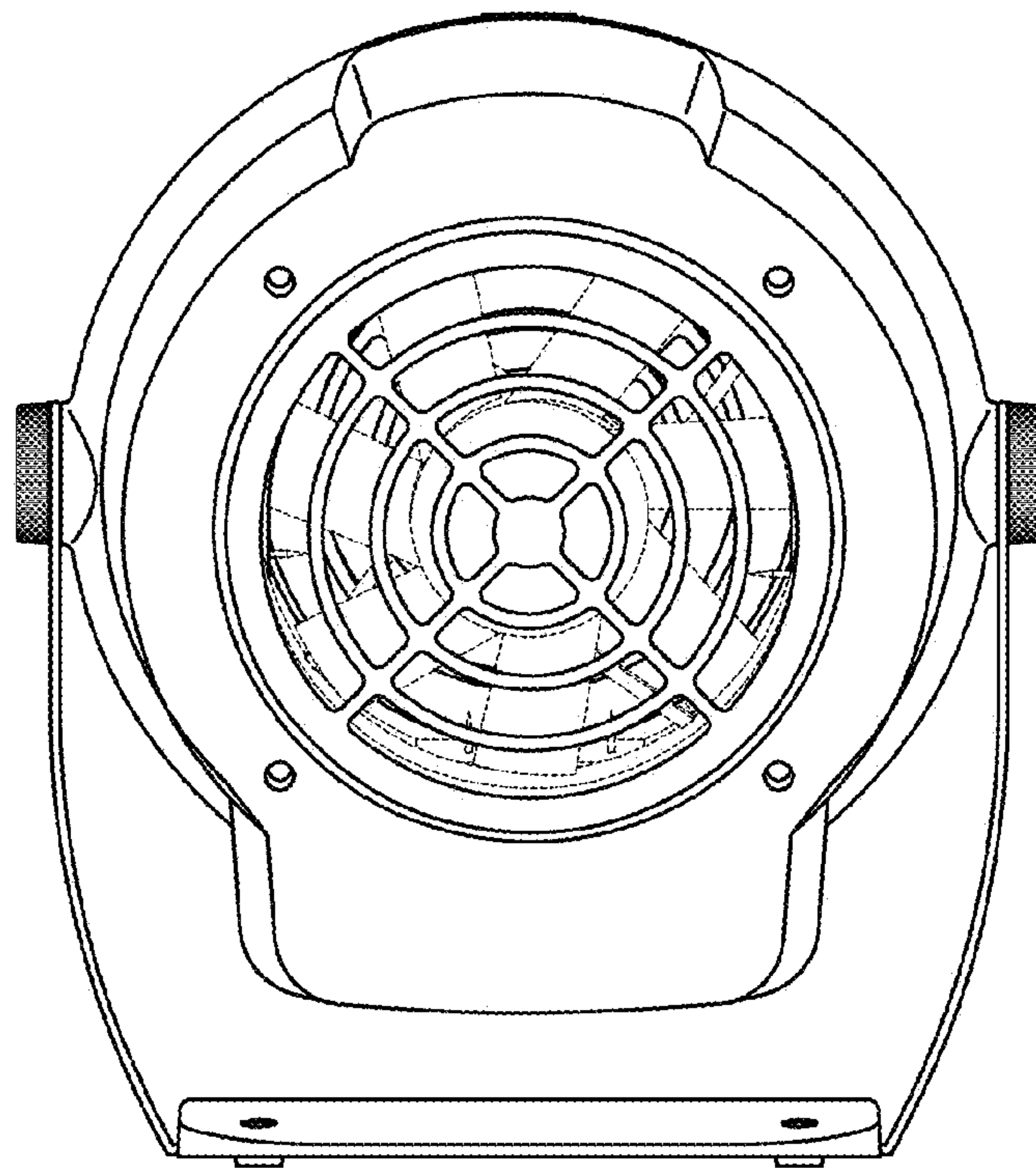




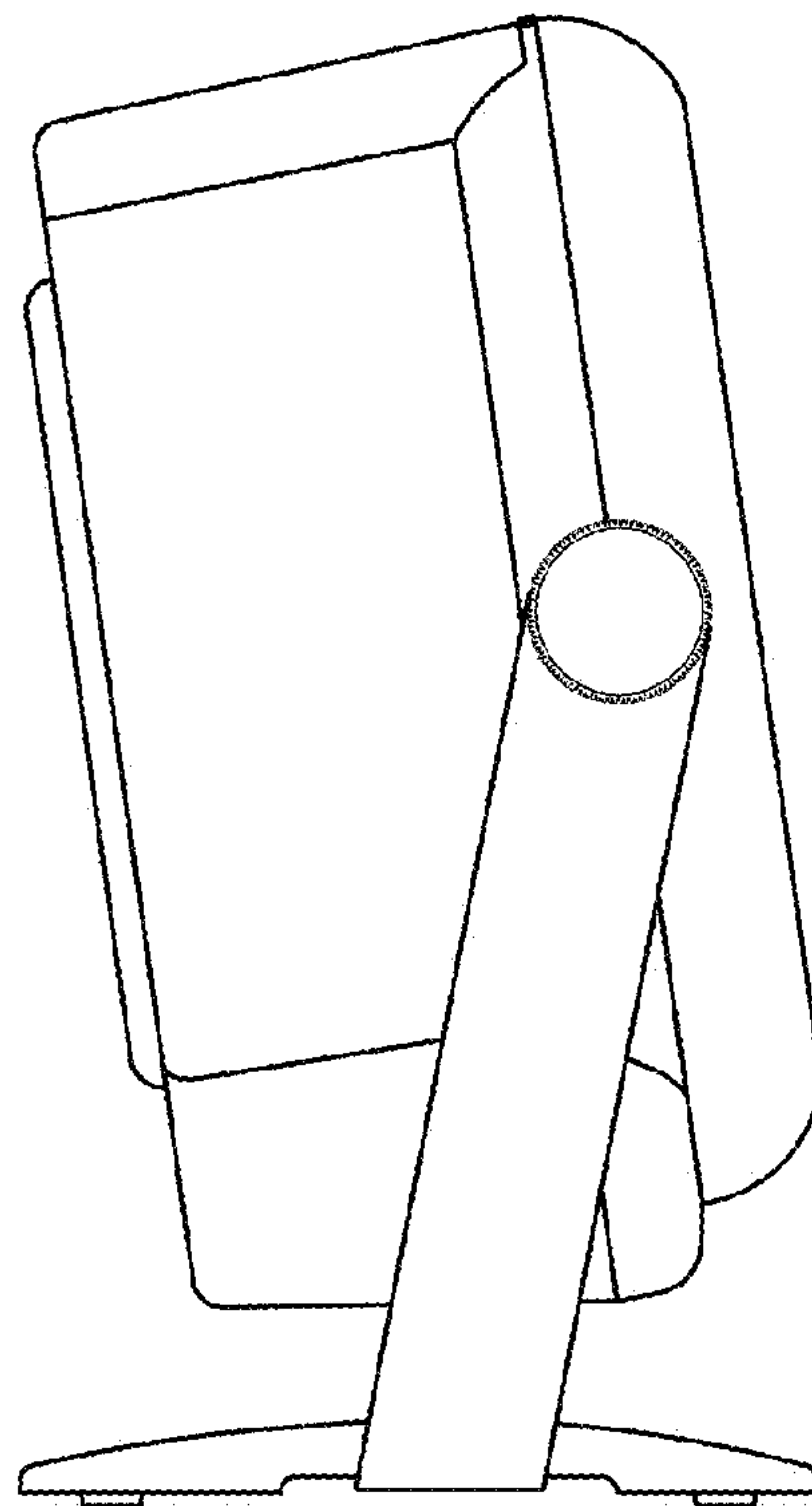
*FIG. 1*



*FIG. 2*

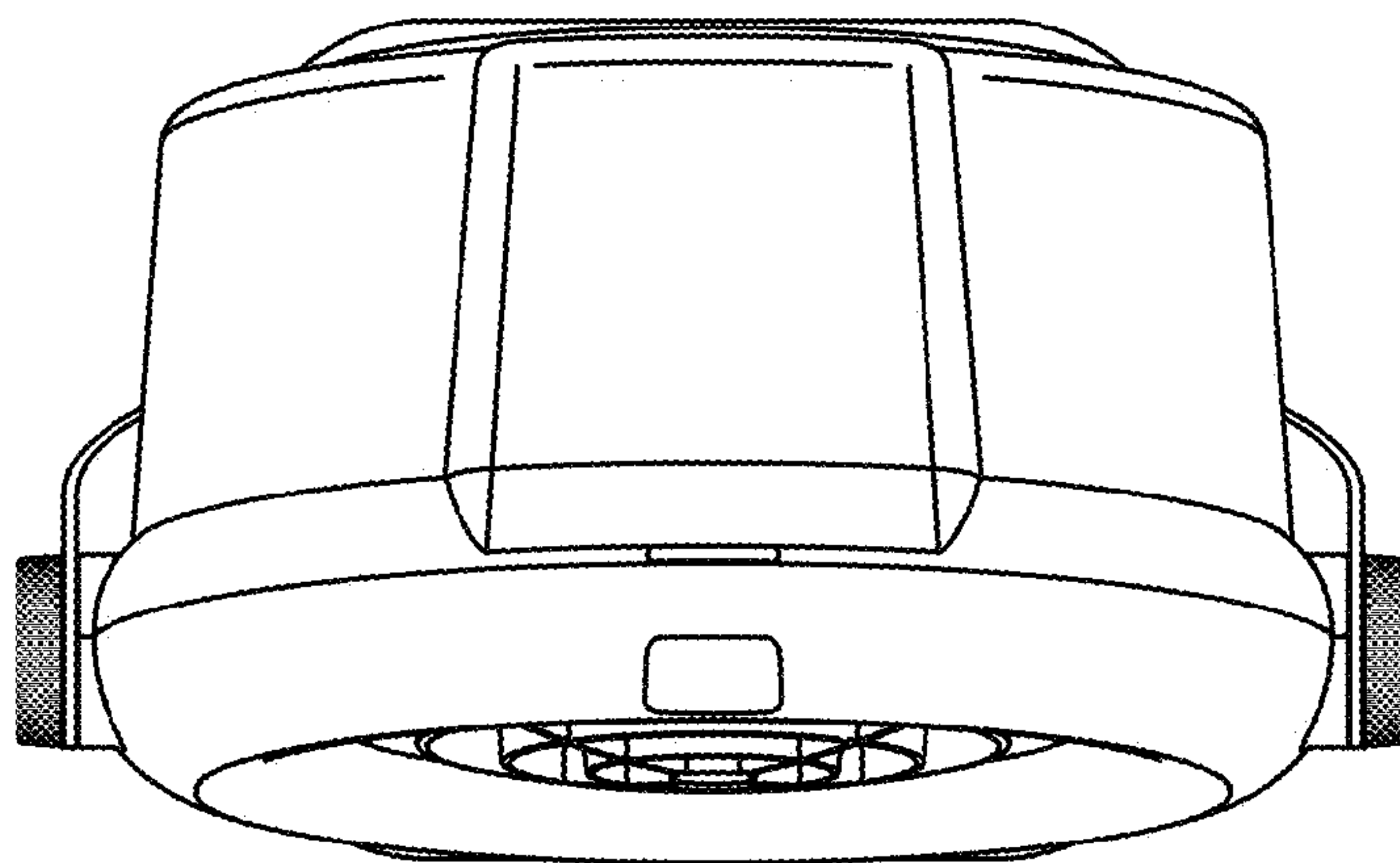


*FIG. 3*

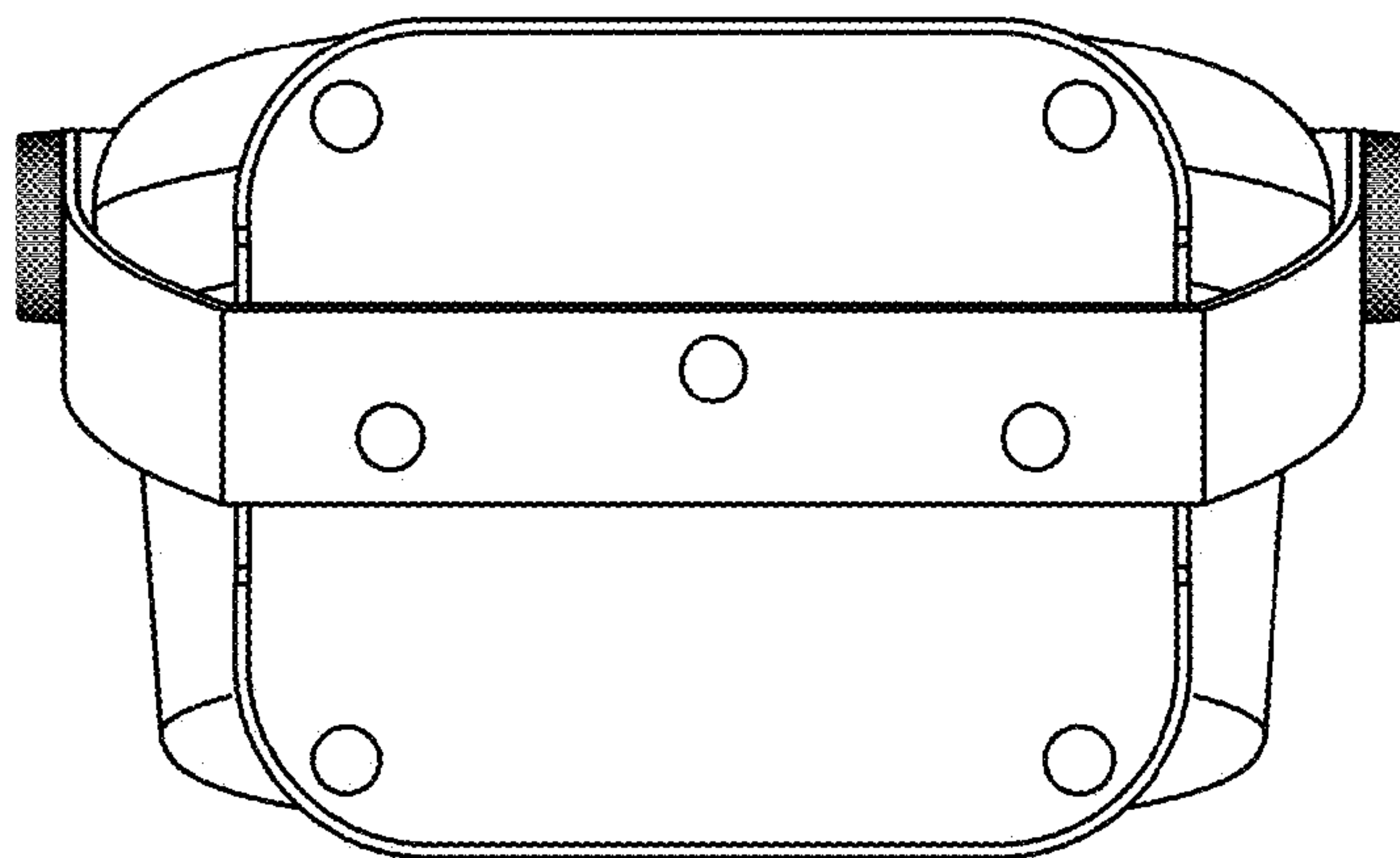


*FIG. 4*





*FIG. 5*



*FIG. 6*